

BCG Assessment of Pathways to Education

Executive Summary



July 16, 2007

THE BOSTON CONSULTING GROUP

BCG ANALYSIS OF PATHWAYS TO EDUCATION

- In 2006-2007, The Boston Consulting Group undertook a detailed pro bono study of the Pathways Program to determine the Social Return on Investment (“SROI”) of the Program and provide advice on how the program could be expanded to other communities.
- BCG analyzed both the short-term educational and other results of the program as well as the long-term financial pay back to society.
- Pathways Canada is now working with other communities and funders to expand the program to other neighbourhoods in Canada (five new community Pathways programs will launch in 2007).

PATHWAYS FOCUSES ON HIGH SCHOOL GRADUATION AS THE KEY TO BREAKING THE CYCLE OF POVERTY

Community Background

Regent Park at an economic disadvantage

- Average income \$17K⁽¹⁾
- #1 neighborhood by poverty rate in the GTA- 72.8% ⁽²⁾
- 79% residents visible minority
- 60% residents immigrants
- 2x number of single parents
- No local high schools

In 2000, limited prospects for youth

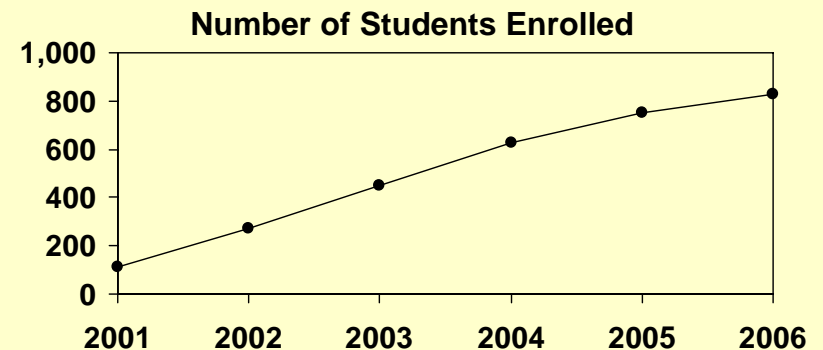
- Drop out rate = 56%, twice city average ⁽³⁾
 - 72% in single parent families
 - 77% in immigrant families (<5 years)
- Nine murders in community
- Few role models, limited support for youth to pursue post secondary education

Pathways to Education Created in 2001

Regent Park Community Health Centre staff created Pathways program in 2001

Research was conducted to identify key strategies necessary to transform the future of youth in Regent Park

Currently 830 students (6 cohorts), enrolled in 60 high schools



(1) Toronto Star / Stat Can GTA census 2001

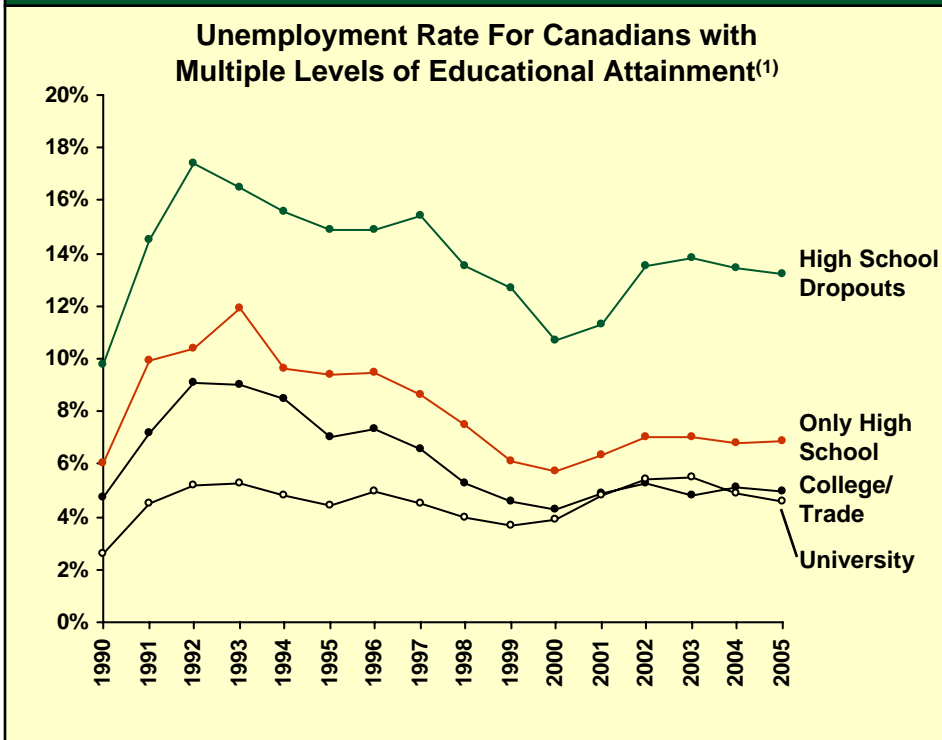
(2) Stat Can- Census 2001, "Poverty by Postal Code" Report by United Way of Greater Toronto and The Canadian Council on Social Development

