

## **CANADIAN LABOUR MARKET AND SKILLS RESEARCHER NETWORK**

### **CALL FOR PROPOSALS ON APPRENTICESHIP IN CANADA**

This is a Request for Proposals for research projects related to Apprenticeship in Canada. The projects are being commissioned as part of the Canadian Labour Market and Skills Researcher Network (CLSRN) supported by Human Resources and Skills Development Canada (HRSDC). The coordinators of this research program are Jennifer Hunt (McGill University) and Michael Smith (McGill University).

To support evidence-based policy decision-making in Canada, CLSRN plans to provide funding for up to 6 research papers under this Call for Proposals.

For the purposes of research support, the product of the research will be peer-reviewed working papers. Copyright of the research papers remains with the author(s). The working papers will appear in the CLSRN research paper series, and may also be posted at the HRSDC web site. The findings may also be reported in HRSDC's research newsletter.

HRSDC is committed to developing interest in apprenticeship research among both established and junior Canadian researchers. This is in accordance with our objectives in supporting CLSRN, and because the apprenticeship system in Canada is a complex area rich in potential for funded, on-going research relevant to HRSDC's policy domains. In this context, we are preparing a small number of visits to Canadian university campuses in early April 2009 to further discuss this Request for Proposals, and recent and potential research in the area. It will be most efficient if we travel to locations where there are sufficient numbers of interested researchers. Please assist us in these efforts by informing us of your interest in such a visit. You may address emails to Lisa Comeau at [lisa.comeau@hrsdc-rhdsc.gc.ca](mailto:lisa.comeau@hrsdc-rhdsc.gc.ca), or by phone at 819-953-8803.

#### **Background, Context and Coverage**

Statistics Canada has recently released two potentially useful new data sources on apprenticeship in Canada: the 2006 Census, and the 2007 National Apprenticeship Survey (NAS). In addition, the Registered Apprentice Information System (RAIS) which provides data on enrolments, completions, etc., has been revised to collect more relevant information.

The 2006 Census adds a unique identifier of apprenticeship completion to the educational coding. This addition opens opportunities for research on apprenticeship issues, such as an investigation of occupational outcomes for labour force participants in the skilled trades, calculation of comparative rates of return to training, and analysis of the relative influence of apprenticeship training on careers and occupational outcomes of women and minority groups including immigrants and aboriginal peoples. More information on the 2006 Census can be acquired at: <http://www12.statcan.ca/census-recensement/index-eng.cfm> or <http://www12.statcan.ca/census-recensement/index-fra.cfm>

The 2007 NAS offers detailed information on pathways through apprenticeship, including motivation to enter, experiences during in-school and on-the-job training, and labour market experience subsequent to training. It complements the surveys of ex-apprentices done by Statistics Canada at the end of the 1980s and in the mid-1990s. More information on the 2007 NAS can be obtained at: <http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=3160&lang=en&db=imdb&adm=8&dis=2> or [http://www.statcan.gc.ca/cgi-bin/imdb/p2SV\\_f.pl?Function=getSurvey&SDDS=3160&lang=en&db=imdb&adm=8&dis=2](http://www.statcan.gc.ca/cgi-bin/imdb/p2SV_f.pl?Function=getSurvey&SDDS=3160&lang=en&db=imdb&adm=8&dis=2)

The RAIS is an annual survey of provinces and territories collecting administrative statistics on the activities of apprenticeship training programs. (It represents an analogue of Statistics Canada's Post-Secondary Student Information System (PSIS) which collects information on the volume of training by post-secondary educational institutions). Over the last three years, RAIS has been the subject of intensive redevelopment, resulting in significantly improved data quality, and beginning for the reporting year of 2008, uses an improved set of data elements – but preserves continuity with previous years. More information on the RAIS can be obtained at: <http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=3154&lang=en&db=imdb&adm=8&dis=2> or [http://www.statcan.gc.ca/cgi-bin/imdb/p2SV\\_f.pl?Function=getSurvey&SDDS=3154&lang=en&db=imdb&adm=8&dis=2](http://www.statcan.gc.ca/cgi-bin/imdb/p2SV_f.pl?Function=getSurvey&SDDS=3154&lang=en&db=imdb&adm=8&dis=2)

The Canadian apprenticeship system is comprised of 13 separate programs administered by provincial and territorial governments. Although each of these programs is administered separately, they share many common features, and over the past half-century efforts have been made to coordinate important aspects of program operation. Generally speaking, all of the jurisdictional programs are intended to provide training in a variety of occupations requiring coordination of theoretical knowledge and practical skills - the skilled trades. In Canada, 49 skilled trades account for 88% of all apprentices (as of 2006). This concentration on serving a set of technical and semi-technical occupations requiring practical skills effectively typifies the Canadian apprenticeship system vis-à-vis those in many other countries.

