

**Paving the Pathway – Expanding Youth Initiatives to  
Improve High School Graduation Rates of At-Risk  
Students in Vancouver**

**by  
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## Ethics Statement

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

- a. human research ethics approval from the Simon Fraser University Office of Research Ethics

or

- b. advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University

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## **Abstract**

High school graduation is an important milestone for future employment and opportunities, income potential and overall well-being. However, too many students in low-income neighbourhoods fail to complete high school. In Canada, youth from low-income families are three times more likely to drop out of high school than youth from middle-income families. Negative peer effects in school and weak neighbourhood dynamics impact socio-emotional development and educational outcomes of youth. Investments in education can help overcome barriers associated with poverty. This capstone assesses how comprehensive youth initiatives can be expanded to improve high school graduation rates of at-risk students in Vancouver, British Columbia. Five criteria were used to assess policy options and their ability to increase high school graduation outcomes. Through literature reviews, interviews and case studies, a recommendation is made for the Ministry of Education to establish an After-School Grant Program and to request written proposals from interested schools and organizations.

**Keywords:** High School Graduation; Youth Initiatives; At-Risk Students; Education

## **Dedication**

This capstone is dedicated to my mom, who continuously shares her love for teaching and helping others. Thank you to my friends and family for providing me love, support and encouragement throughout the years.

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## List of Acronyms

AAA	Aboriginal Academic Achievement Grant
BSSAP	Building Student Success with Aboriginal Parents Grant
EDI	Early Development Instrument
ESDC	Employment Social Development Canada
IHAD	I Have a Dream Program
IFS	Immediate Financial Support
QOP	Quantum Opportunity Program
YEP	Youth Engagement Project
YOW	Youth Outreach Worker
VSB	Vancouver School Board

## Executive Summary

The poorest children show the greatest vulnerabilities and the fewest competencies. Poverty poses adverse socio-emotional effects, delay in cognitive growth, harm in psychological well-being and dysfunctional developmental. Persistent poverty, partnered with weak neighbourhood ties and negative peer effects in schools affect multiple domains of development. In the United States, youth growing up in households with little income are 12 times less likely to graduate from high school than youth from households near the national median income (Dearing, 2008, 325). Canadians who do not complete high school are 2.5 times more likely to be unemployed, constitute 80% of federal inmate populations, and receive 85% of government transfers (Trypuc & Heller, 2008,1).

Education can break the cycle of poverty. Investments in education can empower youth from low-income families to enhance their opportunities, and increase their capacity to participate in the market economy. Time spent outside of school represents 40% of total time available to youth in a typical day (Heath & McLaughlin, 1994, 291). Time before and after-school are opportunities that could be spent on building healthy relationships with peers and adults, learning new competencies and receiving homework support. Many inner-city youth experience their first socially valued successes and feelings of competency and self-esteem in youth organizations (Heath & McLaughlin, 1994, 292). Youth programs can limit the fading effect and increase the probability of youth with weak primary level outcomes to succeed in secondary school.

To improve high school graduation rates of at-risk students in Vancouver, this capstone assessed the feasibility of expanding youth initiatives. First, I analyzed Vancouver neighbourhoods with the highest proportion of low-income households and lowest education indicators. This was done to understand the adverse impacts of poverty and neighbourhood effects. Next, I evaluated the role of youth programs and their ability to provide services for at-risk youth to bridge the high school graduation gap between poor and more affluent students. Subsequently, I conducted a cross-jurisdictional scan of multi-faceted youth programs in Canada and the United States, and how broad-ranging youth programs can provide resources for at-risk students to graduate high school.

Three policy options were established to expand multi-faceted youth programs. Policy options were devised from case studies of youth programs in Canada and the United States and interviews with youth organizations and policy professionals. As education is under provincial jurisdiction, policy options reflect this division of power and puts the Ministry of Education as the primary driver for change.

The first policy option entailed the Ministry of Education to establish an After-School Grant Program and to request written proposals from interested schools and organizations. The second option called for the Ministry of Education to develop a province-wide cost-share program, partnered with Pathways Canada. The last option suggested the Ministry of Education to provide school districts with a grant based on the share of low-income youth in the district.

Five criteria were used to assess policy options and their ability to increase high school graduation rates in Vancouver. These criteria included: cost to government, effectiveness of the program, entry requirements, access to at-risk students and transportation/ease of access. Effectiveness of the program had two components; high school graduation rates among students in the catchment area relative to comparable student populations elsewhere, and the percentage of at-risk youth who proceeded to post-secondary education because of program incentives and opportunities.

Based on the assessment of three policy options weighted against five criteria, this capstone recommended that *Option 1: The Ministry of Education establish an After-School Grant Program and to request written proposals from interested schools and organizations* to be adopted. Despite having moderate incremental costs to the government and moderate opportunities and incentives for post-secondary education, this option demonstrated high academic outcomes of students, access to at-risk students, universal eligibility for all students and accessibility with no transportation costs.

# Chapter 1.

## Introduction

High school graduation is an important milestone for future employment and opportunities, income potential and overall well-being. In 2016, 14% (340,000) Canadians aged 25 years and over had less than a high school education (Uppal, 2017, 1). Lower educational attainments can be related to lower labour force participation, and higher percentage of lone parenthood and reliance on government transfers. Youth from low-income households are more likely to leave school earlier than their more affluent counterparts. Beyond poverty, school and teaching quality, environmental influences, parental guidance and curriculum inadequacies can also be potential barriers for high school graduation. Completing high school increases the potential lifelong earnings, improves employment potential, and helps end the cycle of intergenerational poverty.

Investments in education can overcome barriers associated with poverty. Education can empower youth from low-income families, enhance their opportunities, and increase their capacity to earn income and participate in the market economy. Vancouver East Side schools consistently show lower high school graduation rates and higher percentage of exams failed when compared to Vancouver West Side schools. Multi-faceted and comprehensive youth programs can help at-risk students overcome barriers in education through tailored student support plans, social support, financial incentives, after-school tutoring, mentoring and career planning. Youth programs promote positive development at an extensive capacity, build competencies and skills, and provide opportunities to develop supportive relationships with peers and adults.

This capstone identified three Vancouver neighbourhoods – Strathcona, Downtown East Side, and Grandview-Woodland – as being high-need. The Early Development Instrument<sup>1</sup> identified Strathcona students experiencing significantly more

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<sup>1</sup> The Early Development Instrument determines child development in 5 areas; physical health & well-being, language & cognitive development, social competence, emotional maturity and communication & general knowledge. The questionnaire determines vulnerabilities of children at varied geographies and across time and location to determine adult health, education and social outcomes (The Human Early Learning Partnership, 2020).

social, physical, emotional and cognitive vulnerabilities than the overall city average (City of Vancouver, 2019, 58). Compared to the overall Vancouver average, Strathcona residents show a higher rate of low-income, lower median incomes in the city, and residents with higher levels of stress and anxiety-related illnesses (City of Vancouver, 2019, 60). This is shown in **Figure 1**.

The Downtown East Side education indicators are one of the lowest in the city; over one third of residents have not completed high school, and less than 40% have some type of post-secondary education (City of Vancouver, 2013, 38). Poverty in the Downtown East Side has imposed many barriers to accessing formal education and pursuing further learning opportunities. From the 2011 Census, Downtown East Side has one of the lowest per capita incomes of any urban area in Canada, with an average household income of \$13,691, and in 2005, 53% of its residents were considered low-income after tax (City of Vancouver, 2013, 11).

Downtown East Side children show the highest percentage of early childhood vulnerabilities in Vancouver. In 2011/2012, the Early Development Instrument found that 51% of children in the area were considered “not ready for school”, compared to 36% of children for the entire Vancouver School Board (City of Vancouver, 2013, 35). **Figure 2** shows the low-income rate of children under age 6.

Britannia Secondary School is situated in Grandview-Woodland, a neighbourhood with 20.5% of its population in low-income households (City of Vancouver, 2016, 2). Over a 4-year average (2013-2017), Britannia showed one of Vancouver’s lowest high school graduation rates and highest percentage of provincial exams failed.

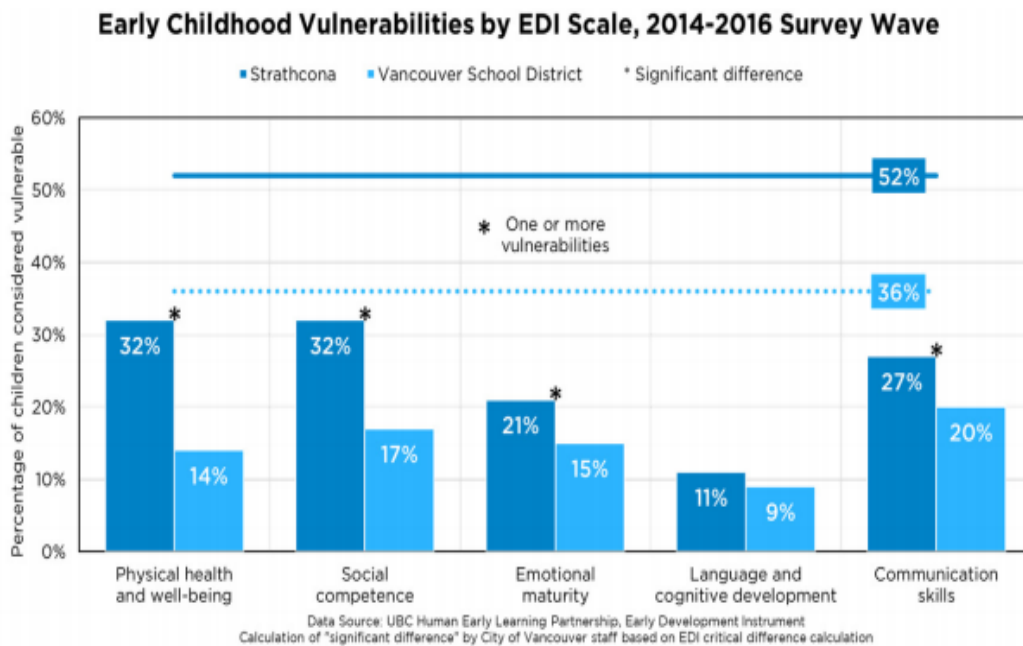
**Table 1: Demographics of Different Vancouver Neighbourhoods**

	<b>Grandview-Woodland</b>	<b>Strathcona</b>	<b>Downtown East Side</b>	<b>Vancouver Average</b>
Median Household Income	\$55,141 (2016)	\$21,964 (2016)	\$13,691 (2011)	\$65,423 (2016)
Population of Low-Income Households	20.5% (2016)	49.8% (2016)	53% (2011)	18.8% (2016)
Children in Low-Income	27% (2010)	35% (2010)	17%* (2010)	19% (2010)

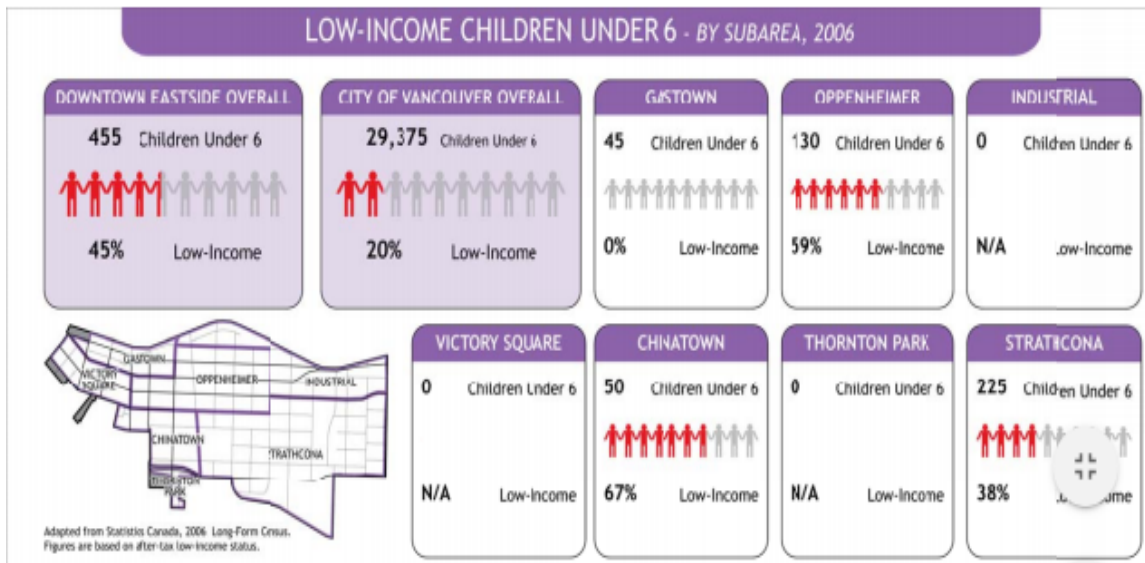


	Grandview-Woodland	Strathcona	Downtown East Side	Vancouver Average
			*This data set combines Downtown and Downtown East Side demographics together	
Early Development Instrument This is the percentage of children vulnerable on one or more scales	39% (2011-2013)	52% (2011-2013)	23%* (2011-2013) *This data set combines Downtown and Downtown East Side demographics together	35% (2011-2013)
Lone- Parent Families	38% (2011)	48% (2011)	31%* (2011) *This data set combines Downtown and Downtown East Side demographics together	28% (2011)

Source: 2016 Census Data & City of Vancouver Social Indicators and Trends 2014



**Figure 1: Early Childhood Vulnerabilities in Strathcona**  
Source: City of Vancouver – Strathcona Neighbourhood Social Indicator Profile 2019



**Figure 2: Downtown East Side Profile**  
 Source: City of Vancouver – Downtown Eastside Local Profile 2013

## 1.1. Vancouver’s High School Academic Performance

This capstone utilizes the percentage of exams failed to evaluate the academic performance of Vancouver schools and their students. The percentage of exams failed is defined as the percentage of students who receive a failing grade in the mandatory grade-12 language arts provincial exams. To understand the improvement or deterioration of academic performance over time in Vancouver public schools, the figures are averaged over a 4-year period (2013-2017). East Vancouver schools consistently ranked lower than West Vancouver schools. On average, from 2013-2017, almost one fifth of Britannia Secondary School students failed the provincial exams, compared to 2.5% of total test-taking students at Lord Byng Secondary School.

