

SSHRC  CRSH

**EVALUATION OF
PARTNERSHIP FUNDING
OPPORTUNITIES**

Final Report
August 2018

*Produced by NSERC's and SSHRC's Evaluation Division
and Goss Gilroy Inc.*



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada 

TABLE OF CONTENTS

- List of Acronyms1
- Executive Summary2
- 1. Introduction5
 - 1.1. Evaluation Background and Purpose5
 - 1.2. Evaluation Scope and Questions5
 - 1.3. Evaluation Methodology.....6
- 2. What Do the Partnership Funding Opportunities Fund?7
 - 2.1 About the Partnership Funding Opportunities7
 - 2.2 Characteristics of Grants.....8
 - 2.3 Characteristics of Participants9
 - 2.4 Participant Involvement10
- 3. Are partnership funding opportunities relevant?13
 - 3.1 Benefits of Collaborative Research.....13
 - 3.2 Demand for Partnership Funding Opportunities14
 - 3.3 Fit with SSHRC Programming.....15
- 4. Are PG and PDG Effective?16
 - 4.1 Research Outputs16
 - 4.2 Knowledge Mobilization17
 - 4.3 Strengthened Relationships.....19
 - 4.4 Academic Outcomes20
 - 4.5 Non-Academic Outcomes21
 - 4.6 Impacts on Trainees.....24
- 5. How could the PG and PDG delivery models be enhanced?.....25
 - 5.1 Areas to Build On25
 - 5.2 Opportunities for Change26
- 6. Conclusions and Recommendations28
 - 6.1 Conclusions.....28
 - 6.2 Recommendations.....29
- Appendix A: Program Profile32
- Appendix B: Evaluation Matrix.....38
- Appendix C: Evaluation Methodology43
- Appendix E: Alignment between evaluation questions and report sections45
- Appendix E: References.....46

LIST OF ACRONYMS

CG	Connection Grants
CS	Case Study
CURA	Community-University Research Alliance
CV	Curriculum Vitae
HQP	Highly Qualified Personnel
IDG	Insight Development Grants
IG	Insight Grants
IMMERSe	Interactive and Multi-Modal Experience Research Syndicate (IMMERSe)
KMB	Knowledge Mobilization
LOI	Letter of Intent
MCRI	Major Collaborative Research Initiative
MRA	Manitoba Research Alliance
NFPs	Not-for-profit
NGOs	Non-governmental Organizations
PDG	Partnership Development Grants
PEG	Partnership Engage Grants
PG	Partnership Grants
PSI	Post-Secondary Institutions
RDI	Research Development Initiative
RGPD	Research Grants and Partnerships Division
SRA	Social Rights Accountability
SRG	Standard Research Grants
SSHRC	Social Sciences and Humanities Research Council

EXECUTIVE SUMMARY

About the Funding Opportunities

Social Sciences and Humanities Research Council of Canada's (SSHRC) partnership funding opportunities provide grants to support knowledge mobilization activities of scholars and researchers working as individuals, in teams, and in formal partnerships with the academic, public, private, and/or not-for-profit sectors. Partnership funding opportunities include:

- **Partnership Grants (PG)** – \$500K-\$2.5M institutional grant for 4-7 years intended to advance research, research training, and/or knowledge mobilization. On average, 19 PGs are awarded each year for an annual total of \$40.5M.
- **Partnership Development Grants (PDG)** – \$75K-\$200K individual grant for 1-3 years intended to foster new research and/or related activities; and/or design and test new partnership approaches. On average, 57 PDGs are awarded each year for an annual total of \$11M.
- **Connection Grants (CG)** – up to \$50K for 1 year, intended to support events and other outreach activities geared toward short-term, targeted knowledge mobilization activities. On average, 251 CGs are awarded each year for an annual total of \$6.6M.

About the Evaluation

PG, PDG and CG were evaluated in the 2017-18 fiscal year. The evaluation scope focused on the five-year period since the launch of PG and PDG in fiscal year 2010-11 to 2016-17.¹ As the PG and PDG are the most material funding opportunities within the partnership suite, study resources were primarily devoted to evaluating these two funding opportunities, and with evaluation of CG relying primarily on secondary data already available. Outcomes of the PG's predecessor funding opportunities, MCRI and CURA, were also incorporated to assess the longer-term outcomes of SSHRC investments in partnerships.

Conclusions and Recommendations

Recommendation 1: Continue to fund partnership-type funding opportunities that range in grant value and length.

Partnership funding opportunities respond to a need for collaborative research to investigate and disseminate knowledge on complex social challenges. Both PG and PDG show evidence of achieving their intended outcomes, including impacts on the academic and non-academic spheres. Furthermore, there is evidence that PG and PDG directly contribute to students and postdoctoral researchers finding employment both within and outside of academia. In comparison to their IG/IDG counterparts, PG/PDG create as many or more types of research outputs, are more likely to disseminate outside of academia, are more likely to increase knowledge, and are more likely to report economic, social, or cultural benefits and changes to public policy. These advantages are more heavily influenced by the type of funding opportunity (i.e., insight or partnership) rather than the value of the grant. PG/PDG most directly impact the knowledge base and professional practice of their partner organizations, but also contribute to longer term policy change. Collaborative research is also well aligned with the mandate and priorities of SSHRC. Finally, the evaluation indicates that researchers require different sizes and lengths of grants to address different challenges.

Given the evidence of sound design and effective implementation, it is recommended that SSHRC continue to support PG and PDG, providing funding opportunities that range in size and scope.

Recommendation 2: Encourage applicants to fully engage non-academics in project leadership and setting research objectives.

Several positive outcomes are associated with the engagement of non-academics (e.g., not-for-profits, industry, government) and high levels of collaboration. For example, non-academics are more likely than academics use research findings, and public policy impacts are most common in networks where research planning is led by non-academics. Furthermore, partners and collaborators who experienced a high degree of collaboration were more likely to say that the project addressed their organizations' needs.

¹ Because the evaluation included an examination of the longer-term outcomes of MCRI and CURA, the period under study also includes years prior to 2010-11 for questions related to outcomes.

At the same time, a majority of collaborators and co-applicants are academics and almost all lead organizations are post-secondary institutions. While academic and non-academic participants are equally likely to be involved in planning the project/network, non-academics lead the planning process in only one quarter of grants.

If a key objective of the partnership suite funding opportunities is to support knowledge use, it is recommended that SSHRC further encourage a high degree of collaboration with non-academic participants. Particular emphasis should be placed on engaging non-academics in project leadership and setting research objectives.

In encouraging non-academic participation, attention should be paid to the perception of role categories used in SSHRC's application process (i.e., co-applicant and collaborator). While co-applicant and collaborative are largely administrative categories, some participants perceive the role of collaborator to have second tier status. Given that the majority of non-academic individual participants are classified as collaborators, this may be damaging to relationships.

Recommendation 3: Continue to ease the burden of the application process for non-academic participants

The application requirements were identified as inappropriate and burdensome for organizations and individuals outside of academia. In particular, participants noted that SSHRC's academic C.V. template was inappropriate for non-academic co-applicants and that many non-academic partner organizations experienced technical difficulties with SSHRC's online system when attempting to provide a letter of support. The substantial time needed to navigate SSHRC's requirements/systems creates barriers for non-academic participants that are often already operating with limited time and resources.

SSHRC has recently taken steps to ease the burden of the application process, including making some revisions to its online system and simplifying the partner invitation process. These improvements were not implemented in time to be considered in the scope of this evaluation. Given the benefits of engaging non-academics, SSHRC should continue to break down barriers both in the application requirements and in the technology that supports the applications.

Recommendation 4: Develop a means to identify each participant's involvement in grant activities and intended benefits.

PG and PDG are deliberately broad, funding a wide variety of projects/networks and partnerships. Participants, even within a single grant, can be involved to varying extents and for varying reasons. While this flexibility seems valuable to the projects/networks, it can make it challenging to assess the impact of these funding opportunities and demonstrate results for Canadians.

The evaluation initially attempted to use SSHRC's official participant roles (i.e., co-applicant, collaborator, partner organization) to understand how participants are involved as well as which participants could be reasonably expected to see outcomes. However, there is no clear correlation between the participant roles used for administrative purposes and a participant's actual involvement or desired benefits. These terms seem to be inconsistently understood and are often used interchangeably.

Developing some other means to identify the involvement of and intended benefits for key participants would allow SSHRC to more accurately assess the value of research partnerships and demonstrate results for Canadians. That is, this information would allow future analysis to focus on assessing impact only for those participants where it is a reasonable expectation. This may help to explain why project directors were significantly more positive about outcomes than other participants. Furthermore, clearly identifying the nature of each partner's involvement would allow SSHRC to better understand the correlation between different types of involvement and different types of success.

As such, it is recommended that SSHRC develop a means to identify the involvement of and intended benefits for key participants. Both activities and benefits should be recorded in a manner that facilitates roll up and analysis across multiple grants.

Recommendation 5: Establish resources or mechanisms to support project directors leading a large partnership.

Managing a large scale partnership or network often demands competencies that are not part of traditional academic training. While some management tasks can be assigned to a competent project coordinator, the project

director must still play a pivotal role in motivating and unifying a wide range of stakeholders. Most project directors develop these skills organically, but this can be a steep and time consuming learning curve. As such, it is recommended that SSHRC support project directors in developing their leadership skills. This should include opportunities to share promising practices between more and less experienced project directors.

1. INTRODUCTION

This report presents key findings, conclusions and recommendations from an evaluation of the Social Sciences and Humanities Research Council (SSHRC) partnership funding opportunities conducted in 2017-18.

1.1. Evaluation Background and Purpose

SSHRC's partnership funding opportunities provide grants to support knowledge mobilization activities of scholars and researchers working as individuals, in teams, and in formal partnerships with the academic, public, private, and/or not-for-profit sectors. Partnership funding opportunities include Partnership Grants (PG) and Partnership Development Grants (PDG), along with the much smaller Connection Grants (CG).²

The purpose of the evaluation was to provide SSHRC senior management with an assessment of the relevance, effectiveness and efficiency and delivery of Partnership Funding Opportunities. The partnership funding opportunities evaluation has been conducted in compliance with the coverage requirements outlined in the *2016 Treasury Board Policy on Results* and the *Financial Administration Act*.

1.2. Evaluation Scope and Questions

The scope of this evaluation focuses on the five-year period since the launch of PG and PDG in fiscal year 2010-11 to 2016-17.³ As the PG and PDG are the most material funding opportunities within the partnership suite, study resources have to be devoted primarily to assessing these two funding opportunities, and less attention has been paid to the smaller CG. Where appropriate and relevant, outcomes of the PG's predecessor funding opportunities (MCRI and CURA) were incorporated to examine changes between them and the current partnership suite and to assess the longer-term outcomes of SSHRC investments in partnerships.

The evaluation addressed the following nine questions:

1. Is there a continued need for the funding opportunities in the current Canadian context?
2. To what extent are the activities and objectives of the funding opportunities consistent with SSHRC's mandate and strategic outcomes, other SSHRC funding opportunities and federal government priorities?
3. To what extent is the design of each funding opportunity appropriate?
4. To what extent are the different types of partnerships funded appropriate?
5. What has been the level of engagement of individuals and teams in research and research-related activities?
6. To what extent has research knowledge been produced and used?
7. To what extent have highly qualified personnel (HQP) participated in research training and enhanced their research, professional skills, and knowledge?
8. To what extent have the PG/PDG funding opportunities contributed to the expertise and excellence of Canadian SSH researchers being recognized nationally and internationally?
9. To what extent are the funding opportunities delivered in a cost-efficient manner?

In order to streamline the report, the nine evaluation questions were consolidated into four main questions:

1. What are we funding?
2. Are the partnership funding opportunities relevant?
3. Are the PG and PDG effective?
4. How could the PG and PDG funding models be enhanced?

Unless otherwise specified, the findings for PG and PDG have been grouped as the results were similar.

² A new partnership funding opportunity, Partnership Engage Grants (PEG), was introduced in 2017/18. PEG is outside of the evaluation scope.

³ Because the evaluation included an examination of the longer-term outcomes of MCRI and CURA, the period under study also includes years prior to 2010-11 for questions related to outcomes.

1.3 Evaluation Methodology

SSHRC evaluators and an evaluation consulting firm (Goss Gilroy Inc.) collaborated to implement this evaluation. It was guided by an Evaluation Advisory Committee composed of representatives from the SSHRC Evaluation Division and SSHRC program representatives.

Evaluating the partnership funding opportunities required multiple lines of evidence including: a review of documents and key literature; a review of financial data, grant files and administrative data; interviews with key informants (n=19); a web based survey of PG and PDG applicants (n=924, response rate=27%) and partner/collaborators (n=725, response rate=18%); and case studies (5 PG, 5 PDG, 4 MCRI/CURA, 2 MCRI/CURA-funded grants that later received PG funding).

Several key comparisons and/or disaggregated analyses were conducted of quantitative data (i.e., survey results and administrative data) where appropriate. This included:

- Disaggregating all results by funding opportunity (PG and PDG rarely showed differences and so all figures in this report include both unless otherwise specified);
- Comparing PG/PDG to data from the 2015/16 evaluation of Insight Grants (IG) and Insight Development Grants (IDG);
- Comparing PG/PDG survey results to a 2014 survey of MCRI and CURA researchers;
- Disaggregating findings based on whether the grant was a project or a network⁴;
- Disaggregating findings based on level of collaboration (as described in 2.4); and
- Disaggregating findings based on whether the grant was deemed to be academic-driven or non-academic-driven.⁵

Key limitations and mitigating strategies included the following:

1. It was not possible to fully evaluate long term outcomes as PG and PDG were only recently launched (and none of the PGs have yet completed their grants). This was mitigated by examining long term outcomes of PG's predecessor funding opportunities (MCRI and CURA) with the assumption that, because PG and PDG have similar intended short/intermediate outcomes to MCRI and CURA (i.e., all funding opportunities have intended outcomes related to research, training/HQP development and collaborations), they will have similar long term outcomes in the future.
2. PG and PDG are often compared to their counterparts from SSHRC's insight suite of funding opportunities, Insight Grants (IG) and Insight Development Grants (IDG). While it is useful to benchmark PG/PDG against 'traditional' academic funding opportunities, these comparisons are imperfect as PG/PDG generally fund higher values and longer time periods than IG/IDG. To mitigate this challenge, all comparative analysis assessed the effect size (i.e., Phi value) of grant value *and* of grant type (i.e., insight vs. partnerships). Findings are only presented where grant type has a larger effect on dependent variables than grant value.
3. Generalizability of findings must be interpreted with caution due to high variability of partnerships and project/network design. This was mitigated by examining outcomes disaggregated by key variables such as level of collaboration, and sector of partners. Where results differ based key grant characteristics this is pointed out.
4. Positive response bias, as the majority of respondents have received or hope to receive SSHRC funding and therefore may be more inclined to interpret granting mechanisms positively. This was mitigated by seeking input from a wide range of stakeholders including those not receiving funding.

Appendix B presents the evaluation matrix, which includes a cross-walk between the evaluation questions and the methods. Appendix C provides more detailed information on the evaluation methodology and analysis conducted. Appendix E shows the alignment between the original evaluation questions and the report sections.

⁴ "Network" is used within this report to describe grants that fund multiple related research projects while "project" is used to describe grants that fund a single research project. Note that this usage of terms is specific to this report and does not necessarily align with official SSHRC definitions. Further information is provided in Section 2.2.

⁵ For the purposes of this report, "academic driven" projects/networks are those where a post-secondary institution led both research planning and development of research questions (as indicated by the Project Director in the evaluation survey). Non-academic driven projects/networks are those where participants affiliated with any organization other than a post-secondary institution (i.e., not-for-profits, government, industry) leads either research planning and/or development of research questions. Further description is provided in Section 2.4.

2. WHAT DO THE PARTNERSHIP FUNDING OPPORTUNITIES FUND?

Summary of Findings:

PG and PDG are distinguished from each other primarily by size and length and grant. They differ from purely academic grants (such as Insight grants) in that: lead applicants and co-applicants are not required to be affiliated with a post-secondary institution; at least one formal partnership is required; and additional emphasis is placed on knowledge mobilization and use. The majority of lead applicants are affiliated with large universities. Furthermore, the majority of PGs and about half of PDGs fund networks (i.e., multiple, coordinated research projects) rather than a single project.

