

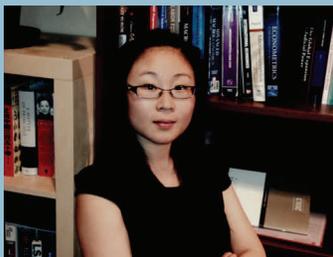


# Labour Market Matters

## Special points of interest:

- Employer-sponsored mid-career education found to contribute to significant wage growth for both men and women.
- While positive outcomes have been observed from the Foundational Workplace Skills Program (FWSP); the lack of a suitable control group precludes definitive attribution of these positive outcomes to the FWSP program.

**“[T]he average treatment effect on the treated of employer supported course enrollment ranges from 4.2 to 7.6 percent higher wage growth for men and from 7.1 to 7.6 percent higher wage growth for women.”**



Wen Ci  
(Carleton University)

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## Impact of Employer-Supported Mid-Career Education on Wages

Individuals who enter the labour market with relatively low levels of education often find that they lack the necessary human capital and credentials needed to adapt to the rapidly changing labour market in Canada. The severe recession of the early 1980s and early 1990s coupled with the restructuring in the labour market caused by the introduction of the US-Canada Free Trade Agreement, the North American Free Trade Agreement, the High Tech Meltdown in the early 2000s and the recent Financial Crisis have also had major implications for job security. Mid-career investments in both human capital and credential acquisition in this context may be increasingly important for workers to both retain stable employment and receive a suitable return for their work. A CLSRN paper entitled **“Does Adult Training Benefit Canadian Workers?”** ([CLSRN Working Paper no. 124](#)) by Wen Ci, José Galdo, Marcel Voia, and Christopher Worswick (all of Carleton University) estimate the causal impacts of employer supported course enrollment and mid-career investments in formal education on wages.

Using longitudinal data from the confidential versions of the

Survey of Labour and Income Dynamics (SLID) of Statistics Canada, the researchers analyze the incidence of employer supported course enrollment as well as the impact on wage outcomes of mid-career investments in education and job training following re-entry into the labour market. Probability of participation in employer supported course enrollment is lower for visible minorities than for non-visible minority workers – but probability of enrollment increases with level of initial education. They also find strong positive effects of employer supported course enrollment on wage changes over time. The estimated effect ranges from 6.8 to 7.7 percent wage growth for men and 7.5 to 9.3 percent wage growth for women. Focusing on the significant results for men, this indicates that a 100 hour long course can lead to approximately a 1.7 percent increase in wage growth. The researchers find these estimates to each be individually statistically significant, and find robust support for the idea that employer supported courses lead to higher wage growth for both men and women in Canada.



Christopher Worswick, José Galdo, and Marcel Voia  
(Left to Right: all of Carleton University)

The same analysis was carried out over sub-samples of less educated workers in order to re-estimate their wage growth model to see whether these course enrollment investments are especially beneficial for workers with less formal education. In each case, the estimated effects on wage growth of enrollment in employer supported courses were similar to what was found in the estimation carried out over the sample of all workers.

The authors also investigate the robustness of the findings to the possibility of endogenous selection into employer supported course enrollment. Using matching based methods, the average treatment effect on the treated of employer supported course enrollment ranges from 4.2 to 7.6 percent higher wage growth for men and from 7.1 to 7.6 percent higher wage growth for women.

## Positive Adult Learning Outcomes from the Foundations Workplace Skills Program (FWSP)

Skills such as literacy, document use and numeracy are often considered to be basic “Foundational Skills” that are essential building blocks towards success in the labour market. For unemployed adults, it is believed that improvement of such foundational skills through Adult Learning programs can be helpful toward the improvement of labour market outcomes for such individuals. The *Foundations Workplace Skills Program (FWSP)* is a small-scale adult learning intervention program delivered at no charge by Douglas College to unemployed workers in Surrey, British Columbia. The program was designed to help develop broadly applicable, general skills – particularly for the facilitation of long-term labour force integration and attachment. A CLSRN study entitled “**An analysis of a foundational learning program in BC: the Foundations Workplace Skills Program (FWSP) at Douglas College**” ([CLSRN Working Paper no. 123](#)) by David Gray and Louis-Philippe Morin (both of the University of Ottawa) analyzes the workings of the FSWP intervention by investigating three measured and observed outcomes for the participants of the FSWP program: i) a return to work, ii) a return to school, and iii) an improvement in the score obtained from the *Test of Workplace Essential Skills (TOWES)* that gauges literacy and essential skills.

The FSWP intervention is structured according to three phases, each of which is considered to be a separate sub-program. Phase 1 assesses

participants and instills awareness of the importance of foundational skills. The TOWES exam – a test that measures adult skills based on actual competency levels rather than on education or credentials – is taken during phase 1. Phase 2 involves the “portfolio development” of skills and relating skills to vocational goals, matching skills with job requirements, exposing participants to essential employability skills, and instilling the notion of transferability of skills and knowledge. Phase 3 involves enhancing and developing foundational skills such as oral communication and working in a team; targeting of skills deficits; using software and internet applications available for career planning, and the retaking of the TOWES exam.



**David Gray**  
(University of Ottawa)

Out of the 1,625 participants who started phase 1; 314 continued on to phase 3 and took the TOWES for a second time. The study found that most of the attrition occurs during phase 1, and most participants who reach phase 2 will continue on to phase 3. Most people who eventually found a job,

and about half of those who eventually went back to school, did so during phase 1. More precisely, 58.6 percent of the participants who found a job, and 50.3 percent of the participants who returned to school, did so during phase 1. Participants with higher initial TOWES scores tended not to continue in the program through phase 3.

**“Of the participants who continued to the end of the program, post-treatment test scores were found to be significantly higher than the initial scores. The researchers found that the magnitude of the improvement is large – representing 51.9, 37.3, and 38.3 percent of a standard deviation for document use, numeracy, and reading, respectively.”**

Of the participants who continued to the end of the program, post-treatment test scores were found to be significantly higher than the initial scores. The researchers found that the magnitude of the improvement is large – representing 51.9, 37.3, and 38.3 percent of a standard deviation for document use, numeracy, and reading, respectively. While this finding is encouraging, the absence of any comparison group for the analysis means that it is not possible to definitively conclude that this improvement should be attributed to the participation in the FWSP.



**Louis-Philippe Morin**  
(University of Ottawa)

While participants who completed the FWSP program improved their TOWES scores, it is impossible to know whether this improvement is attributable to the FWSP or simply due to the fact that participants are more familiar with the test the second time that they take it. Disentangling these two potential confounding factors would require comparing these improvements of program participants to those of a ‘control’ group composed of a group of individuals apparently similar to the participants but not having participated in the FWSP.

The study concludes by making recommendations in regards to developing a new data set that would be suitable for designing and carrying out a rigorous, scientific, and empirical evaluation of labour market interventions like the one that is covered in this study.

### Endnotes

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