



## Targeted call for FSC Project Partners

### Instructions to complete the application form

Please refer to the Future Skills Centre's (FSC) **Targeted Call for FSC Project Partners Guidelines** document when preparing your application.

This application form is structured to help you address the selection criteria for this call and give reviewers easy access to your project information. This form is divided into the following sections:

- Part 1 - General information
- Part 2 - Project summary
- Part 3 - Project details
- Part 4 - Project work plan and budget
- Part 5 - Declaration

If you would like to request accommodations or other types of support, please contact Maysa Mourad by email at [targetedcall@fsc-ccf.ca](mailto:targetedcall@fsc-ccf.ca) or by phone at 437-331-0613.

If you have any questions while compiling your application, you may contact our team at [targetedcall@fsc-ccf.ca](mailto:targetedcall@fsc-ccf.ca). We would be happy to answer any questions.

# PART 1 - GENERAL INFORMATION

## 1. Lead organization

Name of lead organization

Carleton University

Name of project lead

David Hornsby

Project lead's preferred method of contact (email address and/or phone number)

DavidHornsby@cunet.carleton.ca

## 2. Proposed project

Project title

Future Skills Innovation Network

Project start and end dates

January 11, 2022 – September 30, 2023

Projects must end no later than September 30, 2023.

Amount requested from FSC (total)

\$3,177,000.00

Project partners and their location

Simon Fraser University – Vancouver, B.C.  
University of Calgary – Calgary, AB  
University of Saskatchewan – Saskatoon, SK  
Carleton University – Ottawa, ON  
Concordia University – Montreal, QC  
Memorial University – St. Johns, NL

# PART 2 - PROJECT SUMMARY

## 1. Proposed project “one-liner”

**How would you describe your new project in one sentence?**

FUSION will dramatically expand our contribution to the skill-development ecosystem in Canada by tripling the number of participants, expanding the FUSION Skill Library.

(30 words maximum)

## 2. Proposed project summary

**How would you describe your new project and how it builds on the testing and learning of your current project to date?**

We suggest that this summary covers the main information about how your new project addresses all selection criteria of this targeted call.

In the next two years, the Future Skills Innovation Network (FUSION) will expand the reach and impact of FUSION on post-secondary skill development.

- Tripling the number of students engaged in FUSION curricular offerings, enrolling at least 3,000 new participants across the six partner universities, with a special focus on recruiting equity-deserving students from traditionally underrepresented groups.
- Expanding the FUSION skill curricular library from the initial three FUSION Skills to eighteen flexible skill-development opportunities focused on enhancing the skills necessary for 21<sup>st</sup> century success.
- Creating and engaging a pan-Canadian FUSION industry roundtable to inform FUSION priorities with business representatives from a diverse cross-section of industries and locations represented by our network,
- Creating a cross-network, industry-recognized FUSION skills microcredential framework,
- Piloting innovative ways to assess student skill mastery across FUSION skill areas,
- Engaging in the FUSION ethos of radical sharing by continuing to innovate, rapidly test, and scale effective strategies to support post-secondary skill-development,
- Making FUSION resources freely available to the rest of the Canadian post-secondary ecosystem through a FUSION skill repository,

- Expanding the impact of Round 1 funding by supporting the ongoing support for the implementation of existing FUSION programming.
- Promoting the scholarship of teaching and learning with a focus on skill-development opportunities for higher education.

(250 words maximum)

### **3. Additional scope**

#### **How does your new project go beyond the scope of your current FSC-funded project?**

The additional scope may include expanding or extending a project model, its principles and/or components. For example, it may include expanding the project to new regions or jurisdictions, including new or larger target populations, and testing different delivery formats to understand what works to address demands. This would assume the potential for bringing additional partners to deliver the project at a broader scale. The additional scope must be grounded in new concrete learning questions to contribute to your work and of others in the skills ecosystem.