(3) Toronto District School Board custom tabulation Fall 2005

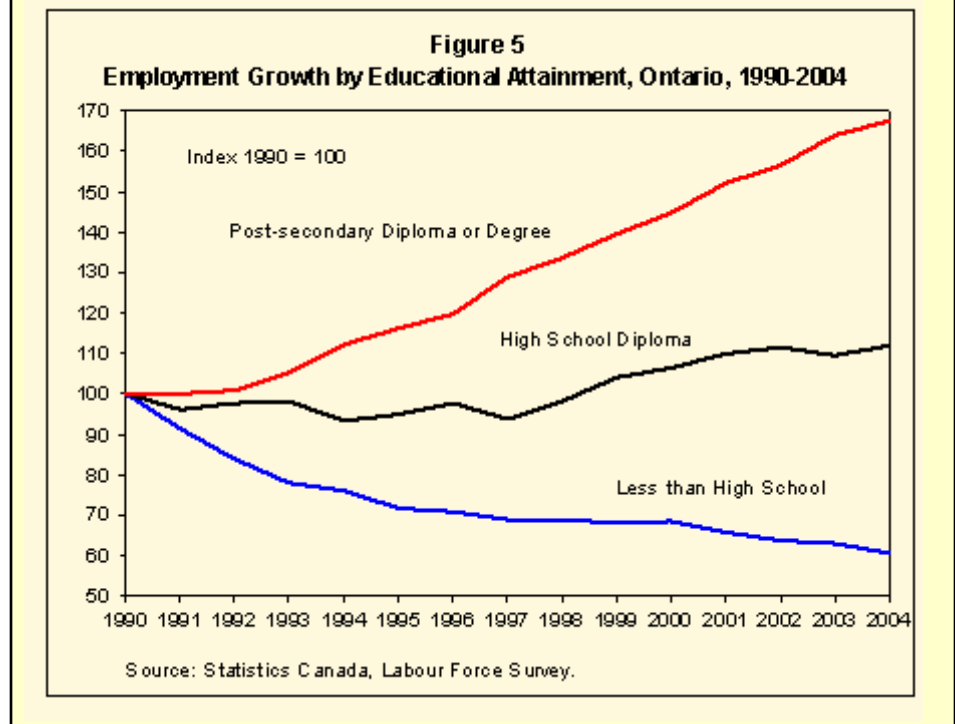
HIGH SCHOOL EDUCATION CRUCIAL IN SECURING EMPLOYMENT IN TODAY'S ECONOMY...

High School Drop Outs Have Higher Unemployment than Youth With No High School

Unemployment Gap between High School Graduates and Non High School Graduates...



...as Employment Growth Favors Higher Education



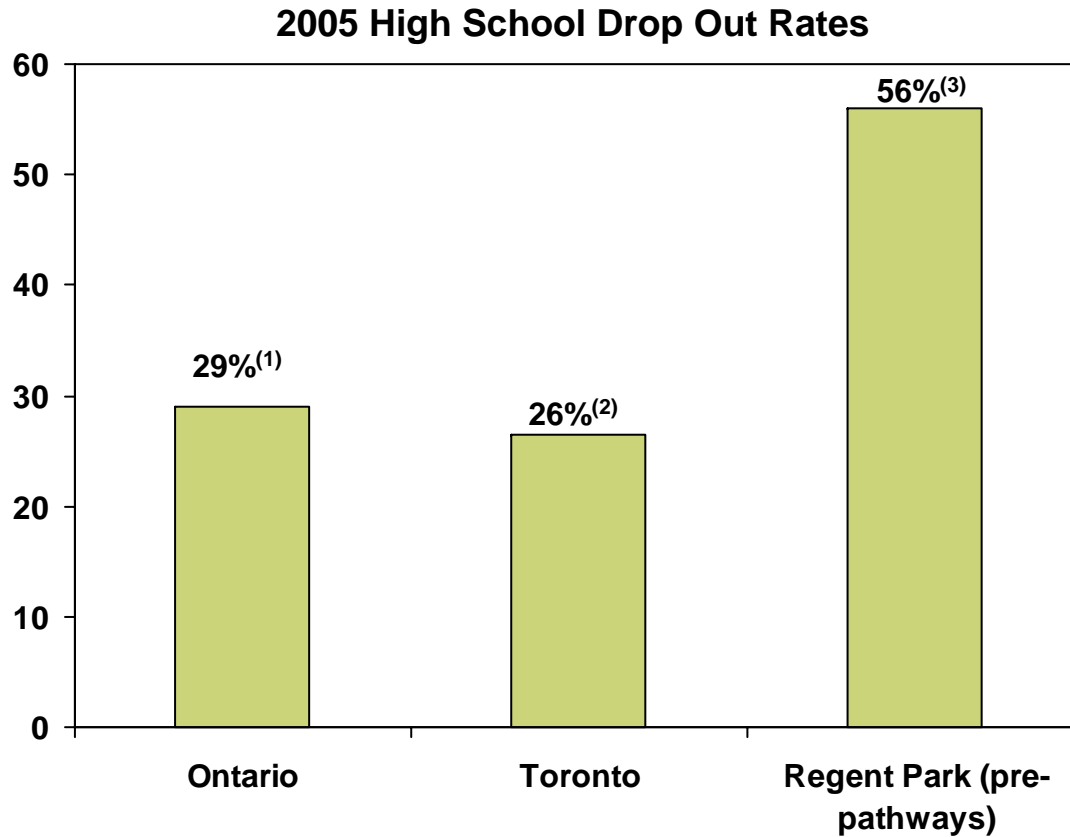
High school diploma required for 89% of forecasted ('04-'09) employment growth in Ontario⁽²⁾

