

JUMP MATH IMPACT REPORT



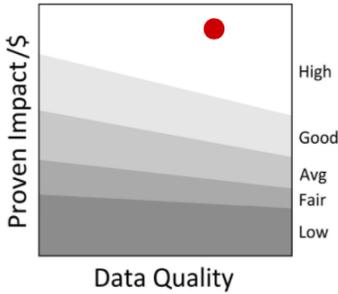
*Jump Math is a High
Impact Charity. Find out
why.*

*Asha McMullin
January 18, 2022
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EXECUTIVE SUMMARY

JUMP Math has high impact. For every dollar spent, JUMP Math creates \$3 of valuable change.

Impact Rating: High



JUMP Math helps students learn math with its own curriculum and workbooks. Improving math knowledge is linked to a child's academic success and their future contribution to society.

JUMP Math is a High impact charity. Charity Intelligence estimates it creates \$13 million in social social value each year through its math program. This is about \$3 in value for every dollar spent.

Most of JUMP Math's impact comes from increasing high school graduation rates. This can also help students graduate from further education levels and reduce their dependence on public services.

Of the 258 charities that Ci has analysed, JUMP Math is one of the best. If you are looking to give with impact, Ci gives JUMP Math our wholehearted recommendation.



JUMP MATH HELPS KIDS REACH THEIR FULL POTENTIAL

Canada is facing a math crisis. Academic achievement in math is the best predictor of academic and career success, even more than literacy. But Canadian children struggle to learn it.

In 2019, only 48% of grade 6 students met the Ontario math standards. This is a dismal result.

JUMP Math promotes a new approach to math learning. Its math program has been tested in multiple control trials done by independent researchers. The result?

Students using JUMP Math curriculum learn math better than their peers.

Over 180,000 Canadian students use JUMP math resources each year. Its curriculum is also being adopted internationally in the US and Spain.

JUMP Math makes workbooks, curriculum and teacher training materials at reduced cost. It also distributes free print resources through the National Book Fund program.

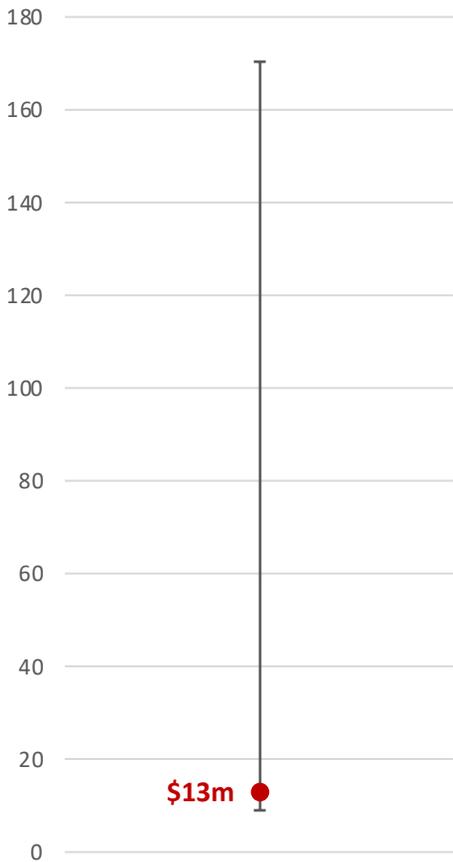
We often get questions about its high overhead costs but these costs do not dilute JUMP Math's high impact.

More information about JUMP Math's finances and programs can be found [here](#).



EDUCATION MAKES IMPACT

JUMP Math helps kids understand and engage with math. This improves their attitude towards math, their grades and their relationship with school overall. JUMP Math students are more likely to graduate and go on to higher education.



Charity Intelligence has measured JUMP Math’s impact. Our best estimate is that JUMP Math creates \$13 million in social value each year. Dividing by total program spending, this is about **\$3 in impact per dollar spent**.

You can think of it like an investment. For every dollar you invest, JUMP Math creates \$3 of social value in the form of better-educated children.

There is uncertainty in our estimates because data on charity work is limited. We estimate that JUMP Math creates between \$9 and \$170 million of social value every year. The error lines on this chart show upper and lower bounds on our impact estimate, with our **best estimate** highlighted in red.

Notice that our estimate is conservative, We only count impacts that are backed up by evidence. If there is charity data missing, we don’t guess how to fill in the gaps. This sets us apart from other charity analysis groups.

