Capturing multifaceted needs, impacts and value-added across stakeholder groups through mixed methods for the 10th-year Evaluation of the Canada Research Chairs program

CES Conference 2012 Halifax
Presentation outline

- **Context:** Overview of the Canada Research Chairs Program (CRCP) and evaluation

- **Question 1:** How to capture multifaceted needs, impacts and value-added across stakeholder groups?
  - Stakeholder-oriented, comparative design
  - Pros & cons of design approach

- **Question 2:** How to address multifaceted needs of stakeholder groups when formulating findings and recommendations?
  - Evidence table
  - Stakeholder consultations on recommendations

- **Conclusion:** Lessons learned and discussion
Overview of the CRCP

- Canada Research Chairs Program (CRCP), established in 2000
- 2000 Chairs to attract excellent researchers to Canadian universities (about 1850 Chair positions filled at any one time)
  - Tier 1 Chairs: $200,000/yr for 7 years, renewable
  - Tier 2 Chairs: $100,000/yr for 5 years, renewable once
  - Special Chairs (120)
- Allocated to universities based on funding received from granting agencies: 35% CIHR, 45% NSERC, 20% SSHRC
- Chairholders are selected and nominated by universities and must align with the university’s strategic research plan
- Nominations are peer-reviewed
Overview of the CRCP

- Nominated chairholders can apply for CFI funding (infrastructure support) as part of the CRCP application
- Funds are allocated to and administered by the university.
- Tri-agency program (CIHR, NSERC, SSHRC), administered by the CRCP Secretariat
- 4 specific objectives of the CRCP:
  - to attract and retain excellent researchers in Canadian universities
  - to improve universities’ capacity for generating and applying new knowledge
  - to strengthen the training of highly qualified personnel (HQP)
  - and to optimize the use of research resources through strategic planning
Overview of the CRCP Evaluation

- Summative evaluation of the CRCP, covers 2000–01 to 2009–10
- 5 key evaluation issues: 1) continued need and relevance; 2) success; 3) efficiency and effectiveness; 4) governance, design & delivery; 5) equity
- 11 main evaluation questions (several sub-questions)
- Multiple lines of evidence, cross-linked to indicators in DCM
- Adequate budget to support mixed methods

Question 1:
- How to capture multifaceted needs, impacts and value-added across stakeholder groups?
Key stakeholders

CIHR  SSHRC  NSERC  CFI  Industry Canada
CRC Secretariat

70 Universities  VP Research

Chairholders  Applicants  Non-chairholders
Tier 1  Tier 2  Special Chairs  Resigned  Declined
Women, Aboriginal people, Visible minorities, People with disabilities

Highly Qualified Personnel  Students/Trainees
Research staff
# Stakeholder-oriented Comparative design

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Overview of the approach

**Phase I: Design**
- Kick-off meeting
- Final Evaluation Design Report

**Phase II: Fieldwork**
- Document/File/Data review
  - 4 Web surveys
    - CRCP chairholders; other chairholders; grantees; university VPs Research
- Study of equity issues
  - 32 interviews with members of four designated groups (related to equity issues)
    - CRCP chairholders; unsuccessful CRCP applicants
  - 10 Program-level interviews (multiple interviewees)
    - Representatives from: Industry Canada* (1); CIHR (1); NSERC (2) and SSHRC* (2); CRCP Secretariat* (1); CFI (1); AUCC* (1) and ACT* (1)
  - 12 Chair-level interviews
    - Unsuccessful CRCP applicants (2); former chairholders who resigned (6); expatriates who were former chairholders (5)
  - 52 Case study interviews
    - V.P. Research (14); CRCP chairholders (14); HQP (15); non-renewed chairholders (2); unsuccessful CRCP applicants (3)
  - 4 HQP focus groups
    - Vancouver, Fredericton, Toronto, Montreal
- Bibliometric data (researchers’ portfolio)
  - CRCP Chairholders; unsuccessful CRCP applicants; other Chairholders; grantees