SSHRC defines categories of participant roles such as partner organization, co-applicant and collaborator. However, in practice, these terms are often used interchangeably and with some confusion. Based on participant roles as defined in grant applications, 2/3 of partner organizations are non-academic, while 1/3 of collaborators and less than 10% of co-applicants are affiliated with non-academic organizations. However, distribution of non-academic participants is not even across grants. Almost all PG and PDG involve at least one non-academic partner organization and about ¾ of PGs and just under ½ of PDGs involve non-academic collaborators. However, less than ½ of PGs and ¼ of PDGs involve non-academic co-applicants..

Participants' activities are influenced by their roles and sectors in the following ways:

- Research planning and question design is typically led by academic participants but academics and non-academics are equally likely have some involvement in these steps;
- Individuals with multiple roles (i.e., partner representative *and* collaborator) are most likely to use project/network findings, closely followed by partners; and
- Non-academics are more likely than academics to use research findings.

About half of project directors, co-applicants, partners, and collaborators characterize their grants as highly collaborative and one third characterizing their grants as having medium levels of collaboration. Based on annual reports submitted to SSHRC to date, PG leveraged 92¢ for each \$1 of SSHRC funds (similar information is not available for PDG).

2.1 About the Partnership Funding Opportunities

Each of the three partnership funding opportunities (PG, PDG, and CG) is designed to respond to both the objectives of SSHRC's Insight Program and/or SSHRC's Connection Program. The current suite of partnership funding opportunities was launched in 2010-11, replacing two primary predecessor funding opportunities: Major Collaborative Research Initiative (MCRI) and the Community-University Research Alliance (CURA).

PG and PDG are distinguished from each other primarily by the size and length of the grant. PG is an institutional grant that supports large projects or programs of research, providing each grant with \$500K-\$2.5M for four to seven years. PDG is an individual grant that supports smaller projects, providing each grant with \$75K-\$200K for one to three years. CG is quite different from the other partnership funding opportunities, funding specific events (\$7K-\$25K) or outreach activities (up to \$50K) geared toward short-term, targeted knowledge mobilization initiatives including workshops, colloquiums, conferences, forums, and summer institutes. Each CG is a one year grant.

PG and PDG differ from more 'traditional' or purely academic grants (e.g., Insight Grants, Insight Development Grants) in the following ways:

- While lead applicants must hold SSHRC institutional eligibility, they are not required to be affiliated with a

- post-secondary institution (PSI);
- Co-applicants are not required to be affiliated with PSI or an institution that holds SSHRC institutional eligibility;
- At least one formal partnership is required;⁶
- Additional emphasis is placed on knowledge mobilization and use.

A more detailed description of the three grants is provided in Appendix A.

2.2 Characteristics of Grants

Partnership Grants are institutional grants (i.e., the primary applicant is an institution or organization) while Partnership Development Grants and Connection Grants are applied for by individuals. In all three grants, the majority of grant recipients are large universities (PG 78%) or affiliated with large universities (PDG 73%, CG 71%). As shown in Figures 1 and 2 respectively, the distribution of grant applications and recipients in PG/PDG is similar to the partnership suite predecessors MCRI and CURA. Note that the category of “other” includes colleges, research organizations, not-for-profits, etc.

Figure 1: Proportion of grant applications by organization/affiliation

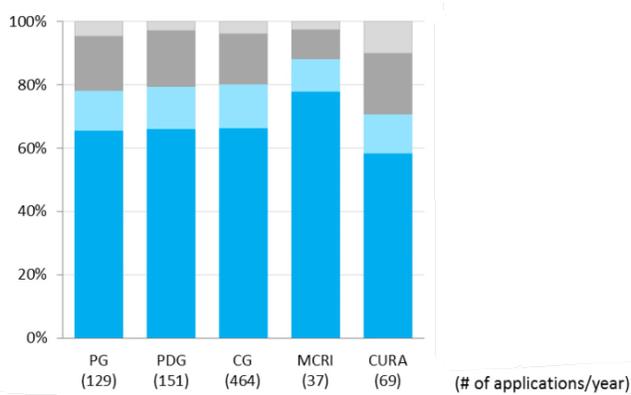
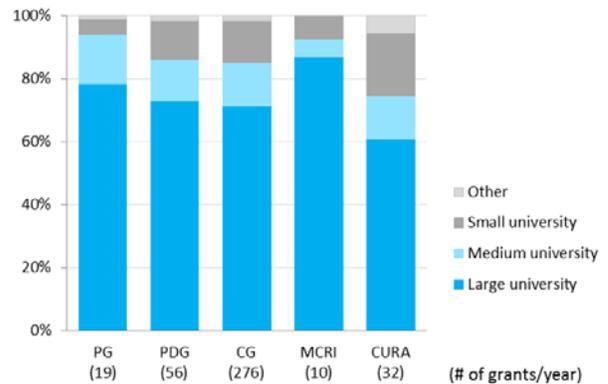


Figure 2: Proportion of grant recipients by organization/affiliation



The survey highlighted that the majority of PG (80%) and close to half of PDG (48%) grants are funding networks. That is, each of these grants funds multiple, coordinated research projects rather than a single project.⁷ Most commonly, a single PG network will coordinate between 11-50 projects while a PDG network will coordinate between 2-10 projects.

PG and PDG grants feature a high degree of interdisciplinarity, with approximately half (52%) of successful applications combining social sciences and humanities disciplines. Just under half (46%) of the successful applications are social sciences only (still usually involving multiple disciplines, while the number of PG or PDG humanities-only grants is limited at 2%).⁸ This suggests that partnership funding may be less relevant and/or useful for research questions that involve only humanities disciplines.

⁶ Within the context of these funding opportunities, formal partnership is defined as a bilateral or multilateral formal collaboration agreement between an applicant organization and one or more partner organizations that agree to commit to work collaboratively to achieve shared objectives.

⁷ “Network” is used within this report to describe grants that fund multiple related research projects while “project” is used to describe grants that fund a single research project. Note that this usage of terms is specific to this report and does not necessarily correlate with official SSHRC definitions.

⁸ Successful grant applications, n=492

2.3 Characteristics of Participants

Participant Roles

PG and PDG include four main participant roles, officially defined as follows:

- **Project Director** - An individual who is responsible for the overall leadership of the team or partnership.⁹
- **Partner Organization** - PG and PDG require that the grant lead develop one or more formal partnerships. According to SSHRC’s official definition “[a] partner organization participates actively in a formal partnership and contributes in a meaningful way to the success of the endeavour.... A partner organization is expected to support the activities of the formal partnership by sharing in intellectual leadership or providing expertise. The partner organization is also expected to provide cash and/or in-kind contributions.”¹⁰ Each partner organization identifies a partner representative who engages directly with the grant team.
- **Co-applicant** – Individuals who make a significant contribution to the intellectual direction of the research or research-related activity, who play a significant role in the conduct of the research or research-related activity, and who may also have some responsibility for financial aspects of the research. Co-applicants may be individuals from any of the following: Canadian postsecondary institutions, not-for-profit organizations, philanthropic foundations, and municipal, territorial or provincial governments; and international postsecondary institutions.
- **Collaborator** – Any individual who will make a significant contribution to the project. Collaborators do not need to be affiliated with an eligible Canadian postsecondary institution. With the exception of certain travel- and subsistence-related expenses, SSHRC does not cover expenses that research collaborators incur in the conduct of research or research-related activity.

A small proportion of individuals hold multiple roles within a single PG or PDG grant. That is, a single individual can officially represent a partner organization and be a co-applicant, *or* can represent a partner organization and be a collaborator. This is relatively uncommon and includes only 4% of all partner representatives, co-applicants, and collaborators. However, in implementing the evaluation case studies, project directors were asked to identify highly engaged grant participants to interview. Individuals holding multiple roles were overrepresented in this sample, suggesting that they may be engaged in networks/projects to a greater extent than those with a single role.

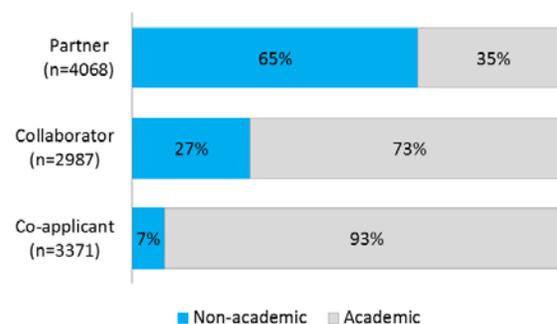
Case studies, key informant interviews, and surveys suggested that the above terminology is not applied consistently and that grant participants are often unclear on the distinctions between roles. For example, case study participants often identified themselves differently from their official role in the grant application (e.g., a co-applicant would call herself a collaborator, a collaborator would call herself a partner, etc.). Furthermore, in the survey, 73% of partner organization representatives characterized themselves as partner organization representatives, while the remainder characterize their role as collaborator.

Participant Sectors

Figure 3 shows that the majority of partner organizations are non-academic (e.g., not for profits, government, industry, etc.) while the majority of collaborators and co-applicants are affiliated with academic institutions. Participants involved in multiple roles showed similar patterns with 63% of those who are both collaborators and partners affiliated with non-academic organizations and 31% of those who are both co-applicants and partners affiliated with non-academic organizations.

Almost all (94%) PG and PDG have at least one non-academic partner organization. However, PG and PDG differ with regards to co-applicants and collaborators.

Figure 3: Percentage of non-academic vs. academic partners, collaborators, and co-applicants involved in PG/PDG grants¹¹



Source: Grant applications (2010/11-2016/17)

⁹ Note: The term “applicant” is used within this document to refer to the collective group of project directors *and* proposed project directors from unsuccessful applications.

¹⁰ SSHRC 2016b

¹¹ Excludes participants that have multiple roles, n=505

Forty-three percent of PGs involve non-academic co-applicants while only 24% of PDGs involve non-academics as co-applicants. Similarly, 74% of PGs involve non-academic collaborators while only 42% of PDGs involve non-academic collaborators.

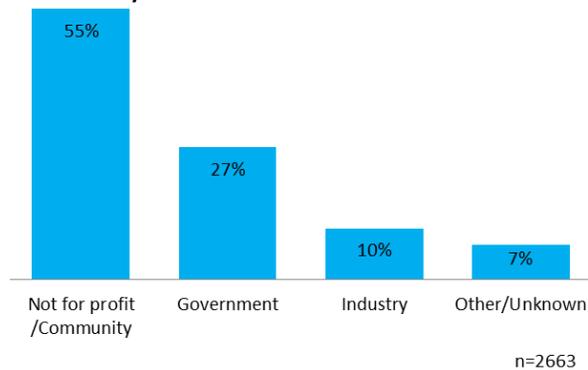
Additional Information on Partners

Figure 4 further breaks down the distribution of partner organization sector showing that, of the non-academics organizations involved, over half are not for profits or community based organizations.

Other key characteristics of PG and PDG partner organizations include:

- PGs engage an average of 21 partner organizations but this can range from one to 121. PDG grants engage an average of 5 partner organizations, but again this can range from one to 25.
- Most (77%) of partner organizations are based in Canada, while 23% are from the international arena.¹²
- Most (85%) of PDG partnerships are newly formed for the purposes of the grant; however given their greater complexity and larger size, PG partnerships are characterized as new less often (67%).¹⁴
- In most cases, project directors had worked with at least some of the partner organizations prior to the grant (85%) and another 12% had worked with all partners previously.¹⁵

Figure 4: Distribution of PG and PDG Non-Academic Partners by Sector¹³



Source: Grant applications (2010/11-2016/17)

PGs also leverage substantial resources from partner organizations. While the leveraging requirement for PG is 35% of the grant by the end of funding, administrative data (i.e., partner contribution statements) indicate that PG has exceeded this target by leveraging a total amount of 92¢ per \$1 granted. To date, PG has leveraged almost \$102M for the \$111M contributed by SSHRC, with higher education institutions and the non-profit sector contributing the majority of leveraged funds.¹⁶

Leveraging does vary on a per grant basis, ranging from a low of 14¢/\$1 to a high of \$6.96/\$1. Half of all grants leverage between 53¢ and \$1.20 per \$1 granted.¹⁷

2.4 Participant Involvement

There is variation in the activities and objectives of each type of participant (i.e., partner organizations, co-applicants, and collaborators). This can be the case within a single grant and across multiple grants. For example, some partner organizations may play a substantial role in defining research questions and using research findings, while others may simply wish to be informed of findings on an ongoing basis. Co-applicants and collaborators can have similar variation, with some playing a substantial and active role in the implementation of the research process and others providing advice on an ad hoc basis.

The evaluation explored three dimensions of participant involvement: 1) who directed the research objectives, 2) who used the knowledge generated through the research process, and 3) participant perceptions of the extent to which the process was collaborative.

¹² Successful grant applications, n=492

¹³ Total does not equal exactly 100% due to rounding error

¹⁴ Survey of project directors, n=439

¹⁵ Survey of project directors, n=195

¹⁶ Comparable data is not systematically collected from PDG as leveraging is not a grant requirement.

¹⁷ i.e., 50% of grants fall within this range.

Direction of the Research Objectives

SSHRC does not systematically track which participants are involved in setting research objectives. However, the evaluation survey included several questions that provides a picture of who is leads and who is involved in planning the research¹⁸. Survey responses show that:

- In ¾ of grants, an academic leads both planning of the research and development of research questions and in ¼ of grants a non-academic leads planning of the research and/or development of research questions (applicant survey responses). Note that this does not take into account participant role (i.e., co-applicant, collaborator, partner).
- Academic and non-academic partner organizations are equally likely to *be involved* in planning the research (partner survey responses).
- Academic and non-academic collaborators are equally likely to *be involved* in planning the research (collaborator survey responses).
- The likelihood that a non-academic organization will lead planning increases somewhat as the proportion of non-academic partners and co-applicants involved in the grant increases (applicant survey responses, administrative data).

For the purposes of subsequent analysis, projects/networks were considered “academic driven” when the project director indicated that academic participants took the lead on both planning of the research and development of research questions. This is contrasted with “non-academic driven” grants where the project director indicated that participants affiliated with a not for profit, government, or industry organization took a leadership role in either research planning and/or development of research questions.

Use of Generated Knowledge

For PG, the most commonly expected benefits of the grant were enhanced policy (57%) and new or enhanced partnerships (51% of grants). For PDGs, 70% expected their grants to result in new or enhanced partnerships and 37% expected to contribute to training and skill development¹⁹. The three most commonly expected scholarly outcomes for almost all of PG and PDG applicants were knowledge creation (83%), enhanced research collaboration (86%) and student training (77%).²⁰

Applicants to PG and PDG are expected to discuss their target audiences in a general sense. Through the evaluation survey, partners and collaborators were asked to indicate their extent of involvement in the use or application of knowledge, approaches, products, or services generated by the grant. This was influenced both by their sector and role, but more heavily by role. Respondents who self-identified as both partners *and* collaborators were most likely to be ‘end users’ (85%), followed closely by partners (79%) with pure collaborators least likely to use findings (62%). Non-academics (78%) were more likely to be end users than academics (37%).

Extent of Collaboration

To profile the grants funded by PG and PDG in terms of the quality and nature of the partnership, a level of collaboration scale was created based on important features of collaborations identified in the literature²¹: frequency of communications; clarity of partner roles; partner influence on decisions; extent to which partners are unified around goals; and level of trust and respect between the lead institution. Participants were asked to rate their collaboration in each of these areas and an aggregate perceived level of collaboration (i.e., low, medium, high) was calculated based on these score. These perceived level of collaboration scores are used later within the report to examine the impact of collaboration on key intended outcomes.

Based on this scale, the perceived level of collaboration is high for about half of PG and PDG principal investigators, co-applicants, and partner organizations and even higher for collaborators (Figure 5).