For more details see *Calculating Impact* on Pg.10

MATH EDUCATION CHANGES LIVES

JUMP Math's total impact is broken down by how it changes a student's education level.

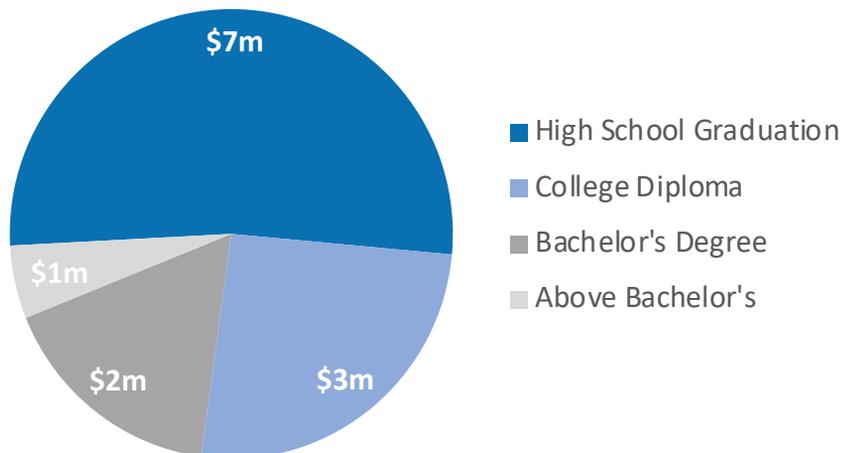
Our model finds JUMP Math's programs create \$13 million in social value. JUMP Math increases the likelihood a student will graduate first from high school and then from other levels of education. Although the increase is small, it affects hundreds of thousands of JUMP Math students. This social value is broken down by which type of education students achieved, regardless of the country (in 2019, JUMP Math operated in Canada, Spain and the US).

\$7 million from High School Graduation: In our best estimate, JUMP Math increases its students' chances of high school graduation by around 0.2%.

\$3 million from College Diploma: Graduating from high school in turn increases your likelihood of graduating collage. Our model assumes JUMP Math enabled students to go to college who otherwise would not have.

\$2 million from Bachelor's Degree: Similarly, graduating from high school increases your likelihood of graduating from University.

\$1 million from Above Bachelor's: Graduate degrees include Medical and Law school, as well as Masters and PhD programs. This works out to a small amount of JUMP Math's impact as increased graduation rates are quite small at this level of education.



GIVE DIFFERENT

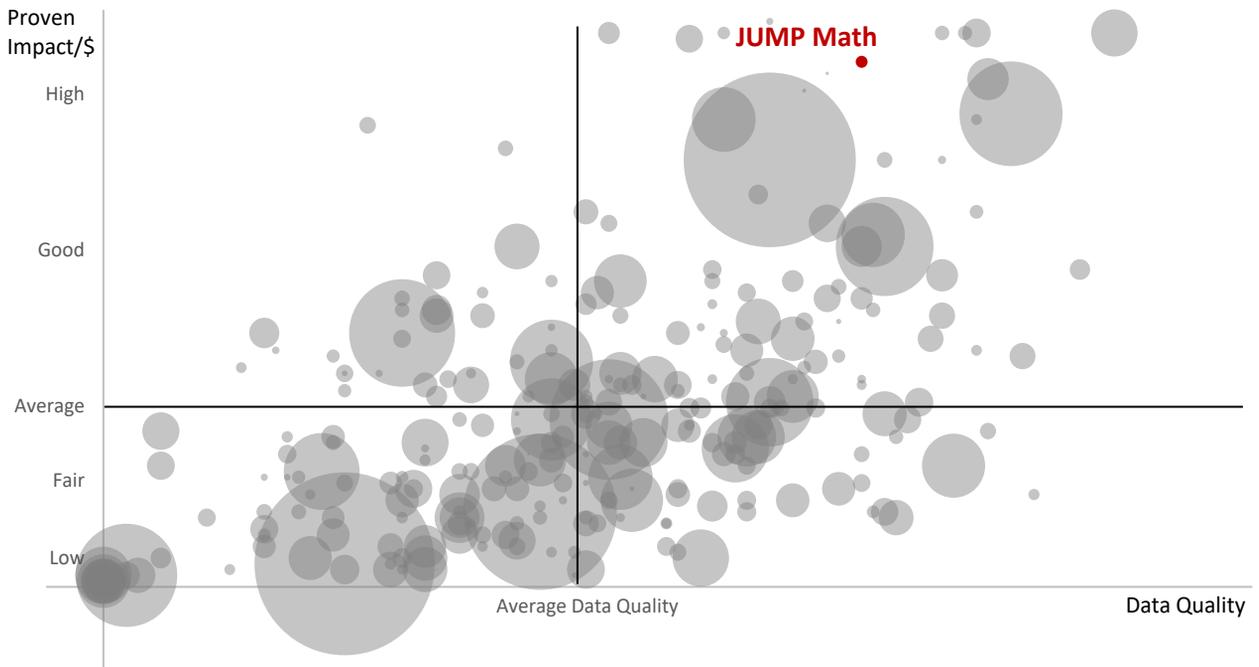
Up to 40 per cent of donations may be wasted by donors giving to charities without measurable, proven, and high impact.

