

BCG

THE BOSTON CONSULTING GROUP

Making an Impact

Assessing Junior Achievement of Canada's Value Creation

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Foreword

In January of 2010 the Boston Consulting Group (BCG) was contacted by the CEO of Junior Achievement of Canada and Chair of Junior Achievement of Canada Foundation to determine how JA could best assess the impact of their mission to inspire youth to make better financial decisions, start-up a company, develop a career plan and express their innovative spirit. JA sought to assess and measure the value their programs delivered to participants and other key stakeholders in achieving their stated objectives of:

1. Develop a skilled and talented workforce
2. Motivate a generation of responsible citizens
3. Secure our future economic prosperity
4. Ensure Canada's competitiveness in a global market
5. Build vibrant and healthy communities

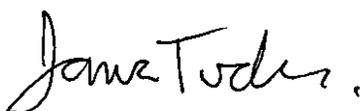
BCG was intrigued and so asked staff if they would like to work on this challenge on a voluntary basis over and above their regular workload. The response was overwhelmingly positive. Through that outreach we uncovered that there were several passionate "Achievers" (JA Alumni) amongst our consulting staff, a disproportionate number in fact. After speaking with each consultant "Achiever" and understanding their own personal stories of JA impact we felt compelled to support this effort.

BCG is committed not only to creating results for corporate clients but also to making a positive impact on society. We have a rich history of helping social impact organizations achieve their goals. We believe we can make the world a better place both directly through our client work and through our pro bono efforts. We seek to pursue progressive policies in every culture where we provide services. We donate a portion of our time and resources to community and global issues and institutions and were happy to assist Junior Achievement realize the goal of measuring their impact on a fully pro-bono basis.

This study was conducted with the same rigor as any of our client engagements, progressing from qualitative insight to quantitative insight, from correlated impact to causal impact, to paint a predictive picture. Equally as important, independent of any review from JA, BCG developed and led the study, conducted all research and wrote the outcomes and recommendations. The combination of rigor and independence assured deep insight and unvarnished, impartial, truth telling.

The study was an extensive year long research project that began with the development of an organizational and market fact base, led to over 50 interviews with various stakeholders, and culminated in a large quantitative study. In this study more than 500 "Achievers" shared their perceptions of the impact that JA made on their lives, careers and abilities. Additionally more than 5,000 Canadians who did not have a JA experience answered similar questions to create a statistically significant baseline against which to compare our "Achievers" experiences. Our sincere thanks go out to all those who participated in the interviews and study.

James Tucker



Principal
The Boston Consulting Group

Introduction

There is a clear gap in Canada's primary and secondary education system that baffles and frustrates educators, the business community, parents and students alike. That gap is an absence of standardized, formalized, business education in the curriculum. Entrepreneurship, financial literacy and work readiness are not currently considered core curriculum and many children are missing the opportunity to develop these critical life skills. It has fallen on activist organizations like Junior Achievement of Canada (JA), their mentor network and their educational partners to fill that need on their own initiative, time and at their own expense.

JA and its partners have clearly done a significant amount of work to close this gap, delivering millions of hours of business education programming to millions of Canadians free of charge – but was this the best use of resources? Did the efforts drive optimal outcomes?

JA's stated goal is to provide students with the foundation for financial success. To give Canada's future leaders the financial, interpersonal and entrepreneurial tools to alter their trajectories, drive both their future commercial success and that of our economy. Unlike the core curriculum, however, there was no report card, no standardized tests, no way of assessing the change in the students skill set, no way to determine the impact they were creating – until now.

Junior Achievement of Canada Overview

Since JA began offering programs in Canada over 50 years ago more than 2,500,000 Canadians have experienced JA programs for a total of over 3,700,000 programs delivered. With, on average, 6 hours of instruction per participant JA has delivered approximately 22,000,000 hours of sorely needed business education. These programs are designed to enhance the overall education levels of participants and prepare them for the business world. The current annual numbers are staggering: Across Canada, Junior Achievement reaches over 230,000 students with 15,000 dedicated business volunteers in over 400 communities, delivering a suite of nine curriculum-matched programs.