**Phase III: High-Level Analysis**
- Study of equity issues
  - 19 case studies
- Bibliometric analysis

**Phase IV: Reporting**
- Meta-Analysis
  - First Draft Evaluation Report
    - Feedback/Revision
  - Second Draft Evaluation Report
    - Feedback/Revision
    - Presentation to the Steering Committee
      - Feedback/Revision
      - Final Evaluation Report

**Timeline**
- June-Dec. 2009
- Jan.-July 2010
- Aug.-Dec. 2010
Looking back on the design…

Pros
- Consultation and feedback loops with clients (CRCP Secretariat, CIHR, NSERC, SSHRC, CFI) via evaluation advisory committee helped us understand and address multiple/emerging needs
- Comparative approach and multiple lines of evidence by question and by stakeholder group to better capture the complex and diverse (sometimes opposing!) perspectives, added-value and impacts of the CRCP
- Leveraged the strong buy-in/participation of stakeholders

Cons
- **TIME** required for the design, fieldwork, analysis and reporting phases
- **Budget ($)** required for “Cadillac”-model evaluation – meeting the needs of all stakeholders is not cost-neutral
- Balance between expectations of multiple clients = all need to **compromise**
Putting it all together

Question 2:

➤ How to address multifaceted needs of stakeholder groups when formulating findings and recommendations?

- Grouped multiple lines of evidence in single place – the evidence table (G. Barrington, *Handling Data: From Logic Model to Final Report*)
- “One stop shop” to review evidence when integrating findings (analysis/reporting) and when validating findings (quality control)
- Easier to identify and focus on findings that are triangulated across data sources and stakeholder groups (other findings can be presented as “mixed” or as specific to a group)
6.1. Has the CRC program contributed to universities’ capacity to attract and retain the highest quality students from Canada and the world?

**Evidence Obtained (by indicator and by source and/or stakeholder group)**

<table>
<thead>
<tr>
<th>Eval. Question</th>
<th>Indicator 6.1.1: Informed opinions on the contribution of CRCP to attracting and retaining high-quality HQP</th>
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<tbody>
<tr>
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<td><strong>Document and file review: Annual reports</strong></td>
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<td>Increased Number of Graduate Students in Strategic Areas: The CRCP has led to greater focus on</td>
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<td>excellence in teaching and training students and in developing and strengthening undergraduate,</td>
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<td>graduate and postgraduate study programs to recruit top students</td>
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<td>Case study interviews (CH, HQP)</td>
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<td>All of the HQP who participated in these case studies indicated that they were extremely pleased</td>
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<td>with the development and training they received as members of the CRCP Chairholders’ research</td>
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<td>groups. HQP were also unanimous in citing their advisor’s experience, area of research and/or</td>
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<td>reputation in the field as the primary reasons for selecting that particular individual as their</td>
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<td>Surveys – Chairholder (Q21 and 23), Other chairholders (Q22 and 23), Grantees (Q20)</td>
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<tr>
<th>Impact of funding of CRCP/other chair</th>
<th>CRCP Chairholders (n=996)</th>
<th>Other Chairholders (n=145)</th>
<th>Grantees (n=125)</th>
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<td>Your ability to attract more students and research staff</td>
<td>80% Positive</td>
<td>86% Positive</td>
<td>94% Positive</td>
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<tr>
<td>Your ability to attract higher quality students and research staff</td>
<td>74% Positive</td>
<td>60% Positive</td>
<td>86% Positive</td>
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<td>The quality of the training of your students and research staff</td>
<td>73% Positive</td>
<td>59% Positive</td>
<td>94% Positive</td>
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- Statistically significant difference between 3 groups: For all 3 three indicators, grantees report higher impacts than both CRCP and other chairs, and CRCP greater than other chairs (K-W test, P = <0.001)