(1) Defined as percent of unemployed people in labour force. Source: StatCan

(2) Labour Market Information and Research, Ministry of Training, Colleges and Universities and Economic Analysis and Information Directorate, Human Resources Development Canada, Ontario Region

...YET NEARLY 30% OF ONTARIANS DROP OUT OF HIGH SCHOOL

Provincial Target of 15% by 2010-2011



**Recent legislation
requires Ontario youth to
stay in high school until
the age of 18**

(1) Legislative Assembly of Ontario, Official Report of Debates, April 25, 2006;

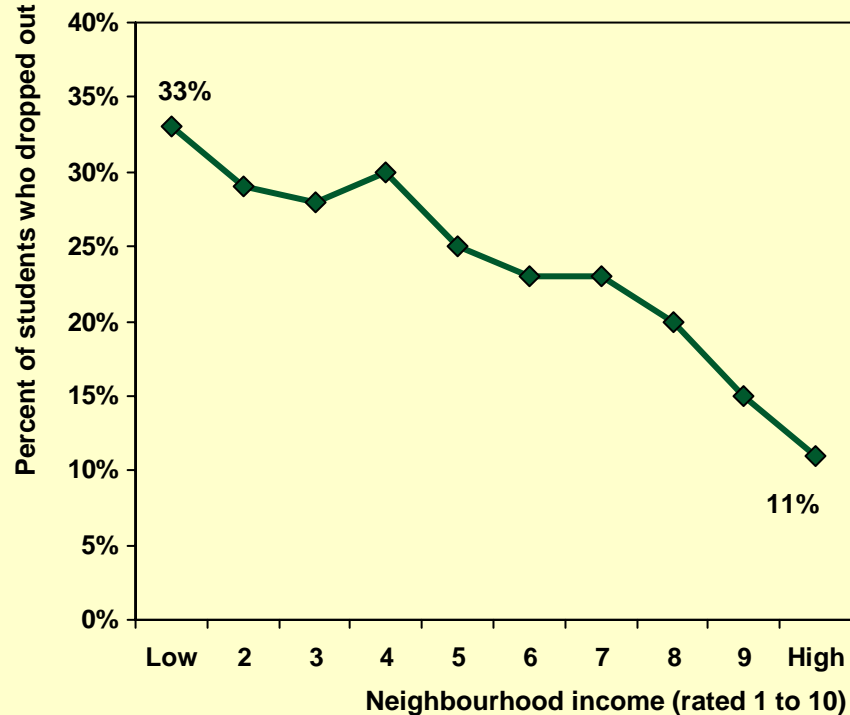
(2) Extrapolation from TDSB data; BCG analysis

(3) Toronto District School Board custom tabulation Fall 2005

UNDERPRIVILEGED YOUTH LESS LIKELY TO GRADUATE FROM HIGH SCHOOL OR REACH POST SECONDARY EDUCATION

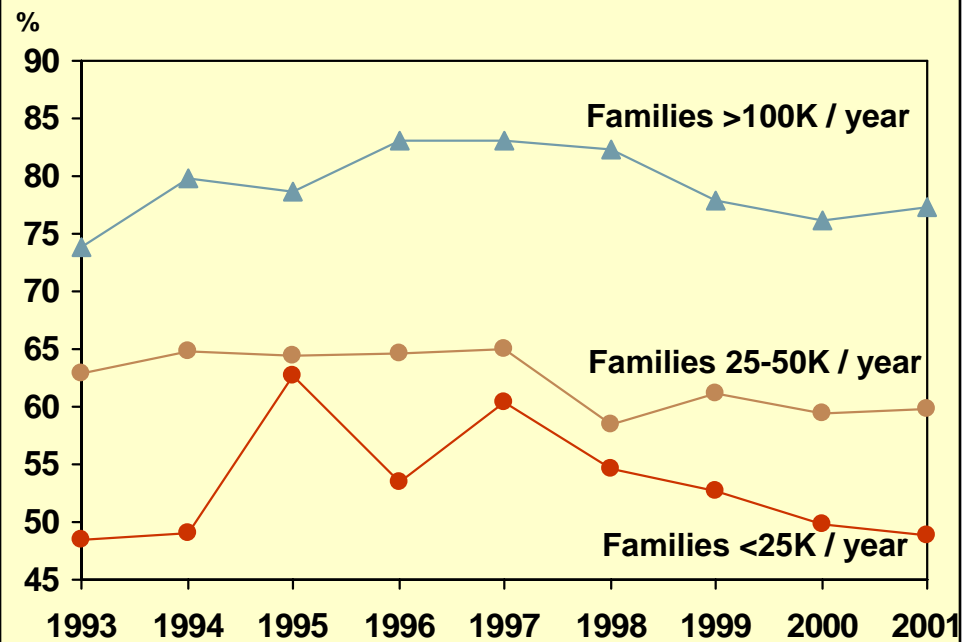
Youth from low income neighbourhoods three times more likely to dropout of high school