JA is a non-profit organization delivering all of programs free of charge to students, and is funded solely by private corporate and personal donations. JA's annual operating budget of \$12,000,000 per year (inclusive of \$500,000 of bursaries, awards and scholarships), makes them one of the most efficient charitable deliverers of educational content in Canada, with a CRA reported efficiency ratio of 83%

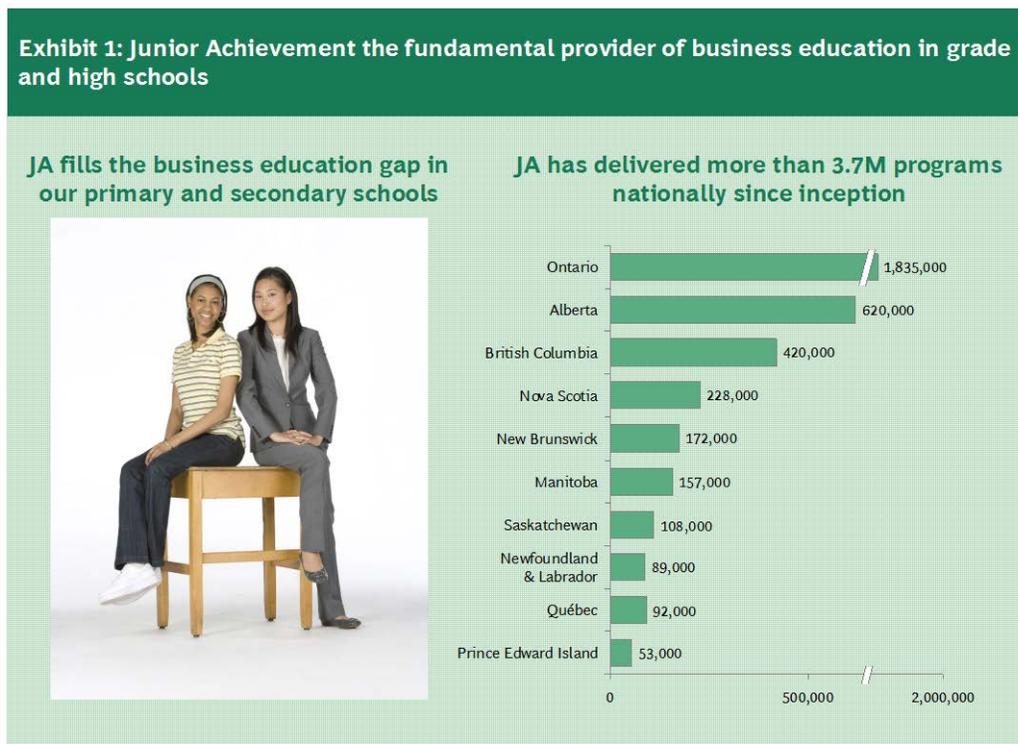
Junior Achievement learning experiences and mentorships have helped young Canadians discover the leadership, entrepreneurial and workforce readiness skills that are critical to achieve their potential and drive individual and societal prosperity.

The programs, delivered via active business mentors, are intended to support student development along three major axes:

1. Financial literacy: to deliver improved understanding of financial concepts
2. Work readiness: to prepare students with the skills required in the business world
3. Entrepreneurship: to develop skills and foster the ambition for entrepreneurial ventures

An overview of the program delivery by region is outlined in exhibit 1:

Exhibit 1: JA Overview



The Impact Assessment Process

Building on previous experience assessing non-profit program value, BCG applied a four stage approach to measuring program impact - with each stage building on the insights garnered from prior phases. In the first phase we built a fact base on Junior Achievement and their stakeholders, developed an understanding of the work they had already undertaken to measure impact, and assessed how other charitable and educational organizations had measured impact. With this information in hand, the JA value proposition fully understood and an emerging sense of the right way to measure impact we began phase two: qualitative interviews.

During this phase we connected with over 50 stakeholders (including alumni (“Achievers”), educators, mentors and volunteers) to test emerging hypotheses, eliminating some and adding others. By the end of phase two we had a fully refined set of potential value hypotheses and were ready to proceed to phases three and four: executing a quantitative survey and comparing it to a representative baseline.