Not all charities are created equal. Many Canadian donations are concentrated in below-average charities. In this graph the size of a circle represents the annual donations a charity receives. As you can see, high impact charities are mostly small dots; they don't get much annual giving.

So often, Canadians are encouraged to give more money to charities. As we see it, there would be better results if we gave differently, to charities with high proven impact, rather than more. We urge Canadians to give different.

Some of Canada's biggest charities are also the ones with the lowest demonstrated impact. *It's rare to find an education charity as effective as JUMP Math.*

JUMP Math could be the future of math learning in Canada. Your donations are an investment in a better world. It's worth making sure that your investment pays off.



GRITTY DETAILS

JUMP Math's impact Data

External References

IMPACT MATTERS

Charity work is supposed to make a difference for the better. How do we know if it's working? Can we tell how big of a difference a charity makes? This report will walk you through how we measure Indspire's impact.

Proven Impact per Dollar: Proven Impact is the measurable change, the difference, a charity's activities create. It is the single most important number in charity analysis.

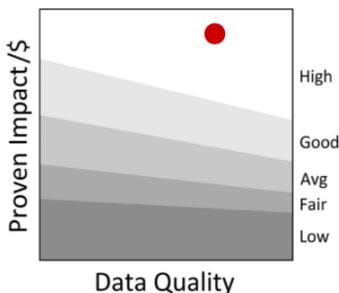
Proven impact is grounded by evidence-based research. Not just wishful thinking but solid proof that its programs are effective and work.

Data Quality: Our estimates on impact are limited by the data we can get from the charity. Often, this data does not give us a complete understanding of its work. We adjust for this by incorporating a Data Quality score into our reporting.

A high Data Quality score means the charity shows detailed information on programs, clients, and spending. It must also show that the change it claims to create is a direct result of its programs. The higher the data quality, the greater confidence we have in our assessment.

JUMP Math's Data Quality Score is 66%, well above the current average of 42%.

Impact Rating: High



Plotting impact: To keep it simple, we show a charity impact rating on this grid. This is shown on our website in the charity profile.

We assign a rating based on which region the charity falls in: High, Good, Average, Fair and Low.

A High impact rating is our strongest recommendation.

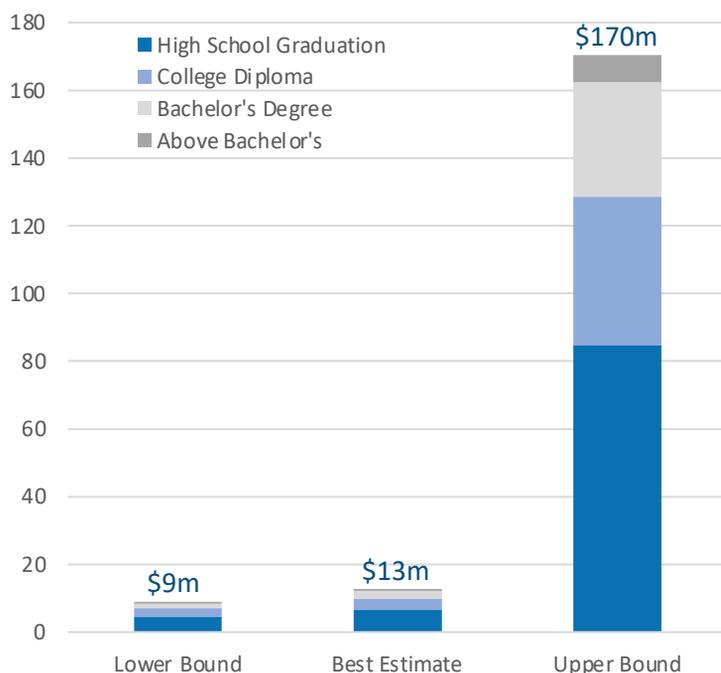
BOUNDS

Here is more detail on the bounds of social impact. The upper bound is what value a charity's programs could produce in a best-case scenario. The lower bound includes only values supported by strong evidence. From external research reports and JUMP Math's results reporting we arrive at our best estimate.