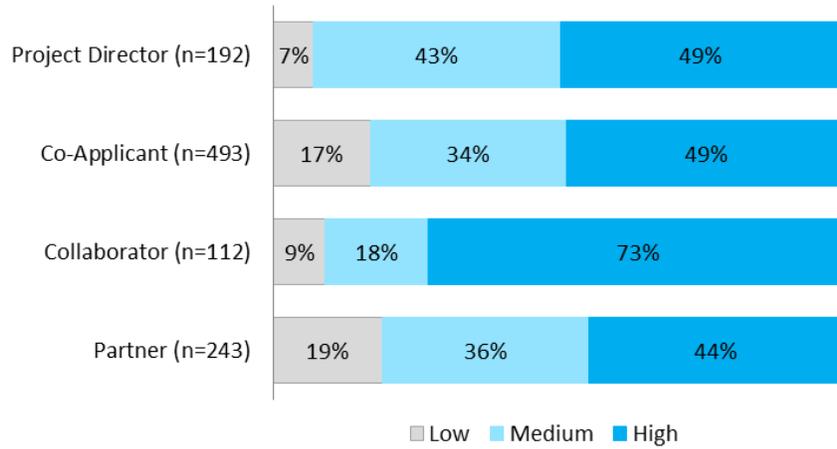
¹⁸ Project directors were asked to indicate, from a list of sectors, which type of organization is leading the following phases “Planning of research to address needs of communities and partner organizations” and “Development of research questions”. Collaborators and partner representatives were asked to identify the extent to which they were involved in “Planning of research to address specific needs/the needs of my organization” and “Development of research questions”

¹⁹ Additional detail on the intended audience for this training and skill development is not specified in applications

²⁰ Successful grant applicants, n=492

²¹ Frey et.al. 2006

Figure 5: Perceived level of collaboration



Source: Partnerships evaluation surveys of project directors, co-applicants, collaborators, and partner representatives

3. ARE PARTNERSHIP FUNDING OPPORTUNITIES RELEVANT?

Summary of Findings:

Partnership funding opportunities are expected to lead to more collaborative research, and therefore have beneficial outcomes for Canadians such as connecting researchers to practitioners, developing innovative solutions, preparing students and postdoctoral researchers for the labour market, and addressing complex societal challenges. These objectives are consistent with the SSHRC mandate and strategic objectives. Partnership suite funding opportunities have a unique structure to obtain these objectives and there is no evidence of duplication with other SSHRC programming.

Stakeholders view the availability of different sizes/lengths of funding opportunities (through PG and PDG) as beneficial. While there is some evidence that holding a PDG can increase the likelihood of obtaining a subsequent PG, the majority of applicants to either funding opportunity are new entrants to SSHRC's partnership suite.

3.1 Benefits of Collaborative Research

Stakeholders believe PG and PDG address a need for collaborative research funding

The evaluation found that there are many expected benefits of investing in collaborative research. For example, the literature highlighted that collaborative research leads to “access to expertise or particular skills, access to equipment or resources, cross-fertilization across disciplines, improved access to funding, learning tacit knowledge about a technique, obtaining prestige, visibility or recognition, and enhancing student education.”²² Program documentation illustrates that collaborative research is intended to contribute to creating an effective platform to connect researchers and practitioners, to addressing end-user needs via innovative solutions and to prepare research students for the labour market and addressing complex societal challenges.²³

Stakeholders agree that there is a continued need for partnership funding opportunities such as PGs, PDGs, and CGs. For example, these funding opportunities were viewed as important to

- Support engaged research, knowledge dissemination and mobilization activities,
- Create breadth across multi-sectoral and multi-institutions teams to address complex problems that would be difficult for institutions to address individually,
- Create and support the international presence of Canadian researchers and SSHRC (as partnership FOs allow for and fund international collaborations), and
- Respond to pressures on universities to engage with external partners.

Social Rights Accountability & Reconceiving Human Rights Practice Martha Jackman, University of Ottawa; Bruce Porter, Social Rights Advocacy Centre

Social Rights Accountability (2003) and Reconceiving Human Rights Practice (2008) were two consecutive CURA projects that focused on coordinating the efforts of experts/activists in the fields of law and human rights in order to secure and improve recognition of social and economic rights in Canada. These projects served to bridge the work being done in academia with work being done in community organizations, to improve communication between academic and community groups, and to address the needs of the community (e.g., by providing information and support to anti-poverty and homelessness groups and affected individuals). Through this concerted effort the research team made headway into improving recognition, adjudication, and access to domestic socio-economic rights in Canada, as well as improving provincial and federal policies surrounding these rights. The egalitarian nature of the collaboration and project leadership contributed significantly to the success of the partnership.

²² Bammer (2008), p.876

²³ Learning from SSHRC funded partnerships; Evaluation of SSHRC's Knowledge Mobilization Funding Opportunities; Government of Canada, Building a Strong Middle Class: Budget 2017

Grants under the partnership suite feature collaboration across sectors and across borders to conduct research and knowledge mobilization that could not occur without the participation of the partners. Interview and case study respondents provided examples of how engaging diverse participants has allowed PG and PDG funded networks/projects to actively address real world problems and encourage knowledge dissemination and mobilization activities.

The partnership funding opportunities are well suited to supporting multi-disciplinary and cross-sectoral partnerships due to the formal partnership requirements and flexibility of the grant. The importance of this flexibility (e.g., to support team work, to include international partners, etc.) was emphasized by both key informants and case study respondents.

3.2 Demand for Partnership Funding Opportunities

Demand for partnership funding opportunities has varied

Since launch, PG has received a total of 643 applications, involving 5,966 individuals as applicants or co-applicants. Each year, the funding opportunity receives an average of 98 applications with approximately 14 researchers per application²⁴. While the number of applications has decreased slightly over time (100 applications in 2012 to 81 applications in 2016) this corresponds roughly with an increase in the average number of researchers per application.

PDG has received a total of 1,057 applications, involving 3,817 individuals as applicants or co-applicants. On average this means 149 applications per year and 5 researchers per application.²⁵ The number of PDG applications per year has also decreased slightly over time (160 in 2011 to 143 in 2016) but PDG has not seen an equivalent change in the number of researchers per application, i.e. the change has been minimal.

CG has received 2,319 applications overall, involving 4,369 researchers. Demand for CG has dramatically risen from 186 in 2013 to 703 in 2016, with a stable average of 3 researchers per application.²⁶

There is no evidence of duplication with other funding opportunities

The documentary, key informant and case study evidence indicates that partnership funding opportunities are distinguished from other SSHRC funding by:

1. The requirement to involve a formal partnership;
2. Being flexible in their requirements (e.g. allowing international partnerships, allowing non-academics to be co-applicants);
3. Placing additional emphasis on engaging non-academic organizations and participants (e.g., not-for-profits and community organizations, government, industry, etc.); and
4. Large grant value (for PGs).

The survey showed that less than a third of unsuccessful applicants proceeded with other funding. When these projects did proceed, they had a decreased budget, as well as adjustments in terms of decreased scope, and decreased formal partnerships and collaborations.

The survey also highlighted that, without SSHRC funding, PG/PDG networks and projects would have been unlikely to receive funding through other grants or sources (74% say little to no chance).

²⁴ Average excludes first year of grant implementation

²⁵ Average excludes first year of grant implementation

²⁶ Average excludes first year of grant implementation

3.3 Fit with SSHRC Programming

The partnership funding opportunities are consistent with the SSHRC mandate and strategic objectives, as well as federal government priorities

The evaluation found that the partnership funding opportunities are consistent with the SSHRC mandate and strategic objectives, as well as federal government priorities. The objectives and activities of these funding opportunities contribute to: enabling excellence in a changing research landscape; creating opportunities for research and training through collaborative initiatives and connect social sciences and humanities research with Canadians which are all key SSHRC priorities. Furthermore, within the Innovation Agenda, the Federal government highlights the importance of collaborative research in fostering positive outcomes for the Canadian society, objectives which are consistent with the suite of partnership funding opportunities.²⁷

The current suite of partnership funding opportunities offers a range of funding options that correspond to researcher needs

Stakeholders view the different sizes and scopes of funding opportunities as responding to a spectrum of needs of academics and communities to engage in partnerships. The funding opportunities were said to provide more diverse opportunities for different types of research questions and various types and roles of partners and collaborators.

For the most part, PG and PDG seem to operate independently with limited overlap in applicants. That is, only 5% of PG recipients have previously held a PDG. However, when applying to PG, PDG recipients do have a higher success rate than those who have not previously held a PDG (25% compared to 15%). This suggests that it is possible for researchers to use smaller grants to build experience and a foundation for larger more complex grants. Overtime, as the pool of past PDG holders increases, we may see an increase in those using PDG as a stepping stone towards PG.

²⁷ Although, this agenda includes investments in social innovation, it focuses far more on R&D and the science, technology, engineering and math disciplines than it does on social sciences and humanities.

4. ARE PG AND PDG EFFECTIVE?

Summary of Findings:

PG/PDG combine formal and informal knowledge mobilization approaches, tailoring these mechanisms to reach both internal and external audiences. This approach is influenced by the nature of the grant, with networks being more likely to use a wider range of knowledge mobilization approaches. Almost all PGs and PDGs create and/or extend knowledge and some enhance research methodologies, lead to development of new curricula, and lead to recognition of SSH research and researchers.

There is some divergence between the perspectives of project directors and partner representatives/collaborators on the non-academic outcomes of PG/PDG; project directors tend to rate these impacts more positively than partner representatives or collaborators. They do, however, agree that most grants increase partners' knowledge base and just under half contribute to changes in professional practice. It seems that longer term outcomes such as policy change are somewhat removed from the grants themselves, with grant funded research generating a knowledge base that can then be used by other organization to advocate for change through a much longer process. Policy change specifically is most likely to occur when the grant funds a network where non-academics have a significant role in driving the research agenda.

The vast majority of PGs and PDGs support students/postdoctoral researchers, providing on the job learning of both academic and professional skills as well as opportunities to network with other sectors and communities. These are believed to be high quality experiences and lead to skill development. About one half (PDG) to two-thirds (PG) of project directors indicate that at least one student/postdoctoral researcher involved in their project was hired by a partner, a conservative estimate as it does not include those that found other related employment opportunities to developed self-employment positions.

Comparing PG and PDG to grants in SSHRC's insight suite of funding opportunities shows that PG and PDG:

- Produce a greater variety of research outputs;
- Are more likely to disseminate outside of academia;
- Are more likely to lead to economic, social, or cultural benefits and changes to public policy; and
- Spend a similar proportion of funds on student/postdoctoral researcher support.

4.1 Research Outputs

As of the mid-term reports, each PG grant had produced an average of 276 research outputs (parallel information is not available for PDG). According to principal investigators, the most common output is a presentation, with 89% PG/PDG producing at least one (Figure 6). The case studies provided a variety of examples of the types of presentation which may include guest presentations, keynote address, public lectures and special invitation to speak to academic or non-academic audiences. Given the larger size of the grant, PG predictably shows greater variety in research outputs than PDG.

Partnership suite grants produce a greater variety of research outputs than insight suite grants

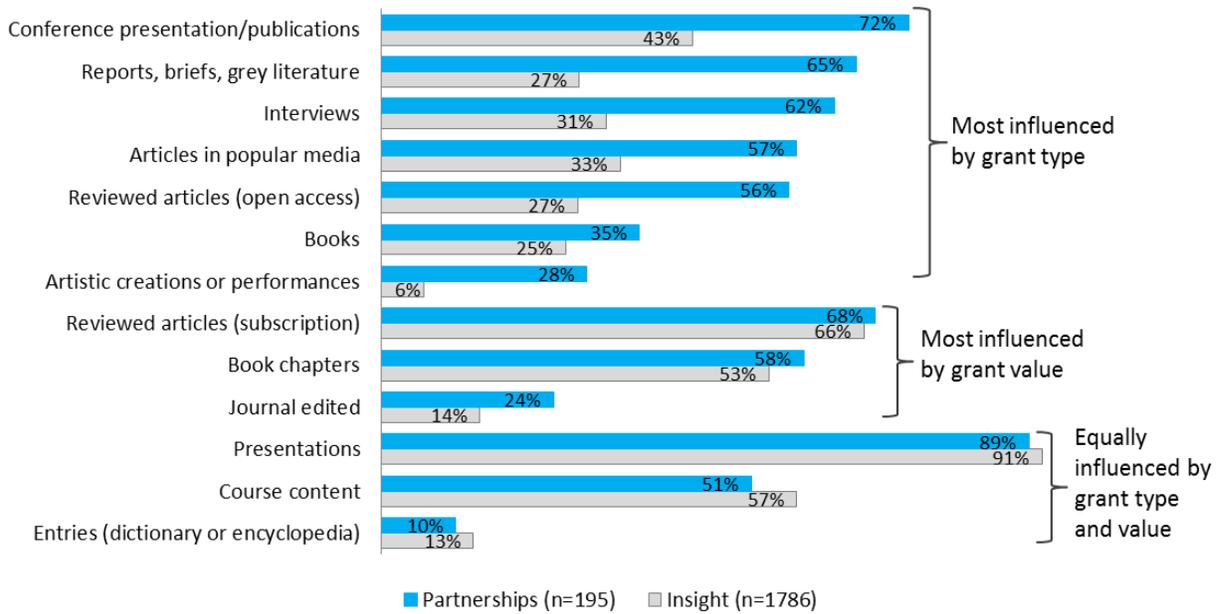
Figure 6 below compares the proportion of grants that produced each type of research output for partnership suite funding opportunities and insight suite funding opportunities. With the exception of subscription-based peer-reviewed articles and presentations, each type of research output is produced more often by partnership suite grants than by grants in SSHRC's insight suite of funding opportunities (IG, IDG, SRG, RDI).^{28,29} It should be clarified that this represents the number of grants that produced each type of output –data were not available on the number of outputs produced.

While any comparison must take into account the fact that PG/PDG are typically larger than their counterparts IG/IDG, the value of the grant was found to have a smaller effect than the type of grant for many types of outputs, in particular those targeted at less academic audiences.

²⁸ Differences between partnership and Insight grants are significant ($p < .01$) for all outputs except subscription articles and presentations.

²⁹ MCRUI/CURA data could not be included in this comparison due to differences in the survey questionnaire.

Figure 6: % of grants producing output: Comparison of partnership FOs and insight FOs



Source: Partnerships evaluation survey of project directors, Insight evaluation survey of principle investigators

4.2 Knowledge Mobilization

PG and PDG use a variety of knowledge mobilization (KMB) strategies to reach their audiences. Among the most common approaches are knowledge exchange, i.e., sharing knowledge with other disciplines or across sectors in a two-way flow such as a workshop or conference (86%); academic dissemination to other scholars in similar field(s) of research (84%); and knowledge brokering, i.e., facilitating the flow of knowledge between others (81%).

PG/PDG combine formal and informal KMB approaches

Just as the majority of grants produce different types of research outputs, the majority (96%) also use a combination of multiple knowledge mobilization strategies. Case studies suggest that these often involve a combination of formal and informal approaches to engage audiences (e.g. academic dissemination through journal articles at the same time as knowledge translation for non-academic audiences through channels such as popular media, and summary materials).

Several of the case study participants commented that effective knowledge mobilization occurs organically when research answers real needs and is focused on real world impacts. It was also pointed out that non-traditional sharing strategies can be much quicker than a more traditional journal article.

PG/PDG tailor KMB for internal and external audiences

Because the grants are founded on formal partnerships and collaboration, PG and PDG have unique opportunities to mobilize knowledge through co-production; that is, building research teams or alliances that generate new knowledge based

**Manitoba Research Alliance (MRA)
John Loxley, Canadian Centre for Policy
Alternatives, University of Manitoba**

The MRA is a group of academic researchers, students, and community and government partners producing community-based research on solutions to Aboriginal and inner-city poverty. The MRA was previously funded through CURA and is currently funded through PG.

The structure and working relationships of the MRA embed knowledge mobilization. By being directly involved in MRA research projects, community groups are essentially commissioning and overseeing the research that they need. In this manner, the groups most likely to benefit from a particular piece of research don't need to wait for publication – they receive findings in real time. According to one MRA interviewee "We often have academics coming to us and asking 'how do you get people to be interested in your research?' This isn't how it works, it's the flipside. It [the interest] is because we do research that meets people's needs".

on an ongoing exchange. Case studies show that often participation in the research process itself is the most effective way to ensure that knowledge is used.

Many networks/projects also create opportunities for team members (i.e., co-applicants, partner representatives and collaborators) to receive and discuss the research through annual meetings, workshops or events which contain formal presentations in addition to equally valuable informal discussion. In these situations, knowledge users are able to engage with the research products, share their insights, and network for future work. Projects/networks also often have members only websites for team members to share early findings and process materials.

For broader audiences, digital strategies (websites) and social media were prominent for most case studies. Several grants demonstrated the power of digital vehicles to not only share knowledge, but to advance it through stimulating discussion, commentary and debate. Because of their accessibility to academic, practitioner and public audiences, these strategies blur the distinctions between dissemination, transfer and translation.

Partnership suite grants are more likely than insight suite grants to disseminate beyond academia

According to project directors/principle investigators, using knowledge mobilization approaches that target non-academic audiences is much more common for partnership suite grants than those in SSHRC's insight suite of funding opportunities (shown in Figure 7).

