

Western helping numbers add up

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To Ivan Fellegi, the numbers simply don't work out. And if anyone knows numbers, it's Ivan Fellegi.

For a quarter of a century, Fellegi served as chief statistician for Statistics Canada. Now retired, he is drawing attention to the desperate need within the public service ranks for a unique-but-important skill set, longitudinal statisticians. He simply sees "far too few" in the field right now.

"The limitation is not so much the labour market as it is the available skill sets," he says. "There is an acute shortage of well-qualified – or even reasonably qualified – candidates."

One of the few post-secondary institutions looking to fill that need is The University of Western Ontario.

This summer, the university will roll out its [Western Summer School in Longitudinal Data Analysis](#) through the [Faculty of Social Science](#).

A certificate program can be taken over two weeks, three and a half hours a day. This stream targets current professionals, inside and outside academia, who want to improve their abilities in targeted areas of analyzing data sets. This program begins in Summer 2012.

There are hopes for a second stream, a diploma program running concurrent with the certificate program. If approved, the program would be offered over two or three summers and incorporate similar certificate courses but with exams. This stream targets those seeking a more comprehensive set of skills in the area.

"The Faculty of Social Science, and the [Department of Sociology](#) in particular, has long been known for its emphasis on quantitative analysis," says Brian Timney, Social Science dean. "The longitudinal data analysis summer school will offer that expertise to a much wider audience and help raise Western's profile in this area even higher." For grads, there will be plenty of opportunity.

Since the early 1990s, Statistics Canada has developed a series of longitudinal surveys designed to increase understanding of key socio-economic questions. Because the same respondents are interviewed at regular intervals, longitudinal surveys can be used to study changes that occur over time, such as job changes or unemployment spells, family changes or movements into and out of poverty.

These data sets are useful in examining cause-and-effect relationships.

And we need longitudinal statisticians to interpret and communicate said data to the public.

"We're not doing a very good job of popularizing the information," Fellegi says.

For example, he cites a study that tracked the incomes of fathers with the subsequent incomes of their sons 25 years later. The study looked at how the two incomes correlated.

The findings of the international study showed Canada was among the most open societies in the world, where little relationship existed between a father's income and his child's.

"That insight is important. It says a lot about Canada and offers a lot of direction if we want to continue to make sure these findings remain the case," he says.

This kind of specific, long-term data, many in and out of public service argue, grows more and more important every day.

Fellegi sees research literature in the field becoming far less comparative, and therefore narrowing the field. On the plus side, he pitches it as a great field to make a name in research quickly.

But don't forget about the policy side, he says.

"The questions are out there. And the answers need to be found," Fellegi says. "And the answers can only be found by longitudinal data."