#### PLAIN LANGUAGE SUMMARIES

Literacy Skills, Occupational Assignment and the Returns to Over- and Under-Education

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### What is this study about?

This study used Canadian data from the International Adult Literacy Survey to examine the relationships between schooling, literacy and the assignment of individuals to occupations. The study determines the extent to which economic returns to workers who appear to be over- and under-educated compared to the the level of education believed to be needed to do the job are, in fact, returns to literacy skills.

Two measures of required training time for the job are used, both of which are based on detailed occupation. One is the General Educational Development (GED) level of the occupation; the other is the sum of the GED and Specific Vocational Preparation (SVP) times.

Analysis of the required training time of individuals' jobs shows that literacy skills are an important determinant of occupational assignment by skill level, once schooling is taken into account. Skills acquired through on-the-job training may also play an important role in occupational assignment.

The research literature on returns to over-education and under-education examines the relation between workers' skills, as measured by their level of schooling, and the skill requirements of their job. The "typical" findings in this body of research are 1) that over-educated workers (schooling greater than required by their job) earn more than workers in jobs with comparable educational requirements but with the (lower) schooling levels that match these requirements; 2) that over-educated workers earn less than workers with comparable schooling in jobs which require this level of schooling; and 3) that under-educated workers (schooling less than required by their job) earn more than comparably educated workers in jobs which match their schooling, but less than workers in jobs with comparable educational requirements whose schooling matches these requirements.

What are the questions addressed by the study?

### Why is this study important?

The Boothby study is important because it supports the notion that literacy skill is an important determinant of economic success for Canada's workers.

The fact that employers appear to be able to identify and choose to reward workers literacy skills even in jobs where their skill levels are higher or lower than those thought to be needed to support job performance across the full range of occupations suggests that literacy is a fundamental determinant of the workers productivity. Many public policy makers had previously assumed that literacy was simply something that more productive workers had rather than something that determined worker productivity.

The Boothby results suggest that focusing public policy on raising average literacy levels and in reducing inequality in literacy levels of different groups of workers would improve employment and wage levels, and reduce employment and wage inequality among workers.

# What does the study conclude?

Boothby finds the expected pattern of positive economic returns to overeducation and under-education for women and men in earnings of full-time workers.

When measures of literacy skill are added, the estimated impact of both overeducation and under-education decreases for men and the estimated Impact of under-education increase for women.

When a measure of literacy use at work is added, this variable has a positive impact on earnings; and there are further decreases in the positive impact of both over- and under-education for both women and men.

The author concludes that literacy skills play a significant role in the assignment of workers to occupations, independent of the role of schooling, that the positive return to under-education for both women and men is in large part a return to above average literacy skills for their level of schooling, and that for men, the return to over-education is in large part a return to literacy skills which are above average for their jobs.

This would seem to indicate that employers are capable of determining their employees' literacy skills by more accurate means than simply depending on the level of schooling as an indicator of workers productivity.

# **Publication information**

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