While the larger value of partnership suite grants must be considered, whether or not a project/network uses a strategy is more heavily influenced by the type of grant (i.e., partnership vs. insight) than its value. Specifically, grant type had a greater impact than grant value on the likelihood of using non-academic strategies (knowledge translation, exchange, brokering, and synthesis). Co-production and networking were equally influenced by both grant value and type; and academic approaches (i.e., academic disseminations, knowledge transfer to other scholars) were likely to occur regardless of the grant type or value.³⁰

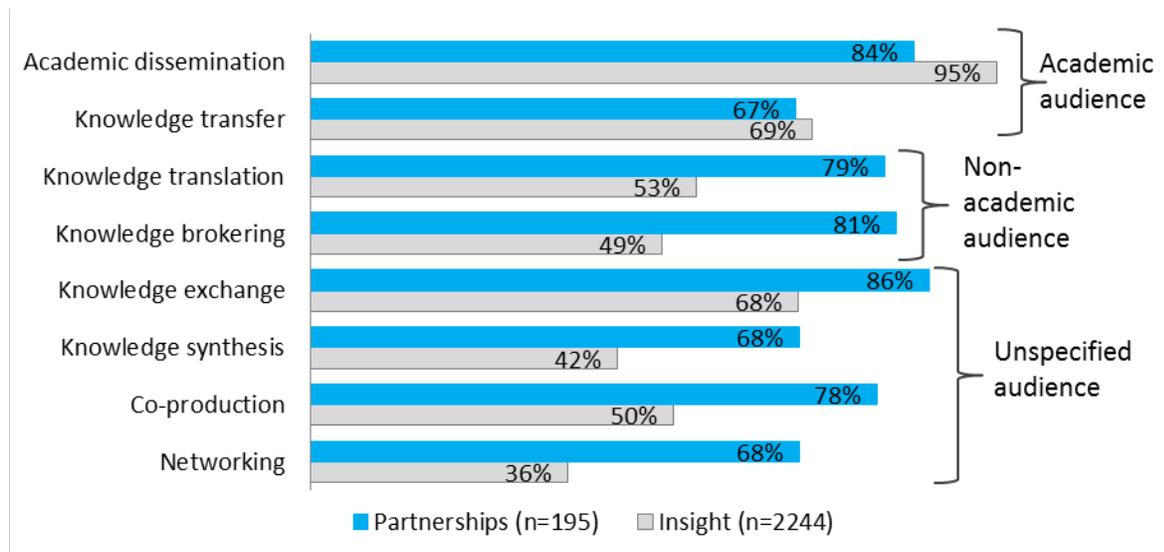
The Interactive and Multi-Modal Experience Research Syndicate (IMMERSe)

Neil Randall, University of Waterloo

PG-funded IMMERSe works to build research capacity in understanding and testing the game player's experience. This understanding simultaneously benefits the growth of academic research in partnership with industry, and furthers academic research and theoretical concerns across various areas of research (e.g. psychology, addiction, computer programming, and education). The IMMERSe team uses digital strategies and social media to mobilize knowledge, including Gamestudies101.com. This website is an online archive which includes: games (a database of games from ecological disasters to crowd-sourced science); texts (posts, articles, and books from game scholars, critics, & designers); and resources (numerous resources for studying, critiquing, designing, and developing games. IMMERSe also uses First Person Scholar (www.firstpersonscholar.com), a web-based publication that occupies the niche between academic blogs and journals, to generate informed conversation through essays, commentaries, podcasts and reviews of games. The site is maintained by graduate student members of The Games Institute, including IMMERSe-funded students.

³⁰ With the exception of knowledge transfer, all differences are significant ($p < .01$).

Figure 7: % of grants using mobilization strategy: Comparison of partnership FOs to insight FOs³¹



Source: Partnerships evaluation survey of project directors, Insight evaluation survey of principle investigators

Knowledge mobilization approach is influenced by grant type

Networks (i.e., grants that fund multiple research projects) are more likely than individual research projects to use most knowledge mobilization mechanisms including: knowledge translation, knowledge exchange, knowledge synthesis (for PDG only), co-production, and networking. Comparing grants that are driven by academics to those driven by non-academics only showed a difference in use of knowledge translation. That is, grants where non-academics led planning or development of research questions were more likely to write or present findings in more readable/useable formats.

4.3 Strengthened Relationships

The partnership funding opportunities supported strengthened collaboration

Almost all partnership principal investigators (94%) reported that collaboration occurred in their project including multidisciplinary and multi-sectoral collaboration. The extent of collaboration is similar to the MCRI/CURA predecessor funding opportunities (94%). Expectedly, collaboration occurs more commonly in the partnership suite compared to Insight suite grants (37% of insight researchers report collaboration as a feature of their grant). The case studies provided many examples of highly diverse partnerships involving community-serving organizations, other research organizations, and less frequently government and private sector.

The relationship between researchers and partners is strengthened through participation in the grant

The evaluation evidence points to the development of sustainable relationships between academic researchers and their partners and collaborators. Most partners/collaborators (74%) indicated their experience with the partnership grant encouraged them to participate in future grants with academic partners. Two-thirds of partners say the grant addressed their organization’s needs and three-quarters say the grant was a worthwhile investment for their organization. This is, however, difficult to interpret given that administrative data do not indicate which partners were intended to implement research knowledge.

³¹ SSHRC defines key knowledge mobilization approaches as follows:

- Academic dissemination to other scholars in or near your field(s) of research
- Knowledge transfer - Transferring knowledge to scholars in other fields of research
- Knowledge translation - Writing or presenting findings in more readable or useable forms (i.e., writing for a wider public)
- Knowledge brokering - Facilitating the flow of knowledge between others
- Knowledge exchange - Exchanging or sharing knowledge with other disciplines or across sectors in a two-way flow (e.g., workshop or conference)
- Knowledge synthesis - Pulling together existing research in a useful form for other researchers or organizations
- Co-production - Building research teams or alliances that generate new knowledge based on an ongoing exchange of knowledge
- Networking - Organizing ongoing networks of scholars and/or other experts to mobilize knowledge

As mentioned above, an important feature of the partnership suite is the flexibility to develop relationships with international partners. Many of the grants under the partnership suite include partners or collaborators from universities outside of Canada, or international non-governmental organizations. The case studies illustrate the potential for social science research to extend outside Canadian borders to the US, Europe and developing countries.

There is an intention for most project directors and partners to work together again as the opportunities arise. However, as noted in the case studies, the end of SSHRC funding also raises concerns about the continuity of the work and the potential loss of momentum. Desire or willingness to work together may be inhibited by the practicalities of the transition without support from SSHRC as there a few to no other funding opportunities for work of this type.

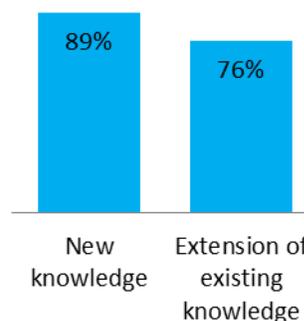
4.4 Academic Outcomes

Almost all partnership suite grants create and extend knowledge

Virtually all (94%) partnership suite grants lead to increased knowledge, whether this is the creation of new knowledge (89%), extension/application of existing knowledge (76%), or both. It was evident in the case studies that, as a result of the partnership suite grants, the academic work in the subject areas had been enriched or guided in a new direction (including the development and adoption of related theory and conceptual frameworks). In these cases, the partnership itself was instrumental in enhancing the research by shaping the research questions, but also by providing tangible research assets such as greater access to community members and information sources (e.g., interview respondents, institutionally-held data).

Knowledge-related outcomes for PG and PDG are similar to the MCRI/CURA predecessor funding opportunities.

Figure 8: % of PG/PDGs resulting in knowledge



Source: Partnerships evaluation survey of project directors (n=189)

Some partnership suite grants enhance research methodologies

About half of PG/PDGs (49%) reported that they created new research methodologies. This is similar to their predecessors MCRI and CURA (47%, no significant difference). Selected cases studies reported development of research methodologies as a result of the grant, which was supported by the inter-disciplinary nature of the work.

Some partnerships lead to the development of new curricula

About half of project directors (51%, n=195) indicated that their PG/PDG influenced course content and about a third (31%, n=195) indicated that their PG/PDG contributed to the development of new university courses or programs. This was echoed by the case studies, where around half of grants led to changes or additions to course content and/or programs at the university level, including in Canadian universities and in institutions internationally. Often, academics involved in these networks/projects will use both findings and methodological tools in their classes, integrating them into existing courses so that students/postdoctoral researchers have access to the most recent materials. In other cases, entirely new programs or classes have been developed based on network/project work.

The partnership suite grants lead to recognition of SSH research and researchers

For academic researchers involved in the partnership suite grants, there are positive impacts on visibility and recognition. The vast majority of principal investigators indicate that the project has led to increased visibility and/or reputation of the researchers (83% of grants). In addition, many grants (71%) have garnered attention in the local or national media or received an academic or other prestigious award (81%). Importantly for many lead institutions and academic co-applicants, the partnership (and leveraged) funding and the associated research outputs led to increased attention to their subject area among scholars and within their academic institution. This attention had substantial effects for some academic participants, including improvements to research infrastructure/ space and academic prominence.

4.5 Non-Academic Outcomes

PG/PDG demonstrate direct non-academic outcomes

The majority of both project directors (74%) and partners/collaborators (86%) agree that PG and PDG lead to increased knowledge base for partner organizations (Figure 9).

With the exception of changes to professional practice, principal investigators are more optimistic than partners and collaborators about the non-academic outcomes of the grant. Based on partner/collaborators' more conservative estimates, about half of grants lead to changes to professional practice. This may include creation or improvement of community programs and/or professional practice, (including providing evidence to inform others in this development). Grants may also have led to the creation of supporting service/practice protocols, instructional videos, workshops, training, etc.

Project directors may be more optimistic than other participants. However, it is also possible that partner/collaborator perspectives are heavily influenced by their roles in the project/network. That is, project directors may have a more holistic view of the project/network while partners and collaborators may only be aware of outcomes that they directly experienced.

Partners and collaborators had similar views for all of the outcomes shown in Figure 9 (i.e., partner responses were similar to collaborator responses). There were some differences, however, based on whether the partner/collaborator was academic or non-academic:

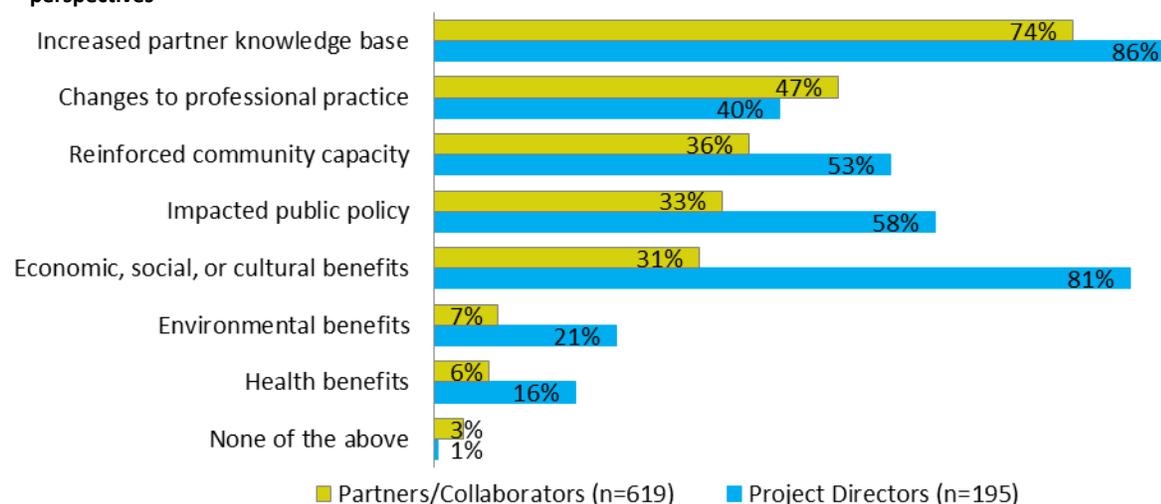
- Academics were slightly more likely to report an increase to their/their organization's skills and research capacity (47% compared to 38%)³²
- Non-academics were slightly more likely to report reinforced community decision-making and problem-solving capacity (38% compared to 30%).

Chaire de partenariat en prévention de la maltraitance (La Chaire)

Marie-Hélène Gagné, Université Laval

La chaire de partenariat en prévention de la maltraitance (PG-funded) contributed to the development of an abuse prevention strategy in Quebec, inspired by an international model, and adapted to the reality of two Quebec regions. Over 100 front-line practitioners were trained in the program. Thanks to the better intervention strategies and training obtained through the partnership, three Integrated Health and Social Services Centres and their local partners, Quebec was able to develop best practices that resulted in wait time reductions and better service for families with 0-12 year-old children. There was an improvement in the quality of care and service parents and families received and/or had access to. In addition, La Chaire gave smaller, non-academic partners the opportunity to gain credibility by training their practitioners in an internationally-recognized abuse prevention program. The knowledge and findings from La Chaire also provided larger organizations with data they can use for planning, to secure funding, engage funders and leverage policy-maker buy-in to proposed programming.

Figure 9: % of grants resulting in non-academic outcomes: Comparison of project director and partner/collaborator perspectives



Source: Survey of partners/collaborators and survey of project directors

³² This outcome is not shown in Figure 9 as it was not asked in both the project director and partner/collaborator survey.

Longer term outcomes are somewhat removed from the grants themselves

Qualitative sources provided several examples of how direct outcomes such as developing partners' knowledge contribute to broader societal benefits but cannot receive full credit. Case studies show that PGs most often provide evidence to inform decision making, justify existing or additional funding, and/or create policy-related tools but are not directly involved in these changes. This is typical for much of the utilization focused research in the social sciences and humanities. For example, several cases highlighted that the grant itself does not create policy change but instead creates a foundation for it. That is, a PG-funded network may generate a knowledge base that is used by community organizations to advocate for policy change which, if implemented, is expected to have economic/social/cultural benefits. If this is the case, it is not surprising that only 1/3 partner representatives/collaborators reported longer term impacts.

While involvement with industry is not common for the PG or PDG grants, two of the case studies noted commercial outcomes. Again, this was somewhat removed as grant-funded research informed the advancement of a commercial practice, model, or product along with other contributing factors.

International Research on Permanent Authentic Records in Electronic Systems (InterPARES)

Luciana Duranti, University of British Columbia

International research on Permanent Authentic Records in Electronic Systems (InterPARES) anticipates and responds to the quickly changing technology used to create, manage, use, store, and preserve digital records by providing theory, methods, procedures and tools to be used in the public and private sectors to make policy and personal decisions. On the basis of InterPARES findings, countries all over the world have passed legislation regulating their recordkeeping and preservation; international and national standards setting bodies have developed broadly adopted standards; universities have expanded their graduate curricula; and most importantly an international network of researchers has been developed.

In addition, InterPARES has indirectly influenced the commercial sphere. For example, one InterPARES researcher in Europe partnered with a cloud service provider to switch their model from cloud storage to cloud archiving. This shift from storage to archiving allows organizations in the UK to store data long term in service provider data centres accessed over the internet. This provides organizations with the ability to easily retrieve data for various purposes including retention management and auditing. Commercial benefits of this shift include: A decrease in cost, increased storage capacity, and quicker response times when accessing data.

Youth-friendly public spaces

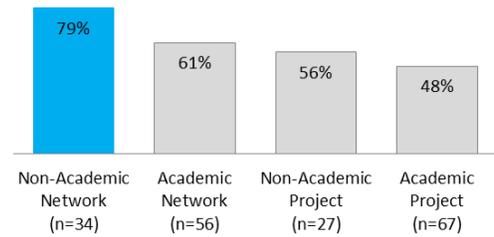
Julie-Anne Boudreau, Institut national de la recherche scientifique

The PDG-funded Youth-friendly public spaces project in a context of rapid urbanization brought together Canadian and Vietnamese researchers and non-governmental organizations (NGOs) to examine the relationship between youth and their access to public spaces in Hanoi (Vietnam). The project contributed content to policy discussions on urban planning. While it did not have direct policy, legislative and/or economic impacts on the community, it provided an NGO with a policy brief and the necessary scientific knowledge they could use in ongoing policy advocacy work, community mobilization (at the local level) and it contributed to the ongoing conversation on the use of public spaces by youth in Hanoi. In addition, the reports made available to partners, policy makers and various members of society contributed to a growing concerted effort to address the issues around the urbanization of public spaces. The NGO (Healthbridge) made extensive use of the reports and policy brief for advocacy work, resulting in ongoing projects to build playgrounds in Hanoi.