The estimates vary widely because it is unclear how much JUMP Math improves the likelihood of graduating high school, an effect that trickles down into the likelihood of graduating higher levels of education.

In our best estimate, JUMP Math increases its students' chances of high school graduation by 0.2%. In our upper bound estimate, it increases the chance of graduation by 1.2%. The value of a high school graduation also varies between estimates, which is why you see such a big change.

In each estimate, about half of JUMP Math's impact comes from High School Graduation.



CALCULATING IMPACT

The table below is a summary of our model’s calculation of JUMP Math’s impact. The impact is split between benefits to the student (increased education level) and benefits to society (reduced burden on public services).

JUMP Math’s total spending in 2019 was \$4.8 million. This total spending includes spending on its programs, fundraising and administration.

We take all three estimates into account to get our impact score. Our final estimate for JUMP Math is a x3 return on impact for every dollar spent.

	Lower Bound	Upper Bound	Best Estimate
Total Spending: \$4.8 million in 2019			
Demonstrated Impact per dollar spent (SROI) (Total social value of outcomes / Total spending)	x 2	x 35	x 3
Value created by JUMP Math Programs			
Value in millions \$			
High School Graduation	\$5	\$85	\$7
Increased Education Level, higher lifetime income	\$0	\$24	\$1
Lower burden on public services, increased income tax paid	\$5	\$60	\$6
College Diploma	\$2	\$44	\$3
Increased Education Level, higher lifetime income	\$2	\$34	\$2
Lower burden on public services, increased income tax paid	\$1	\$10	\$1
Bachelor's Degree	\$1	\$34	\$2
Increased Education Level, higher lifetime income	\$1	\$25	\$1
Lower burden on public services, increased income tax paid	\$1	\$9	\$1
Education above Bachelor's	\$1	\$8	\$1
Increased Education Level, higher lifetime income	\$0	\$6	\$1
Lower burden on public services, increased income tax paid	\$0	\$2	\$0
Total Value Added	\$9	\$170	\$13

A \$0 figure represents a value less than \$0.5m and is therefore rounded down to zero.

IMPACT BY COUNTRY

JUMP Math’s impact can also be broken down by country, rather than education achieved. In 2019, JUMP Math operated in Canada as well as Spain and the US. The charity collaborated with an organization in Spain to develop Spanish JUMP Math books. It also sends JUMP Math books to the United States. About 92% of JUMP Math’s impact comes from Canada, while the rest comes from Spain (6%) and the US (2%).

The national Book Fund operates in Canada and awards free teaching resources and professional development to support math teachers. This is opposed to the Canada program, that works with students.

The chart below reports impact in thousands, opposed to millions reported on the previous page, to represent smaller impact numbers.

In 2022, JUMP Math reports its resources are also being used in Chile, Colombia, and Bulgaria.

	Lower Bound	Upper Bound	Best Estimate
Total Spending: \$4.8 million in 2019			
Demonstrated Impact per dollar spent (SROI) (Total social value of outcomes / Total spending)	x 2	x 35	x 3
Value created by JUMP Math Programs by Country			
Value in thousands \$			
Canada	\$8,076	\$140,960	\$11,174
Higher Education Levels increase income	\$2,554	\$68,604	\$4,490
Income taxes and reduced burden on public services	\$5,523	\$72,356	\$6,684
National Book Fund	\$338	\$17,339	\$541
Higher Education Levels increase income	\$253	\$13,411	\$413
Income taxes and reduced burden on public services	\$85	\$3,928	\$128
Spain	\$566	\$5,100	\$783
Higher Education Levels increase income	\$179	\$2,483	\$315
Income taxes and reduced burden on public services	\$387	\$2,617	\$469
United States	\$11	\$6,957	\$279
Higher Education Levels increase income	(\$84) *	\$4,977	\$136
Income taxes and reduced burden on public services	\$95	\$1,980	\$143
Total Value Added	\$8,991	\$170,356	\$12,778

* This value is negative because the change in income for receiving a post-secondary credential may not outweigh the cost of tuition and income missed while in school.