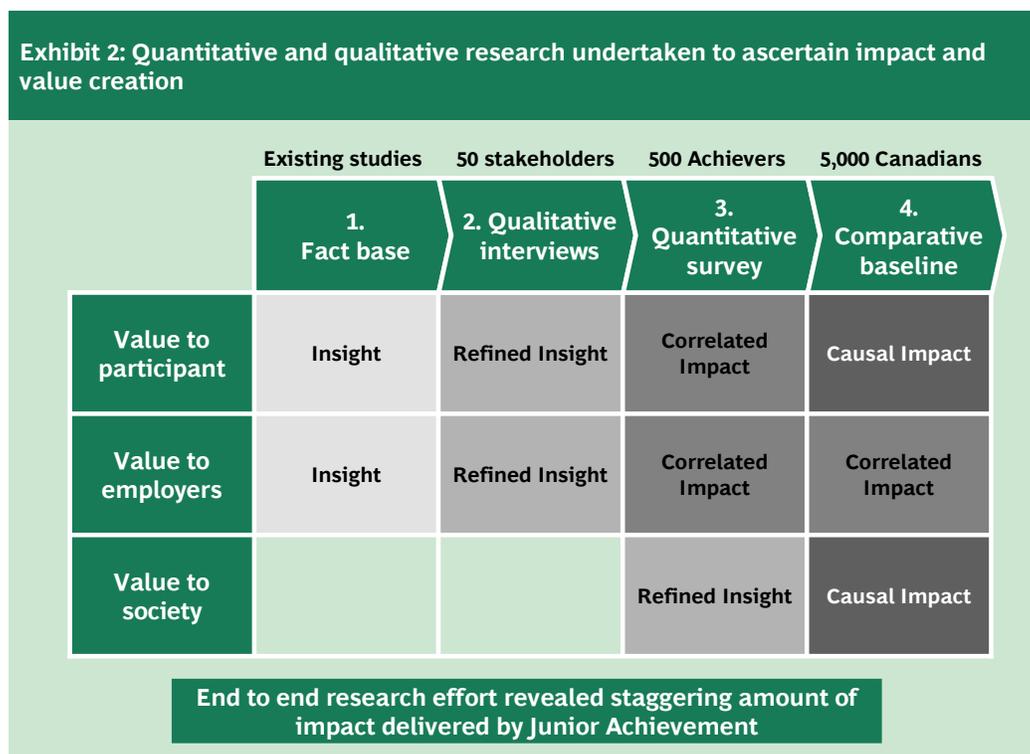
In these phases we surveyed 500 “Achievers” and 5,000 Canadians without a JA experience. This survey was designed to allow us to compare the outcomes of JA participants to those of non participants. The survey was designed not just to assess correlated impact but to lay the foundation for a defensible perspective on causal value. In order to do that the survey not only asked about outcomes (“Do you own your own business?”) but also about the events that led to that (“Was JA critical in developing your ability and desire to open your own business?”). In this way we were careful to account for a common critique: “students who choose JA programs are more likely to become entrepreneurs – and therefore JA programs don’t change student outcomes. In this report we only attribute value creation to JA in the cases where the alumni specifically

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called out JA as a transformational event that fundamentally changed the choices they had made.

An overview of the value discovery process is outlined in exhibit 2 below:

Exhibit 2: Value Discovery Process



Perspective on Drivers of Value Creation

JA proposes to be the successful link between education and the business world by giving youth the confidence and knowledge they need to define personal success, enhance their workforce readiness and pursue their dreams – but do they deliver? Junior Achievement claims to inspire youth to make better financial decisions, start a company, develop a career plan and express their innovative spirit – but are youth really listening?

The response is a resounding “Yes”. Our quantitative analysis clearly demonstrates that JA is over-delivering on its three pillars.

JA programs produced more financially literate graduates that saved more, borrowed less, and went bankrupt less often than the average Canadian. Moreover, many achievers credited JA with being the driving force behind their financial literacy skills of budgeting, long term planning and investing. The impact: more solvent citizens who put a lower burden on the social safety net, who provide for their own retirement and who are a more activist investor base.