There are several issues of current interest to apprenticeship program administrators and planners in Canada. Some of them lend themselves well to focused research projects using these new data sources alone and/or in conjunction with other data sources. Other topics of interest may require work of a more theoretical nature. CLSRN welcomes proposals for both empirical and theoretical research.

Here is a list of researchable issues that are of current policy interest:

1. What are the economic rates of return to apprenticeship training? Challenges related to investigation of this issue include the variability and variety of

pathways through training, and ambiguities in the available data may complicate the measurement of training duration. New information offered by the 2006 Census, NAS, and Statistics Canada's RAIS may be helpful in this regard.

2. What are the relative labour market outcomes of apprenticeship training for identifiable groups (e.g., equity groups, occupations, etc.)? Since administrative records are not consistent in their reporting on many groups of interest, the Census could be used in combination with the NAS surveys (and perhaps RAIS) to construct estimates of such patterns.
3. Past attempts to model apprenticeship intakes and completions have been largely unsuccessful. This is likely due to the complexity of typical pathways through apprenticeship training and deficiencies in available data. Empirical models of the determinants of apprenticeship training volumes would be useful for predictive purposes are needed by program administrators.
4. Unlike other forms of post-secondary education and training, apprenticeship training volumes are clearly pro-cyclical. What factors explain this procyclicality? What are the relationships between training volumes (entries, completions, preferably also by trade group and region) and the economic environment?
5. Are the numbers of skilled trades practitioners trained by the system meeting the needs of the labour market? What would be the basis of such a determination?
6. What are the non-economic outcomes of apprenticeship training, and do these outcomes vary significantly between different trades? How is apprenticeship training related to social outcomes such as socio-economic class identity, citizenship engagement, health status and so on? Does this vary for different equity groups (eg. women, Aboriginal peoples, immigrants)?
7. What are the influences of occupational licensure of some trades (i.e., compulsory certification, as found in most jurisdictions) on enrolments, completions, and post-training incomes? To what degree are economic rents involved?
8. What are the effects on apprenticeship outcomes (e.g., Red Seal exam scores, income after completion) of training characteristics (e.g., mode, length of technical training)?

CLSRN welcomes proposals addressing the more specific questions listed above. In addition, we encourage proposals for projects addressing more general questions such as the following:

9. Employers training apprentices are eligible for tax credits, both federally and in some provinces. Using administrative records from provincial and the federal governments, can employer behavior (in this regard) be modeled to judge the impact of these subsidies? Could the model be developed to assess the effect of the subsidy over the business cycle, to determine whether and how the magnitudes of the subsidies could be varied to suit business conditions?
10. Similarly, the Government of Canada and some provinces offer grants and other inducements to apprentices to continue or complete training. Can the impact of these be modeled (based on available data) to show the effectiveness of these programs? Over the business cycle?
11. The balance between providing training tailored to local needs versus facilitation of inter-provincial mobility through commonly recognised certification.
12. The standards by which Canadian apprenticeship programs should be assessed, given that the predominant purposes of these programs are the establishment and maintenance of a well trained workforce in a relatively small number of technical occupations requiring manual skills.
13. The inter-connectivity between Canadian apprenticeship programs and other educational pathways is sometimes questioned. Are there lessons to be learned from experience in other countries?
14. It has been suggested that better coordination of the technical training of apprentices and their on-the-job training would yield pedagogical advantages. How effective is this coordination at present? Do the experiences of programs in other countries point to cost-effective improvements?
15. The facilitation of inter-provincial geographic mobility is a primary goal of the Red Seal process. How effective has this mechanism been in achieving enhanced mobility? How could this be assessed, given current data availability?
16. The impact of apprenticeship (and related certifications) on labour market productivity is a topic of continuing interest. However the evidence of this relationship is highly anecdotal and the strongest arguments are usually based on theory, not fact. Given this lack of direct evidence, are there indirect ways of showing this relationship?

### **Proposal Selection Criteria**

Proposals must involve new research that is not supported by other organizations. However, the proposed research may be related to, or an extension of, research supported elsewhere.

All proposals *and* papers will be peer reviewed. Academic reviewers will assess the quality of the proposed research and the potential contribution to knowledge. Representatives of selected Canadian government departments will assess proposals and papers for their policy relevance (broadly defined). Only proposals that meet both criteria – academic excellence and policy relevance – will be funded.

Proposals can be submitted by any university-based faculty or postdoctoral researcher. Graduate students can participate as co-investigators, but not as principal investigators. These research grants are not intended to support PhD thesis research – CLSRN does this in other ways – and thus the proposed research should not be part of a graduate student’s PhD thesis. Since one of the objectives of CLRSN is to help ensure the emergence of a new generation of researchers with an interest in labour market policy, proposals from new researchers from a range of disciplines are especially welcome. For established researchers, proposals that involve graduate students or recent graduates in a significant role are also encouraged.