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<td>HQP Focus groups</td>
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<td>Main reasons for selection of supervisor (in order of prevalence):</td>
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**Indicator 6.1.2: Informed opinions on the opportunities to collaborate with other leading Canadian and international researchers available to CRCP trainees, in comparison with other HQP**

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“Internal” processes

- Discussed key findings and proposals for recommendations at several internal evaluation team meetings
- Most effective when all evaluators who collected and/or analysed data from particular stakeholder groups attended and spoke as “champions” of that group
  - Safe way to test recommendation ideas
- In case of opposing perspectives or needs, how to decide what to recommend?
  - As external evaluators, we chose to view the program itself as the ultimate beneficiary (how does a recommendation affect the relevance or contribute to the performance of the program?)
Getting to recommendations

“External” processes (3 months)

- Multiple consultations with client on recommendations
  - SSHRC Project Authority
  - CRCP Secretariat
  - CRC Management Committee (VP-level)
  - CRC Steering Committee

- Led to significant & iterative revisions to recommendations and the supporting text (rationale)

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<th>Final Version</th>
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<tr>
<td>Improve the coordination between CRCP-supporting organizations (i.e., the CRCP, the CFI, federal granting agencies, and universities) to ensure timely and effective support of chairholders’ research programs.</td>
<td>Ensure that all chairholders receive timely and adequate cross-organizational support for their research program.</td>
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Looking back on the recommendations…

Pros

- Most recommendations accepted by the CRC Steering Committee
- Generated more awareness of key issues and their complexities across stakeholder groups
- Served as part of basis for the CRC Secretariat’s follow-up plan (monitor trends, collaborate with universities)
- Informed reflections regarding federal budget reductions (no cuts)

Cons

- Recommendations “diluted” via consultation process
- Did not lead to significant tangible changes in program delivery to date (approx. 1 year after Management Response)
Looking back on the evaluation...

- Fairly successful effort to meet needs of multiple client stakeholders
  - Mixed results in terms of evaluation outcomes
- More successful at capturing needs, impacts and added-value of multiple beneficiary groups
  - Stakeholder-oriented/comparative mixed-method design
  - Evidence table worthwhile investment to capture complexity/diversity
- Collaborative (internal, external) approaches are key but take more time – and don’t expect it to be easy
- Scope and range of methods unlikely to be repeated for 15th-year evaluation (maybe 20th-year evaluation)
Get in touch!

CONTACT INFORMATION

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### Data Collection Method Details

1. **Document/ literature and file review**
   - The review of documents, secondary literature, files and program data included:
     - CRCP documents, past evaluations/reviews and administrative data (CIMS), external documents
     - CRCP Chair reports (annual university and chairholder reports and financial reports)

2. **Interviews (106)**
   - Total number of interviews
     - Program-level key informant interviews (1-4 interviewees per interview) 10
     - Chair-level interviews (three groups) 12
     - Case studies interviews (for 19 case studies) 52
     - Equity-related interviews with members of four designated groups 32

3. **HQP focus groups**
   - Total number of focus groups (Fredericton, Montreal, Toronto, Vancouver) 4 (34 participants total)

4. **Web surveys (4)**
   - Total number of completed responses (valid response rate, margin of error):
     - Survey of CRCP chairholders 1009 (55.8%, 2.1%)
     - Survey of other chairholders (excluding federal granting agency chairs) 173 (29.3%, 6.3%)
     - Survey of grantees (not CRCP chairholders) 172 (29.0%, 6.3%)
     - Survey of university VPs Research 44 (60.3%, 9.4%)

### Analytical Method Details

1. **Case studies**
   - Total number of case studies: 14 CRCP Chairs, 2 non-renewed Chairs, 3 non-awarded Chair applications

2. **Bibliometric analysis**
   - Analysis of the scientific performance of CRCP chairholders compared pre-post and to three groups:
     - a group of unsuccessful CRCP applicants
     - a group of other chairholders (matched; excluding federal granting agency chairs)
     - a group of grantees (matched; not CRCP chairholders)