Collectively, Vancouver students show one of the highest graduation rates<sup>2</sup> in British Columbia at 90%. The high school graduation range for all British Columbia students is between 76% - 86%. However, the high school graduation rate for Indigenous students in Vancouver is 62%, compared to the British Columbia average of 69%. In the three neighbourhoods identified (Grandview-Woodland, Strathcona, and Downtown East Side), there are higher proportions of individuals of Indigenous identity.

<sup>2</sup> High school graduation rate is defined as the percentage of grade 8 students who graduate with a Certificate of Graduation within 6 years, adjusted for outmigration.

This capstone recognizes the lower high school completion rates in other parts of British Columbia, and focuses on the vulnerabilities of student populations in inner-city Vancouver schools.

## **1.2. Indigenous Student Education Gap**

The high school graduation gap between Indigenous and non-Indigenous students in British Columbia has been narrowing in the past 15 years, with the province showing one of the highest Indigenous graduation rates in Canada. Despite this trend, in the 2018/2019 school year, there was still a large difference in graduation rates between Indigenous (69%) and non-Indigenous students (89%) (Ministry of Education, 6, 2020). In Vancouver, the high school graduation rate for Indigenous students is 62%, compared to 92% for non-Indigenous students. Britannia has been identified as one of Vancouver's largest urban Indigenous community schools for decades, and has offered a sense of belonging and connectedness to Indigenous students and families. In 2016, one-third Britannia students identified as Indigenous, and 79 out of 189 secondary students came from outside Britannia's catchment area (Hyslop, 2016).

In 2016, 10% of Strathcona's population identified as being Indigenous, compared to 2.4% in the overall City of Vancouver. From 1996 to 2016, the Indigenous identity population in Strathcona grew by 33%, and the non-Indigenous identity population fell by 14% (City of Vancouver, 2019, 29). In 2013, The Vancouver School Board launched a pilot program for Indigenous students who could not graduate due to missing credits. Teachers and Indigenous support workers provided additional means of support such as counselling, specific instruction, discussion of personal barriers and special care. Meetings were set up with parents to discuss progress and address barriers (e.g. the lack of meals and transportation options). In the first year, the program saw 24 out of 26 participating Indigenous students graduating (Alphonso, 2014). Additionally, Britannia Secondary School offers an alternative educational program called Outreach, a small group program for Indigenous students who face barriers in attending regular classes. Outreach focuses on Indigenous students from grades 10 to 12 who wish to improve their academic and socio-emotional skills. The curriculum offers more cultural content and support. Another program that Britannia offers is Streetfront, an alternative program for students from grade 8 to 10 that combines academic learning with physical fitness and outdoor experiences. The academic component makes up for

60% of the curriculum, whereas the physical component makes up the remaining 40%. There is an enrollment of 22 students and 3 staff members (one teacher, one youth and family worker and one school and student support worker).

**Table 2: Identification of Indigenous Identity by Neighbourhood- Census Data**

	<b>Grandview-Woodland</b>	<b>Strathcona</b>	<b>Downtown East Side</b>	<b>Vancouver</b>
Indigenous Identity	8.1% (2011)	10% (2016)	10% (2011)	2.4% (2016)

Source: 2011 & 2016 Census Data

### **1.3. Policy Problem**

Too many students in low-income neighbourhoods fail to complete high school. In Canada, youth from low-income families are three times more likely to drop out of high school than youth from middle-income families (Boston Consulting Group, 2011, 4). Many low-income families lack the social capital and resources to support their children’s educational pursuits. Often the dynamic of negative peer effects in low-income neighbourhoods and dynamics in school’s interplay with problems faced by low-income communities. This capstone assesses the feasibility of expanding multi-faceted youth programs to improve high school graduation rates and better support at-risk students in Vancouver.

## **Chapter 2.**

### **Background**

#### **2.1. Child and Youth Poverty Effects**

Child poverty disproportionately arises among the most vulnerable social groups, with an overrepresentation of children from Indigenous identity groups (Rothman, 2007, 662). In Canada, nearly 50% of Indigenous children live in poverty – two and a half times more than the national average rate (Press, 2019). Living in poverty increases the risk of socio-emotional problems and negative educational outcomes. The poorest children show the greatest vulnerabilities and fewest competencies; to reduce adverse intergenerational impacts of poverty, education can be a critical factor.

##### **2.1.1. Socio-Emotional Outcomes**

Poverty affects socio-emotional outcomes and psychological well-being. Compared to more affluent children, children in poverty may externalize higher levels of interpersonal problems such as anger, destructive behaviour and hyperactivity, and internalize personal problems such as anxiety, depression and fearfulness (Dearing, 2008, 325). This may be a result of the typical characteristics of families in poverty: constant disruptions in the child's life, chaotic living conditions, inconsistency in parenting behaviours and unpredictability of the family's life.

Negative impacts continue into adolescence and adulthood. Poor youth are more likely to show neuroendocrine markers of chronic stress than more affluent children (Dearing, 2008, 326).

##### **2.1.2. Cognitive Development Outcomes**

Growing up in poverty is correlated with decreased cognitive and developmental functioning in terms of school achievement and attainment. Poverty can hinder cognitive potential and achievement throughout the developmental stages; children who grow up in poverty may score half a standard deviation lower on IQ test than children from more affluent families. Poor students are more likely to fall behind, achieve lower levels of

kindergarten reading and math skills, and fail to close the gap in the subsequent school years when compared to their more affluent peers (Duncan, Magnuson & Votruba-Drzal, 2016, 415).

## **2.2. Outcomes of Poverty**

### **2.2.1. Collective lack of opportunities**

Poor youth face a collective lack of opportunities in their schools, communities and family environments. Differences between poor youth and more affluent youth are observed in many cases. In their schools, poor youth are more likely to encounter unsafe school conditions, teacher shortages and fewer co-operative educational opportunities. This in turn affects academic performance, years of completed schooling, upward social mobility and status attainment in their life span (Duncan, Magnuson & Votruba-Drzal, 2016, 426). Family socio-economic characteristics such as family income and parental education are influential to educational successes. Poor youth are also less likely to engage in extra-curricular activities and before or after-school programs than their affluent counterparts, and are more likely to engage in anti-social and deviant behaviour.

### **2.2.2. Internalization of Inferiority**

Income inequality directly impacts children's emotional wellbeing and perception of self. Children coming from poor families internalize norms of poverty, which impact their behaviours, attitudes and health. Such children are less confident in their ability to succeed, leading to lower aspirations, educational attainment and competencies. Children may continue to internalize symptoms of anxiety, depression and heightened sensitivity to negative emotional responses (Capistrano, Bianco & Kim, 2016, 1). The manifestation of status anxiety and the negative sense of self from being poor may affect children by creating social distance and a sense of inferiority (Duncan, Magnuson, Votruba-Drzal, 2016, 424).

### **2.2.3. Lack of Resources & Economic Pressures**

A family's economic resources influence a child's development process. Families living in poverty may have fewer resources to invest in educational materials, high

quality childcare, quality parental time and rich educational experiences that contribute to healthy development (Duncan, Magnuson & Votruba-Drzal, 2016, 420). Economic pressures of poverty heighten parental stress, which may lead to higher instances of psychiatric disorders and punitive parenting styles.

#### **2.2.4. Environmental Stress**

The quality of the family environment can account for differences in school achievements and developmental outcomes when comparing affluent families to low-income families. Negative physical and psychosocial environments in the home and neighbourhood can lead to lower future earnings, higher crime rates and higher risks for developing mental health problems. Compared to more affluent peers, the physical environment of poor children is more likely to consist of structural problems such as building instability, insect infestations, loud noises and poor ventilation.

### **2.3. Neighbourhood Effects**

Neighbourhoods have sociodemographic characteristics that are determined by their cultural and racial makeup, geographical boundaries, social networks and poverty rates (Sampson, Morenoff & Gannon-Rowley, 2002, 444). Sustained exposure to disadvantaged neighbourhoods has harmful consequences on child development and school progression. From a resource perspective, poor neighbourhoods typically lack high quality institutions such as good schools, childcare and supplementary educational programs.

Poor neighbourhoods are more socially disorganized, characterized by low trust and weak social ties, and contain a high concentration of problematic behaviours. The absence of social values reinforces negative normative behaviour and limits growth of local institutions (Pebley & Sastry, 2003, 5). In addition, lower social control, weak internalization of positive norms, and lack of collective trust between neighbours impacts the developmental outcomes of children living in the neighbourhood (Wodtke, Harding & Elwert, 2011, 4).

Residence in poor neighbourhoods influences children and youth outcomes, particularly in terms of collective socialization, peer-group influence and institutional

capacity (Mayer & Jencks, 1989). When compared to more affluent neighbourhoods, there is a higher concentration of adolescent delinquencies, social and physical disorders, high school dropouts and crime in deprived neighbourhoods. Deviant subcultures emerge in many poor neighbourhoods that devalue schooling and internalize risky behaviour. When compared to their affluent counterparts, poor youth are more likely to engage in deviant behaviours and school disruptions due to the disengagement from home and school.

Wodtke, Harding & Elwert (2011) assess how the duration of exposure to deprived neighbourhoods affects high school graduation rates. This was done through following 4,154 children in the Panel Study of Income Dynamics to measure neighbourhood context once per year from age 1 to 17. To understand the dynamic of long-term residential disadvantage, they control both the time-varying family characteristics and indirect neighbourhood effects to determine level of educational attainment. They found that disadvantaged neighbourhoods characterized by a high prevalence of welfare recipients, poverty and unemployment rates significantly impact the likelihood of youth graduating high school (Wodtke, Harding & Elwert, 2011, 731). Children who grow up in such neighbourhoods may pass on to future generations obstacles to cognitive development, in addition to producing an intergenerational transmission of poverty (Wodtke, Harding & Elwert, 2011, 732).

## **2.4. When to Intervene- Early Childcare or High School?**

High quality early childcare supports both cognitive and language development and emotional growth. Primary benefits include higher educational attainment, employment earnings and quality of life. Secondary benefits to society include reduced cost to the health care and criminal justice systems. Two early childcare initiatives, the ABC/CARE childcare program and Perry Preschool Project have shown both short and long-term benefits.

