The Impact of Bursaries: Debt and Student Persistence in Post-Secondary Education
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Canada Millennium Scholarship Foundation

The Canada Millennium Scholarship Foundation is a private, independent organization created by an act of Parliament in 1998. The Foundation works to improve access to post-secondary education for Canadians from all backgrounds; it encourages a high level of achievement and engagement in Canadian society; and it brings people and organizations together to understand barriers and improve access to post-secondary education in Canada. Each year, the Foundation distributes $340 million in bursaries and scholarships to students across Canada.

The Research Program

The Millennium Research Program furthers the work of the Foundation by undertaking research and pilot projects aimed at understanding and reducing barriers to post-secondary education. It ensures that policy-making and public discussion about opportunities in higher education in Canada can be informed by the best available evidence.

Research Note Series

Part of the mission of the Canada Millennium Scholarship Foundation is to improve access to post-secondary education so that Canadians can acquire the knowledge and skills needed to participate in a changing economy and society.

Higher education provides the prospects for personal fulfillment and economic advancement to which Canadians from all backgrounds are entitled. The Foundation carries out extensive research, collecting and analyzing data from surveys and pilot projects, so that we can better understand the barriers that prevent some students from making it to the post-secondary level, and so that we can identify means to alleviate those barriers.

Within the broad scope of our research, we uncover certain trends, questions and issues that call for wider public dialogue. This research note, the fourth in an ongoing series examining issues of access and funding for post-secondary education, seeks to inform this dialogue and the development of new programs and policies.
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Debt and Student Persistence in Post-Secondary Education

There is convincing empirical evidence that qualified students can be driven to abandon post-secondary education if their debt load is too high. This inevitably has an impact on the country’s ability to compete effectively in a knowledge-based global marketplace. Fortunately, research also shows that reducing debt by providing student borrowers with non-repayable bursaries has a positive impact on their ability to stay in school long enough to successfully complete their programs of study.

A properly managed student aid policy achieves two goals: the first, and obvious one, is that it improves access to post-secondary studies; the second, and possibly the most important, is that it contributes to students’ success in sticking with their studies, or what is referred to throughout this note as “persistence.”

All students benefit from government transfers, which allow colleges and universities to operate, and from education-related tax credits. Additionally, about half of Canadian post-secondary students rely on government support to pursue their studies. Student aid recipients have access to student loans, and, in certain cases, some funds that do not need to be repaid. Non-repayable assistance comes either as a grant that replaces or tops up student loans, or as a remission payment that reduces a student’s outstanding debt, either at the end of an academic year or upon completion of studies. The Canada Millennium Scholarship Foundation’s millennium bursaries, like most non-repayable assistance, are provided to student loan recipients with high levels of financial need as determined by their provincial/territorial student aid program.

This research note examines information from three different reports, published through the Millennium Research Series, on the impact of student financial assistance on post-secondary persistence and success. All three reports were prepared for the Foundation by Lori McElroy, a Victoria-based researcher.

Does Debt Matter?

The research examines the amounts and kinds of student financial aid provided to students in three case studies. It explores their relationship to the different levels of student success. The first provides a snapshot

Figure 1: Student Financial Aid by Type

- Grants only: 47%
- Loans only: 15%
- Grants and loans: 25%
- No aid: 13%
of student aid recipients at six universities who began their studies in 1997 or 1998. It tracked their progress over the course of five years. During this tracking period, these students received $78.9 million in loans and $17.4 million in grants. Individual aid amounts ranged from a low of $15 to a high of $138,376. Figure 1 portrays the mix of financial aid they received.

To measure the relationship between financial assistance and persistence, McElroy examined the level of student success as it relates to a student’s amount of annualized aid. Annualized aid divides the total amount of aid a student received by the number of years of full-time study he or she completed. As Figure 2 indicates, students who received larger amounts of financial aid during each year of full-time studies (or the equivalent) completed fewer required credits than those who received less aid. Figure 3 demonstrates that they were also less likely to complete their studies.

Clearly, students with high levels of financial need are vulnerable to abandoning their studies. However, does the form of financial aid provided to these students make them more or less likely to remain in school? In particular, do measures to reduce or prevent student debt have an impact on student success? As Figure 4 indicates, there appears to be a direct connection between the mix of student aid and the level of persistence.

Students who receive a grant as well as or in addition to a loan complete more required credits than those who do not; they are also more likely to have earned their degree during the five-year tracking period (although those with the highest levels of student aid were slightly less likely to finish their studies than those who received no financial aid, regardless of whether or not they received a grant). Perhaps what is more important is the significant gap in the completion rate between those who received both a loan and a grant and those whose assistance was limited to student loans. Grant-and-loan recipients with the highest levels of financial need were almost five times as likely to earn a degree as those who got only loans.