High School Drop Out Rate by Neighbourhood Income⁽¹⁾



Youth from high income families ~50% more likely to participate in university/college

Average Participation Rate of Children in Post Secondary Education By Level of Family Income

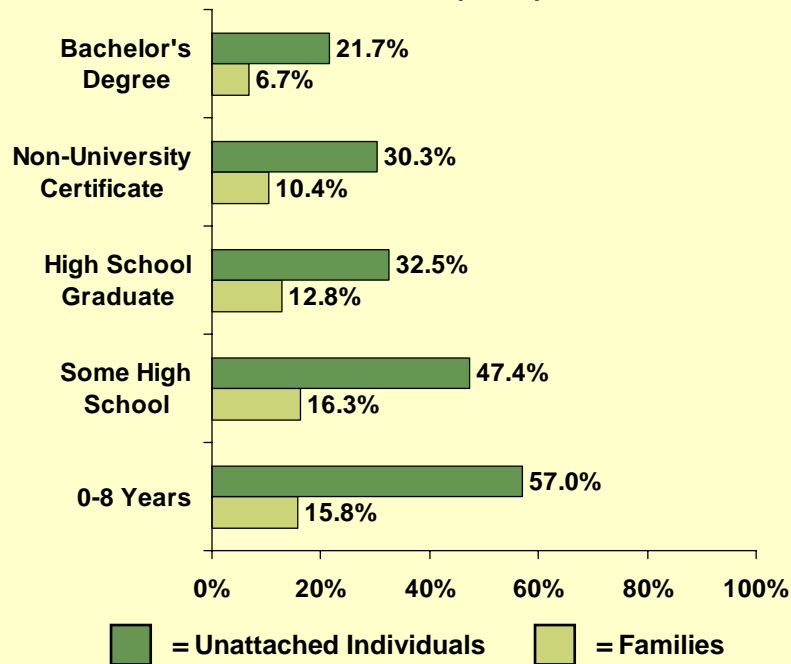


(1) Toronto District School board study of students who started grade 9 in 2000
Source: Statcan

VICIOUS CYCLE OF LOW EDUCATION AND POVERTY EXISTS IN CANADA

Likelihood of poverty significantly higher for non-educated population....

Poverty Rate by Level of Educational Attainment (2003)⁽¹⁾



"Household income affects families' hopes for children's education. Only half of children aged 12 and 13 in families with incomes of less than \$20,000 per year hoped to go to university. The figure was 71% for children from families with incomes over \$80,000."⁽²⁾

"The vast majority of homeless youth have not completed high school. In Ottawa and Toronto, that number ranges between 63% and 90%."⁽³⁾

"In 2004, the unemployment rate among people aged 25 to 44 who did not have a high school diploma was 12.2%, while for those whose highest level of education was high school, it was 6.8%."⁽⁴⁾

Without intervention, children from Canada's low income families are less likely to receive higher education, and more likely to remain impoverished

(1) National Council of Welfare

(2) The Progress of Canada's Children 2001. Canadian Council on Social Development, March 2001.

(3) "Environmental Scan on Youth Homelessness", Research Highlights – Socio-economic series. July 2001, Issue 86.

(4) Provincial Drop-out Rates – Trends and Consequences. Statistics Canada, December 16, 2005.

U.S. AND CANADIAN RESEARCH INDICATES BOTH SCHOOL AND NON-SCHOOL FACTORS CONTRIBUTING TO DROP OUT RATES

A Sample of Factors Addressed by Pathways to Education

“Early School Leavers” Report Identifies Risk Factors and Protective Factors for Youth

Sample Of Non-school Risk Factors

- Low social class
- Minority status
- School-home link

Sample Of School Risk Factors

- Ineffective discipline
- Lack of counseling / support / outreach
- Disregard for learning style
- Low level of engagement

Sample Of Non-school Related Key Protective Factors For Youth

- Supportive others in community (links to child welfare etc)
- School-home link

Sample School Related Key Protective Factors For Youth

- Positive school climate
- Counselors – outreach

Report for Gates Foundation Points To a Need For Discipline, Advocacy and Real-World Learning

Reasons For Dropping Out

- 47% thought classes were not interesting (and did not apply to real-life)
- 43% missed too many days and could not catch up
- 42% spent time with people who were not interested in school
- 38% had too much freedom and not enough rules

Factors That Would Improve Chances Of Staying In School

- 81% increase opportunities for real-world learning
- 71% better communication between parents & school, get parents more involved
- 71% parents make sure their kids go to school every day
- 70% increase supervision at school; ensure students attend class

(1) Early School Leavers: Understanding the Lived Reality of Student Disengagement from Secondary School, Dr. Bruce Ferguson et al, May 2005.

(2) “The Silent Epidemic” Perspectives of High School Drop Outs, Report by Civic Enterprises for Gates Foundation. John M. Bridgeland et al.