JUMP MATH RESEARCH

Many studies have looked at JUMP Math's impact on students learning math. One long term study found JUMP Math students improved standardized test scores.

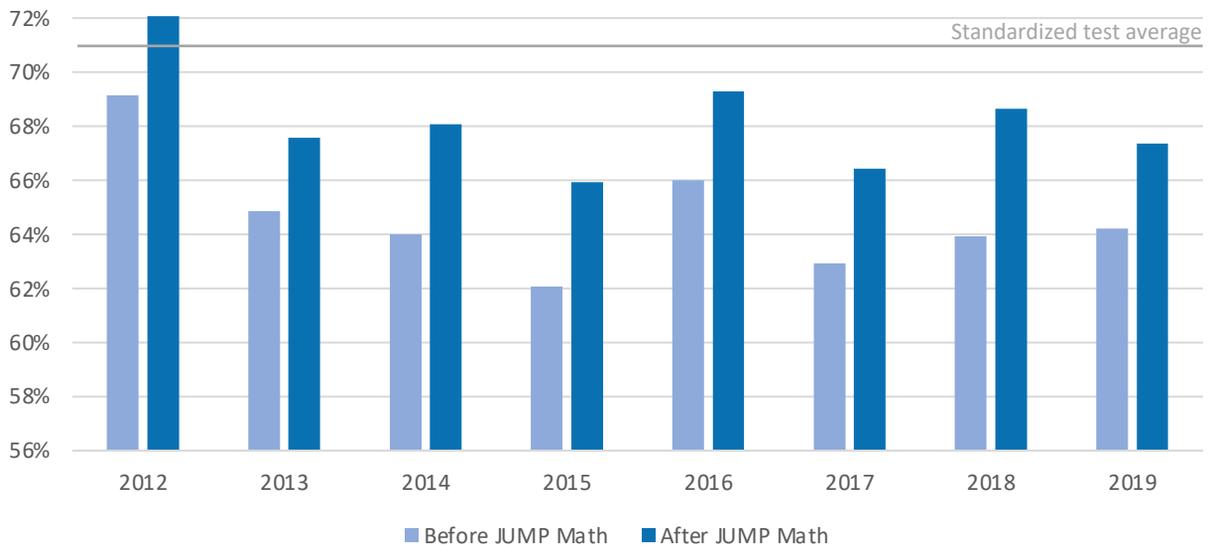
From 2012 to 2019, a study looked at a cohort of classrooms in high-need communities using the JUMP math curriculum. The students took a standardized test in the fall, before beginning JUMP Math, and again in the spring, after using JUMP math over the school year. Students learning inline with the curriculum are expected to score the same on both the fall and the spring tests.

However, after using JUMP Math, students scored an average of 4% higher, indicating that JUMP Math helps students do better in Math.

Because the program targets high need communities with below average math scores, JUMP Math is able to help struggling students catch up with their peers.

Although this study has been repeated over eight years, students were not randomly assigned to JUMP Math and the standard curriculum for comparison. This can lead to confounding factors. Other randomized control trial [studies](#) have been completed on JUMP Math and show differing results.

Standardized testing scores before and after JUMP Math



SOURCES

Ci relies heavily on research done by other organizations. Here are some sources we used while estimating JUMP Math's impact

JUMP Math Sources

Solomon et al. (2019). [A cluster-randomized controlled trial of the effectiveness of the JUMP Math program of math instruction for improving elementary math achievement](#)

Murray, B. (2019). [Increased math achievement in elementary students participating in JUMP Math's 2018-19 National Book Fund program.](#)

[Effectiveness Study by the University of Barcelona](#)

And further research on JUMP Math's [website](#)

Education Statistics

Elaine M. Allensworth John Q. Easton “ [What Matters for staying on track and graduating in Chicago public High Schools](#)”, University of Chicago 2007.

Robert L. Hawkins, James Jaccard, and Elana Needle, “[Non-academic Factors Associated with Dropping Out of High School: Adolescent Problem Behaviors.](#)” University of Chicago Press 2013.

[Ontario Curriculum and Resources](#)

Statistics Canada [high school drop-out rate](#)

Legal disclaimer: *The information in this report was prepared by Charity Intelligence Canada and its independent analysts from publicly available information. Charity Intelligence and its analysts have made endeavours to ensure that the data in this report is accurate and complete but accepts no liability.*

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