This first case study demonstrates that debt plays an important role in a student’s decision to continue his or her studies from one year to the next. It shows that students who receive...
large amounts of financial aid are more likely to abandon their studies, but that the receipt of even part of their aid in the form of a non-repayable grant has a positive impact on their persistence. In short, debt matters, and measures to alleviate it seem to work.

**Does Loan Remission Work?**

The second case study, an analysis of the millennium bursary’s impact in Manitoba, provides insight into the effect loan remission programs have on student success. Since 1999–2000, the Canada Millennium Scholarship Foundation has provided just under $11 million annually in non-repayable assistance to high-need Manitoba college and university students who already had completed one year of post-secondary studies. The Foundation’s millennium bursary, in addition to the province’s corresponding bursary investment, reduces the annual debt load of Manitoba students. In its first year, the average recipient of either bursary (they are treated as one remission program for the purpose of this analysis) had his or her debt reduced by $3,085. By 2002–03, the average benefit had grown to $5,224, as many students had received the bursary more than once.

In her report, McElroy examines two cohorts of students: those who benefited from the loan remission program and those who studied just prior to its introduction (the “millennium” and “pre-millennium” cohorts). As one would expect, students who received the bursary amassed less debt than did their “pre-millennium” peers, as indicated in Table 1.

Though the student aid database does not track the actual number of credits each student earned, McElroy was able to determine which students might have completed their

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programs, which were still pursuing studies, and which had appeared to have abandoned their studies. The results suggest that the introduction of the bursary had a positive effect on persistence. Those in the “millennium” group were more likely to either have arrived at the final year of their program or at least to have been enrolled at the end of the four-year tracking period. As Figure 5 indicates, the proportion of “leavers” dropped by 10 percentage points following the introduction of the bursary. Figure 6 suggests that the recipients of loan remission were able to spend more time in school; perhaps the presence of debt-prevention measures reduced students’ likelihood to work part- or full-time during the academic year, allowing them to spend more time in class and less in the labour market.

McElroy explored possible reasons other than the bursaries themselves to explain the improved persistence among the “millennium” cohort, including grades, tuition and

<table>
<thead>
<tr>
<th>Table 1</th>
<th>The Impact of the Millennium Bursary on Student Debt in Manitoba (in Constant 2002 Dollars)</th>
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<tbody>
<tr>
<td></td>
<td>2-Year Diploma Program</td>
</tr>
<tr>
<td>“Pre-millennium” total debt</td>
<td>$15,731</td>
</tr>
<tr>
<td>“Millennium” before remission</td>
<td>$17,514</td>
</tr>
<tr>
<td>“Millennium” after remission</td>
<td>$13,600</td>
</tr>
<tr>
<td>Average benefit</td>
<td>$2,131</td>
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</tbody>
</table>

Figure 5 Persistence Measures by Original Program Length and Credential

Leavers

- 2-Year Diploma: Pre-Millennium 25%, Millennium 15%
- 3-Year Degree: Pre-Millennium 36%, Millennium 34%
- 4-Year Degree: Pre-Millennium 26%, Millennium 23%

Continuers

- 2-Year Diploma: Pre-Millennium 2%, Millennium 4%
- 3-Year Degree: Pre-Millennium 18%, Millennium 23%
- 4-Year Degree: Pre-Millennium 18%, Millennium 7%

Potential Completers

- 2-Year Diploma: Pre-Millennium 7%, Millennium 32%
- 3-Year Degree: Pre-Millennium 48%, Millennium 48%
- 4-Year Degree: Pre-Millennium 54%, Millennium 53%
changes in other forms of student financial assistance, and she discounts them. She concludes that “loan remission bursaries (and the resulting reduced debt load) had the very positive effect of increasing persistence among the ‘millennium’ cohort.” Loan remission recipients were much less likely to abandon their studies and were more likely to reach the final year of their program or begin working on a second credential. Why? They carried lower debt. They worried less about debt and spent more time focusing on studies. In a nutshell: loan remission works.

Is Debt All That Matters?

The third case study examines the limits of loan reduction by exploring the impact of the millennium bursary in British Columbia. McElroy looks at the evolution of the provincial student aid system since 1998. The introduction of the millennium bursary prior to the 1999–2000 academic year allowed for the expansion of the existing B.C. grant program to students in their first four years of post-secondary study. Previously, it had only been available to students in their first two years. In 2001–02, 14,351 students who beforehand had only been eligible for loans received an average of $4,445 in non repayable assistance because of the expansion of the grant program. The average benefit to the 3,069 of these students who had dependants was higher at $9,072.