Public policy impacts are most common for networks that are heavily influenced by non-academics

For the most part, reported public policy impacts did not vary by characteristics of the grant such as whether the grant funded a network or project and whether it was directed by academics or non-academics. However, the likelihood that a grant would report public policy impacts was greater for networks (i.e., grants that coordinate multiple research projects) and greater for grants driven by non-academics (i.e., grants in which non-academic led planning and the development of research questions). Note that this finding is based on reports of project directors, not policy-makers themselves.

Figure 10: Proportion of grants reporting public policy impacts



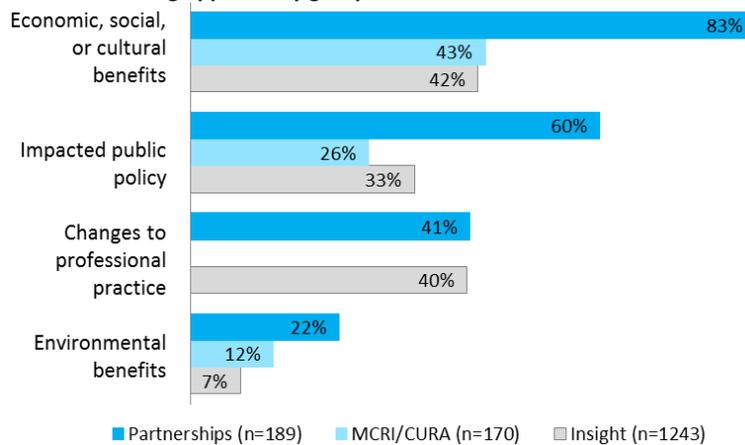
Source: Survey of PG/PDG project directors

PG/PDG report better non-academic outcomes than their predecessors (MCRI/CURA) and their knowledge focused counterparts (IG/IDG)

Looking just at project director perspectives, partnership suite grants more often report outcomes in areas such as economic, social or cultural impact and policy impact (Figure 11).³³ Both partnership-type and Insight-type grants have similar outcomes for professional practice.³⁴

When comparing IG/IDG to PG/PDG, statistical testing shows that grant type has a greater influence than grant value on the likelihood of achieving these outcomes. When comparing PG/PDG to MCRI/CURA it is unclear what causes these differences.

Figure 11: % of grants resulting in non-academic outcomes: Comparison of three funding opportunity groups³⁵



Source: Partnerships evaluation survey of project directors, MCRI/CURA survey of project directors, Insight evaluation survey of principle investigators

The Senses: Towards and integrated perspective

Mohan Matthen, University of Toronto

The goal of this PDG-funded project is to establish a new theoretical framework for understanding how the brain and the organism process and integrate information from the different senses, and how this results in phenomenally rich experience, thought, and perceptually-guided action.

In addition to philosophical results that were published, key informants also mentioned that the investigators collaborated with key players in the food, drink and art industries. For example, chefs worked with partners on how to use The Senses research data to create multisensory dining experiences in which sound and visual experience modified the consumer's responses. Similarly, the wine industry benefit from consultations about the perception of wine flavor and how wine makers can adjust products to enhance consumer experience. Another key informant consulted from a local gallery explained "we produced a piece of research working on how people experience art when using audio guides including ways to integrate information coming through their ears into what they are looking at."

³³ Partner/collaborator perspectives cannot be compared across funding opportunities due to differences in evaluation design.

³⁴ All differences between partnership and Insight grants are significant ($p < .01$) with the exception of professional practice.

³⁵ It should be noted that the Insight survey asked respondents whether stakeholders used project findings/outputs to produce the listed outcomes while the PG/PDG and MCRI/CURA survey asked whether the grant resulted in the listed outcomes. Also note that the MCRI/CURA survey did not include a response item on changes to professional practice

4.6 Impacts on Trainees

Almost all PGs engage students or postdoctoral researchers (96%)³⁶, with each PG supporting an average of 67 and each PDG supporting an average of 15 students/postdoctoral researchers. Student/postdoctoral researcher expenditures represented 25% of all PG grant expenditures and 40% of all PDG grant expenditures. This is approximately the same proportion of funds spent on support as in Insight-type grants.

Typical opportunities for students/postdoctoral researchers include:

- **On the job learning**, where students/postdoctoral researchers gain hands-on experience by contributing to the research project itself
- **Networking** with other scholars and students, postdoctoral researchers, organizations from other sectors, and communities in their area of interest. Networking is often accomplished by working on a team but may also include specific networking events

Some networks/projects also include targeted learning opportunities such as special conferences and/or may provide dedicated funding to support students/postdoctoral researchers in pursuing their own research (when related to the grant objectives).

Trainee experiences are believed to lead to skill development

Students who were interviewed through case studies were very pleased with their experience, providing examples of academic skill development and professional skill development (in particular those related to project management, coordination and communication) that are transferable to non-academic professional settings.

About three-quarters of principal investigators rate the quality of HQP experiences as higher than other research grants in terms of opportunities to interact with researchers in other sectors and disciplines and to engage in research that is relevant to organizations outside academia.

Trainee involvement often leads to employment

The learning and research experience translates into employment with partner organizations for many students/postdoctoral researchers. For PG, 69% of principal investigators indicated that their students/postdoctoral researchers were hired by partner organizations. For PDG, 47% of principal investigators indicated that their students/postdoctoral researchers were hired by partner organizations. Partner organizations that hired HQP say they are pleased with their job readiness.

Figures on student/postdoctoral researcher employment can be considered a conservative estimate as they do not include those who transferred knowledge gained through their PG/PDG experience to other employers, self-employment, or academic careers. Case studies provided examples of students/postdoctoral researchers moving on to graduate training, postdoctoral fellowships or academic posts, often pursuing studies integrally related to the subject matter of their research. A few examples were also provided of students/postdoctoral researchers developing self-employment related to their improved skill sets.

Manitoba Research Alliance (MRA) John Loxley, Canadian Centre for Policy Alternatives, University of Manitoba

One student engaged in the MRA was enrolled in an archival studies master's program. The student worked with the MRA on sub-projects focused on documenting urban indigenous history as well as archiving elders' land-based stories. During that time, they gained on the job experience and a broader perspective on community-based archival work.

This student has recently started a position on a SSHRC funded project as an oral historian. Within this role, they will travel Manitoba on a food truck to collect stories from food producers. The same individual is also starting their own business to help families and organizations record life histories and preserve their photographs and records.

In the student's own words "All of the little things that I had to learn for [MRA] projects have moved into my work.... It gave me direction for an alternative archival career.... I am the only one in my [archival studies program] cohort who is working outside of an archival institution or directly with the community" (student).

³⁶ Based on PG Midterm Reports. Figures may be higher by the end of grants.

5. HOW COULD THE PG AND PDG DELIVERY MODELS BE ENHANCED?

Summary of Findings:

The PG and PDG delivery models have a number of strengths. Delivery is efficient and the design of the funding opportunities is well-regarded by stakeholders. Higher levels of satisfaction and benefits for partners are associated with higher levels of collaboration among participants in the grant. Furthermore, high engagement of non-academics is associated with greater utilization of research findings.

There are, however, some aspects of the model that could be enhanced. Challenges include:

- Application success rates are lower for small universities, colleges, and non-academic organizations,
- Current understanding of the distinctions between co-applicants and collaborators may inhibit the full engagement of non-academic organizations; and
- Complexities in managing a large partnership may extend beyond the skill set traditionally developed by academics.

5.1 Areas to Build On

Stakeholders are generally satisfied with PG/PDG design

Stakeholders are generally satisfied with the design of the partnership funding opportunities, including the collaborative focus of the model and support and communications from SSHRC staff. The availability of SSHRC funding and leveraged funding to support the partnership, and the flexibility of the PG/PDG funding model were also identified as important success factors.

Both applicants and partners/collaborators are satisfied with the leveraging requirement for PG (35% of the grant) which, as mentioned above, is exceeded by most grants. The reporting requirements (a mid-term and a final report for PG and a final report for PDG) are viewed as appropriate by participants and useful by SSHRC. A small number of stakeholders suggested that reporting could be improved with more meaningful input from the partner perspective.

In terms of access to partnership suite grants by designated groups (women, Indigenous, disability, visible minority), SSHRC does not collect these data, with the exception of gender. These data indicate that there is parity between men and women in terms of application and success rates. Survey and key informant interview data do not point to barriers for designated groups that are unique to the partnership funding opportunities.

The delivery of the partnership funding opportunities is cost-efficient

The ratio of operating expenses relative to the total amount of grants is a common method to evaluate the operational effectiveness of grant programs. This ratio represents the cost to deliver one dollar of grant funds awarded. SSHRC administrative records indicate that, for PG and PDG, 4¢ are spent on the administration of the partnership funding opportunities for every \$1 granted. This figure is slightly higher for CG at 6¢ for every \$1 granted. This administrative ratio is similar to other SSHRC funding opportunities. For example, IG and IDG each cost 6¢ to administer for every \$1 granted and MCRI and CURA each cost 5¢ for every \$1 granted.

High levels of collaboration are associated with more positive outcomes in some areas.

The evaluation evidence suggests that the factors that support the success of the partnership suite grants have to do with the existence and quality of the partnership itself, including having pre-established relationships among at least some of those involved, strong leadership of the principal investigator, egalitarian relationships and effective communications within the team. The survey data indicate that applicants, co-applicants and partners and collaborators who characterized their grant as having higher levels of collaboration were also more likely to provide positive ratings of their experience in other areas. For partners and collaborators specifically, those who experienced a high degree of collaboration were more likely to indicate that their participation was a worthwhile investment and

demonstrated greater interest in participating in collaborative research in the future. These partners and collaborators were also more likely to have experienced benefits including visibility/recognition for their organization and were more apt to say the grant addressed their organizations' needs.

Engagement of non-academics is associated with greater utilization of research findings

As mentioned in earlier sections, non-academics were more likely to be involved in using research findings than academics (78% compared to 37%). Furthermore, public policy impacts are most common in networks where research planning is led by non-academics. And finally, grants with a higher proportion of non-academic participants (partners, co-applicants or collaborators) are more likely to have non-academics lead research planning.

Given these correlations, it can be assumed that engaging a larger proportion of non-academics is desirable as it may contribute to greater utilization of research findings.

5.2 Opportunities for Change

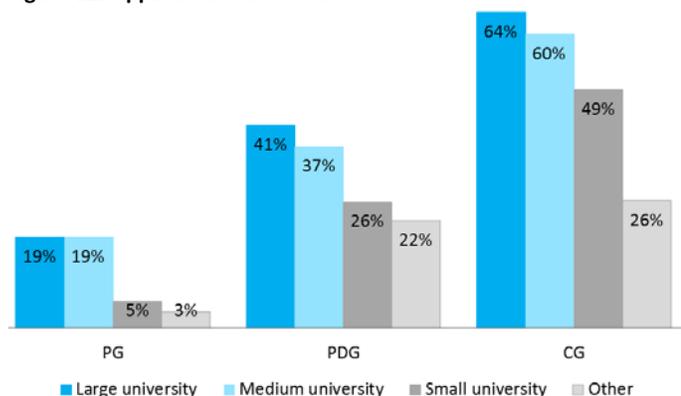
Access to lead a PG/PDG is limited for small universities, colleges, and non-academic organizations

Most applications to the partnership funding opportunities (66%) are submitted by large universities, which also have higher success rates compared to small universities, colleges and non-academic organizations (Figure 12).³⁷

While there is always some expectation that large academic institutions will have advantages in applying for SSHRC funding (due to additional resources) there is some evidence that the differences based on institution type are amplified for the partnership suite. When comparing PG/PDG to IG/IDG, both institution type and grant type had a significant relationship with success rate yet size of this effect was slightly greater for PG and PDG.³⁸

Qualitative data gathered during the evaluation suggests that access to partnership funding opportunities by small universities, colleges and NFPs is limited by the extensive effort required for proposal development and the lack of institutional support (e.g., through large, established research office) for this effort. For NFPs, the institutional eligibility criterion³⁹ is a barrier to access to the grant as a lead organization; currently, there are few non-post-secondary institutions that are eligible to administer a SSHRC grant.

Figure 12: Application success rates



Source: SSHRC awards management information system (2010/11-2016/17)

A novel idea proposed by some key informants – including respondents internal and external SSHRC – is for the partnership grants suite to allow co-principal investigators. That is, to allow two individuals to share the role and responsibilities of project director. Additional flexibility to permit a co-principal investigator was suggested by these respondents as a potential avenue to engage non-academic participants, and those affiliated with Indigenous organizations specifically, in greater leadership roles. Currently, applications to the partnership funding opportunities may only identify a single principal investigator.

Current distinctions between co-applicants and collaborators may inhibit the full engagement of non-academic organizations

It was frequently noted by interview and case study respondents that the application requirements for co-applicants

³⁷ While CURA has a success rate of 26% for 'other' organizations, this is not significantly different from PG's 3% success rate, likely due to the low number of applications.

³⁸ In comparing success rates by institution type, $P < 0.05$ in all cases, Phi for PG/PDG=0.146, Phi for IG/IDG=0.087

³⁹ To receive partnership funding as an applicant, a researchers' institution must meet SSHRC's institutional eligibility criterion which includes being a signatory to the Agreement on the Administration of Agency Grants and Awards by Research Institutions (the Agreement) or the Terms and Conditions. If an institution does not already have institutional eligibility, they may apply for this designation simultaneously with their funding opportunity application.

are rigorous, but also biased to prioritize applicants' academic experience. Until the 2017 competition, all co-applicants were required to prepare a SSHRC (academic) CV as part of the application⁴⁰. While SSHRC did provide instructions indicating that non-academics were not required to provide as much detail, this was perceived as a disadvantage. As a result, placing non-academics in the centre of the partnership as a co-applicant has been difficult. There is a tendency and the potential to include not-for-profit, industry, and government participants as 'collaborators'; a more streamlined and open application requirements, but which is also associated with a secondary or less engaged role in the project (e.g., collaborators do not assume responsibility for financial aspects of the grant).

Respondents pointed out that this 'second tier status' is problematic when trying to fully engage non-academic participants and, in particular, individuals associated with indigenous organizations. According to some, this creates a no win decision where the project director is forced to choose between an inappropriate application process that take substantial time and resources from already overtaxed community organizations, and de-valuing the contribution of key participants which may alienate important players.

Variation in participant involvement poses challenges for performance measurement

As mentioned above, there is substantial variation in the activities and objectives of each type of grant participant. Two participants with the same official role can have very different types of involvement and expectations. This poses challenges for performance measurement as, without a systematic way to capture the expected benefits for an organization or individual, it is very difficult to assess whether or not these benefits have been realized.

This applies to partner organizations, co-applicants, and collaborators. Furthermore, variation can exist within individual grants as well as across grants.

The partnership model can have complexities that are demanding to manage

The evaluation found that while project directors, co-applicants, partners, and collaborators were generally satisfied with their experience, the partnership model is not without challenges. Across lines of evidence, factors that hinder the successful execution of this type of research include:

- Managing logistics of (often) long-distance, international and multi-institutional communication/co-ordination
- Managing turnover within the partnership; and/or
- Navigating institutional policies, organizational cultures, and varying capacities.

Partnerships that are multi-sectoral can also often encounter challenges in bridging different vocabularies and expectations regarding the speed of a project (e.g., for academics, industry, practitioners). Finally, for PG in particular, the management aspects of the grant often placed a substantial time burden on the project director which is only partially alleviated by a dedicated resource for project coordination.

Several key informant and case study respondents pointed out that these challenges are typical of a large scale partnership but often demand competencies that are not part of traditional academic training. While most project directors do develop these skills organically, it can be a steep learning curve with limited support. Respondents also commented that directing a large partnership is also time consuming and reduces the time a project director has for other work, yet is rarely recognized/rewarded within an academic setting.

⁴⁰ As of the 2017 competition, SSHRC has a strict cap of 10 co-applicant CVs. It is believed by SSHRC staff that, in addition to improving the review process, this may ease some applicant concerns regarding providing CVs for non-academics.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

What do the partnership funding opportunities fund?