EXPERTS AGREE ON NEED FOR COMPREHENSIVE, COMMUNITY-BASED PROGRAMS TO SUPPORT YOUTH EDUCATION

Programs must include academic, advocacy, mentoring and financial support

“In order to be effective, programs must be comprehensive and directed towards all facets of a student’s life.”

– Dr. Bruce Ferguson

“Our analysis suggests that the key to success is not one of these strategies but rather a mix of all elements.”

– Samuel Helprin, Founder, American Youth Policy Forum

Community-based programs essential to support extensive and valuable school-based efforts

“Given the evidence on risk and resilience..., a comprehensive attempt to reduce inequities in life outcomes and improve the situation of children at risk must extend beyond the school; it should attempt to address the range of factors that create and sustain risk for students.”

– Dr. Ben Levin, Deputy Minister of Education

“Schools cannot be expected to solve problems of poverty rooted in social structure. Resources now allocated to low-value activities such as individual remediation could be used to support emerging work to strengthen communities.”

– Dr. Ben Levin, Deputy Minister of Education

“Other community agencies must share the responsibility for ensuring that students have an equitable opportunity to succeed.”

– Dr. Mordechai Rozanski, Chair of the Education Reform Commission, and former president, University of Guelph

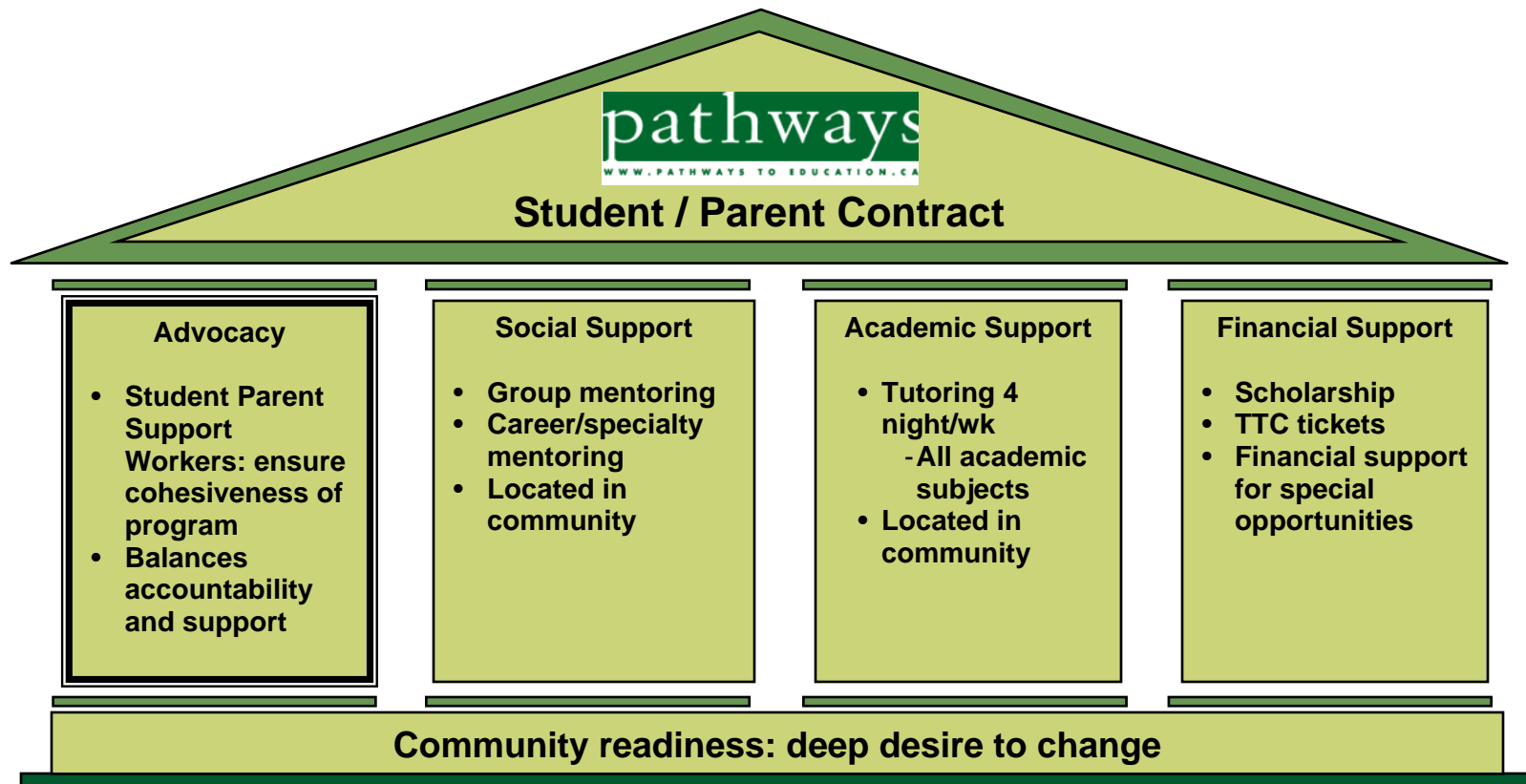
“Community factors have a far greater impact on achievement (50% of variance) than school-based (6-14%).”