As in her Manitoba analysis, McElroy compares a “pre-millennium” cohort to the group of students benefiting from the new investment. Because “pre-millennium” students were eligible for grant assistance from the province for their first two years of post-secondary study, the effects of the Canada Millennium Scholarship Foundation’s assistance can only be measured properly by assessing its impact on students continuing studies beyond two years. Figure 7 indicates that students enrolled in short programs who had completed two years of post-secondary studies, then benefited from the new millennium bursary for subsequent years of study, were more likely to reach their fourth year than those who pursued studies of more than two years prior to its introduction. In particular, it appears that students with children benefited the most from the new investment, as their success rate nearly doubled.
The reverse was true, however, for those entering longer, four-year programs with no background of higher education; the “millennium” cohort did worse than the one that preceded it. McElroy concludes that this finding is likely due to the fact that students in four-year programs have higher levels of unmet need. Students in the “millennium” and “pre-millennium” cohorts had levels of unmet need that were 31% and 44% higher, respectively, than those of students in two-year programs. Unmet need is the amount of a student’s financial need that is recognized but not funded through the financial aid system because of limits in the amount of available aid. Students with unmet need must turn to bank loans, family and part-time work, or even full-time work, to make ends meet. McElroy suggests that grants (which, in both British Columbia and Manitoba, reduce debt without increasing the total amount of money available to students) can only improve persistence if recipients can pay their bills during the school year. Figure 8 demonstrates the degree of unmet need among students in four-year programs. While students who continued from first to second year had lower levels of unmet need, the presence of more students with high levels of unmet need likely served to mute the overall effect of the grants. In other words, levels of unmet need, while somewhat lower than those in the “pre-millennium” group, were simply not low enough.

The B.C. experience suggests that students who cannot balance their budgets at the end of the month are vulnerable to dropping out, even if they are less concerned about amassing debt. While decreasing debt has a positive impact on persistence, it alone cannot enable students who are short on cash to make ends meet. This presents an interesting dynamic to the challenges associated with student aid, for it may be that debt matters, but unmet need matters more.

Consider a student who has high levels of financial need. If that student is adequately funded, she will be able to pay her tuition and fees, rent, groceries, etc. If her source of income is dominated by repayable loans, however, the research suggests that she is at risk of abandoning her studies as the prospect of amassing a large debt load increases. For this student, debt reduction measures, like loan remission grants and bursaries, can have a positive impact on her likelihood to persist in her studies. Now imagine her classmate, whose student financial aid package, even when combined with income from a part-time job, is insufficient to pay the bills. One can assume that this student would be pre-occupied more with an urgent,
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growing stack of unpaid bills, and less with the accumulation of debt. Reducing his level of repayable debt will do nothing to help his cash flow problems, which are likely to pressure him to abandon his studies.

In either case, the result is the same — the student is more likely to abandon his or her studies without some form of targeted assistance. Only in the first case, however, are debt reduction programs alone effective at improving persistence.

**Conclusion: A Two-Pronged Approach**

Student financial aid is a key part of any policy that seeks to provide more equitable access to post-secondary education. It helps economically disadvantaged students access the funds they need to pay for their education. And by providing continued financial support, it prevents students from abandoning the pursuit of a higher education for financial reasons.

Canadians have a significant long-term economic stake in ensuring that every qualified student can pursue a higher education without risking financial jeopardy. Consequently, it is vital that policymakers be aware of the need to ensure that student aid adequately meets the needs of students, but also that it is generous enough to ensure that debt does not drive students to abandon post-secondary studies.

In fact, debt load is a serious concern among those who borrow to study. The evidence indicates that some potential debt levels are so high that they deter qualified students from completing their programs.

Policymakers have a valuable tool in grants and loan remission. By providing even a portion of assistance in the form of a non-repayable grant, they make it easier for students to focus on school and their studies.

Equally important to policymakers is the need to keep students’ short-term financial worries under control by providing them the funds they need to meet the basic costs of living. Short-term financial concerns lead to untenable levels of part-time work that cut into study time, or the added burden of last-minute bank loans. These can drive students out of the classroom. It is imperative that qualified students have access to all the funds they need to make it through the school year successfully.

Policies designed to improve the success rate among post-secondary students must reflect the concerns raised here. Helping qualified students who need financial assistance without taking on excessive debt has long-term benefits. While it could be argued that reducing student debt through a sufficient level of grants and loan remission adds to education costs, there is a long-term argument in its favour: Canada’s progress in the 21st century depends on its ability to compete effectively. Ensuring that qualified students can pursue post-secondary education is the key to creating the highly educated and skilled population that will give the country a competitive edge.