JA graduates are better prepared for the workforce resulting in accelerated career tracks, altered trajectories and more skilled employees for employers. Moreover a large proportion of “Achievers” cite JA participation as a significant source of impact on their ability to get a job, performance success at work, and personal network. This production of more work ready employees helps to close the talent gap and provides companies

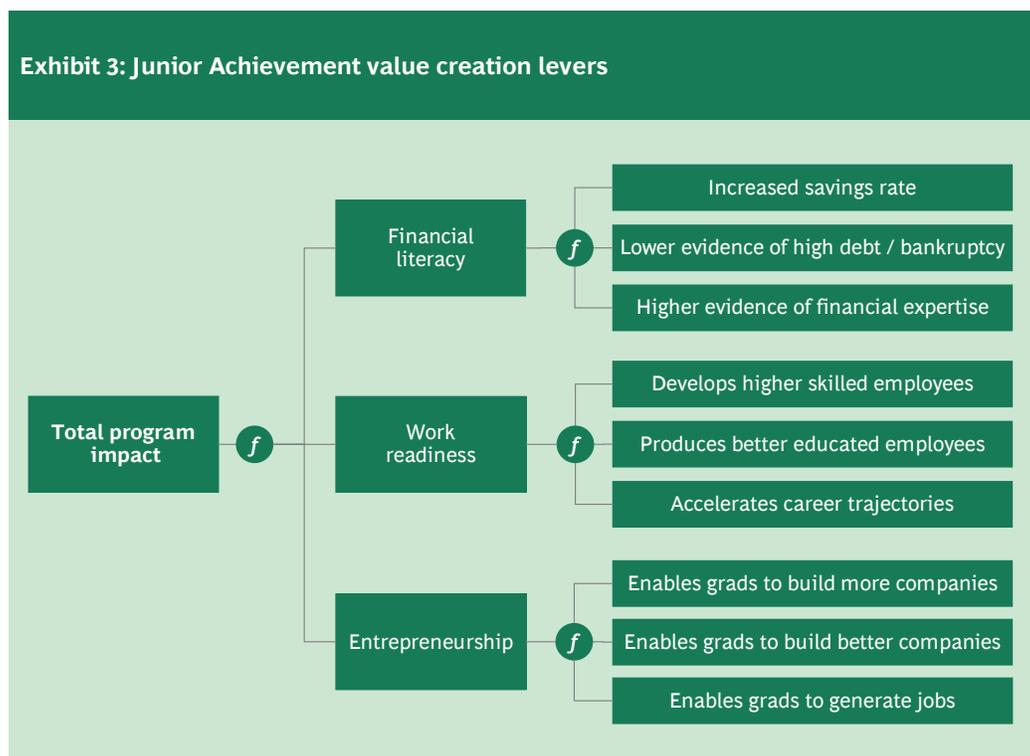
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with the future leaders of their businesses, while simultaneously driving personal impact for participants.

JA produces graduates who are more likely to become entrepreneurs, create jobs and power our economy. These future business leaders attribute JA as the catalyst that gave them the ambition to open their own business and the transformational force that empowered them with the skills and abilities to do so successfully. These new enterprises and net new jobs will be a significant portion of the economic engine that will drive Canadian prosperity and help close the productivity gap.

An overview of types of impact is outlined in exhibit 3 below:

Exhibit 3: Overall Value Creation



Perspective on Value for Participants

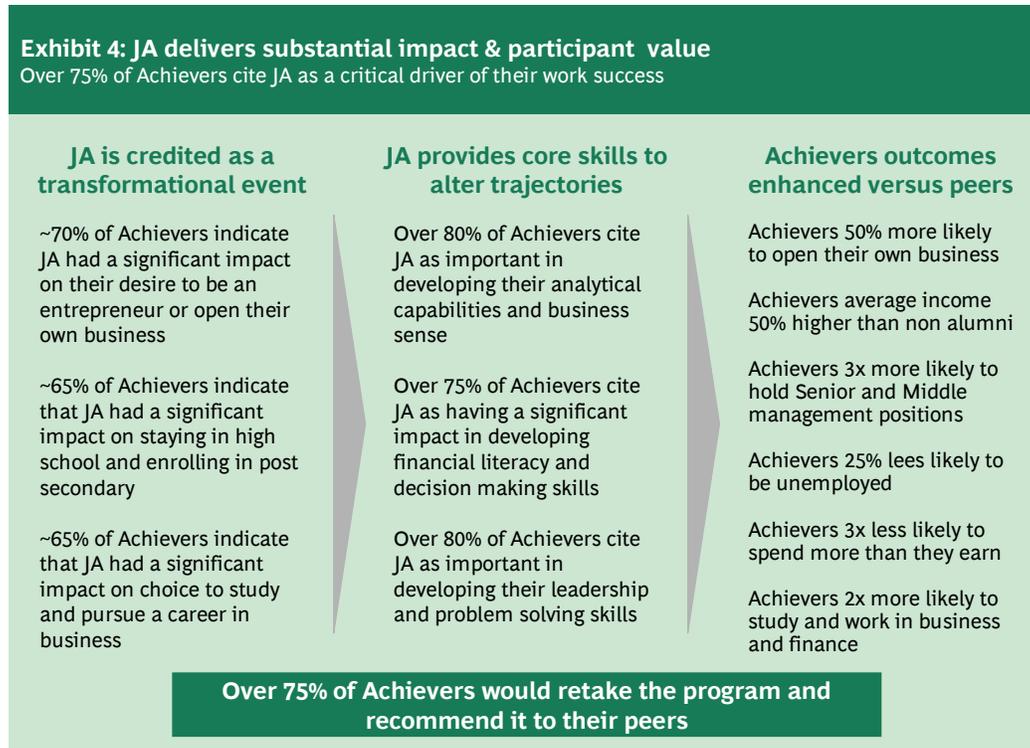
Students, or their parents, thinking about embarking on a JA program rightly, ask themselves about the trade offs inherent in JA participation versus other options. Based on our feedback from “Achievers” and a comparison to the general population we see a compelling case for JA participation.

JA’s impact is a three stage process: transforming, delivering, and achieving. JA provides a transformational event that alters ambitions and encourages “Achievers” to do more with their lives. Secondly, JA delivers the skills and confidence required to achieve those great things. Finally, those skills and ambitions come together in improved outcomes - different “Achievers” follow different paths but, on average, they outperform their peers substantially and explicitly credit JA for that causal impact.

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An overview of evidence of impact on participants of the programs is outlined in exhibit 4 below:

Exhibit 4: Value for Participants



Perspective on Value for Employers

While we found significant evidence of Junior Achievement being a net positive for employers, without additional studies to survey employers, we could not prove that this impact was causal. That said, the correlated evidence suggests that JA employees outperformed their peers, and that JA provides better raw talent for employers.

Given the evidence, employers may want to explicitly look for JA participation when hiring a business executive as a strong lead indicator for future “in role” success. The most compelling statistic is that “Achievers” are three times more likely to be senior or middle managers than their peers, strongly suggesting a predictive link between JA participation and business leadership potential.

An overview of evidence of impact on employers outlined in exhibit 5 below:

Exhibit 5: Value for Employers



Perspective on Societal Impact and Prosperity

Donors, governments, citizens and volunteers are all looking for ways to maximize impact in light of scarce resources. They all want to know that the time and money they invest are being put to good use and delivering on the mission of the charitable organization they are directed to. In short they are looking for the return on investment (ROI).

Junior Achievement makes a substantial annual impact on our economy and empowers “Achievers” with the aspiration and ability to unlock their potential and maximize their own personal value creation.

We have quantified the ROI directly attributable to JA program dollars along seven key dimensions. We then identified the difference between “Achiever” outcomes and those of the general population, and further isolated what part of that differential is directly attributable to JA programs. The aggregate annual impact is the sum of these differentials, based on rigorous analysis and credible third party sources

JA delivers value through improving “Achievers” level of completed education. We determined a total annual impact, directly attributable to JA, of C\$105,000,000. This is the product of the number of JA alumni who were more likely to have completed various levels and types of education versus the general population and who indicated that JA was the driving force behind that decision. That number was then multiplied by the differential annual earning power of an individual who had completed the specified level of education.

