PPX Learning Event Challenges in Implementing New Methodologies and Managing Data

SUSAN MORRIS LOUISE-MICHELLE VERRIER

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Natural Sciences and Engineering Research Council of Canada

Social Sciences and Humanities Research Council of Canada

Conseil de recherches en sciences naturelles et en génie du Canada

Conseil de recherches en sciences humaines du Canada



NSERC and SSHRC

Core Responsibility	Responsabilité essentielle
Funding Social Sciences and Humanities/Natural Sciences and Engineering Research and Training	Financement de la recherche et formation en sciences humaines/Sciences naturelles et génie

- 3 equivalent Programs in Program Inventory
 - Insight / Discovery Research
 - Research Partnerships
 - Research Training and Talent Development



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Research Training and Talent Development

- Support to graduate students and postdoctoral fellows during their studies
 - To attract and, retain highly qualified personnel
 - To develop the next generation of researchers and leaders across society
- Essential to build the human capital required to enable a strong, globally competitive research and innovation system in Canada





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Academic Path and Agency Support

Masters

Ph.D.

PDF

PGS-M (NSERC) CGS-M Doctoral Fellowships (SSHRC) PGS-D (NSERC) CGS-D

PDFs (NSERC, SSHRC) Banting PDFs

Vanier CGS

CREATE (NSERC)





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Research Training Results

- Departmental Result: Canada has a pool of highly skilled people in the SSH / NSE
- Proportion of award holders who are underrepresented individuals
- Number of research trainees supported
- Percentage of research trainees that go on to work in a research position
 - ... but there is a lot more to measure!



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5

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Results measurement

- Talent Achievement Report (SSHRC)
 - Completed by awardee mandatory
 - Within 6 months after the award end-term
 - Built like a short survey
 - Hosted on an external platform
- Exit surveys & Follow-up surveys 7 years post-award (NSERC)
- Focus on Outcomes, Collaborations, Skills, Knowledge mobilization, Distinctions, Career development, etc.



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Variables of Interest

- Excellence
- Degree completion / Time to completion
- Accumulation of debt
- % Master's students pursuing PhDs; PhDs taking up postdoctoral fellowships
- Research production / Collaboration
- Development of research and professional skills
- International exposure
- Employment status (Sector, Research intensity)



Challenges (1/3)

- Tri-Agency considerations
 - Discipline-based cultures
- Declining response rates
- Appropriateness and accessibility of comparison groups
 - Unsuccessful applicants
 - Awardees of similar programs
 - Student population



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Challenges (2/3)

- Incrementality
 - Attribution of "what would have happened in the absence of the program" particularly challenging
 - Expected results stemming from program support vs. selection of candidates
 - Results for Canadians



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Challenges (3/3)

- Longer-term trajectory missing
 - What is the ultimate advantage for GoC to fund scholarships?
 - We would like to link to academic & life long career outcomes

Possibilities are arising using data linkage



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10

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Post-secondary Administrative Data Pilot Project

- Four institutions
- Phase I:
 - award recipients and students paid from grants vs. overall population
 - time to completion, completion rates
- Phase II
 - discontinuity analysis
 - link with Statistics Canada tax data



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11

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