PG and PDG are distinguished from each other primarily by size and length and grant. They differ from purely academic grants (such as Insight grants) in that: lead applicants and co-applicants are not required to be affiliated with a post-secondary institution; at least one formal partnership is required; and additional emphasis is placed on knowledge mobilization and use. The majority of lead applicants are affiliated with large universities. Furthermore, the majority of PGs and about half of PDGs fund networks (i.e., multiple, coordinated research projects) rather than a single project.

SSHRC defines categories of participant roles such as for partner organizations (and their representatives), co-applicants, and collaborators. However, in practice, these terms are often used interchangeably and with some confusion. Based on participant roles as defined in grant applications, 2/3 of partner organizations are non-academic, while 1/3 of collaborators and less than 10% of co-applicants are affiliated with non-academic organizations. However, distribution of non-academic participants is not even across grants. Almost all PG and PDG involve at least one non-academic partner organization and about 3/4 of PGs and just under 1/2 of PDGs involve non-academic collaborators. However, less than 1/2 of PGs and 1/4 of PDGs involve non-academic co-applicants.

Participant activities are influenced by their roles and sectors in the following ways:

- Research planning and question design is typically led by academic participants, but academics and non-academics are equally likely to have some involvement in these steps;
- Individuals with multiple roles (i.e., partner representative *and* collaborator) are most likely to use project/network findings, closely followed by partners; and
- Non-academics are more likely than academics to use research findings.

About half of project directors, co-applicants, partners and collaborators characterize their grants as highly collaborative and one third characterizing their grants as having medium levels of collaboration. To date, PG leveraged 92¢ for each \$1 of SSHRC funds (similar information is not available for PDG).

Are partnership funding opportunities relevant?

Partnership funding opportunities are expected to lead to more collaborative research, and have beneficial outcomes for Canadians such as connecting researchers to practitioners, developing innovative solutions, preparing students and postdoctoral researchers for the labour market, and addressing complex societal challenges. These objectives are consistent with the SSHRC mandate and strategic objectives. Partnership suite funding opportunities have a unique structure to obtain these objectives and there is no evidence of duplication with other SSHRC programming.

Stakeholders view the availability of different sizes/lengths of funding opportunities (through PG and PDG) as beneficial. While there is some evidence that holding a PDG can increase the likelihood of obtaining a subsequent PG, the majority of applicants to either funding opportunity are new entrants to SSHRC's partnership suite.

Are PG and PDG effective?

PG/PDG combine formal and informal knowledge mobilization approaches, tailoring these mechanisms to reach both internal and external audiences. This approach is influenced by the nature of the grant, with networks being more likely to use a wider range of knowledge mobilization approaches. Almost all PGs and PDGs create and/or extend knowledge and some enhance research methodologies, lead to development of new curricula, and lead to recognition of SSH research and researchers.

There is some divergence between the perspectives of project directors and partner representatives/collaborators on the non-academic outcomes of PG/PDG; project directors tend to rate these impacts more positively than partner representatives or collaborators. They do, however, agree that most grants increase partners' knowledge base and just under half contribute to changes in professional practice. It seems that longer term outcomes such as

policy change are somewhat removed from the grants themselves, with grant funded research generating a knowledge base that can then be used by other organization to advocate for change through a much longer process. Policy change specifically is most likely to occur when the grant funds a network where non-academics have a significant role in driving the research agenda.

The vast majority of PGs and PDGs support students/postdoctoral researchers, providing on the job learning of both academic and professional skills as well as opportunities to network with other sectors and communities. These are believed to be high quality experiences and lead to skill development. About one half (PDG) to two-thirds (PG) of project directors indicate that at least one student/postdoctoral researcher involved in their project was hired by a partner, a conservative estimate as it does not include those that found other related employment opportunities to developed self-employment positions.

Comparing PG and PDG to grants in SSHRC's insight suite of funding opportunities shows that PG and PDG:

- Produce a greater variety of research outputs;
- Are more likely to disseminate outside of academia;
- Are more likely to lead to economic, social, or cultural benefits and changes to public policy; and
- Spend a similar proportion of funds on student/postdoctoral researcher support.

How could the PG and PDG delivery models be enhanced?

The PG and PDG delivery models have a number of strengths. Delivery is efficient and the design of the funding opportunities is well-regarded by stakeholders. Higher levels of satisfaction and benefits for partners are associated with higher levels of collaboration among participants in the grant. Furthermore, high engagement of non-academics is associated with greater utilization of research findings.

There are, however, some aspects of the model that could be enhanced. Challenges include:

- Application success rates are lower for small universities, colleges, and non-academic organizations; Current understanding of the distinctions between co-applicants and collaborators may inhibit the full engagement of non-academic organizations; and
- Complexities in managing a large partnership may extend beyond the skill set traditionally developed by academics.

6.2 Recommendations

Recommendation 1: Continue to fund partnership-type funding opportunities that range in grant value and length.

Partnership funding opportunities respond to a need for collaborative research to investigate and disseminate knowledge on complex social challenges. Both PG and PDG show evidence of achieving their intended outcomes, including impacts on the academic and non-academic spheres. Furthermore, there is evidence that PG and PDG directly contribute to students and postdoctoral researchers finding employment both within and outside of academia. In comparison to their IG/IDG counterparts, PG/PDG create as many or more types of research outputs, are more likely to disseminate outside of academia, are more likely to increase knowledge, and are more likely to report economic, social, or cultural benefits and changes to public policy. These advantages are more heavily influenced by the type of funding opportunity (i.e., insight or partnership) rather than the value of the grant. PG/PDG most directly impact the knowledge base and professional practice of their partner organizations, but also contribute to longer term policy change. Collaborative research is also well aligned with the mandate and priorities of SSHRC. Finally, the evaluation indicates that researchers require different sizes and lengths of grants to address different challenges.

Given the evidence of sound design and effective implementation, it is recommended that SSHRC continue to support PG and PDG, providing funding opportunities that range in size and scope.

Recommendation 2: Encourage applicants to fully engage non-academics in project leadership and setting research objectives.

Several positive outcomes are associated with the engagement of non-academics (e.g., not-for-profits, industry,

government) and high levels of collaboration. For example, non-academics are more likely than academics use research findings, and public policy impacts are most common in networks where research planning is led by non-academics. Furthermore, partners and collaborators who experienced a high degree of collaboration were more likely to say that the project addressed their organizations' needs.

At the same time, a majority of collaborators and co-applicants are academics and almost all lead organizations are post-secondary institutions. While academic and non-academic participants are equally likely to be involved in planning the project/network, non-academics lead the planning process in only one quarter of grants.

If a key objective of the partnership suite funding opportunities is to support knowledge use, it is recommended that SSHRC further encourage a high degree of collaboration with non-academic participants. Particular emphasis should be placed on engaging non-academics in project leadership and setting research objectives.

In encouraging non-academic participation, attention should be paid to the perception of role categories used in SSHRC's application process (i.e., co-applicant and collaborator). While co-applicant and collaborative are largely administrative categories, some participants perceive the role of collaborator to have second tier status. Given that the majority of non-academic individual participants are classified as collaborators, this may be damaging to relationships.

Recommendation 3: Continue to ease the burden of the application process for non-academic participants

The application requirements were identified as inappropriate and burdensome for organizations and individuals outside of academia. In particular, participants noted that SSHRC's academic C.V. template was inappropriate for non-academic co-applicants and that many non-academic partner organizations experienced technical difficulties with SSHRC's online system when attempting to provide a letter of support. The substantial time needed to navigate SSHRC's requirements/systems creates barriers for non-academic participants that are often already operating with limited time and resources.

SSHRC has recently taken steps to ease the burden of the application process, including making some revisions to its online system and simplifying the partner invitation process. These improvements were not implemented in time to be considered in the scope of this evaluation. Given the benefits of engaging non-academics, SSHRC should continue to break down barriers both in the application requirements and in the technology that supports the applications.

Recommendation 4: Develop a means to identify each participant's involvement in grant activities and intended benefits.

PG and PDG are deliberately broad, funding a wide variety of projects/networks and partnerships. Participants, even within a single grant, can be involved to varying extents and for varying reasons. While this flexibility seems valuable to the projects/networks, it can make it challenging to assess the impact of these funding opportunities and demonstrate results for Canadians.

The evaluation initially attempted to use SSHRC's official participant roles (i.e., co-applicant, collaborator, partner organization) to understand how participants are involved as well as which participants could be reasonably expected to see outcomes. However, there is no clear correlation between the participant roles used for administrative purposes and a participant's actual involvement or desired benefits. These terms seem to be inconsistently understood and are often used interchangeably.

Developing some other means to identify the involvement of and intended benefits for key participants would allow SSHRC to more accurately assess the value of research partnerships and demonstrate results for Canadians. That is, this information would allow future analysis to focus on assessing impact only for those participants where it is a reasonable expectation. This may help to explain why project directors were significantly more positive about outcomes than other participants. Furthermore, clearly identifying the nature of each partner's involvement would allow SSHRC to better understand the correlation between different types of involvement and different types of success.

As such, it is recommended that SSHRC develop a means to identify the involvement of and intended benefits for key participants. Both activities and benefits should be recorded in a manner that facilitates roll up and analysis across multiple grants.

Recommendation 5: Establish resources or mechanisms to support project directors leading a large partnership.

Managing a large scale partnership or network often demands competencies that are not part of traditional academic training. While some management tasks can be assigned to a competent project coordinator, the project director must still play a pivotal role in motivating and unifying a wide range of stakeholders. Most project directors develop these skills organically, but this can be a steep and time consuming learning curve. As such, it is recommended that SSHRC support project directors in developing their leadership skills. This should include opportunities to share promising practices between more and less experienced project directors.

APPENDIX A: PROGRAM PROFILE

The Individual, Team and Partnership Knowledge Mobilization Grants sub-program, within the Connection program of SSHRC's PAA "provides grants to support knowledge mobilization activities of scholars and researchers working as individuals, in teams, and in formal partnerships with the academic, public, private, and/or not-for-profit sectors" (SSHRC, 2016c). The following funding opportunities are found within this sub-program:

- Partnership Grants
- Partnership Development Grants
- Connection Grants
- Aid to Scholarly Journals
- Awards to Scholarly Publications

The PG and PDG are designed to respond to the objectives of the Insight program as well as the Connection program.

Partnerships Grants and Partnership Development Grants

PG and PDG are the primary partnership funding opportunities, and both require the establishment of a formal partnership — that is, a bilateral or multilateral formal collaboration agreement between an applicant organization and one or more partner organizations that agree to commit to work collaboratively to achieve shared objectives.

PDG provide between \$75,000 and \$200,000 over one to three years to foster new research and related activities with new and existing partners and to design and test new partnership approaches for research and related activities (SSHRC, 2016d).

PG provide between \$500,000 and \$2.5 million over four to seven years to support new or existing formal partnerships for initiatives that advance research, research training, and knowledge mobilization in the social sciences and humanities (SSHRC, 2016c).

Beneficiaries of partnerships funding opportunities include social sciences and humanities researchers affiliated with Canadian postsecondary institutions or not-for profit organizations that are awarded grants, as well as the institutions that are awarded grants and administer grants, and co-applicants who are not affiliated with Canadian postsecondary institutions. The research funded by PG provides students and postdoctoral researchers with research training opportunities and gives partner organizations the opportunity to apply findings. Additionally, beyond the researchers, their institutions, and their partners, the general public — including knowledge users who are able to apply research findings to their needs — benefits, and citizens of Canada and the world may benefit from the uptake and application of research findings (SSHRC, 2015c).

Eligibility

As noted above, applications to PG and PDG are expected to address the objectives of the Insight program or the Connection program, or a combination thereof. In the case of PG, if the proposed research is exclusively for partnered research training initiatives, the applicant is expected to link their project to the objectives of the Talent program. Proposals may involve any disciplines and thematic subject areas eligible for SSHRC funding. Applicants must also meet the following requirements:

- Affiliation with an eligible Canadian institution at the time of application, but one that is not primarily associated with a non-Canadian postsecondary institution.
- Submission of an end of grant report or activity report for previous SSHRC grants.
- Applicants primarily affiliated with a not-for-profit organization must have at least one Canadian postsecondary institution partner organization.
- Postdoctoral researchers must formally establish an affiliation with an eligible institution within five months of the grant start date and maintain the affiliation for the duration of the grant period.
- Students are eligible only if they have met all requirements for their degree before the grant is awarded, they

establish a formal affiliation with an eligible institution with five months, and maintain the affiliation for the duration of the grant period (SSHRC, 2016d).

PG- and PDG-supported research institutions that hold SSHRC institutional eligibility, and individual participants who act as principal investigators, co-applicants, or collaborators, include the following:

- Project directors who have received a SSHRC grant of any type must have submitted an end of grant report for their previous project.
- Co-applicants may be from Canadian or international postsecondary institutions and Canadian not-for-profit organizations, philanthropic foundations, think tanks, and municipal, territorial, or provincial governments; postdoctoral researchers who are affiliated with a postsecondary institution are also eligible to be co-applicants.
- Collaborators may be any individuals who make a significant contribution to the project; individuals from the private sector or federal government may only participate as collaborators.
- Partner organizations may be Canadian or international institutions, or organizations of any type. (SSHRC, 2016c, 2016d).

Both PG and PDG require applicants to secure financial contributions, cash and/or in-kind, for their initiative during the life of the grant.

Administration of Awards

PDG application results are announced each year in March, following a November application deadline. Application committee members evaluate and rank proposals based on their challenge (50%), feasibility (20%), and capability (30%) (SSHRC, 2016d).

PG applications are reviewed in a two stage process — a letter of intent followed by a formal application (by invitation). Application committee members evaluate and rank proposals based on their challenge (40%), feasibility (30%), and capability (30%) (SSHRC, 2016c).

Once PG are awarded, grantees participate in a reporting process that includes a midterm report and a milestone report. The midterm report requires key members of the partnership to describe activities and accomplishments to date and confirm and update the plan of activities designed to ensure the achievement of the stated goals and objectives of the partnership. The Midterm Review Committee assesses the progress of activities reported by the partnership. The milestone report is intended to provide key members of partnerships with a tool to create a roadmap for the project so that progress can be assessed at the midterm point (SSHRC, n.d.-a, n.d.-b).

Program Expenditures

PDG and PG annual spending combined with Joint Initiatives spending is estimated at \$55 million. The following tables show dollar amounts distributed by grants as well as the number of applications and number of grants awarded for each fiscal year.

For PDG, the number of awards granted, as well as the amounts, was highest in 2011–12 and has decreased by almost \$4 million in subsequent years. The PG grants have decreased in the number of awards granted, while dollar amounts granted have increased.

Table 1: PDG Expenditures

Fiscal Year	# of Applications	# of Awards	Total Granted (\$)
2010–11	164	53	\$10,574,405
2011–12	153	72	\$13,739,564
2012–13	157	58	\$11,168,527
2013–14	154	57	\$10,614,148
2014–15	128	51	\$9,576,512
2015–16	143	51	\$9,582,291

Source: (SSHRC, 2016e)

Table 2: PG Expenditures

Fiscal Year	# of Applications	# of Awards	Total Granted (\$)
2011–12	151	25	Not available
2012–13	100	20	Not available
2013–14	102	18	\$38,759,428
2014–15	99	17	\$40,560,516
2015–16	100	17	\$42,413,558

Source: (SSHRC, 2016e)

Funding Opportunity History

PG and PDG funding opportunities were created in 2011–12 and 2010–11, respectively, as a result of SSHRC's Program Architecture Renewal, and incorporate features of two former partnership funding opportunities: Community-University Research Alliances (CURA) and the Major Collaborative Research Initiatives (MCRI).

- MCRI awarded funds to established researchers working in collaborative, multi-centre teams. Grantees were able to receive up to \$2.5 million over seven years (increased from five years in the mid-2000s). The funding opportunity was established in 1993 and last offered in February 2010 (SSHRC, 2013, 2015c).
- CURA supported the creation of community-university alliances involving ongoing collaboration and mutual learning with awards of \$20,000 at the letter of intent (LOI) stage to develop the project and up to \$200,000 for up to five years for the project. Between 1999 and 2008, a total of 107 grants were awarded for research and knowledge mobilization activities in areas of importance for the social, cultural, and economic development of Canadian communities (University of Victoria, 2009).

