

Social Programs That Work Review

## Evidence Summary for Learning Accounts

### HIGHLIGHTS:

- **PROGRAM:** A program in New Brunswick, Canada that provided up to \$8,400 in financial aid for post-secondary education to low-income 10<sup>th</sup> grade students, conditioned on their meeting certain benchmarks (i.e., completion of 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade).
- **EVALUATION METHODS:** A large, well-conducted randomized controlled trial (RCT) with a sample of 1,145 low-income 10<sup>th</sup> graders.
- **KEY FINDINGS:** Over the 10 years following random assignment, the program produced a 6.5 percentage point increase in the high school graduation rate, and 6.8 percentage point increase in the rate of postsecondary completion.
- **LIMITATIONS:** A study limitation is that it was conducted in a single Canadian province. A replication RCT, conducted in another jurisdiction, would be valuable to hopefully confirm the sizable effects found in this study and establish that they generalize to other settings where the program might be implemented.

### I. Evidence rating: **NEAR TOP TIER**

The standard for Near Top Tier is:

*Programs shown to meet almost all elements of the Top Tier standard, and which only need one additional step to qualify. This category primarily includes programs that meet all elements of the Top Tier standard in a single study site, but need a replication RCT to confirm the initial findings and establish that they generalize to other sites. This is best viewed as tentative evidence that the program would produce important effects if implemented faithfully in settings and populations similar to those in the original study.*

### II. Description of the Program:

Learning Accounts was a demonstration program in New Brunswick, Canada that provided up to approximately \$8,400 in conditional financial aid for post-secondary education to low-income 10<sup>th</sup> grade students (i.e., students with a family income below the New Brunswick median). The aid did not have to

be re-paid provided the student was accepted into a recognized post-secondary program in Canada. The program deposited money in students' accounts as they met certain benchmarks – approximately \$2,100 for completing 10th grade, \$2,100 for completing 11<sup>th</sup> grade, and \$4,200 for graduating from high school. All monetary amounts in this summary are 2019 US dollars.<sup>1</sup>

A description of the program is [linked here](#) (page 8). The cost of delivering Learning Accounts as implemented in the study described below was approximately \$3,300 per student.<sup>2</sup>

### **III. Evidence of Effectiveness:**

This summary of the evidence is based on a systematic search of the literature to identify all well-conducted randomized controlled trials of Learning Accounts. Our search identified one such trial. What follows is a summary of the study design and the program's effects on the main outcomes measured in the study, including any such outcomes for which no or adverse effects were found.

#### **Evaluation Method: A randomized controlled trial with a sample of 1,145 low-income 10<sup>th</sup> grade students in 30 high schools in New Brunswick, Canada**

This was a randomized controlled trial conducted at 30 schools in New Brunswick, 15 of which were French-language (Francophone) and 15 of which were English-language (Anglophone). All 14 school districts in New Brunswick (Anglophone and Francophone) contributed at least one school to the sample. Within each school, the low-income students were randomly assigned to a group that was offered participation in the Learning Accounts program, or to a control group that received usual school services.<sup>3</sup>

In total, 1,145 low-income students were randomly assigned across the 30 schools. These students averaged 14.5 years of age when the program began, more than 95% were white, and fewer than 10% had a parent with a university degree. Their families' average income was approximately \$30,000 per year. 52% of the students attended Anglophone schools, and 48% attended Francophone schools.

---

<sup>1</sup> These calculations are based on an exchange rate of \$1.15 Canadian dollars to \$1 U.S. dollars, which was the median exchange rate for 2009, the year the study began. We then adjusted for U.S. inflation since 2009 using the Consumer Price Index.

<sup>2</sup> This is the average amount of financial aid that the program provided to students in the Learning Accounts group in the study we summarize here. It does not include the up-front cost of setting up specialized systems for payment, but on a per-student basis these costs would be minimal in an ongoing program implemented at scale by a student financial aid system.

<sup>3</sup> The study actually was a four-armed RCT. Low-income students in the 30 New Brunswick schools were randomly assigned to one of four groups: (i) Explore Your Horizons (an after-school program designed to help students understand their range of post-high school choices); (ii) Learning Accounts; (iii) a combination of Learning Accounts and Explore Your Horizons; or (iv) control. This summary focuses on a comparison of two study arms – the Learning Accounts group and control group – because Explore Your Horizons was found to produce only weak effects on postsecondary outcomes, and the combined program was found to produce roughly the same effects as Learning Accounts by itself.

**Effects of Learning Accounts on high school graduation 5.5 years after random assignment:**

- In the full sample, the study found a 6.5 percentage point increase in graduation with a diploma or its equivalent<sup>4</sup> (89.2% of the Learning Accounts group graduated versus 82.7% of the control group, a difference that is statistically significant at the 0.01 level).
- In the subgroup of Anglophone schools, the study found an 8.9 percentage point increase in graduation (89.2% for the Learning Accounts group versus 80.3% for the control group, statistically significant at the 0.01 level).
- In the subgroup of Francophone schools, the study found a 4.2 percentage point increase in graduation that was not statistically significant and therefore is suggestive but not fully reliable evidence of an effect (89.1% versus 84.9%).