– CD Howe institute, Raptis and Fleming, 2003; Wendel 2000

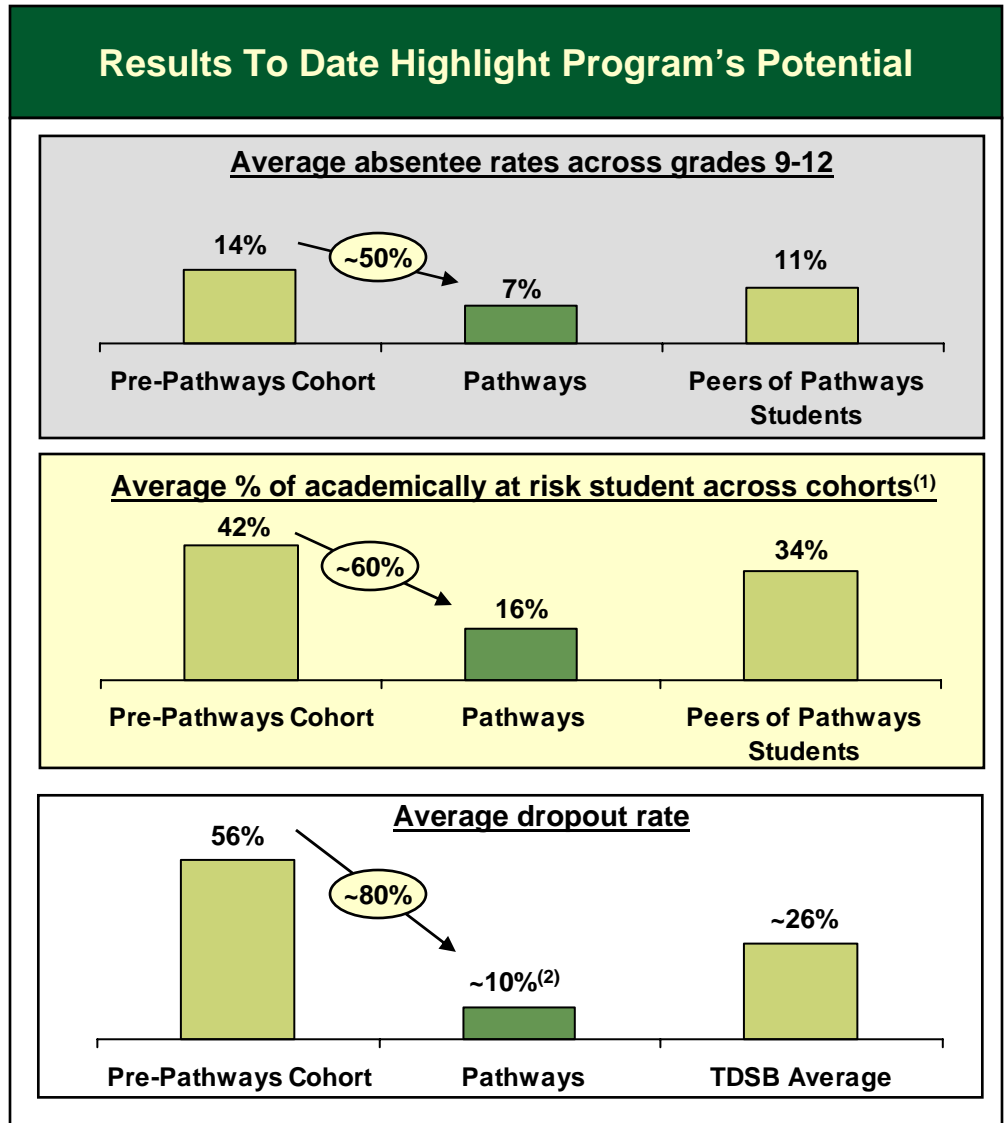
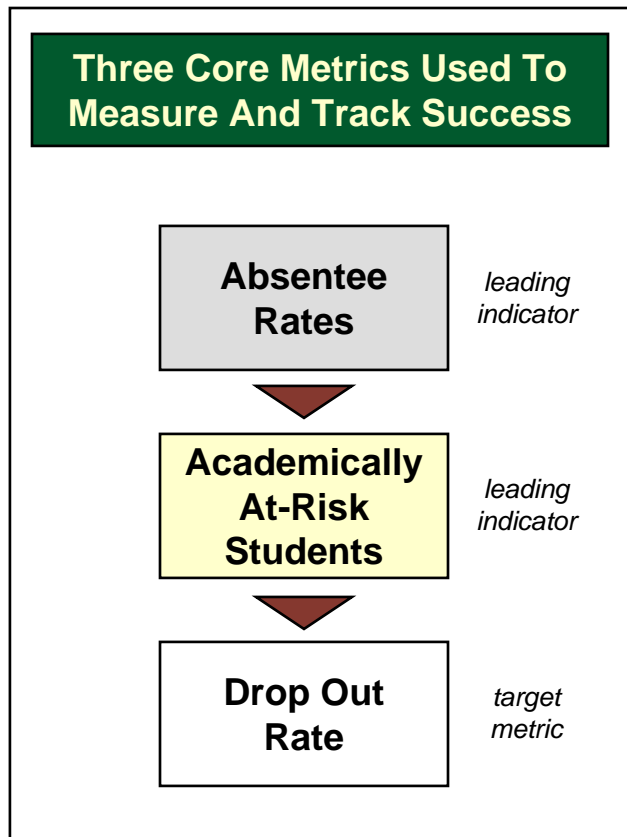
“Key risk factors are present in the community and, as a consequence... protective factors are created in communities.”