Connection Grants

CG provide support for outreach activities geared toward short-term, targeted knowledge mobilization initiatives including workshops, colloquiums, conferences, forums, and summer institutes. These activities facilitate:

- Disciplinary and/or interdisciplinary exchanges in the humanities and social sciences;
- Scholarly exchanges between those working in the social sciences and humanities and those working in other research fields;
- Inter-sectoral exchanges between academic researchers in the humanities and social sciences and researchers and practitioners from the public, private, and/or not-for-profit sectors; and/or
- International research collaboration and scholarly exchanges with researchers, students, and non-academic partners from other countries.

CG require a minimum of 50% of the amount requested from SSHRC in the form of cash and/or in-kind contributions from sponsoring organizations. Events are able to receive up to \$25,000 over one year, and outreach activities may receive up to \$50,000 (higher amounts for outreach activities may be considered if well justified) (SSHRC, 2017a).

The research funded by CG provides students and postdoctoral researchers with research training opportunities, and gives partner organizations the opportunity to apply findings. Additionally, beyond the researchers, their institutions, and their partners, the general public — including knowledge users who are able to apply research findings to their needs — benefits, and citizens of Canada and the world may benefit from CG-funded research (SSHRC, 2015b).

Eligibility

All grant applications must involve a discipline, thematic area, and approach or subject area eligible for SSHRC funding. Applications may be submitted by postsecondary institutions and not-for-profit organizations or individual applicants and teams.

- Eligible Canadian institutions may apply for an Institutional CG to conduct an event or outreach activity to attain strategic objectives relevant to the institution’s mission and mandate. The institution must identify a principal investigator to prepare the application and lead the project.
- Individuals or teams may apply for Individual CG to conduct an event or outreach activity that primarily falls within the applicant’s domain of expertise and will allow them to make a significant contribution to their field of research.

Applicants must meet the following requirements:

- Applicants must be affiliated with an eligible Canadian institution at the time of application.
- Applicants/principal investigators cannot be the applicant or principal investigator for an individual or Institutional CG if they are on any project funded through a still-active SSHRC CG.
- Applicants who have previously received a SSHRC grant must have submitted an end of grant report (SSHRC, 2017a).

CG applications may also involve postdoctoral researchers, co-applicants, collaborators, and students (SSHRC, 2017a).

Administration of Awards

Applications for CG are received four times per year; awards are announced roughly eight weeks later. CG applications are adjudicated through a merit review process that evaluates applications based on challenge (40%), feasibility (30%), and capability (30%).

Table 3: CG Annual Application Deadlines and Decision Dates

Deadline	Decision Date
February 1	March 31
May 1	June 30
August 1	September 30
November 1	January 8

Source: (SSHRC, 2017a)

Once the grants are awarded, grantees are required to participate in a reporting process that includes completing an achievement report at the end of the grant.

Program Expenditures

CG are administered through the Research Grants and Partnerships Division (RGPD). For the period from 2012–13 to 2015–16 the number of awards and dollars granted increased by approximately 100 awards and \$1 million.

Table 4: CG Expenditures

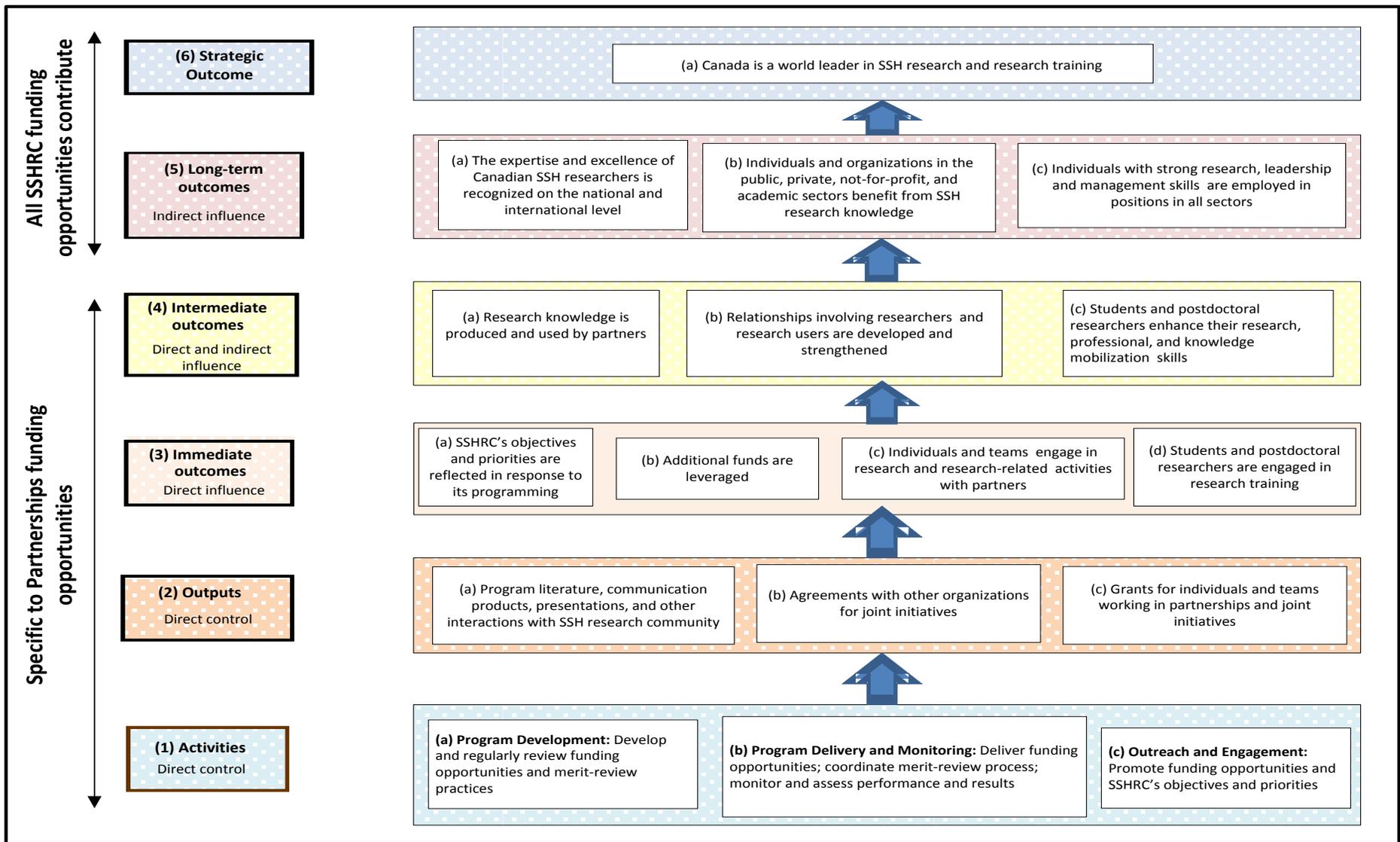
Fiscal Year	# of Applications	# of Awards	Total Granted (\$)
2012–13	238	190	\$5,920,750.32
2013–14	292	237	\$6,543,314.00
2014–15	450	289	\$6,937,671.00
2015–16	527	288	\$7,084,778.00

Source: (SSHRC, 2016e)

Logic Model

The logic model for partnerships funding opportunities (including PG and PDG) is shown below. The logic model was developed in 2015 as part of the Partnerships Performance Measurement Strategy. It demonstrates how the partnership suite’s activities are expected to achieve immediate, intermediate, and long-term outcomes and contribute to SSHRC’s strategic outcomes.

Figure 13: Partnership Funding Opportunities Logic Model



APPENDIX B: EVALUATION MATRIX

Table 5: Evaluation Matrix for Partnership Funding Opportunities

Question	Indicator	Data Sources	Priority
Relevance			
1. Is there a continued need for the funding opportunities in the current Canadian context?	Demand for PG, PDG, and CG funding (trends in # and type of applicants and grant recipients)	Administrative data review	<i>Medium priority/emphasis</i>
	Perceptions of need for the funding opportunities	Key informant interviews Partnership case studies	
	Evidence of changes in the Canadian context since inception of the funding opportunities that potentially affect the need for them	Literature review Document review Key informant interviews	
2. To what extent are the activities and objectives of the funding opportunities consistent with SSHRC's mandate and strategic outcomes, other SSHRC funding opportunities and federal government priorities?	Extent of alignment between PG, PDG, and CG activities and objectives with SSHRC's mandate and strategic outcomes	Document review Key informant interviews	<i>Medium priority/emphasis</i>
	Extent of alignment between PG, PDG, and CG activities and federal government priorities	Document review	
	Description of similar funding sources available from SSHRC and assessment of areas of overlap, duplication, and differences	Document review (review of previous studies and evaluations) Key informant interviews	
Design and Delivery			
3. To what extent is the design of each funding opportunity appropriate?	Success rates of institutions by: sector (i.e., academic and non-academic institutions) region official language and official language minority status size	Administrative data review	<i>High priority/emphasis</i>
	Success rates of applicants (principal investigators) by membership in designated groups; i.e.: women visible minorities people with disabilities Aboriginal peoples	Administrative data review	
	Stakeholder perceptions of challenges and/or barriers to access for designated groups, official language groups, applicants from particular sectors, or other institution characteristics (e.g., region, size)	Key informant interview Survey of applicants Partnership case studies	

Question	Indicator	Data Sources	Priority
	Perception of challenges and barriers affecting access to programs overall (e.g., turnaround time on funding decisions, eligibility requirements, weight for each criterion, application process/burden for non-academics, partnering requirements for other sectors, application interview process, merit review procedure) and for partners from particular sectors, particular research areas, and particular outcome areas	Key informant interviews Survey of applicants Survey of partners Partnership case studies	
	Perception of whether the requirements around leveraging (financial and in-kind) and commitment of formal partnerships are appropriate (securing level and proportion of funding required from partners)	Key informant interviews Survey of applicants Survey of partners	
	Perception of whether reporting requirements are appropriate (level of burden, timing of reports, etc.)	Key informant interviews Survey of applicants Survey of partners	
	Trends in successive grants held by successful applicants and co-applicants among the five funding opportunities	Trends in successive grants held by successful applicants and co-applicants among the five funding opportunities (region, administrative data review	
4. To what extent are the different types of partnerships funded appropriate?	Typology of partnerships in terms of characteristics, objectives, types of partners (e.g., sectors)	Administrative data review Literature review Key informant interviews	<i>High priority/emphasis</i>
	Distribution of partnerships by type	Administrative data review (list of projects and partners)	
	Proportion of new and recurring partnerships	Administrative data review (list of projects and partners)	
	Alignment of each partnership type to corporate mandate and objectives, and appropriateness of balance across types	Administrative data review Key informant interviews	
Effectiveness			
5. What has been the level of engagement of individuals and	Amount of additional funds leveraged (PG and PDG)	Administrative data review (financials) File review	<i>High priority/emphasis</i>

Question	Indicator	Data Sources	Priority
teams in research and research-related activities?	Level of collaboration with partners — measured by Level of Collaboration Scale (level of definition of roles, frequency and prioritization of communication, independence of decision making)	Literature review (e.g., Tollefson’s Levels of Collaboration Scale) File review Survey of applicants Survey of partners Partnership case studies	Note: It could be relevant to examine leveraging for PG and PDG by partnership type, size of grant, number of partners, and formal partners and partner organizations.
	Strength of leadership within the partnership: co-applicant, partners, collaborators rate strength of leadership by applicant, on same scale	Survey of applicants Survey of partners Partnership case studies	
	Governance structure that facilitates meaningful engagement from all: measure level of co-applicant, partner, and collaborator involvement in design and conduct of the research, and other activities, on same scale	Administrative data review Survey of applicants Survey of partners Partnership case studies	
	Level of mutual respect and trust: same question asked of all participants on a project to see if scores match, and if they do not, perception as to why scores do not match	Survey of applicants Survey of partners Partnership case studies	
	Extent to which partners continue to collaborate with researchers after the grant period ends	Survey of applicants Survey of partners	
	Extent to which partners intend to continue collaborating with the researchers after the grant period ends	Survey of partners	
	Willingness of partners to work with other SSH researchers in future, given the opportunity	Survey of partners	
	Perceptions of unintended outcomes arising from partnerships		
6. To what extent has research knowledge been produced and used?	Number and description of research outputs produced by type (total and average per grant)	File review Survey of applicants	<i>High priority/emphasis</i>
	Number and description of knowledge mobilization strategies used (total and average per grant)	File review Survey of applicants Survey of partners Partnership case studies MCRI/CURA case studies	

Question	Indicator	Data Sources	Priority
	Number & percentage of projects receiving (national, local) media attention	File review Survey of applicants Survey of partners Partnership case studies MCRI/CURA case studies	
	Number & nature of impacts of knowledge use on non-academic partners and other users, such as: changed public discourse or professional practice new skills and organizational capacities built within partner organizations improvements to services offered by partner organizations policy and legislative impacts economic impact within targeted communities	File review Key informant interviews Survey of applicants Survey of partners Partnership case studies MCRI/CURA case studies	
	Number & nature of impacts of knowledge use on academic partners, such as: new courses and programs new inter-university linkages new and improved theories new and improved research methodologies	File review Key informant interviews Survey of applicants Survey of partners Partnership case studies MCRI/CURA case studies	
	Perception of extent to which relationships between researchers and research users have been developed and strengthened through the PG, PDG, and CG funding opportunities	File review Key informant interviews Survey of applicants Survey of partners Partnership case studies	
7. To what extent have HQP participated in research training and enhanced their research, professional skills, and knowledge?	Indicators of involvement in training (compare to IG/IDG as applicable): number of trainees involved in PG-/PDG-/CG-funded research by type percentage of PG/PDG/CG funds spent on trainees descriptions of training/experience provided	Administrative data review File review Partnership case studies	<i>Medium priority/emphasis</i>
	Indicators of research/professional skill development (compare to IG/IDG as applicable): perceptions of the extent of skill development perceptions of quality of training experience	File review Partnership case studies	

Question	Indicator	Data Sources	Priority
8. To what extent have the PG/PDG funding opportunities contributed to the expertise and excellence of Canadian SSH researchers being recognized nationally and internationally?	Percentage of successful applicants and co-applicants listed in rankings of top-cited researchers, compared to unsuccessful applicants and co-applicants	Document review Administrative data review	<i>High priority/emphasis</i>
	Percentage of funded projects cited for Canadian and/or international recognition or prizes (<i>compare to IG/IDG as applicable</i>)	File review Survey of applicants	
	Description of success/hindrance factors to research excellence	Key informant interviews Survey of applicants Survey of partners Partnership case studies MCRI/CURA case studies	
Efficiency			
9. To what extent are the funding opportunities delivered in a cost-efficient manner?	Ratio of administrative costs to grant funding for PG, PDG, and CG (<i>compare to IG/IDG, MCRI/CURA</i>)	Administrative data review (financial)	<i>Low priority/emphasis</i>
	Ratio of grant funding to funds leveraged for PG and PDG (<i>compare to IG/IDG, MCRI/CURA</i>)	Administrative data review (financial)	
	Suggested changes or alternatives for improved cost-efficiency	Key informant interviews Partnership case studies	

APPENDIX C: EVALUATION METHODOLOGY

The evaluation of the partnership funding opportunities was based on a multiple lines of evidence approach that included secondary data maintained by SSHRC, as well as primary data collection with stakeholders using qualitative and quantitative methods. Each of the lines of evidence is described below.

Purpose	Scope/Sample
<i>Document and Literature Review</i>	
The purpose of the document review was to systematically extract relevant secondary data from identified documents, focusing on relevance of collaborative research and achievement of expected outcomes.	The focus of the review was on recent documents from 2012 to 2017 although a few older documents (dating as far back as 2003) were also included to assess relevance of SSHRC funded partnerships in general. Thematic keyword searches were performed to narrow down the review of the longer documents. SSHRC corporate reports, program documentation, and performance measurement strategies were consulted on an ad hoc basis to develop program profiles and to obtain official renditions of SSHRC strategic objectives and outcomes. A list of articles reviewed is included in Appendix D.
A review of academic and grey literature was conducted to address relevance and to explore the key characteristics or types of partnerships.	The search for pertinent articles was conducted mainly using Google Scholar as a search engine, as well as other sites including Academia.edu, and the Conference Board of Canada website. Key words were also used to conduct searches, including: research collaboration, research partnerships, academic (university)-industry partnerships (collaborations), academic-community organization (NGO, civil society, third sector) partnerships (collaborations), Benefits of, typology of, types of for example. A list of articles reviewed are included in Appendix D.
<i>Financial, Grant Files and Administrative Data Review</i>	
This line of inquiry determined if the Partnership Funding Opportunities was delivered in an efficient manner based on administrative expenditures in relation to grants. In addition, the content of PG, PDG and CG grant mid-term and achievement reports were analyzed. Finally, administrative data were reviewed to create a profile of applicants and partners/collaborators and analyze application success rates.	The scope of the administrative data review included competition years 2010 to 2016 and fiscal years 2011 to 2016. Some of the administrative data was obtained from SSHRC staff between March and August 2017: <ul style="list-style-type: none"> • <i>PG Statement of Accounts;</i> • <i>Administrative cost summaries for IG, IDG, SRG, RDI, PG and PDG;</i> • <i>PG Leveraged Contributions and PG Leveraged Contributions Summary.</i> The remaining administrative data was extracted from the AMIS database in August and September of 2017.
<i>Key Informant Interviews (n=19)</i>	
Key informant interviews were used to gain a greater understanding of the opinions of individuals who have had a significant role in or experience with the Partnership Funding Opportunities, or who have a key stake in it.	Interviews were conducted with representatives from: SSHRC staff and management (n=8); adjudication committee members (n=7); and SSH researchers (n=5). In total, of the 25 individuals invited to participate in an interview, 19 interviews were conducted with 20 individuals.