ABC/CARE was a comprehensive early childcare program that focused on improving socio-emotional competencies, early life skills, communication and prosocial behaviour in disadvantaged children in Chapel Hill/ Durham, North Carolina (Garcia et. Al., 2016, 8). Beginning as early as 8-weeks old, children were enrolled full-time (8-9 hours a day, five days a week) in a learning centre until entering kindergarten. Children



participated for 50 weeks per year, for 5 years. Doctors and nurses were on site to provide health and developmental screenings and patient education, with follow-ups to ensure medical adherence. The program employed professionally trained childcare educators, provided nutritious meals and snacks, and offered free child minding for parents who wanted to enter the workforce or advance their careers. In a benefit-cost analysis, the annual cost was \$18,500 (2014 USD dollars) per child and it generated a 13.7% per year return on investment, which included costs of running the program (Heckman, 2017, 1). It showed socially efficient results; the cost of the program paid for itself within five-years from taxes in the increased parental income, and the program generated a benefit of \$7.30 for every dollar spent. ABC/CARE also showed benefits in multiple life domains such as better physical health, advanced social-emotional skills and foundational skills that improved productivity in the workforce. Unlike other early childcare programs, there was no fading effect in terms of cognitive and socio-emotional development. Long-term follow-ups showed benefits across multiple life domains (e.g. health, quality of life, employment and education). The permanent gains could be a result of its intensive programming and high quality learning opportunities.

The Perry Preschool Project assessed the short and long-term financial returns and human value of early childhood programs for children living in poverty. Children were provided two years of intensive preschool and home visits from educators. Program effects were collected from ages 3 through 11, and again at ages 14, 15, 19, 27 and 40 (Schweinhart, et al., 2005, 1). The program group did significantly better than the non-program group in terms of high school graduation rates, higher median annual earnings, run-ins with the criminal justice system and welfare status. Cost per participant was \$15,166, with a \$12.90 return to society per dollar invested (HighScope Educational Research Foundation, 2020).

High quality early childhood education can produce tangible benefits and eliminate cognitive gaps for disadvantaged students in the early primary grades. However, many studies have shown the positive outcomes of early childhood education typically fade in upper primary and secondary grades. In addition, these positive outcomes strongly resonate in middle and upper-middle income families rather than children from disadvantaged families. Multi-faceted youth programs at the secondary level can limit the fading effect and increase the probability that at-risk children with weak primary level outcomes succeed in secondary school.

## Chapter 3.

### Methodology

Literature reviews and case studies are the two primary methodologies used in this capstone. This capstone uses publicly available sources to compare multi-faceted youth programs in Canada and the United States. This is to identify the impact of youth programs on high school graduation rate, post-secondary attainment outcomes, and any successful characteristics and challenges of youth programs. The objective of the literature review is to guide interview questions and determine the feasibility of policy options. The programs assessed were either brief randomized control trials or long-term, extensive programs. All programs and randomized trials studied were in North America. These include Pathways to Education, Britannia's Homework Club and Youth Engagement Program, The Quantum Opportunity Program, I Have a Dream Program and a Chicago randomized experiment on academic and behavioural intervention with disadvantaged youth.

Case studies of government grants and per-pupil funding were studied for their applicability in the BC context. These include; Title 1 Funding, Connecticut's After-School Grant Program, Ontario's Learning Opportunities Grant, Manitoba's Aboriginal Academic Achievement Grant and British Columbia's per-pupil Aboriginal Student funding.

Local Vancouver youth programs were given a more comprehensive overview and analysis. These include Pathways and Britannia's Homework Club. As Pathways has been rigorously evaluated since its inception in 2001 and is an ongoing program rooted in the Strathcona and Downtown East Side neighbourhoods, it is extensively reviewed to understand its impacts and limitations, as well as feasibility for expansion.

Qualitative interviews were conducted with youth organizations and policy professionals to understand barriers faced by youth, and to gain a more comprehensive understanding of the programs.

## **Chapter 4.**

### **Role of Youth Programs to Bridge the High School Graduation Gap**

Many schools do not provide consistent support for youth beyond the school day. Time spent outside of school represents 40% of total time available to youth in a typical day (Heath & McLaughlin, 1994, 291). Time before and after-school are opportunities that could be spent on productive learning activities. Participating in youth programs during these times can build upon the skills and strengths and provide expertise and learning opportunities beyond school settings. In low-income neighbourhoods, youth programs can promote equity of access to programs and resources, and bridge the graduation and post-secondary education attainment gap between poor and more affluent students. Multi-faceted programs with a range of academic, social and developmental activities are more successful than narrow-targeted programs because they respond to the diverse and unique needs of youth (Ferguson, Tilleczek, Boydell & Rummens, 2005, 14).

Multi-faceted youth programs offer an academic and social space for relationship-building, tutoring, mentoring and recreational programming. They focus on positive development at an extensive capacity, which includes building competencies and skills, developing supportive and positive relationships with adults and exploring their passions. These informal institutions build upon the strengths and needs of youth, while enabling youth to engage in activities beyond the school day. Many inner-city youth experience their first socially valued successes and feelings of competency and self-esteem in youth organizations (Heath & McLaughlin, 1994, 292).

Effective youth programs provide quality adult engagement with youth, as adults can provide a sense of belonging, care and achievement. Adults must also have the competencies to deal with the barriers that youth face and be non-judgemental. This is especially critical in disadvantaged youth who are unlikely to have this support in other areas of their lives (Williamson, 1996, 61). This provides opportunities for youth to build competencies, engage in recreational activities together and develop ongoing relationships with responsible and caring adults.

Youth organizations and programs are intrinsically motivating and well-suited in creating trusting environments where other forms of social capital can develop. However, the challenge is leveraging the relationship between youth organizations and schools to share information about youth's experiences and needs. Barriers need to be broken down to effectively promote after-school opportunities, and working relationships must be built between schools and youth organizations that prioritize the needs of youth. This enables high quality learning environments to extend all day, and not just within the school day.

#### **4.1.1. Pathways to Education**

Pathways to Education is a comprehensive program aimed at helping disadvantaged and at-risk youth. Working with the government, community partners, schools and volunteers, the program aims to break the cycle of poverty through helping low-income youth graduate high school. It has been able to reach a high fraction of its target population: in Toronto, between 80 to 95% of eligible students entering high school registered for the program (Oreopoulos, Brown and Lavecchia, 2014, 35).

In metropolitan Vancouver, Pathways operates in the Downtown East Side and Surrey, and is operated by Pacific Community Resource Society. Pathways has four main pillars of support for participating students: counselling, tutoring, mentoring, and financial support.

- **Counselling:** each student is assigned a youth outreach worker (YOW) who monitors students' progress, commitment to the program and problematic behaviour at home or at school. The YOW develops support plans that address the educational needs of youth and actively encourages student participation. The YOW also builds relationships with participants' families to discuss program expectations and the expectations of family support.
- **Tutoring:** volunteer tutors provide extensive tutoring for four-nights a week. Sessions are offered on a one-on-one basis and in a small group setting. The ideal volunteer to student ratio is 1:5 (Pathways Academic Manual, 2019, 12). Each student is required to complete a minimum of three hours of tutoring a week as part of their agreement when signing up for the program.

- Pathways Vancouver and Surrey offers tutoring four nights per week, ranging from two to five hours provided each evening (Pathways Academic Manual, 2019, 6). For students who do not have homework, Pathways offers BC School curriculum-based work such as literacy packages, current textbooks and worksheets.
- Mentoring: social supports are provided through group mentoring sessions. There are lists of competencies and goals prescribed for each grade. These could include leadership, communication and social skills, career mentoring and counselling, learning opportunities and community engagement.
- Financial support: students receive financial assistance for immediate schooling needs such as transportation tickets and school supplies. Pathways offers a monthly Immediate Financial Support (IFS). Youth can choose either a Translink Compass pass or grocery cards. Youth have the potential to earn a full Translink compass pass (transportation card) or, up to \$50 in grocery cards. The amount provided is calculated on their participation: 50% school attendance, 17% one-on-one meetings, 16% mentoring attendance and 17% tutoring attendance (Pathways Youth Worker Interview, 2020).

In addition, up to \$400 can be awarded to each student per academic year, which can be used for post-secondary expenses (Pathways Mentoring Manual, 2019, 3). Scholarship money is determined by participation in the Pathways to Education Mentoring Program. Students must participate for a minimum of two years prior to receiving this scholarship. If a student decides to not participate in the mentoring portion of the program, they are ineligible for a scholarship in that academic year.

Pathways began in Regent Park, Toronto's oldest and largest public housing site. In 2001, 67% of families in Regent Park lived below the after-tax low-income cut-off; 59% of residents had no earnings, and the high school dropout rate was double that of the rest of Toronto (Oreopolous, 2005, 7). In the 1990s, more than half of its residents failed to complete high school. The Regent Park Community Health Centre devised a strategy to promote academic success of its residents and a more positive community environment for the youth. This included a community succession plan that envisioned

greater economic mobility for youth in the community, and strategies that promoted the community as a driver for social change.

Since beginning in 2001, the program has expanded to 20 sites across Canada and serves over 5000 students (ESDC, 2019, 5). To address the needs and barriers of Indigenous students, Pathways contributes to two specific Aboriginal focused programs in Mashteuiatsh (First Nations Reserve in Quebec) and Winnipeg, Manitoba. Pathways operates in every province except Newfoundland, Alberta and Saskatchewan. Ontario has the highest number of sites and participants, and British Columbia has the lowest number of sites and participants. Priority neighbourhoods are selected based on communities with high gang presence, criminal activity and high social service need. After an examination of current sites, Pathways generally operates in low-income neighbourhoods with many public housing projects.

#### **4.1.2. Difference-in-Difference Analysis**

Oreopoulos, Brown and Lavecchia use a difference-in-difference analysis to determine if Pathways had an impact on high school graduation rates. Their analysis was based on the difference between higher completion rates in Regent Park relative to student cohorts in other comparable housing projects that did not have Pathways. This is illustrated in **Figure 3**.

Relative to the graduation rate of the 2000 cohort, Regent Park's graduation rate rose dramatically in subsequent cohorts after the introduction of Pathways (a range about 14 – 28 percentage points). Meanwhile, among other Toronto housing projects, graduation rates rose much less (range 0 – 10 percentage points). From 2000 to 2001, the first grade-9 Pathways cohort in Regent Park increased its graduation rates by 14.2 percentage points, compared to a 0-percentage point change in other housing project sites without Pathways. The 14.2 percentage point difference between Regent Park and other comparable public housing sites can be viewed as Pathways' contribution to improving graduation rates (Oreopoulos, Brown and Lavecchia, 2015, 4).

After the initial success of Regent Park, Pathways expanded to two other Toronto neighbourhoods, Rexdale and Lawrence Heights. Prior to Pathways, these two neighbourhoods closely followed high school graduation trends of public housing sites.

After Pathways was introduced in 2007, high school graduation rates in Rexdale and Lawrence Heights increased on average by 5.7 percentage points relative to other public housing sites (Oreopoulos, Brown and Lavecchia, 2015, 4).

Oreopoulos and colleagues assume that, without Pathways in Regent Park, Rexdale and Lawrence Height, the change in graduation rates at Pathways sites would have been similar to changes in other projects. The difference between graduation rates in public housing sites with Pathways public housing sites without Pathways is their estimate of the program’s overall impact (Oreopoulos, Brown and Lavecchia, 2014, 27).



**Figure 3: Difference in Difference Analysis of Pathways Programs to Other Public Housing Sites**

Source: C.D Howe E-Brief- Evaluating Student Performance in Pathways to Education

### 4.1.3. Eligibility

Pathways is open to any student living in a Pathways-defined catchment area. If a student wanted to participate in Pathways but lived outside the catchment area, he or she would require a referral from a counsellor or health professional (Pathways Youth

Worker Interview, 2020). Though all students living in the Pathways catchment area are eligible, schools help identify eligible students who are likely to benefit from Pathways by contacting and setting up meetings between parents and Pathways administrators. Pathways obtains grade 8 student lists from local schools and visits different households to invite students to participate in the program.

In addition to schools, referrals are also received from local community centres and the Ministry of Children and Family Development. For students living outside the catchment area, there is an eligibility assessment tool to determine if students can participate. Eligibility for these out-of-catchment students is based on an initial discussion with the referral source and/or participant and their family (Pathways Case Management Manual, 2018).

Pathways operates within the community alongside the school system. Students can enter Pathways at any grade, but Pathways encourages grade 8 students to join to ensure support throughout high school. Prior to entering the program, students must agree in writing to stay accountable to the program's conditions and high expectations. Each student is assigned his or her youth outreach worker (YOW), who monitors progress and checks-in with the student twice monthly. They are allocated \$80 per month in petty cash expenses for one-on-one meetings with students. All students are required to re-register with their YOW annually to review consent forms, areas for improvement, support strategies and the expectations of Pathways. During re-registration, parents must meet with the YOW to discuss the youth's progress, involvement and any concerns (Pathways Youth Worker Interview, 2020). Parents are mailed updates 1-2 times a year regarding their child's performance and attendance, and if there are areas requiring improvement.