For the JA pillar of entrepreneurship we have determined a total annual impact, directly attributable to JA, of C\$425M. This is due to the number of JA alumni who cite JA as the driving force behind their decision to open a business, versus the general

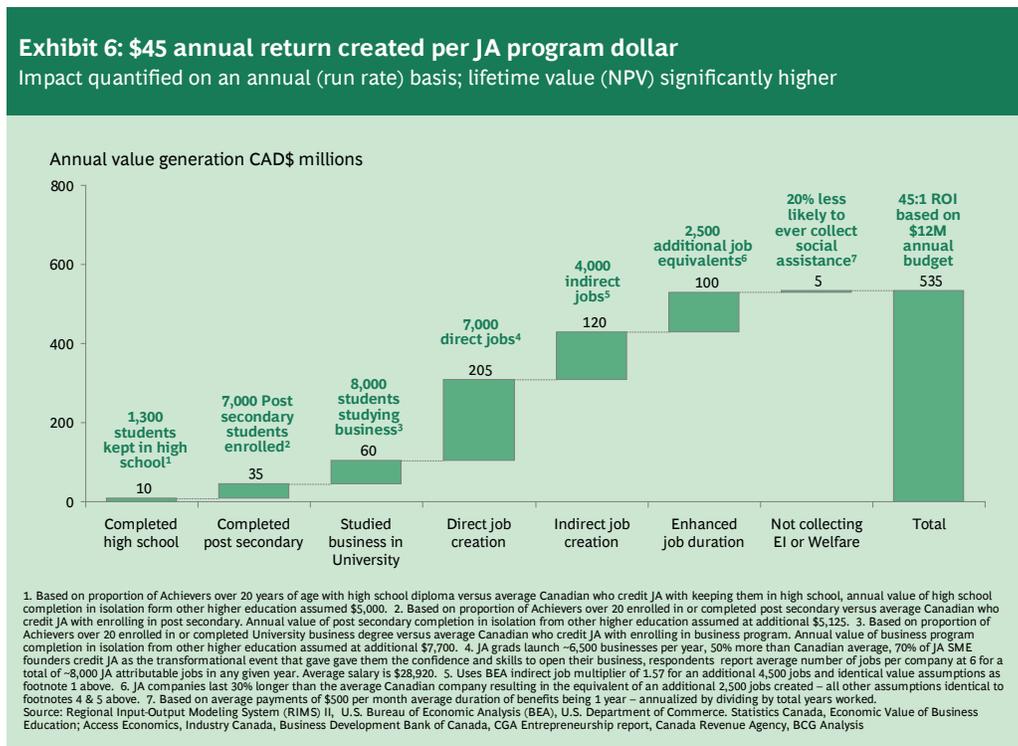
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population, and all associated jobs created. We took the number of JA attributable businesses, multiplied it by the straight line average number of employees at each business (reported in the survey) and multiplied the total number of employees by average salary data from Statistics Canada. In addition to direct job creation, indirect jobs arise to serve these new organizations. The Bureau of Economic Analysis provided the standard multiplier we used to estimate this. Additionally, we discovered that “Achievers” typically open businesses that last longer than the average Canadian new venture. In order to account for the extended value we translated the extended duration into job year equivalents, divided that by the average working life of a Canadian and determined the number of additional job unit equivalents created by “Achiever” businesses.

When brought together with a more modest social assistance number, JA creates an annual return of 45:1 in terms of societal prosperity for every JA dollar spent. This phenomenal value creation is a testament to the efficacy of the program, the efficiency of delivery and the spirit of the “Achievers”.

An overview of evidence of impact on society at large is outlined in exhibit 6 below:

Exhibit 6: Value for Society



In Summary

One conclusion would be that since JA is doing so much good work, the best thing to do would be to provide them with more funds and enable them to scale up delivery even further. While that is one of the major recommendations, “more of the same” is too limiting for Junior Achievement in Canada. During the course of our work we have

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identified four major themes for enhancing delivery of, and impact from, Junior Achievement programs. These themes are clearly laid out in exhibit 7 below:

Exhibit 7: Potential Program Enhancements

Exhibit 7: Enhanced funding will allow Junior Achievement to drive more impact and societal value		
Lever	Actions	Impact
Scale current program delivery	Grow school penetration <ul style="list-style-type: none"> Use data to gain school access Secure value based funding Secure required mentors 	More students get current value <ul style="list-style-type: none"> More delivery of same value creating instructional units will directly scale overall value
Develop alumni relations program and database	Track, monitor and communicate <ul style="list-style-type: none"> Develop alumni rolodex Develop portal and infrastructure Plan value add interactions 	Create JA connection for life <ul style="list-style-type: none"> Formalized affiliation will drive virtuous fundraising and mentoring circles
Deliver programs remotely	Build enabling infrastructure <ul style="list-style-type: none"> Develop and test online offering Conduct targeted pilot Scale launch 	More access, lower delivery cost <ul style="list-style-type: none"> Online delivery of programs will optimize the value delivery per unit of instruction
(Further) Penetrate underserved communities	Match delivery to areas of need <ul style="list-style-type: none"> Identify underserved targets Develop mentorship rolodex Pilot and scale roll out 	Value built where needed most <ul style="list-style-type: none"> Creates transformational program adding more value per user based on starting points

Closing

There is currently a pervasive gap in the core curriculum around the topics of business education and financial literacy. Junior Achievement and other activist stakeholders are putting significant effort and resources into closing that gap. Junior Achievement is impacting the most students and delivering the most programs - providing not just quantity, but also quality in terms of the exceptional impact and transformation of the trajectory of the participants. These JA alumni have, in turn, significant positive impact, both for their employers and society at large. Further investment in JA, in our opinion, is an excellent allocation of resources and will provide a substantial return to society.

About the Author

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Methodology - Quantitative Survey and Comparative Baseline

The quantitative facts and figures in this report stem from a carefully constructed survey that was formed, distributed and populated during the summer of 2010.

The survey was available in both English and French. Respondents were not expressly aware of how the survey data would be used, other than that it would be used anonymously.

BCG engaged GlobUs Consulting & Research to source respondents for the survey. The instructions were to achieve a representative sample of the Canadian population. The respondents were not selected by, known to or associated in any way with BCG, Junior Achievement or any of its employees / volunteers.

The overall survey received 5,000 responses including responses from 500 JA alumni. The English survey received 3,830 complete and usable responses, including 400 Junior Achievement participants. The French survey received 1,170 complete and usable responses, including 100 alumni of Junior Achievement / Jeunes Entreprise. The English and French responses were then brought together into a single dataset which form the basis of all analysis.

All statistics in this report reflect national numbers.

All comparisons made in the report regarding “Achievers” vs. the “general population” are comparing survey results for self-identified “Achievers” against survey results for non-Junior Achievers (the ‘control group’), which represent the ‘general population’. In other words, both the self-identified “Achievers” and the control group were answering the exact same questions (with same wording) regarding education status, employment status, entrepreneurship, income, etc. These questions were in the same order on each survey. “Achievers” were also asked to answer a few additional questions regarding their experience with JA Canada.

The detailed footnotes of Exhibit 6 capture the detail of individual calculations. It is important to understand the definition of value creation and the relatively conservative approach used. The value figures shown are *annual* benefits and are calculated to reflect *causal* impact. Let’s follow through one example – the number of students who go on to complete post-secondary education:

- The survey data suggests that 85% of Junior Achievers attend post-secondary education, vs. 71% of the control group
- The *correlated* impact is calculated as 200,000 “Achievers” (annual program throughput), times the 14% spread, equaling an effect of approximately 28,000 incremental post-secondary students out of the 200,000 “Achievers”.
- However, the *causal* impact takes the 28,000 additional students and multiplies by 24.9%, which is the % of Junior Achievers who self-reported that Junior Achievement had a ‘Strong impact’ (top box) on their decision to attend post-secondary education. This yields the net total of ~7,000 post-secondary students, as reflected in exhibit 6. No credit is given for Junior Achievers who said that JA had a “Moderate impact” on their decision to attend post-secondary education.
- Net result: JA generates 7,000 additional Post-secondary grads each year
- The related *dollar* impact (\$35M on exhibit 6) is an *annual* figure. In other words, 7,000 additional post-secondary students are estimated to generate \$35M in *annual* benefits to society during their lives through the higher taxes they pay, higher productivity, etc. This \$5,125 annual per person figure is an average and sourced externally from a report prepared for the Australian Business Deans Council by Access Economics Pty Limited and adjusted for Canada with Statistics Canada Data and BCG analysis. The *lifetime* value (NPV) would be considerably higher and would factor in a ramp up period before benefits came online.