Purpose	Scope/Sample
<i>Web-Based Survey with PG and PDG applicants and partners/collaborators</i>	
<p>The purpose of the survey was to obtain quantitative data on respondents' experiences with and perceptions regarding the PG and PDG, as well as information on the academic and non-academic impacts of the grant. Where possible and appropriate, comparisons to the 2016 survey of MCRI/CURA researchers and applicants from SSHRC's knowledge creation grant were examined. In addition, comparisons were made to the survey of researchers of Insight-type grants.</p>	<p>The survey included both successful and unsuccessful PG and PDG applicants from competition years 2011 to 2016 for PG and 2010 to 2015 for PDG. In total, 3,667 applicants were in the survey frame, of which 924 completed the survey for a response rate of 27%. Note that the response rate for principal investigators was much better at 50% for PG principal investigators and 47% for PDG principal investigators. PG and PDG partners/collaborators were surveyed from the same competition years. In total, 5,147 partners/collaborators composed the survey frame. Of these, 725 completed the survey for a response rate of 17.6%.</p>
<i>Case studies (16)</i>	
<p>The case studies collected data on the partnerships, research and benefits of grants funded by the Partnership Funding Opportunities. The aggregation and cross-case analysis of the case study findings contribute to overall analysis of relevance, performance and implementation.</p>	<p>Case studies were conducted with 16 grants, including 5 PG, 5PDG, 2 former MCRI/CURA grants that had transitioned to PG funding and 4 mini case studies of MCRI/CURA grants. Each case study included: a review of available files, documents and data; a review of the grant's website; and interviews with the principal investigator, centre management, key co-applicants, partners and/or collaborators and HQP.</p>

APPENDIX E: ALIGNMENT BETWEEN EVALUATION QUESTIONS AND REPORT SECTIONS

In order to streamline reporting, the original nine evaluation questions were consolidated into four overarching questions as, each of which is covered in a section of the report. The following table shows the alignment between the original evaluation questions and report sections

Original Evaluation Questions	Report Sections
1. Is there a continued need for the funding opportunities in the current Canadian context?	Are the partnership funding opportunities relevant?
2. To what extent are the activities and objectives of the funding opportunities consistent with SSHRC's mandate and strategic outcomes, other SSHRC funding opportunities and federal government priorities?	
3. To what extent is the design of each funding opportunity appropriate?	How could the PG and PDG funding models be enhanced?
4. To what extent are the different types of partnerships funded appropriate?	What are we funding? (description of types of partnerships) Are the PG and PDG effective? (relationship between types of partnerships and effectiveness)
5. What has been the level of engagement of individuals and teams in research and research-related activities?	What are we funding?
6. To what extent has research knowledge been produced and used?	Are the PG and PDG effective?
7. To what extent have HQP participated in research training and enhanced their research, professional skills, and knowledge?	
8. To what extent have the PG/PDG funding opportunities contributed to the expertise and excellence of Canadian SSH researchers being recognized nationally and internationally?	
9. To what extent are the funding opportunities delivered in a cost-efficient manner?	How could the PG and PDG funding models be enhanced?

APPENDIX E: REFERENCES

Literature Review

Advisory Panel for the Review of Federal Support for Fundamental Science. Investing in Canada's Future: Strengthening the Foundations of Canadian Research: Canada's Fundamental Science Review; 2017.

Allen, Liz. "What Value Collaboration? Recognizing, Understanding, and Incentivizing Collaboration", in *The Connected Culture of Collaboration: Digital Science and Overleaf*, 2017.

Association of Universities and Colleges of Canada. *Canada's Universities in the World: AUCC Internationalization Survey, 2014 [In English]*. (2015).

Bammer, Gabriele. "Enhancing Research Collaborations: Three Key Management Challenges"; *Research Policy* 37, no. 5 (2008/06/01/ 2008): 875-87.

Bayona, Cristina, Teresa García-Marco, and Emilio Huerta. "Firms' Motivations for Cooperative R&D: An Empirical Analysis of Spanish Firms"; *Research Policy* 30, no. 8 (10/2001): 1289-307.

Bloom, Michael, Cameron MacLaine, Daniel F. Muzyka, and James Stuckey. *Partnering for Performance: Enhancing Partnerships between Post – Secondary Education and Business*; Ottawa, 2016.

Bloom, Michael, and Douglas Watt. *Evaluating Education-Business Partnerships: Value-Assessment Process Workbook*; The Conference Board of Canada, 2015.

Bozeman, Barry, and Monica Gaughan. "How Do Men and Women Differ in Research Collaborations? An Analysis of the Collaborative Motives and Strategies of Academic Researchers"; *Research Policy* 40, no. 10 (12/2011): 1393-402.

Brandstetter, Regina, and et al. *Successful Partnerships: A Guide*; Vienna, Austria: Organisation for Economic Cooperation and Development LEED Forum on Partnerships and Local Governance, 2006.

Chernikova, Elena. "Chapter 3: Negotiating Research Collaboration between Universities and Other Civil Society Organizations in Canada"; in *Putting Knowledge to Work*, 71-106, 2017.

Cummings, Jonathon N., and Sara Kiesler. "Coordination Costs and Project Outcomes in Multi-University Collaborations"; *Research Policy* 36, no. 10 (12/01/2007): 1620-34.

Doberneck, Diane M., Chris R. Glass, and John Schweitzer. "From Rhetoric to Reality: A Typology of Publically Engaged Scholarship"; *Journal of Higher Education Outreach and Engagement* (2010): 31.

D'Este, P., and P. Patel. "University–Industry Linkages in the UK: What Are the Factors Underlying the Variety of Interactions with Industry?"; *Research Policy* 36, no. 9 (11/01/ 2007): 1295-313.

Fielden, Sarah J., Melanie L. Rusch, Mambo Tabu Masinda, Jim Sands, Jim Frankish and Brian Evoy. *Key Considerations for Logic Model Development in Research Partnerships: A Canadian Case Study*; [In eng]. no. 1873-7870 (Electronic) (20070810 DCOM- 20071010).

Fontana, Roberto, Aldo Geuna, and Mireille Matt. "Factors Affecting University–Industry R&D Projects: The Importance of Searching, Screening and Signalling"; *Research Policy* 35, no. 2 (3/2006): 309-23.

Frey, Bruce B., Jill H. Lohmeier, Stephen W. Lee, and Nona Tollefson. "Measuring Collaboration among Grant Partners"; *American Journal of Evaluation* 27, no. 3 (2006): 383-92.

Jacobson, Nora, Dale Butterill, and Paula Goering. "Organizational Factors That Influence University-Based Researchers' Engagement in Knowledge Transfer Activities"; *Science Communication* 25, no. 3 (2004): 246-59.

Katz, J. Sylvan, and Ben R. Martin. "What Is Research Collaboration?"; *Research Policy* 26 (1997): 1-18.

- Kyvik, Svein, and Mari Teigen. "Child Care, Research Collaboration, and Gender Differences in Scientific Productivity"; *Science, Technology, & Human Values* 21, no. 1 (1996): 54-71.
- Lee, Yong S. "The Sustainability of University-Industry Research Collaboration: An Empirical Assessment"; *The Journal of Technology Transfer* 25, no. 2 (2000): 111-33.
- Misra, Joya, Laurel Smith-Doerr, Nilanjana Dasgupta, Gabriela Weaver, and Jennifer Normanly. "Collaboration and Gender Equity among Academic Scientists"; *Social Sciences* 6, no. 1 (2017): 25.
- Morrison, Michael. "'A Good Collaboration Is Based on Unique Contributions from Each Side': Assessing the Dynamics of Collaboration in Stem Cell Science."; *Life Sciences, Society and Policy* 13, no. 1 (2017): 7.
- Nichols, Naomi, David J. Phipps, Johanne Provençal, and Allyson Hewitt. "Knowledge Mobilization, Collaboration, and Social Innovation: Leveraging Investments in Higher Education"; *Canadian Journal of Nonprofit and Social Economy Research* 4, no. 1 Spring (2013): 25-42.
- Operating Principles for PSE-Business Partnerships; The Conference Board of Canada.
- Partnership Project Appendix A: Literature Review; George Brown College Community Partnerships Office.
- Philbin, Simon. "Measuring the Performance of Research Collaborations"; *Measuring Business Excellence* 12, no. 3 (2008): 16-23.
- Ponds, Roderick, Frank Van Oort, and Koen Frenken. "The Geographical and Institutional Proximity of Research Collaboration"; *Papers in Regional Science* 86, no. 3 (2007): 423-43.
- Roche, Chris. "Effective Partnerships between NGOs, Civil Society Organisations & Universities"; The Association of Commonwealth Universities website, <https://beyond2015.acu.ac.uk/submissions/view?id=47>.
- Schartinger, Doris, Christian Rammer, Manfred M. Fischer, and Josef Fröhlich. "Knowledge Interactions between Universities and Industry in Austria: Sectoral Patterns and Determinants"; *Research Policy* 31, no. 3 (2002/03/01/2002): 303-28.
- Smith, Joanna, and Priscilla Wohlstetter. "Understanding the Different Faces of Partnering: A Typology of Public-Private Partnerships"; *School Leadership & Management* 26, no. 3 (07/01 2006): 249-68.
- The Canadian Press. "Science Minister Considers Forcing Universities to Attract More Female Research Chairs"; *CBC News Online*, April 27, 2017.
- Waruszynski, Barbara Theresa. "Collaboration in Scientific Research: Factors That Influence Effective Collaboration During a Period of Transformational Change"; Royal Roads University, 2017.

Document Review

- Advisory Panel for the Review of Federal Support for Fundamental Science. (2017, April) *Investing in Canada's Future: Strengthening the Foundations of Canadian Research*. Retrieved April 14, 2017, from [http://www.sciencereview.ca/eic/site/059.nsf/vwapj/ScienceReview_April2017.pdf/\\$file/ScienceReview_April2017.pdf](http://www.sciencereview.ca/eic/site/059.nsf/vwapj/ScienceReview_April2017.pdf/$file/ScienceReview_April2017.pdf)
- Corporate Internal Audit Division, Social Sciences and Humanities Research Council of Canada. (2016, November). *Audit of Partnership Funding Opportunities*.
- Hall, B., & Tremblay, C., The Center for Public Sector Studies. (2012, May). *Learning from SSHRC funded Partnerships*.
- House of Commons. (March, 2017). *Building a Strong Middle Class: #Budget2017*. Retrieved April 14, 2017, from <http://www.budget.gc.ca/2017/docs/plan/budget-2017-en.pdf>
- Kishchuk N., Social Sciences and Humanities Research Council of Canada. (2003, November). *Performance Report*:

Phase 1 of the Community-University Research Alliances (CURA) Program.

Kishchuk, N., Social Sciences and Humanities Research Council of Canada. (2005, March). Performance Report: *SSHRC's Major Collaborative Research Initiatives (MCRI) Program*.

Innovation, Science and Economic Development Canada. (June 2016). *An Inclusive Innovation Agenda: The State of Play*. Retrieved April 14, 2017, from [https://www.ic.gc.ca/eic/site/062.nsf/vwapj/Inclusive_Innovation_Agenda-eng.pdf/\\$file/Inclusive_Innovation_Agenda-eng.pdf](https://www.ic.gc.ca/eic/site/062.nsf/vwapj/Inclusive_Innovation_Agenda-eng.pdf/$file/Inclusive_Innovation_Agenda-eng.pdf)

Innovation, Science and Economic Development Canada. (June 2016). *Canada: A Nation of Innovators*. Retrieved April 14, 2017, from [https://www.ic.gc.ca/eic/site/062.nsf/vwapj/InnovationNation_Report-EN.pdf/\\$file/InnovationNation_Report-EN.pdf](https://www.ic.gc.ca/eic/site/062.nsf/vwapj/InnovationNation_Report-EN.pdf/$file/InnovationNation_Report-EN.pdf)

Office of Community Based Research: University of Victoria. (2009, October). *The Funding and Development of Community University Research Partnerships in Canada*.

*Office of the Prime Minister. (Not dated). *Minister of Science Mandate Letter*. Retrieved July 7, 2017, from <http://pm.gc.ca/eng/minister-science-mandate-letter>

*Office of the Prime Minister. (Not dated). *Minister of Innovation, Science and Economic Development Mandate Letter*. Retrieved July 4, 2017, from <http://pm.gc.ca/eng/minister-innovation-science-and-economic-development-mandate-letter>

Social Sciences and Humanities Research Council of Canada. (2017, May). *Partnership Grants Compendium*.

Small Globe. (2015, October). *Summative Evaluation: ICURA*.

Social Sciences and Humanities Research Council of Canada. (2013, September). *Evaluation of SSHRC's Knowledge Mobilization Funding Opportunities*.

⁴¹Social Sciences and Humanities Research Council of Canada. (2014). *Not-for-Profit Organizations Applying for Institutional Eligibility*. Consulted June 29, 2017, from http://www.sshrc-crsh.gc.ca/about-au_sujet/policies-politiques/statements-enonces/not_for_profit-sans_but_lucratif-eng.aspx

*Social Sciences and Humanities Research Council of Canada. (2016a). *Advancing Knowledge to Canada's Future – SSHRC Strategic Plan 2016-2020*. Retrieved June 29, 2017, from http://www.sshrc-crsh.gc.ca/about-au_sujet/publications/strategic-plan-strategique-2016-eng.pdf

*Social Sciences and Humanities Research Council of Canada. (2016b). *Definitions of Terms*. Retrieved April 2018, from <http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx#a13>

*Social Sciences and Humanities Research Council of Canada. (2016c). *Environmental Scan 2016*.

*Social Sciences and Humanities Research Council of Canada. (2016d). *Partnership Development Grants*. Consulted July 7, 2017, http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/partnership_development_grants-subventions_partenariat_developpement-eng.aspx

Social Sciences and Humanities Research Council of Canada. (2016e, November 1). Competition Statistics. Retrieved March 2, 2017, from <http://www.sshrc-crsh.gc.ca/results-resultats/stats-statistiques/index-eng.aspx>

*Social Sciences and Humanities Research Council of Canada. (2017a). *Guidelines for Effective Knowledge Mobilization*. Consulted July 5, 2017, from http://www.sshrc-crsh.gc.ca/funding-financement/policies-politiques/knowledge_mobilisation-mobilisation_des_connaissances-eng.aspx

*Social Sciences and Humanities Research Council of Canada. (2017b). *Guidelines for Partnered Research Training*

⁴¹Select information was extracted from those documents but they were not systematically reviewed

Initiatives. Consulted July 4, 2017, from http://www.sshrc-crsh.gc.ca/funding-financement/policies-politiques/partnered_research_training-partenariat_de_formation_de_recherche-eng.aspx

* Social Sciences and Humanities Research Council of Canada. (2017c). *Partnership Grants-Stage 1*. Consulted July 2017, from http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/partnership_grants_stage1-subventions_partenariat_etape1-eng.aspx

Social Sciences and Humanities Research Council of Canada: PRA Inc. (2017). *Evaluation of Partnership Funding Opportunities: Design Report*.

The Conference Board of Canada. (2016, January). *Partnering for Performance: Enhancing Partnerships Between Post-Secondary Education and Business*.

The Impact Group. (2014, December). *Strengthening Research Partnerships Between Post-Secondary Institutions and Industry*.