Funded studies will generally provide new empirical evidence to support evidence-based policy decision-making in Canada. To that end, preference will be given to proposals either directly using Canadian data, or where lessons learned are clearly transferable to the Canadian context. They are to be of the quality of papers submitted to peer-reviewed, refereed journals and authors are encouraged to ultimately submit them to such forums (with appropriate acknowledgement to the funding source). The normal budget for such research studies is \$25,000 (plus GST, cost of Regional Data Centre (RDC) access, and / or university overhead if applicable). More ambitious projects using partnerships or teams of researchers will also be considered.

Government researchers are also invited to submit proposals, either as principal investigators or as co-investigators. However, government researchers are not eligible for CLSRN financial support.

**Schedule of Deliverables**

Payments will normally be scheduled as follows: (i) upon submission of a preliminary outline for the paper, including planned methodology; (ii) upon submission of a satisfactory first draft; and (iii) upon submission of a satisfactory final draft.

The timelines for the projects are as follows:

May 15, 2009	Proposals due
June 15, 2009	Researchers are informed of decision
July 15, 2009	Preliminary outline of project due
November 10, 2009	First draft of paper due
November 2009	Workshop
February 15, 2010	Final draft of paper due

Working papers are expected to be 20-40 pages in length, although they could be somewhat longer than this standard in order to provide sufficient detail on methods used and results obtained.

The researchers will also be expected to present the paper at a workshop to be organized by HRSDC in the spring of 2010.

### **Proposal Requirements**

The proposals can be brief (e.g., 5-6 pages) and can take the form of the proposed outline of the research paper or papers, along with methodological and budgetary information. Proposals and final working papers may be written in English or French. The proposal should outline the rationale for the study, situating it in the relevant literature and indicating the gaps in our knowledge that it proposes to fill. The proposal should also explain the relevance of the proposed research for public policy, bearing in mind the HRSDC mandate. Finally, the proposal should describe the data to be used and the proposed methodology. The CVs of all co-investigators should be included with the proposal.

The project budget can be used for any purposes deemed appropriate by the researchers to meet the legitimate expenses associated with carrying out the research. Such expenses can include: teaching or administrative release (at the relevant local university rates for such release); research assistance; researchers' stipends; data collection; and travel associated with conducting the research. For reasons addressed later in this Call, the costs associated with RDC access should not be included in the initial budget (though applicants are asked to indicate where RDC use will be required to complete the work). Funds for successful proposals can be transferred to the Principal Investigator's university, in which case the budget in the proposals can include university overhead up to a maximum of 25%. University signatures are not required on the proposal itself. The payments can also be made directly to the researchers. Travel associated with presenting the paper at workshops organized by CLSRN and HRSDC will be covered separately. In all cases, and especially for funding requests beyond the base level of \$25,000, a justification of the budget should be provided.

If the proposed research is to be carried out in a Research Data Centre (RDC), applicants should note that proposals that are approved for funding by CLSRN will not also be required to go through the SSHRC review process that is normally required for RDC access. Such proposals will, however, still be reviewed by Statistics Canada. The Statistics Canada review focuses on two issues: (i) demonstrated need for access to confidential micro-data (i.e., could the proposed research be carried out with public use data?) and (ii) whether the available data are capable of addressing the research question(s) posed. Researchers wishing to use data housed in a RDC should ensure that their proposal addresses these issues. Other information needs in support of RDC access include:

- Clear specification in the proposal that access to an RDC will be required;

- Which RDC(s) will be accessed and by whom;
- Whether or not those accessing the RDC already have appropriate security clearance; and,
- A total budget that includes RDC access costs of \$3,957. RDC access costs are a legitimate additional expense over and above the base budget of \$25,000.

More than one project may be commissioned on a particular research question and none may be commissioned in others. The suggested questions (listed above) may also be combined and researchers may propose alternative topics. Researchers may be involved in more than one topic and in different areas.

**Proposals should be sent via e-mail to:** Katherine Meredith, at [clsrn@interchange.ubc.ca](mailto:clsrn@interchange.ubc.ca), (Canadian Labour Market and Skills Researcher Network, Department of Economics, University of British Columbia).

**Enquiries** about this research project can be directed to: Jennifer Hunt (Department of Economics, McGill University, [jennifer.hunt@mcgill.ca](mailto:jennifer.hunt@mcgill.ca)) or Michael Smith (Department of Sociology, McGill University, [michael.smith@mcgill.ca](mailto:michael.smith@mcgill.ca)).