#### **4.1.4. Cost-Benefit Analysis**

In Regent Park, the average cost per student over their high school cycle is estimated to be \$14,935 in present value direct operating costs, plus indirect administrative cost and cost of post-secondary attainment (ESDC, 2019, 31). The highest direct operating cost is public transportation tickets (20%), followed by scholarship expenditures (15%), with the remainder used on staffing and tutoring costs (Oreopoulos, Brown and Lavecchia, 2014, 36).



Oreopoulos, Brown and Lavecchia found significant positive private and government returns. First, they assume that high school dropouts earn \$20,000 annually during their working-ages, with a 1.5% increase in annual real earnings. For every additional year of high school for marginal students, there are returns in the range of 10% per year. Next, they assume that Pathways, on average, facilitates two additional years of high school that students would have not completed without the program. Therefore, Pathways would increase earnings by 20% compared to students who did not graduate high school, and result in annual real earnings of \$25,000 over their working-ages (Oreopoulos, Brown and Lavecchia, 2015, 7).

In Regent Park, Pathways generated a 15% increase in high school graduation rates and 19% increase in post-secondary attainment rates. At a 3% discount rate, eligibility to participate in Pathways is expected to increase present value lifelong earnings by \$36,900 (Oreopoulos, Brown and Lavecchia, 2015, 7). In Rexdale and Lawrence Heights, Pathways had a lower comparable impact on high school graduation and post-secondary attainment rates. It was expected to increase present value lifelong earnings by \$10,100 at these two sites.

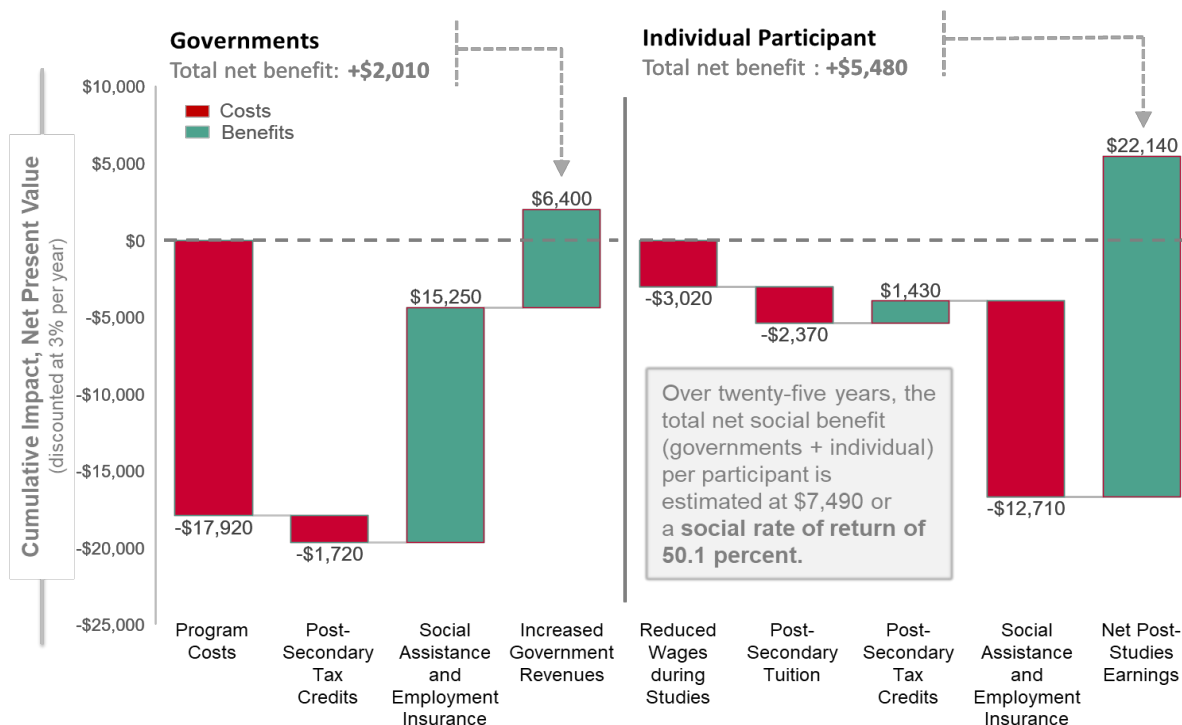
Through expected lifelong earnings and social benefits, Pathways generates an overall positive social (private plus public) return on investment. The costs to the government of the program are more than often offset by higher lifetime tax revenues from Pathways participants, and decreased likelihood of accessing welfare services, incidents with the criminal justice system and reliance on the health care system.

In a second benefit-cost analysis, Employment Social Development Canada calculated benefits and costs to government and individuals from participation in Pathways. Individual participants incur costs of post-secondary education, and foregone social policy benefits and wages during studies. Their major benefit is higher net after-tax post-studies earnings. This results in a total present value estimate to participants of net benefits of \$5,480 (ESDC, 2019, 24).

For the government, short term costs include program operating cost and post-secondary education support (i.e. post-secondary tax credits). In the long run, there are increased government revenues due to higher lifelong tax revenue from participants and lower government support payments. ESDC estimates the present value of net benefits

to the government to be \$2,010 per participant. Pathways-eligible students made less use of income assistance by 5.1 percentage points and employment insurance by 5.8 percentage points when compared to non-eligible students (ESDC, 2019, 22).

The total social net benefit per student (over 25 years at 3% discount rate) is \$7,490 compared to a non-participating student. **Figure 4** illustrates the cost and benefits associated to individual participants and the government over a 25-year period.



\* Components may not sum to reported total due to rounding

Chart Source: ESDC staff estimates based on results found in Lavecchia et al. (2018). "Long Term Impacts of the Pathways Education Program" for ESDC.

**Figure 4: Cost-Benefit Analysis of Pathways to Education**

Source: Employment Social Development Canada- Evaluation of Pathways of Education, Final Report 2019

### 4.1.5. Funding

Funding for Pathways comes from a variety of sources. Half of the funding comes from different levels of government, and the other half from foundations, corporations, individuals and other supports. For Ontario sites, the breakdown of Pathways funding in the 2014/2015 fiscal year includes; Ontario government (37%), federal government (23%), corporations (23%), foundations (7%), individuals (5%) and events (5%) (ESDC, 2019, 40).

Since 2010, Employment and Social Development Canada has invested over \$55 million in Pathways Canada. In the 2017 Budget, the federal government committed to investing an additional \$38 million over the next 4 years, starting in the 2018/2019 fiscal year (ESDC, 2019, 7).

#### **4.1.6. Pathways Effects- Study of Regent Park Beyond High School Completion Rate**

Oreopoulos, Brown and Lavecchia compiled data from 7,901 students from Toronto Community Housing Sites who entered grade 9 in the Toronto District School Board between 2000 and 2008. They use a difference-in-difference empirical strategy to assess the overall impact on graduation rates and post-secondary attainment of students in Regent Park relative to students in other Toronto Community Housing Sites. Using data from Toronto Community Housing, Pathways administrators and Toronto District School Board, they assessed if Pathways students would have sufficient credits to complete high school by the end of their fifth year. As the program was phased in cohorts, researchers could compare the results of Regent Park to students living in other public housing projects.

Information about post-secondary intention and enrollment within 5 years of entering Pathways was also obtained. This was to understand Pathways' role and influence on desired outcomes and to establish a more transparent evaluation of student's academic performance and post-secondary aspiration and attainment rates.

Oreopoulos, Brown and Lavecchia applied a regression model to control for the effect of age when entering high school, gender, immigrant status, income status, location of housing and primary language spoken at home. They found that these factors played a very small role in explaining the differences among sites.

Pathways had tremendous success in participation rates and high coverage rate of eligible students. In the first-year Pathways was offered at Regent Park, 58.5% of eligible students registered, growing to 80.7% in the second year, and 89.3% in the third year (Oreopoulos, Brown and Lavecchia, 2014, 24). After three years, they found that Pathways had effects on school engagement, math and reading scores, and the likelihood of taking prerequisite courses for university. There were greater impacts for

females than males in high school completion rates, and a higher impact for males than females in 2- year community college effects.

Furthermore, Pathways continued to reduce student absenteeism in subsequent grades. The first Pathways cohort (2001) missed 3.4% fewer school days in its grade 9 year than the previous, 2000, pre-Pathways cohort (10.8% vs. 7.4%), and by grade 11, absenteeism was 7.4% lower (8.5% versus 15.9%) (Rowen & Gosine, 2005).

#### **4.1.7. Pathways Effects- Beyond Regent Park**

Pathways addresses educational barriers and finds strategies to ensure a more equitable participation of disadvantaged students in post-secondary education. 79% of students who participate in Pathways demonstrate on-time high school graduation, and 73% of those students participate in post-secondary education (ESDC, 2019, 8). These figures illustrate highly successful results, as typically only 47% of students in the lowest income quintile and 57% of students in the second-lowest income quintile successfully transition to post-secondary.

On average across the six Ontario sites, graduation rates for Pathways students were 19.1 percentage points higher than comparable non-eligible students. Pathways tailors their programming to the needs of the youth and the community. In Winnipeg, Manitoba, 72% of Pathways participants identified as being Indigenous, and programming was tailored to address multiple barriers faced by Indigenous students and allocated resources for their unique needs (ESDC, 2019, 17).

#### **4.1.8. Feasibility of Expansion of Pathways**

The success of Regent Park created opportunities to test if the initial impacts could be replicated across Canada. Pathways Canada ensures that, for each project, there is secure funding for a 5-year cohort, quantitative data that demonstrates a need for Pathways and a suitable community partner. For a community to be eligible for a Pathways site, they must demonstrate a need and capacity to fully execute a Pathways program. Characteristics of typical neighbourhoods include high poverty rates, low high school graduation rates, high immigrant populations and low education attainment levels (Kettle-Verleyen, 2013, 23).

#### **4.1.9. Self-Selection and Migration Bias**

Self-selection bias can occur when motivated parents move deliberately into a Pathways catchment area to participate in the program. This creates a bias that improves Pathways high school graduation and post-secondary attainment rates relative to what would probably have arisen without the migration. Another potential bias is family effects; parents who are most likely to enroll their children in Pathways are those parents most likely to assure their children graduate with or without Pathways. Such parents are conscious of the benefits of Pathways and value educational outcomes; therefore, they would jump at the prospect of better tutoring, mentoring and financial support. These biases mean that simply comparing the completion rate of Regent Park students in Pathways relative to Regent Park students not in the program is not a realistic assessment of the impact of Pathways.

To avoid self-selection bias, Oreopoulos, Brown and Lavecchia establish credible comparison groups. The underlying assumption is that a similar share of motivated parents (whose children are likely to graduate with or without Pathways) exists in the control neighbourhoods as in Regent Park (Oreopoulos, Brown and Lavecchia, 2015, 3). In addition, migration bias is minimized because the Pathways program was not introduced to residents prior to recruitment and long wait times for public housing made it unlikely for motivated parents to move to Regent Park for enrollment. Likewise, the difference-in-difference analysis reduces both self-selection and migration biases because high school completion rates in Regent Park are compared to relative student cohorts in other housing projects that did not have Pathways.

#### **4.1.10. Limitations**

There is a lack of available data on how Pathways neighbourhood sites are selected and what determines a neighbourhood's ability to host a Pathways program. As there are only two sites in the Lower Mainland (one in Vancouver and the other in Surrey), the lack of transparent evaluation criteria makes it difficult to determine why certain sites are chosen over others and how readiness is determined in communities. For example, Britannia Secondary School in the Grandview- Woodland neighbourhood and King George Secondary School in the West End neighbourhood have both consistently shown the two lowest high school graduation rates in Vancouver. Why is

Pathways' catchment area not extended into these two neighbourhoods despite showing the highest need?

Another limitation of Pathways is the lack of additional programs and resources for students who choose to not continue with post-secondary education. Pathways does not offer programs and financial support for students who take alternative routes such as entering the workforce, taking a gap year or starting an internship or apprenticeship.

Pathways serves many vulnerable students who are socially and economically marginalized, and face challenges of poverty, affordable quality housing, drug addiction and crime. Pathways cannot address all structural socio-economic inequalities of marginalized groups living in their catchment area. Pathways works as youth intervention program for more equitable student outcomes and to enhance the opportunities of low-income groups to succeed.