**Effects of Learning Accounts on university or community college graduation 10 years after random assignment (i.e., 7 years after scheduled high school graduation):**

The graduation data capture universities (i.e., programs leading to a bachelor's degree or higher) and community colleges (i.e., programs leading to a degree or certificate below a bachelor's degree) within the province of New Brunswick and, for university graduation, two neighboring provinces.<sup>5</sup>

- In the full sample, the study found a 6.8 percentage point increase in university or college graduation (36.1% of the Learning Accounts group graduated versus 29.3% of the control group, a difference that is statistically significant at the 0.01 level). This effect was driven entirely by an increase in graduation from colleges as opposed to universities.
- In the subgroup of Anglophone schools, the study found a 4.0 increase in graduation that was not statistically significant and therefore is suggestive but not fully reliable evidence of an effect (25.5% for the Learning Accounts group versus 21.5% for the control group).
- In the subgroup of Francophone schools, the study found a 13.4 percentage point increase in graduation (49.3% versus 35.9%, statistically significant at the 0.01 level).

**Effects of Learning Accounts on employment and earnings during years 4-10 after random assignment (i.e., the 7 years following scheduled high school graduation):**

The study found no significant effect on total earnings over these seven years, nor on employment or earnings in any given year during this time (the non-significant effects are close to zero).<sup>6</sup> However, it may be too early to gauge whether Learning Accounts will ultimately have an effect on earnings,

---

<sup>4</sup> In Canada, the equivalent is a General Education Development diploma (GED). The study did not report the program's effects on regular versus GED diplomas.

<sup>5</sup> The graduation data do not capture private vocational institutes or apprenticeship programs.

<sup>6</sup> These outcome data capture employment and earnings in any Canadian province, not just New Brunswick.

because students in the sample had only recently completed their university or college studies, and some were still enrolled, at the end of the seven years.

**Discussion of Study Quality:**

- The study evaluated Learning Accounts as implemented on a sizable scale in 30 New Brunswick schools, thus providing evidence of the program’s effectiveness under real-world implementation conditions.
- At the start of the study, the Learning Accounts and control groups were highly similar in demographic and educational characteristics (e.g., student age, course grades, parents’ views on higher education, family income).
- The study appropriately sought to measure outcomes for all individuals assigned to the Learning Accounts group, regardless of whether or to what extent they participated in the program (i.e., the study used an “intention-to-treat” analysis).
- The study had a long-term follow-up (10 years after random assignment) and low sample attrition. Survey data, used to measure high school graduation, were obtained for over 80% of the sample at Anglophone schools, and over 90% of the sample at Francophone schools, and follow-up rates were very similar in the Learning Accounts and control groups. Graduation from New Brunswick colleges and from universities in New Brunswick and two neighboring provinces, and workforce earnings anywhere in Canada, were measured with administrative data that affords almost complete coverage of the study sample.
- The study’s statistical analysis appropriately adjusted for the fact that the random assignment ratio — i.e., proportion of students in the Learning Accounts versus control group — varied over time depending on when students entered the study.
- The study’s main limitation is that it was conducted in a single province of Canada (i.e., New Brunswick). A replication RCT, conducted in another jurisdiction, would be valuable to hopefully confirm the sizable effects found in this study and establish that they generalize to other settings.

**IV. References:**

Ford, Reuben, Taylor Shek-wai Hui, and Isaac Kwakye. “Future to Discover: Seventh Year Post-secondary Impacts Report.” *Social Research and Demonstration Corporation*, December 2018.

Hui, Taylor Shek-wai and Reuben Ford. “Education and Labour Market Impacts of the Future to Discover Project: Technical Report.” *Toronto: Higher Education Quality Council of Ontario*, 2018.

Ford, Reuben and Isaac Kwakye. “Future to Discover: Sixth Year Post-secondary Impacts Report.” *Social Research and Demonstration Corporation*, July 2016.

Ford, Reuben and Isaac Kwakye. “Future to Discover: Sixth Year Post-secondary Impacts Report (revised).” *Social Research and Demonstration Corporation*, March 2016.

Ford, Reuben, Douwre Grekou, Isaac Kwakye, and Claudia Nicholson. “Future to Discover: Fourth Year Post-secondary Impacts Report.” *Social Research and Demonstration Corporation*, August 2014.

Ford, Reuben, Marc Frenette, Claudia Nicholson, Isaac Kwakye, Taylor Shek-wai Hui, Judith Hutchison, Sabina Dobrer, Heather Smith Fowler, and Sophie Hébert. “Future to Discover: Post-Secondary Impacts Report.” *Social Research and Demonstration Corporation*, October 2012.

Currie, Sheila, Judith Hutchison, Reuben Ford, Isaac Kwakye, Doug Tattrie. “Future to Discover Pilot Project: Early Implementation Report.” *Social Research and Demonstration Corporation*, October 2007.