The Canada Millennium Scholarship Foundation provides approximately $285 million each year to students in the form of millennium bursaries. These bursaries either reduce existing borrowing among high-need students or increase the amount of student aid they receive; in all cases, they are provided as non-repayable grants. Measures like the millennium bursary are designed to limit the accumulation of debt among Canadian post-secondary students. As this research note demonstrates, they have the additional benefit of effectively improving students’ chances of success at the post-secondary level.

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Endnotes

1. The first report, Student Aid and University Persistence: Does Debt Matter, examines the effect of different kinds and amounts of student aid on persistence at six universities across Canada. The second, The Millennium Foundation Bursary in Manitoba: Exploring its Impact, provides an assessment of the effect the Canada Millennium Scholarship Foundation’s bursary investment has had on student debt levels and persistence in Manitoba since its introduction in 1999–2000. The final report, The Millennium Bursary in B.C.: Exploring its Impact, provides a similar analysis. All three reports are available online at www.millenniumscholarships.ca/en/research/researcheries.asp.

2. The report relies on administrative data provided by Simon Fraser University, Brock University, Carleton University, Lakehead University, the University of Ottawa and Concordia University. In total, it examines a cohort of 13,280 students. The study included students in a degree program with no prior post-secondary experience; students could be studying full- or part-time, though foreign students were excluded from the analysis.

3. Unfortunately, the data do not allow us to determine what proportion of the grant assistance was delivered on the basis of financial need. Because need-based grants are generally provided only to those who have borrowed from governments, it is reasonable to assume that almost all of those in the “grants only” group received merit scholarships, and not need-based grants (only about 9% of all grants are based on merit). However, we cannot discount the notion that some of those in the “grants & loans” group received at least a portion of their non-repayable assistance on the basis of merit and not financial need. This paper does not explore the relationship between the receipt of a merit scholarship and persistence, although doing so would contribute to our understanding of student success.

4. Looking at total amounts of aid would skew our results in favour of those who spent more time in school, i.e., those who did not abandon their studies. It therefore undermines the possibility of finding any negative impact that the receipt of large amounts of financial aid may have on persistence.

5. It is important to note that students who changed post-secondary institutions or who abandoned their studies with the intention of returning in the future could not be distinguished from those who would be considered dropouts.

6. Curiously, almost all students receiving financial assistance, regardless of the amount, completed as many or more required credits than students who did not access student aid. It is plausible that the “no aid” group’s heterogeneity had something to do with it. One can imagine that this group consisted of students relying on family support as well as students struggling to pay for their education without access to external sources of support, including loans. Additionally, it is plausible that students willing to amass debt to pay for their studies may be more committed to or motivated about their education. Unfortunately, this research, which is based on administrative data, does not allow us to explore these hypotheses.

7. The Manitoba millennium bursary was introduced prior to the 2000–01 academic year, one year after the Foundation’s bursary had been implemented. Manitoba millennium bursaries were designed to provide similar loan remission assistance to students who did not qualify for the Foundation’s bursary. These students were either in their first year of studies (the Foundation’s bursary required the recipient to have already completed one year of post-secondary education) or they had slightly lower levels of assessed financial need than the Foundation’s bursary recipients. The effect of the two bursaries, which were designed to avoid any duplication of assistance, was to limit the amount of debt students could accumulate from government sources.

8. Because she was able to access Manitoba Student Aid administrative data, McElroy was able to establish a “pre-millennium” cohort that matched the actual cohort of bursary recipients, controlling for differences that might affect persistence. As she writes, “The intent was to make access to loan remission the only difference between the two cohorts.”

9. Students who did not apply for student financial assistance during each of their post-secondary years would be considered to have abandoned their studies, since the research relied on Manitoba Student Aid data.

10. Prior to 1999–2000, the B.C. grant was available to students in their first two years of study whose level of provincially assessed need exceeded $105 per week. Following the introduction of the millennium bursary and the corresponding expansion of the B.C. Grant program, the need threshold was increased to $125 per week. As of 2000–01, single parents in their fifth year of study were also eligible for the bursary.

11. Whereas 29% of students with dependants and 35% of students with no dependants in the “pre-millennium” cohort reached their fourth year, only 25% and 16%, respectively, of those in the “millennium” cohort did so.

12. Because the report relies on administrative data from the student aid program, it is impossible to measure the impact of institutional programs designed to address unmet need by providing additional assistance to students.