## **4.2. Britannia Homework Club**

The Britannia Homework Club began in 2001 to support students in academic, social and developmental skills. There is a strong emphasis on a collaborative and supportive environment to welcome students who come together to study, play games, build relationships and socialize. Britannia Homework Club is offered as a tutoring site for Pathways participants to fulfill their required 3 hours of tutoring a week.

The Youth Engagement Project (YEP) began in 2012 and runs as an extension of the Homework Club. It is an intensive, incentive-based program that provides support and engagement for at-risk youth. Britannia Secondary School is situated in one of Vancouver's poorest neighbourhoods, with 30% of its grade 10 students not on track to graduate within the next 2 years.

### **4.2.1. Eligibility**

All students attending Britannia Secondary School are eligible for the Homework Club and YEP. Exceptions can be made for non-Britannia students to participate in the Homework Club if they follow Britannia's Code of Conduct. In addition, Britannia's Homework Club is offered as a Pathways tutoring site for students to receive their

required 3 hours of tutoring a week. There is no attendance cap for the Britannia Homework club.

Only Britannia Secondary School students can participate in the YEP. To be eligible for the YEP, students must have failed one or more classes in the previous school year, and show willingness to commit to program standards. Due to funding limitations, limited students (between 15-20) are chosen per year to participate.

#### **4.2.2. Funding**

A Board of Directors, made up of retired teachers and counsellors, applies annually for grants to fund the Homework Club and the YEP. Both programs are considered independent from Britannia Secondary school and are donor-dependent; funding is not provided from the Vancouver School Board or provincial government. In the YEP, bursaries for students attending post-secondary school are from private donors.

#### **4.2.3. Structure**

The Britannia Homework Club meets every Monday, Tuesday and Thursday in two adjoining classrooms at Britannia Secondary School from 3:00pm-6:30pm. Classrooms are set-up and used as a studying and socializing space for students. On average, there are 50 students in attendance to the Britannia Homework Club. Snacks are provided after-school and a hot meal is shared between 4:00 pm-5:00 pm. Coordinators put an emphasis on recruiting grade 8 and 9 students to start to build positive relationships and help develop healthy study habits early in high school. Tutors for the Homework Club are post-secondary volunteers from UBC's Kite Program.

The YEP runs alongside the Homework Club and meets three times a week. The YEP replicates many of Pathways' supports, and uses their financial incentives model to address social and economic inequalities.

#### **4.2.4. Financial Incentives**

There are few financial incentives for students just in the Homework Club. Students are welcome to enter and leave when they please, and when they complete 30

minutes of studying, they are provided a stamp. After 10 stamps, they receive a small gift from the Homework Club coordinator.

Students in the YEP are paid stipends for every completed goal, to a maximum of \$50 per month. A further \$500 is set aside for post-secondary education if students pass all their classes. Students are provided with academic tutors, opportunities for field trips, personal support and financial incentives. Seminars are provided on study habits, essay writing and provincial exam preparation. In its inaugural year in 2012, 15 students were accepted, which expanded to 20 students in the following year.

### **4.3. The Quantum Opportunity Program**

The Quantum Opportunity Program (QOP) provided after-school supplemental education, developmental activities and financial incentives for at-risk and low-performing high school students.

Education activities included forming an individual education plan, one-on-one tutoring, computer-assisted instruction and college planning such as college and campus visitations. The program objective was to improve the likelihood of low academic attaining students in completing high school and enrolling in post-secondary education or a training program. Developmental activities were designed to reduce risky behaviour and provide an opportunity to learn about topical issues such as health, alcohol, drug abuse, sex, family planning and career planning. Community service activities helped youth develop a sense of community and responsibility. This included volunteering at a nursing home, local food bank and activities aimed at improving the conditions of the community.

The QOP first began in 1989 as a controlled trial research design. It served a single cohort of ninth grade students over a five-year period in seven evaluation sites across the United States. The Eisenhower foundation replicated the program in four sites from 2002- 2006 that served over 60 students per site. As of March 2020, there are currently no QOP sites active.



### **4.3.1. Objective**

The QOP promoted academic achievement, post-secondary enrollment and social competencies of low academic attaining and low-income youth. It was a broad-ranging, multi-service program that provided ongoing assistance and mentoring throughout the student's high school years.

The QOP encouraged long-term involvement and meaningful relationships that continued after the completion of the program. It differentiated itself from the "add-on" and "second-chance" traditions of most youth programs (Hahn, Leavitt & Aaron, 1994, 3). The enrollment and detainment strategy of the QOP was different from other youth programs because regardless of motivation and participation, youth continued to be enrolled in QOP even if they were incarcerated, moved schools, dropped out or became inactive.

### **4.3.2. Eligibility**

Students were eligible for the QOP if they were identified having low grades during their eighth-grade studies at the participating high school. There were three criteria eligible students must satisfy: they cannot be repeating the ninth grade; they must have a grade point average below the 67<sup>th</sup> percentile of all students entering the ninth grade at the school, and they must not have any physical and learning disabilities that could prevent them from participating. In the 1989 randomized control trial, participating youth were randomly put into a treatment group (580 students) or control group (489 students) (US Department of Education, 2007, 5).

### **4.3.3. Funding**

A single national community-based organization would provide guidance, technical assistance and replication interventions, and community based organizations would run QOP demonstration programs. Programs were delivered after-school in one of two settings; either in public school or in self-paced home environments with occasional group activities. In the randomized control trial, the average cost was between \$22,000 – \$28,000 per enrollee over the five years (US Department of Education, 2007, 2).

#### **4.3.4. Structure**

Both students and administrators received financial incentives to meet program participation goals. Staff received incentive payments based on the time youth spent in program activities and number of youth participating. There was a prescribed annual participation goal of 750 hours per student: 250 hours of educational activities, 250 hours of developmental activities and 250 hours of community service (Hahn, Leavitt & Aaron, 1994). Students received an hourly stipend of \$1.25 and an additional \$100 bonus if they completed 100 hours that could be used for college tuition (Rodriguez-Planas, 2012, 21). On average, youth received \$350 in the first year, however, participation decreased as the years went on, and youth earned on average, \$156 in the fourth year. Additionally, students were promised to receive an amount equal to their earnings if they graduated high school and continued with post-secondary education or a training program. Youth in the program, on average, received \$1000.

The QOP was more intensive than other youth mentoring programs. Case managers were more involved with youth for longer periods of time and available during off-hours for emergencies. All program activities continued throughout the summer and school vacation periods. Youth were encouraged to attend summer school if they failed a class, and case managers assisted youth age 16 or older to find summer jobs. Community service and developmental activities such as college/ job planning, community service projects and volunteering did not cease with the school year.

#### **4.3.5. Findings**

When assessing three randomized evaluations of the QOP, each study only found positive short-term benefits of the program. The evaluations found negligible long-term employment effects and a fading effect on long-term benefits. The program fared better for female participants than male participants, and for students in the middle of the grade distribution.

Rodriguez-Planas (2012) conducted a randomized evaluation of the QOP by assigning students entering the ninth grade to either a treatment group or a control group. Treatment group students received year-round support workers and services, financial rewards, academic tutoring and life skill activities. Students in the treatment

group were also required to participate in community service, educational activities and development activities after-school and half-days during the weekend. The control group was only eligible for youth services offered by the community.

The study found that QOP participation was correlated to higher post-secondary attainment, but its effects on high school graduation faded within two years. Control group youth quickly caught up to treatment group youth, with negligible long-term employment effects.

The program fared better in multiple dimensions for female participants relative to male participants. There were improved educational effects for women in short, medium and long-term, in addition to long-term employment outcomes. Whereas for men, participation did not improve short term educational outcomes or long-term employment outcomes, and even increased risky behaviour up to five years after the program.

In a second randomized evaluation, Hahn, Leavitt, Aaron & Heller (1994) found positive effects of QOP for only two years. The treatment group scored higher in eleven academic and functional skills than the control group, with five of the scores being statistically significant (Hahn, Leavitt, Aaron & Heller, 1994, 6). There were also differences in expectations for post-secondary education between the treatment and control groups. After two years, the treatment group showed a much higher interest in post-secondary education when compared to the control group, and the difference was statistically significant (Hahn, Leavitt & Aaron 1994, 6).

Hanh, Leavitt, Aaron & Heller (1994) also pointed out significant program outcomes between different demonstration sites. Philadelphia was more successful than other sites because of its ability to maintain meaningful relationships, a high group morale and a group identity among QOP students. It showed statistically significant results in academic and functional skills, and educational expectations. In Saginaw, Michigan and Oklahoma City, Oklahoma, there were only slightly positive outcomes. By senior year, the structured program activities and institutional ties between students and the program were minimal. However, personal ties between the coordinator and students remained strong and was of significant value to many youth. In San Antonio, the QOP had no net positive effects on students, and the control group fared slightly better than the treatment group.

In the last randomized control trial, Schirm, Rodriguez-Planas, Maxfield & Tuttle (2003) assigned 1,110 QOP eligible youth to either a control or treatment group. They interviewed both groups, collected survey data regarding risky behaviours, conducted telephone interviews and administered math and reading achievement tests. They also obtained both high school transcripts and information about students from QOP case managers.

They found short term results to be statistically significant. The program increased the likelihood of enrolled students graduating high school with a diploma by 7-percentage points and the likelihood of engaging in post-secondary attainment by 6-percentage points (Schirm, Rodriguez-Planas, Maxfield, & Tuttle, 2003, 54). Furthermore, the QOP was more beneficial for enrollees at the middle of the grade distribution than for enrollees at the top or bottom of the grade distributions. In the treatment group, enrollees in the middle of the distribution were 14-percentage points more likely to receive a diploma. Whereas control group youth had a 13-percentage point increase in receiving a college or university acceptance and an 8-percentage point decrease in teen pregnancy.

However, the QOP did not meet its secondary goal of reducing risky behaviour (e.g. criminal activity, alcohol consumption and teen pregnancy), improving achievement scores or the number of credits earned by enrollees. In addition, participation in the program was substantially less than the prescribed annual goal of 750 hours, and declined throughout high school years. Like the findings of Hanh, Leavitt, Aaron & Heller (1993) and Schirm, Rodriguez-Planas, Maxfield & Tuttle (2003), they also found that the success of the QOP differed between sites.

#### **4.4. I Have a Dream Program**

Beginning in 1986, the I Have a Dream Initiative (IHAD) provides coordinated academic and financial support for students from elementary school into early years of college. It first began as a college tuition promise for East Harlem students, and it later developed into a comprehensive support and mentoring program for high-risk students (Coons & Petrick, 1998, 82). IHAD is only operational in the United States; as of March 2020, there are currently 14 active IHAD sites and 5 new program sites in progress.

There are approximately 67 program participants per IHAD cohort (Rhodes, Truitt & Martinez, 2005, 1).

In a coordinated effort between sponsors, project coordinators, volunteers and community organizations, the program supports high-risk students in reaching their educational goals. Each IHAD site has tailored outcomes based on availability of resources and the needs of that unique community. Sponsors fully fund the program and adopt a class of students between the 3<sup>rd</sup> and 5<sup>th</sup> grades or a cohort from a housing project. Project coordinators are employed by sponsors to coordinate activities, motivate students to participate in programming and encourage students to stay in school. Local community organizations such as the Boys' and Girls Club and YMCA are used as a meeting space and provide oversight to the program.

#### **4.4.1. Objective**

The objective of IHAD is to enhance school experiences for participants, reduce antisocial behaviours and promote educational achievements. This is achieved through promoting positive relationships with caring and responsible adults such as their project coordinators and sponsors. It is designed to support high-risk students and help them transition from elementary school, all the way to post-secondary education.

Building social trust and commitment among participants is crucial for the success of the program. Youth reported that they were highly influenced by their relationship with sponsors and project coordinators as they were an avenue for motivation, intervention, academic success and trust. Youth could acknowledge their need for trusting adults, and in turn, these adults provided youth with information and resources (Kahne & Bailey, 1999, 330).

#### **4.4.2. Structure**

Sponsors provide direction, oversight, mentorship and scholarships for program recipients (Dreamers). Sponsors could be individuals, couples, community organizations, private foundations, churches or colleges. Mentorship is a major aspect of the program; sponsors are expected to play an active role either directly or through hired surrogates (Rhodes, Truitt & Martinez, 2005, 3). Sponsors typically make an initial

commitment of \$300,000, and provide an additional \$150,000 over time (Rhodes, Truitt & Martinez, 2005, 4). Participants build long-term relationships with their project coordinators and sponsors to increase their employment and academic opportunities. There is an emphasis on developing personalized relationships and strengthening community connections to increase the social capital of inner-city youth.