– Hawkins et al (2000)

PATHWAYS HAS SIX CORE ELEMENTS



PATHWAYS HAS EXCEEDED EXPECTATIONS ON KEY EDUCATION METRICS



(1) Academically at risk refers to students who have completed grade 10 and have less than 16 credits

(2) Reflects 8% for cohort 1 and 12% for cohort 2

Note: Pathways data reflects average across all Pathways cohorts for 2005 results

Source: Literature search, interviews, Pathways data, TDSB data

HIGHER GRADUATION RATE CONNECTED TO OTHER SOCIAL IMPROVEMENTS

<p>Lower Drop Out Rate</p>	<ul style="list-style-type: none"> • Reduction in drop out rates from 56% to ~10%⁽¹⁾
<p>Increased Post Secondary Enrollment</p>	<ul style="list-style-type: none"> • Post-secondary enrollment increased from 20% to 80% • Post-secondary split evenly between college and university
<p>Decreased Crime and Youth Violence</p>	<ul style="list-style-type: none"> • 32% decrease in violent crimes (Division 51 level) • 56% decrease in property crimes (Division 51 level) • Compares favourably to increase in violent crimes in neighbouring divisions
<p>Lower Rates of Teenage Pregnancy</p>	<ul style="list-style-type: none"> • Reduction of 75% in teen birth rate from 30 to 7.5 out of 1,000⁽²⁾ • Increased education correlated with higher likelihood of normal birth weight babies and reduced smoking and obesity
<p>Better Integration of New Immigrants</p>	<ul style="list-style-type: none"> • Delivered in a community that is 79% visible minority, 60% immigrants • ~85% of Pathways post-secondary entrants were first generation immigrants

(1) Reflects 8% for cohort 1 and 12% for cohort 2

(2) Pathways scenario reflects observed teen birth rate of 3 per 400 female students; ~7.5 per 1,000

Source: Literature search, interviews, Pathways data, Police services data. Results calculated across cohorts.

PATHWAYS CHANGES HOPES AND EXPECTATIONS



Pathways has offered us new hope, new possibilities, and new successes.. Many [students] learned that they too can go to university or college, that they too can become doctors, teachers, or lawyers...Through Pathways' inspiration and encouragement, many students have found their passion in life.

Joey, Graduate
Graduation Ceremony 2005



Growing up in this neighbourhood can be challenging - avoiding the potential influence of drugs and crime...Pathways is kind of like your parents...[It] can be tough - there are high expectations, and we must always do our very best, in return we are supported through what ever trials and challenges we face.

Mohammed, Graduate
Graduation Ceremony 2005



They (SPSWs) say: here are your boundaries—maybe you should step back and think about what you are doing right now, or, go for it — it's a great opportunity for you. They are both a coach and a referee for us.