The willingness to respond to program expectations comes from the strength and trust between the project coordinators/sponsors and participants. Project coordinators/sponsors provide a sense of support to participants that is available whenever required. IHAD does not work alongside the school system; academic, socio-emotional support is provided after-school, on the weekends and over the summer, to a maximum of 10 years. Long-term relationships are built to allow participants to take advantage of supports and opportunities, and positively respond to prosocial behaviours and norms for academic achievements.

The IHAD model facilitates access to extensive social and professional networks for participants. IHAD leverages social capital of sponsors. Sponsors use their extensive social and professional networks for educational enrichment and employment opportunities for students. This builds social trust between sponsors and participants. Through project coordinators and sponsors, participants were provided summer job placements, community service opportunities, academic enrichment activities, extra-curricular activities and referrals to city programs.

Parents are encouraged to participate in IHAD with their children. These include the development of a parental advisory committee and reinforcing positive educational behaviours. IHAD provides opportunities for parent training and adult education classes (Coons & Petrick, 1992, 88).

#### **4.4.3. Scale**

IHAD operates on a small scale to maintain a personalized environment. This allows for a comprehensive and personalized program to manage the needs of all the participants. In addition, small group environments allow sponsors and staff to provide higher levels of accountability, higher quality implementation and more individualized support for youth.

IHAD reinforces practices that promote high academic performance. Participants are rewarded for good grades and attendance; in one program, five Delaware students were given an all-expense paid trip to New York for a weekend (Coons & Petrick, 1992, 88).

#### **4.5. Academic and Behavioural Intervention with Disadvantaged Youth (Chicago Randomized Experiment)**

Cook et al. (2014) examine the systemic “mismatch” in organized school systems. Given the wide range of student skills, educational programs are not optimally designed for students who fall behind in grade-level material. Schools do not have resources to individualize academic instruction to bring students who have fallen behind back to their grade level.

Chicago has one of largest urban school districts in the United States, with 87% of Chicago public school students eligible for free or reduced price lunch (Cook et. Al, 2014, 4). Non-academic barriers such as family background, crime and poverty adversely impact educational outcomes of Chicago youth. On average, Chicago students are two years behind in grade level reading and four years behind their expected grade-level math (Cook et. Al, 2014, 6). Students in the Chicago public school system largely come from two dominant races- 44% identify as Hispanic and 42% identify as Black.

In the study, students came from racially and economically segregated neighbourhoods. The average GPA of all the students was 2.1 on a 4-point scale, and one in five had been arrested prior to the study. The cost-per-student was around \$400 per student, but expected to be \$2,800 per student if carried out at a large scale in a district and all the program slots were filled up (Cook et. Al, 2014, 31).

In the 2013-2014 school year, the study assigned 2,718 male students in the 9<sup>th</sup> and 10<sup>th</sup> grade from 12 Chicago public high schools to receive intensive, small group tutoring (treatment group) or to a control group. The intensive, small group tutoring (treatment group) included math tutoring for one hour each day during school days, and the control group enrolled in tutoring as a for-credit class. The goal of the treatment

group was to develop positive relationships and maximize the student's time-on task. Both groups received access to after-school tutoring.

The study focused on math tutoring because they found a correlation between failure to complete math classes and high school dropout. In addition, they believed that success in math classes determined long- and short-term success in school. For the treatment group, math achievements in a broad-based math exam significantly increased – between 0.19 to 0.31 standard deviation. There have also been reductions in math course failures and increases in math scores.

## **4.6. Case Studies of Government Grants & Per-Pupil Funding**

### **4.6.1. Title One Funding**

The US Department of Education provides financial assistance to public schools, local education agencies and state educational agencies with a high number of low-income families. Title 1 school funding began in 1965 to improve education outcomes of low-income students across the United States. There are two programs available for Title 1 schools: targeted assistance for low-income students and a school-wide improvement delivery model. In the targeted assistance program, funds can only be used on students who are identified as high-need. For a school-wide program, 40% or more of students must be considered low-income. Schools determine themselves how to use Title 1 funds, which could include extra instructional support, curriculum updates, instructional activities, parental involvement, hiring additional staff or programming to bridge the gap between low-income students and more affluent students. In addition, schools must meet the criteria set out by the US Department of Education such as improved achievement results of students, high quality instruction, increased parental involvement and regular coordinated and supported education programming. The funding formula is based on census poverty estimate data, number of low-income students who live in that area, and the cost of education in each state. In 2014/15, the federal government provided over 14 billion dollars to Title 1 schools. In 2015/16, more than 55,906 public schools were eligible for Title 1 funding, serving over 26 million students in elementary and secondary schools (US Department of Education, 2018).



#### **4.6.2. The Aboriginal Academic Achievement Grant**

The Aboriginal Academic Achievement (AAA) Grant in Manitoba provides school districts with a per-pupil funding for each Aboriginal student considered 2 or more grades behind (Office of the Auditor General, 2016, 33). Manitoba has the lowest high school graduation rate of Indigenous students in Canada, with a 32% gap in high school completion rates between Indigenous and non-Indigenous students (Office of the Auditor General Manitoba, 2016, 11). The Aboriginal Academic Achievement Grant requires schools to spend 50 percent or more of grant funds on literacy and numeracy initiatives for Aboriginal students (Office of the Auditor General Manitoba, 2016, 16).

The Department of Education and Advanced Learning identifies the number of Aboriginal families with children under 19 using Statistics Canada data. This is different from Alberta and British Columbia, where students voluntarily declare their Aboriginal identity. Statistic Canada data is used because the Department recognizes that students and families may not feel comfortable in disclosing this information to their schools, and it may be inappropriate and unfair as self-identification is a personal choice.

In 2014/15, an average grant of \$225,978 was provided per school district, which translated to approximately \$290 per self-identified Indigenous student (Office of the Auditor General Manitoba, 2016, 24). This grant provides direct support to Aboriginal students through additional academic resources, literacy programs, and hiring full-time Aboriginal Academic Achievement Workers and Educational Assistants in the classroom.

Grants could be used to support parental involvement and engagement in their child's educational activities. These could include fostering stronger connections between the parents and the school, providing resources to support children's learning and well-being at home, developing culturally diverse materials in different languages to keep parents informed, and hosting workshops and learning opportunities to engage parents.

Manitoba's Building Student Success with Aboriginal Parents Grant (BSSAP) aims to increase Aboriginal parent's involvement in their child's education. The grant provides parents with skills and knowledge to better support their children in school readiness, success and wellbeing. In 2014/2015, BSSAP grants totaled to \$600,000,

and supported 18 school districts in Manitoba (Office of the Auditor General Manitoba, 2016, 24).

### **4.6.3. Indigenous Students in BC**

Like Manitoba's Aboriginal Academic Achievement Grant, a similar initiative was done for Indigenous students in British Columbia. The Ministry of Education previously provided \$1,000 to school districts for each self-identified Indigenous student (Richards & Scott, 2010, 40). Funds were used to develop Indigenous educational programs, engage with Indigenous communities and implement Aboriginal Education Enhancement Agreements that focused on Indigenous student's development and outcomes.

### **4.6.4. Connecticut State Department of Education's After-School Grant Program**

The Connecticut State Department of Education requested written proposals from local educational agencies, non-profit organizations, municipalities and public/private organizations interested in developing or expanding an after-school program. To receive grant funds, the programs must offer educational enrichment opportunities for students from kindergarten to grade 12. High quality programs are meant to complement regular school hour activities and student's learning and development. Schools have discretionary power to choose which activity to carry out before or after-school, or during school breaks. These activities include mentoring, tutoring, remedial education, activities regarding health and wellness, STEM, entrepreneurial education, global education, college readiness, and fine arts and music. Students are given opportunities to provide input in the activities offered.

The objective of the After-School Grant Program is to improve academic achievements, reduce absenteeism rates and encourage positive in-school behaviour. Priority is given to joint applicants from community organizations and local school agencies and applicants from low-performing schools. Funding is provided for two years, with a minimum of \$25,000 to a maximum of \$200,000 per year to implement or expand after-school programs (Connecticut State Department of Education, 2017, 2). There is no set number of grants available- this is dependent on the available funds and number of applicants.

#### **4.6.5. Ontario's Learning Opportunities Grant**

Demographic allocations are provided per- low-income students in Ontario through the Learning Opportunities Grant. The grant provides students at-risk of academic failure and disengagement with financial assistance. Schools are allocated funds based on social and economic indicators and student vulnerability such as low household income, low parental education, single-parent household, family violence, substance abuse, proximity to sub-cultures of crime and immigrant/Indigenous/refugee status. In 2019-2020 year, 366.1 million dollars was allocated for the Learning Opportunities Grant (Ontario Ministry of Education, 2019, 9). Schools can use funds for early intervention programs, individualized support, breakfast clubs, homework clubs or after-school programs. Schools do not need to apply to this grant as it is distributed per-low-income pupil.

#### **4.7. Conclusion of Case Studies**

All case studies provided academic and development opportunities for at-risk students to graduate high school. In most cases, a single national community-based organization receives funding from the government, and smaller local community organizations replicate the program across different sites. Programs require steady funding for long-term feasibility and broad-based participation. Donor-dependent programs that are independent from governmental funding face uncertainty in future program operations.

Many programs found success from the strong, guiding personal relationships built between participants and adults. All case managers were involved with youth throughout their high school period, and many worked with schools to receive attendance and academic records and parental contact information. Some programs did not work alongside the school system and provided additional academic and socio-emotional support over the weekend, during the summer time and vacation periods, for up to 10 years.

Small-scale intervention programs that focused on building personalized and long-term connections were highly effective. Programs provided academic and employment opportunities, scholarships, and expectations for positive normative

behaviour. Tutoring was retained in all case studies, and tutors were volunteers from the community. Almost all programs provided financial incentives for post-secondary school, and employment opportunities during the summer time and school vacation periods.

It was difficult for programs to address structural factors such as inadequate schools and funding, lack of upward mobility and job opportunities of parents, intergenerational cycle of poverty and adverse neighbourhood characteristics. Most programs did not just target low performing and at-risk students, as it could have created an “othering” effect. Students who participate in after-school programs may feel inferior, more vulnerable and less intelligent than students who do not find the need to participate.

In terms of government initiatives and grants, funds are provided to school districts with high percentages of at-risk student populations. The goal of the grants is to improve academic achievements, engage with at-risk student populations, encourage parental involvement and provide extra instructional activities. However, school districts have high discretionary power on choosing how to use grant funds (e.g. teacher salaries, building upgrades, curriculum updates, purchasing resources and after-school programs). Grants are provided by the designated Ministry/Department responsible for education in that jurisdiction.

## Chapter 5.

### Policy Options

This chapter develops policy options that support at-risk Vancouver students in graduating high school. All options are designed to support students through programming.

#### **5.1. Policy Option 1: The Ministry of Education establishes an After-School Grant Program and requests written proposals from interested schools and organizations**

This option utilizes Ministry funds to support the expansion or implementation of an after-school program. Schools are responsible for submitting written proposals to the Ministry to indicate their interest in establishing an after-school program and clearly state their goals and project outcomes. Grants opportunities are one or two years targeted-grants. Programs are to provide academic and educational enrichment activities for students outside of regular school hours.

From the grant funds, program administrators and teachers would receive honorariums and salaries. To reduce program costs, volunteers can be recruited for mentoring, tutoring and administrative tasks. Britannia's Homework Club utilized Kite Vancouver's Rise Tutoring program to leverage resources and knowledge of university students.

Program administrators would provide input on supports offered and planned program objectives. These could include tutoring, mentoring, homework help, socio-emotional developmental activities, engagement programs with parents and academic programs. Financial incentives could be established from funds for when students reach their participation or academic goals. A similar initiative was done in the Connecticut State Department of Education's After-School Grant Program. The number of clubs set up across the province is dependent on annual budgetary allocations. In Connecticut, the average cost per after-school program was between \$150,000 and \$200,000, serving 150 students and their parents (Connecticut State Department of Education, 2017, 2). If the BC Ministry of Education allocates an annual budget of 5 million dollars

for the After-School Grant Program, this would allow up to 25 after-school programs to be set-up across the province, and with an approximately cost of \$1,250 per student, per year.

## **5.2. Policy Option 2: The Ministry of Education establishes a province-wide cost-share program and partners with Pathways Canada**

The Ministry of Education is responsible for setting standards and policies for human and social development of students in the BC school system. The Ministry recognizes that educational programs should address the needs of at-risk youth and operate as a place that allows for healthy development of relationships with trusting and supportive adults. However, the Ministry does not administer youth services. The Ministry is responsible for setting out requirements for the BC Graduation Program and to develop guidelines associated with curriculum development and assessment requirements.