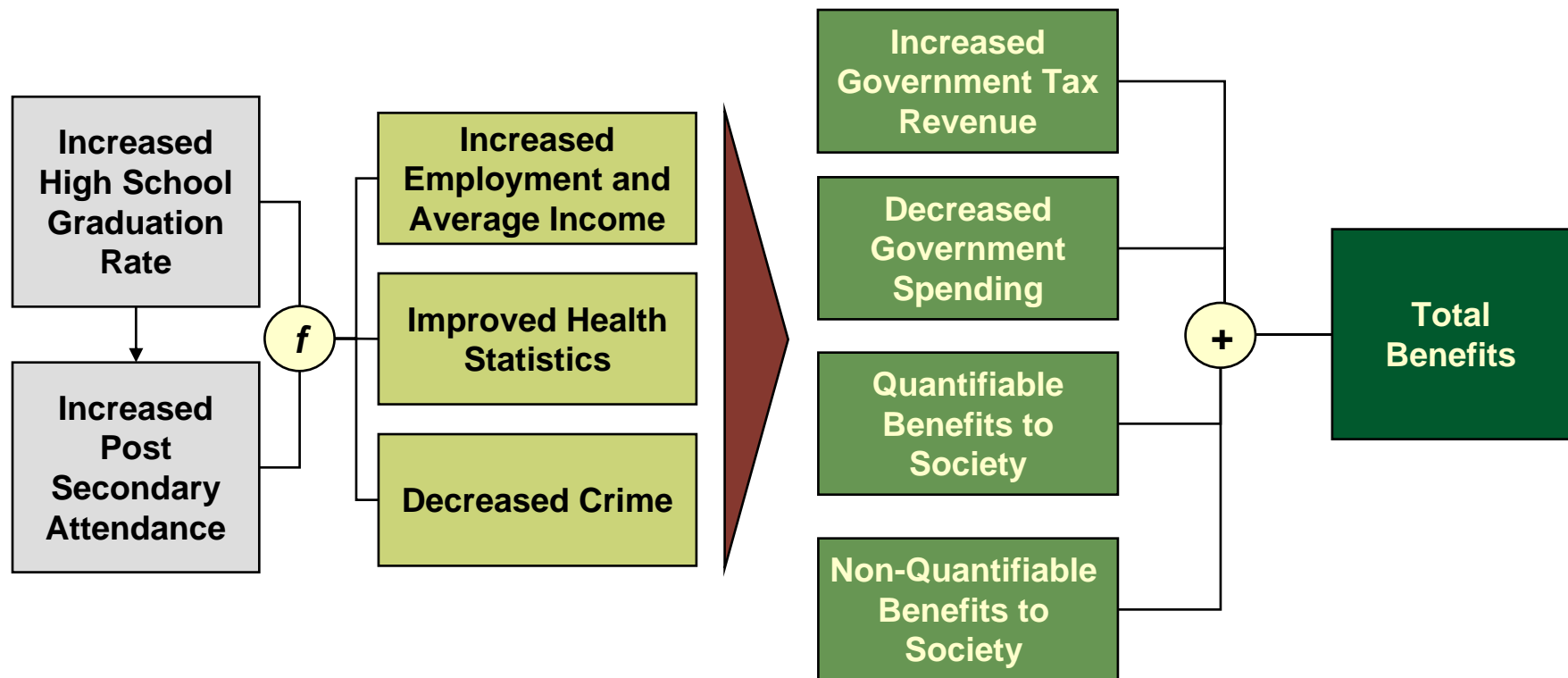
Peter, Student
Grade 10



One of the things I hope my daughter or others will do when they graduate is to come back and be an example, come back and say: listen, I came through this program, it IS possible.

Malcolm, Parent

PATHWAYS WILL LEAD TO MULTIPLE, QUANTIFIABLE BENEFITS TO GOVERNMENT AND SOCIETY



INCREASED HIGH SCHOOL GRADUATION RATE WILL LEAD TO FOUR KEY AREAS OF BENEFIT

Examples of Identified Benefits

Increased government income	<ul style="list-style-type: none">• Higher income taxes resulting from high employability and average income of graduates• Higher sales taxes generated as a result of higher income and consumer spending
Decreased government spending	<ul style="list-style-type: none">• Decreased transfer payments and welfare resulting from greater employability and income levels of graduates• Decreased incarceration spending resulting from lower incarceration rate for graduates
Quantifiable benefits to greater society	<ul style="list-style-type: none">• Decreased smoking rates resulting from different smoking habits by level of education• Decreased teen pregnancy rates• Increased general health (reduced cases of high blood pressure, obesity, high cholesterol)
Non-quantifiable benefits to greater society	<ul style="list-style-type: none">• Increased aspiration of youth to take part in their community• Decreased youth time spent on streets• Increased youth sense of responsibility for their educations and career decisions• Decreased “ghettoization” of Toronto

PATHWAYS HAS A FULL FINANCIAL PAYBACK TO SOCIETY OF 9.4% ANNUALLY ON ALL COSTS

Cumulative benefits per student enrolled of ~400K, ~40-60M per cohort

- **Benefit of ~250K per Pathways student enrolled**
- **Benefit of ~150K from second generation effects**

High societal ROI per charitable dollar⁽¹⁾ invested in Pathways:

- **~24.5X payback on investment in Pathways**
- **~12.5X payback on investment in Pathways in real dollars⁽²⁾**

Adjusted for time value of money, value of Pathways to society: ~50K per student, ~5-7M per cohort

- **NPV of 49K per Pathways student enrolled in Pathways⁽³⁾**
- **Internal rate of return (IRR) of 9.4%**

(1) Excludes incremental spending by Ministries of Education and Training, Colleges, and Universities

(2) Real Dollars reflects value of benefits on inflation-adjusted basis

(3) Assumes discount rate of 4.5%

Note: Assumes cohort size of 100-150 students

Source: BCG Analysis

PATHWAYS WORKS WHERE OTHER PROGRAMS HAVE STRUGGLED

By All Accounts Education Reform is Not Easy

'(In 2000) the Gateses decided to expand their charity to include public education, whose inequities in the U.S. had long troubled both of them...

... After gathering a team of experts, they decided to focus on high school dropouts, the 20% to 30% of teens who fail to get a degree in four years...

...Six years and a steep learning curve later, the Gateses see just how intractable are the many ills plaguing America's worst schools. It has been a difficult, even humbling experience...'

- Business Week

So What Makes Pathways Different?

Top programs in US and Canada were examined for results-proven community impact in education

Pathways' unique success can be attributed to five key factors

- 1 A contract between Pathways, students and parents, supported by Pathways' student parent support workers (SPSW)
- 2 A holistic, community based support network (mentoring, tutoring and other activities)
- 3 Alignment with a community hub agency that has local credibility
- 4 Short and long term incentives
- 5 Long term commitment from key stakeholders