This option entails additional funding to Pathways to expand the number of school catchment areas eligible for participation. The Ministry of Education would work with Pathways Canada to seek suitable community partners and high-need neighbourhoods, in addition to securing a five-year cohort funding for additional sites. The Ministry would outline the anticipated outcomes of students participating in the program, criteria for the community partner, funding structures, number of participants and the neighbourhood site.

## **5.3. Policy Option 3: The Ministry of Education provides school districts with a grant based on the share of low-income youth in the district**

This option provides a grant to school districts based on the share of youth in the district living below a certain poverty threshold. Using Statistics Canada data to measure the number of low-income households in a neighbourhood, funds are then provided to school districts per low-income pupil. Superintendents would divide funds based on need and academic outcomes of schools and students. Schools have discretionary power on how the funds may be used; these include mentoring, tutoring, after-school help,

additional resources and courses, professional development for teachers and curriculum updates. Funds would not be directly provided to the student. At the end of the school year, schools would submit a proposal outlining the achieved outcomes, performance indicators of success and how the funds were specifically used. There are precedents such as Title One Funding for low-income students in the United States and Indigenous student grants in British Columbia and Manitoba.

## **Chapter 6.**

### **Criteria**

Each policy option is evaluated against five criteria. Criteria are established to measure the performance of the three policy options, with the goal of increasing high school graduation rates for at-risk students in Vancouver. All criteria are of equal importance for evaluation. These include cost to government, effectiveness of the program, access to at-risk students, entry requirements and ease of access /transportation. Each criterion is ranked with a high, medium/moderate and low ranking, which translate into numerical values of one to three. I use Pathways as a base measure for many criteria as it has been rigorously evaluated throughout Canada, and partners with local Vancouver youth agencies to provide services to at-risk youth. Due to data limitations and the inability to interview the VSB, the numbers found in the criteria reflect data from Regent Park.

#### **6.1. Cost to Government**

This criterion examines the incremental cost incurred by the government because of the program. This encompasses the initial and ongoing cost of program implementation, and is measured in a dollar amount per year.

- A score of 1 (high) is given if the annual program cost is more than \$5,000 per student on programming. \$5,000 is the annual anticipated spending per student in Pathways programs.
- A score of 2 (medium) is given if the annual program spends between \$2,500 and \$5,000 per student on programming.
- A score of 3 (low) is given if the annual program spends less than \$2,500 per student on programming.



## 6.2. Effectiveness of the Program

This criterion looks at the increased probability of at-risk students graduating because of the program offered. Effectiveness of the program has two components: increase in graduation rates among students in the catchment area relative to comparable student populations elsewhere, and incentives and opportunities provided to students for post-secondary education attainment.

Higher graduation rates are measured relative to the percentage point increase in high school graduation rates in Pathways' inauguration year and site (14.2 percentage points in Regent Park for 2001 cohort relative to 2000 cohort).

- A score of 1 (low) is given if there is less than 7.1 percentage points increase in high school graduation rates relative to comparable student populations elsewhere.
- A score of 2 (medium) is given if there is between 7.1 and 14.2 percentage points increase in high school graduation rates. This range is defined as half of the percentage point increase in Regent Park's high school graduation rates in its introductory 2001 cohort, relative to comparable student populations elsewhere.
- A score of 3 (high) is given if there is more than 14.2 percentage points increase in high school graduation rates relative to comparable student populations elsewhere. Regent Park showed a 14.2 percentage point increase in their high school graduation rate in the program introductory 2001 cohort.

The second component looks at incentives and opportunities provided to students for post-secondary education attainment. Each year, Pathways awards to each student \$400 per academic year to be used for post-secondary expenses.

- A score of 1 (low) is given if there is less than \$200 awarded to each student per academic year to be used for post-secondary expenses.
- A score of 2 (medium) is given if there is between \$200 - \$400 awarded to each student per academic year to be used for post-secondary expenses.

- A score of 3 (high) is given if there is more than \$400 awarded to each student per academic year to be used for post-secondary expenses.

### **6.3. Access to At-Risk Students**

This criterion looks at the ability and barriers to target at-risk students.

- A score of 1 (low) is given if there are significant barriers (i.e. no direct avenues of targeting at-risk youth, inability to obtain school lists) to target students for programming.
- A score of 2 (medium) is given if there are moderate barriers (i.e. referrals from the Ministry of Education or Ministry of Children and Family Development or non-governmental/ governmental organizations, door-to-door outreach to parents and word of mouth advertising) to target students for programming.
- A score of 3 (high) is given if there are no barriers (i.e. access to school lists and academic records) to target students for programming.

### **6.4. Entry Requirements**

This criterion assesses whether students are eligible to participate in the program. It considers if:

1. the program equally allows all groups to participate
  2. the program is based on geographical catchment areas
- A score of 1 (low) is given if only students living in geographical catchment area can participate in programming
  - A score of 2 (moderate) is given if students must seek approval or receive a referral from school administrators or health professionals to participate in programming if they do not live in the geographical catchment area
  - A score of 3 (high) is given if there is universal participation. Any student can participate regardless of where they lived and went to school and do not require a referral.

## 6.5. Ease of Access/ Transportation

This criterion looks at accessibility of sites and additional incurred time to reach the site. This is measured by the time and costs incurred by students to reach the programming site. Some students may be unable to reach programming sites due to financial barriers, safety concerns and negative characteristics of certain neighbourhoods.

- A score of 1 (significant) is given if a youth needs to travel on public transportation or in a car after-school to reach a programming site.
- A score of 2 (minimal) is given if a youth needs to take active transportation (walking/ cycling) after-school to reach a programming site.
- A score of 3 (none) is given if a youth does not have to leave their school to reach a programming site.

**Table 3: Matrix of Criteria & Measures**

Criteria	Description	Measure	Score
Cost to Government	What is the incremental spending by the provincial government for this program?	This is measured by the incremental financial contributions or anticipated costs made by the Ministry of Education to fund a program.	High to low, lower is better. High = 1 Medium = 2 Low = 3
Effectiveness of the Program	How effective is the program in increasing the high school graduation rate and post-secondary attainment rate?	This is measured by the probability of at-risk students graduating and proceeding to post-secondary education because of the programming offered.	High to low, higher is better. High = 3 Medium = 2 Low = 1
<i>High School Graduation Rates- Outcomes of Students:</i>			
<i>Post-Secondary Education Attainment Rates- Incentives and Opportunities for Students:</i>		High graduation rates are measured by outcomes of students. Post-secondary attainment rates are measured by incentives and opportunities for students.	

Criteria	Description	Measure	Score
Access to at-risk students:	How easy is it to target students for programming?	This is measured by ability to target at-risk students for participation.	High, medium and low, higher is better. High = 3 Medium = 2 Low = 1
Entry Requirements	What are the entry criteria for students to participate?	This is measured by the number of entry criteria for participation.	High, moderate and low, lower is better. High = 1 Moderate = 2 Low = 3
Ease of Access/ Transportation	Are there any additional travel or barriers to access programming?	This is measured by the time and costs incurred by students to reach the programming site.	Significant, minimal & none, lesser is better. Significant = 1 Minimal = 2 None = 3

## **Chapter 7.**

### **Policy Option Evaluation**

Policy options are devised from case studies of multi-faceted youth programs in Canada and the United States and interviews with youth organizations and policy professionals. As education is under provincial legislature, policy options reflect this division of power.

#### **7.1. Policy Option 1: The Ministry of Education establishes an After-School Grant Program and request written proposals from interested schools and organizations**

##### **7.1.1. Cost to Government**

There are moderate incremental costs to the government if they are to provide grants to all accepted schools and organizations. In Connecticut, the grant awarded a minimum of \$25,000 to a maximum of \$200,000 per accepted school/organization, per year to implement or expand after-school programs that enrich educational and academic activities (Connecticut Department of Education, 2017, 2). The average cost per program was between \$150,000 and \$200,000, serving 150 participants and their parents.

This option requires a committee to review and score written proposals. Depending on the number of applicants, this may be a lengthy process as each application is graded according to the criteria set out in the Request for Proposal.

There may be additional costs to collect and analyze data on the projected outcomes of the program. The Ministry needs to set clear targets and policies for improved outcomes. There must be a system in place to track and monitor the increased academic success, retention in school, attendance and graduation rates.

##### **7.1.2. Effectiveness of the Program**

1. High School Graduation Rate - Outcomes of Students:

Multi-faceted after-school programs have shown academic improvements for at-risk students. At Britannia Secondary School, the YEP capped the program to 15 students. The YEP has shown positive benefits and outcomes; in the first year YEP was offered, two additional students who were previously not on track to graduate within a few years successfully completed their requirements. There is no assessment on the success of the Britannia Homework Club or Youth Engagement Project. On anecdotal data, it was reported that 2 additional students graduated as a result of this program.

Additionally, program participants expressed greater interest in their academic success and more positive attitudes towards school. Specific outcomes include higher grades, improved social skills and better ability to secure adult attachments. To ensure the program meets the needs of the students, program administrators set out clear and specific academic goals and provided high quality instructional support.

## 2. Post-Secondary Attainment Rate- Incentives and Opportunities for Students:

There are moderate incentives and opportunities for students. The Ministry requires schools to provide project activities and goals, and outline how these learning and enrichment opportunities outside of school-hours meet the needs of students.

As after-school programming is not operational during the winter, spring and summer break times, there are minimal student engagement and employment opportunities. Schools could connect students with external youth organizations for employment and engagement opportunities, but do not provide these opportunities themselves.

### **7.1.3. Access to At-Risk Students**

Schools have access to academic and attendance records, biographical data and parental contact information. Schools can easily target at-risk students and contact parents regarding programming. With the help of counsellors and teachers, students can be identified and encouraged to participate in after-school programming. Schools also provide a sense of legitimacy for parents who might hesitate to allow their children to participate in programs elsewhere.

#### **7.1.4. Entry Requirements**

There are minimal barriers for entry in this option. Many in-school programs have open eligibility, and all students enrolled in the school are eligible to participate regardless of academic performance, attendance and goals.

#### **7.1.5. Ease of Access/ Transportation**

There are no transportation costs for in-school programs. In-school programs have minimal costs, safety concerns and need for additional transportation. Under the assumption that students live within safe walking distance, school programs have a considerable advantage in ensuring the safety of their students when compared to external organizations.

### **7.2. Policy Option 2: The Ministry of Education establishes a province-wide cost-share program and partners with Pathways Canada**

#### **7.2.1. Cost to Government**

There are high incremental costs in this option as Pathways has high initial and ongoing costs. It is costly to set-up a new Pathways site as it requires finding a suitable community space, purchasing materials, hiring qualified youth workers and administrators, developing outreach materials, and additional incurred costs to monitor and assess the new site. In Regent Park, the average cost per student over their high school cycle is estimated to be \$14,935 in present value direct operating costs, which translates to about \$5,000 per student, per year (ESDC, 2019, 31). As Pathways is eligible for any student living in the catchment area, there would be uncertainty of cost due to the unknown interest and uptake from students.

#### **7.2.2. Effectiveness of the Program**

##### **1. High School Graduation Rate- Outcomes of Students:**

Pathways successfully addresses educational barriers for high school graduation and finds strategies to ensure a more equitable participation of disadvantaged students

in post-secondary education. Pathways provides opportunities to build meaningful relationships with peers and adults, constructively engage students in their free after-school time and learn new skills. 79% of students who participate in the Pathways program demonstrate on-time high school graduation and 73% of those students participate in post-secondary education (ESDC, 2019, 8).

## 2. Post-Secondary Attainment Rate- Incentives and Opportunities for Students:

Pathways students are awarded up to \$400 per academic year, which can be used for post-secondary expenses (Pathways Mentoring Manual, 2019, 3). In addition, there are greater opportunities for students to drop-in to different Pathways sites and use their services. Pathways offers tutoring and mentoring at 6 different locations in Vancouver. This allows for greater flexibility for students to attend different sites depending their preference and proximity to their schools and homes. After-school tutoring is required three hours per week and is offered four times per week.

Pathways offers monthly Immediate Financial Support (IFS). Youth have the potential to earn a Translink Compass pass or, up to \$50 in grocery cards depending on their participation. The amount is calculated as an overall percentage; 50% school attendance, 17% one-on-one meetings, 16% mentoring attendance and 17% tutoring attendance (Pathways Youth Worker Interview, 2020). Youth are required to complete three hours of tutoring a week, attend mentoring workshops, and meet with their youth outreach worker every 2 weeks. Financial supports encourage youth to participate in programming and attend school. Data is provided by the Vancouver School Board every 2 weeks to track school attendance. Youth are required to sign-in during all programming activities to track participation.

Additionally, there is a high earned income potential for Pathways participants. Pathways works with This Way Ahead Program to offer a 10-week internship at Gap, Banana Republic or Old Navy. The program encompasses a 9-week, part-time life and employment skills workshop to prepare youth for paid employment at one of the three stores. Youth learn how to write cover letters and resumes, prepare for interviews, and learn problem-solving and customer service skills. After the workshop, they are given a placement at one of the stores for a 10-week paid internship. A job coach is also provided to support youth post-internship.



### **7.2.3. Access to At-Risk Students**

Schools help identify eligible students who are likely to benefit from Pathways by contacting and setting up meetings with parents and Pathways administrators. Referrals from the principal, teachers, counsellors and student support teams were the most common means in which Pathways recruited participants. Pathways obtains grade 8 student lists from local schools and visits different households to invite students to participate in the program.

Outreach to parents about out-of-school programs may be more difficult than in-school programs. Sending information home with youth does not guarantee that parents would see it, and in-home visits may be difficult to organize or feel intrusive to some households. Direct contact would allow parents to be aware of the after-school program options, and youth workers could encourage parents to enroll their children.

Pathways would be more successful in recruiting students who dislike the school environment or lack trusting teacher-student relationships. An external youth organization can attract students who were uncomfortable or unhappy at school to participate.

### **7.2.4. Entry Requirements**

The Pathways model poses moderate barriers for participation. The program is only eligible to a student living in the Pathways-defined catchment area. If students want to join Pathways but live outside the catchment area, they require a referral from a counsellor or health professional (Pathways Youth Worker Interview, 2020).

### **7.2.5. Ease of Access/ Transportation**

There are minimal transportation barriers for youth. A large majority of Pathways participants go to Britannia Secondary School and attend the Homework Club located inside the school. Britannia's Homework Club is offered as a Pathways tutoring site for Pathways students to receive their required three hours of tutoring a week. Additional Pathways tutoring sites are located within the catchment neighbourhood and where many program participants reside, such as at Strathcona and Raycam Community Centres.

For youth living outside the catchment area, tutoring is available at Broadway Youth Resource Centre. Youth can also fulfil their tutoring hours at their high school's homework clubs. For this option, youth and their outreach worker would arrange an alternative tutoring hours sheet for the school to sign.

Youth may choose to receive a Translink Compass pass as their monthly Immediate Financial Support. Pathways has also partnered with Shaw Mobi bikes and provided 250 year-passes to youth and their family members (Pathways Youth Worker Interview, 2020). Shaw Mobi bike stations are located at Raycam and Britannia community centres.

### **7.3. Policy Option 3: The Ministry of Education provides school districts with a grant based on the share of low-income youth in the district**

#### **7.3.1. Cost to Government**

There are low incremental costs to the government to establish a new grant to provide school districts with funds based on the number of low-income students. School districts rank-order schools based on poverty levels to determine how much money each school receives. The Aboriginal Academic Achievement Grant and Building Student Success with Aboriginal Students funds a combined amount of \$290 per self-identified Aboriginal student per year (Office of the Auditor General Manitoba, 2016, 4), and the Title 1 School funds between \$500 and \$600 a year per low-income student (Dynarski & Kainz, 2015, 2).

#### **7.3.2. Effectiveness of the Program**

##### **1. High School Graduation Rate - Outcomes of Students:**

Schools have discretionary power on how grant funds would be spent. These could include hiring more teachers, offering professional development opportunities, providing supplemental instruction to the regular education program, additional support for schoolwork and purchasing additional resources. Some schools may not choose to establish programs for at-risk students and schools use funds for curriculum developments, teacher salaries and building upgrades.

## 2. Post-Secondary Attainment Rate - Incentives and Opportunities for Students:

There are limited incentives and opportunities for students with school district funding. As schools have considerable discretion on how the funds would be used, programs would be set-up based on the priorities and goals of the school. This could be in the form of financial incentives for students, curriculum updates, professional development opportunities for teachers, systemic upgrades or purchasing additional resources.

Funding could positively benefit the entire school. All students can take advantage of additional teacher support, supplemental instruction, curriculum updates, program improvement and classroom materials. In the summer-time, there is no earned income potential for students as grants are provided to the school district.

### **7.3.3. Access to At-Risk Students**

There is a strong outreach potential in this option. Schools have access to student's academic performance, attendance records and parent's contact information. This information could be used to target individual students for after-school programming.

### **7.3.4. Entry Requirements**

There are minimal barriers for entry in this option. All low-income students in the school district are eligible for a grant amount used by the district.

### **7.3.5. Ease of Access/ Transportation**

School districts may decide to concentrate their program delivery for low-income students in certain schools. Additionally, schools have significant influence on how funds are spent. Some schools may choose not to adopt programs and use funds for other priorities. This option could require students to travel to external sites to participate in programming and may pose some transportation barriers.

## Chapter 8.

### Recommendation

It is recommended that *Option 1: The Ministry of Education establish an After-School Grant Program and request written proposals from interested schools and organizations* to be adopted. This option has high academic outcomes of students, high access to at-risk students, universal eligibility for all students, and no transportation costs. However, there are moderate incremental costs to the government to establish an After-School Grant Program and there are only moderate financial incentives and opportunities for students.

**Table 4: Matrix Summary of Policy Analysis Results**

Criteria:	Measure:	<i>Option 1: The Ministry of Education establishes an After-School Grant Program and request written proposals from interested schools and organizations</i>	<i>Option 2: The Ministry of Education establishes a province-wide cost-share program and partners with Pathways Canada</i>	<i>Option 3: The Ministry of Education provides school districts with a grant based on the share of low-income youth in the district</i>
<b>Cost to Government</b>	Incremental cost to the government because of the program. High, medium, low. Lower cost ranks higher.	Moderate (2) There are moderate incremental costs to the government to establish an After-School Program Grant. Connecticut Department of Education spends on average \$1,250 per participant, per year in an after-school grant program.	High (1) There are high incremental costs to the government to establish a partnership with Pathways Canada. Pathways spends approximately \$5,000 per participant, per year.	Low (3) There are low incremental costs to develop a new grant based on the number of low-income students. Manitoba's Ministry of Education provides \$290 per self-identified Indigenous student.

Criteria:	Measure:	<i>Option 1: The Ministry of Education establishes an After-School Grant Program and request written proposals from interested schools and organizations</i>	<i>Option 2: The Ministry of Education establishes a province-wide cost-share program and partners with Pathways Canada</i>	<i>Option 3: The Ministry of Education provides school districts with a grant based on the share of low-income youth in the district</i>
		There may be additional costs to establish a committee to review and score written proposals, and collect and analyze data of the program.		
<b>Effectiveness of the Program</b>	The probability of at-risk students graduating and attending post-secondary education because of the programming offered.  High, medium low. Higher is better.			
<i>High School Graduation Rate - Outcomes of Students:</i>		High (3) After-school programming has shown positive benefits and outcomes for at-risk students.	High (3) Pathways has shown positive results in terms of absenteeism rates, academic outcomes and high school graduation rates.	Low (1) School grants can be used on a multitude of initiatives.  This is made with the assumption that if the money is not being explicitly targeted, then the most might be used on other initiatives.
<i>Post-Secondary Attainment Rate - Incentives and Opportunities for Students:</i>		Moderate (2) There are many academic enrichment opportunities for students. However, programs cease in the summer time as school is not in session.	High (3) Pathways works with This Way Ahead Program to offer a 10-week internship at Gap, Banana Republic or Old Navy.	Low (1) Schools may not use funds to implement after-school programming or design programs that include financial incentives.
<b>Access to At-Risk Students</b>	Ease of targeting students for programming.	High (3)	Medium (2)	High (3)

Criteria:	Measure:	<i>Option 1: The Ministry of Education establishes an After-School Grant Program and request written proposals from interested schools and organizations</i>	<i>Option 2: The Ministry of Education establishes a province-wide cost-share program and partners with Pathways Canada</i>	<i>Option 3: The Ministry of Education provides school districts with a grant based on the share of low-income youth in the district</i>
	High, medium, low. Higher is better.	Schools have access to academic records and can target at-risk youth.	Schools refer students to Pathways. Pathways receive school lists from counsellors, health professionals, community centres and the Ministry of Children and Family Development.	Schools have access to academic records and can target at-risk youth.
<b>Entry Requirements</b>	The set-out criteria for participation. High, moderate and low. Lower is better.	Low (3) All students are eligible to participate in after-school programming.	Moderate (2) They would require schools and community members to provide referrals.	Moderate (2) All students are eligible to participate. However, not all schools may implement an after-school program
<b>Transportation</b>	The time and cost incurred by students to reach the programming site.  Significant, minimal & none. Lesser is better.	None (3) There are no transportation costs and high accessibility for in-school programs.	Minimal (2) Youth could receive a Compass Card as their monthly Immediate Financial Support. There are also many sites.	Minimal (2) School districts may decide to concentrate their program delivery in certain schools. Some students may be required to travel to different schools to participate in programming.
<b>Total:</b>		16	13	12

## Chapter 9.

### Limitations

There are several limitations in my research. I was unable to interview counsellors and teachers at Britannia Secondary School because I did not obtain ethics approval from the Vancouver School Board. Beyond data found in public sources and responses from interviewees, I was unable to learn more about the barriers faced by youth and initiatives at Vancouver high schools that addressed low high school graduation rates. At-risk youth were also not interviewed due to ethical challenges such as identification of at-risk youth, privacy, legal status as minors and letters of permission from parents or guardians and teachers.

Another limitation is the inability to obtain Pathways Vancouver data due to information sharing and privacy concerns. Therefore, this capstone assesses the success of Pathways in Regent Park, Toronto. Oreopoulos, Brown and Lavecchia's costs and benefits to individuals and the society and difference-in-difference analysis reflect Regent Park data. The data and results may not be fully reflective of Pathways Vancouver and Surrey conditions, demographics of students (Indigenous and immigrant population) and family income status. In addition, the two sites in BC are relatively new (the Vancouver site was established in 2014 & Surrey in 2017), and much fewer sites compared to eight Ontario sites.

Multi-faceted, broad-ranging youth programs are not the only intervention programs that can improve high school graduation rates. In-school initiatives such as hiring more teachers, personalizing materials for student's success, providing individualized support and monitoring the progress of students could be feasible options to improving high school graduation rates. There should also be a greater analysis of early childhood programs and their role in long-term academic successes. Early childhood programs have shown tremendous success in socio-emotional and cognitive development in primary years. There should be a greater exploration between the effectiveness of early childhood intervention compared to high school intervention and how household income plays a role on the fading phenomenon.

The relationship between the provincial government, schools and youth organizations needs to be further examined. These three groups should work together to identify at-risk youth, set-up program sites, develop programming material, and establish criteria for funding and resources.



## Chapter 10.

### Conclusion

This capstone assessed the feasibility of expanding multi-faceted programs to improve high school graduation rates of at-risk students in Vancouver. I outlined the conditions of three high-need neighbourhoods in Vancouver, looked at the adverse impacts of poverty and neighbourhood effects, analyzed the need for youth programs for at-risk students to improve high school graduation rates, and assessed the ability of youth programs to promote equity of access to programs and resources. I conducted a literature review of youth initiatives in Canada (Pathways to Education, Britannia's Homework Club, The Youth Engagement Project, Manitoba's Aboriginal Academic Achievement Grant, British Columbia's Indigenous Student Grant and Ontario's Learning Opportunity Grant) and in the United States (Quantum Opportunity Program, I Have a Dream Initiative, Title 1 Funding, Connecticut State Department of Education's After-School Grant Program and a randomized control trial in Chicago).

Three policy options were presented to improve high school graduation rates for at-risk youth in Vancouver. The first option was for the Ministry of Education to establish an After-School Grant Program and request written proposals from interested schools and organizations. The second option was establishing a province cost-share program and partnering with Pathways Canada to expand the number of catchment areas. The last option was providing school districts with a grant based on the share of low-income students.

When policy options were weighed against five criteria, it is recommended that *Option 1: The Ministry of Education establish an After-School Grant Program and request written proposals from interested schools and organizations* to be adopted. This option had high academic outcomes of students, high access to at-risk students, universal eligibility for all students, and no transportation costs.

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