The second phase of FUSION strategically expands our project scope by expanding the FUSION curriculum from the original three skill areas to eighteen skill offerings. We expand on our successful model of collaboration by working with industry and non-profits to consult on development, application, and assessment of FUSION skill offerings. We expand on our impact with the goal of tripling the number of students participating in FUSION offerings, and plan to provide further value to students by creating a cross-network, industry-recognized FUSION microcredential framework which member universities can adopt. Finally, we will radically increase the impact of our project by publishing our skill-development curricular resources for free-of-cost adoption by any Canadian higher education institution seeking to bolster skill-development offerings at their institution. This will create opportunities for FUSION to expand its informal affiliations beyond the original six members and lays the groundwork for future formal expansion of network membership.

(150 words maximum)

### **4. Importance of the additional scope**

#### **Why is the additional scope of your project important to your organization, sector and target populations? Why is it timely?**

We believe that the university as an institution still has a critical role to play in preparing the next generation of contributors to the Canadian and global work and citizenry. In the 21<sup>st</sup> century knowledge economy where quality sources of information are increasingly democratized, centering the skill development opportunities available in higher ed will be increasingly important to our value proposition. With FUSION, we continue to demonstrate that through our ethos of radical sharing a strong track-record of breaking institutional silos to expand the pace, scale, and effectiveness of our skill-development innovations. By expanding our offerings and continually finding new ways to push these conversations forward, we seek to provide a viable model for cooperation and innovation that extends beyond our six campuses.

(150 words maximum)

## PART 3 - PROJECT DETAILS

In this section, please provide information about how your new project supports each of the selection criteria of this targeted call.

We provide prompting questions to help you address all criteria in the application guidelines. You may prepare this section following the prompting questions in sequence or using your own sections and narrative.

Although you have flexibility regarding the format for this section, please make sure that you address all criteria according to the prompting questions. Reviewers will assess your application by scoring each criterion individually.

This section should not exceed **seven** pages. We anticipate that most proposals will present this section in **five** pages.

### A. Relevance

The future of work is changing for Canadians and for the world at large. The Future Skills Innovation Network (FUSION) believes that we can't prepare our students for the problems of tomorrow without the university evolving in response to the changing work and knowledge economy. In this, FSC and FUSION share key strategic priorities that make us natural partners in this work.

***FSC Priority #1: Easy to access practical labor market and skills information.***

FUSION's first round has focused on providing our most important stakeholder, students, with access to flexible and effective tools to a) learn about the skills that are increasingly essential to future success, b) more rapidly develop these skills, and c) articulate how their FUSION experience has prepared them for success. Our next

round of project activities will broaden this impact by expanding the library of FUSION skill resources, by tripling the number of students who have access to FUSION resources, and by continually innovating new strategies to deepen the effectiveness of our work. Our commitment to expand the availability of FUSION resources to the broader Canadian higher education ecosystem is an ideal way to expand access in phase 2.

**FSC Priority #2: Responsive Career Pathways.** The university is not the only viable pathway to a career, but we posit that higher education has an essential role in skills training and developing flexible career pathways, positioning our students for success upon graduation and into the future as the dynamic labour market continues to evolve. While universities have traditionally excelled at delivering high quality curricular content, FUSION expands on this work by integrating skill instruction in the active learning experiences that our participants engage in in their university experience. FUSION has been a catalyst for shifting the conversation of skills development as a core function of our institutions. As we proceed, we are positioned to further integrate skill development with curricular advancement.

**FSC Priority #3: Agile labour market responses.** To date, FUSION has successfully delivered on our initial theory of change—when we collaborate across Canadian university contexts, we can innovate better, scale-up faster, and rapidly learn from the work happening across the network. In the expansion phase of FUSION, we build on this promise by actively working with industry, non-profits, government, and other sectors of the labour market to help produce outcomes explicitly linked to the needs of the employment sector.

**FSC Priority #4: “What Works” replication.** Continuing its partnership with FUSION affords the FSC the opportunity to scale up a prototype innovation with well-documented empirical evidence of effectiveness. We have triangulated the effectiveness of our interventions, highlighted by the FUSION curriculum implementation, through a culture of data-gathering and evaluation. This includes pre- and post-assessments of student skills, student interviews, and analysis of student learning artifacts. Across our six institutions, we have gathered quantitative and qualitative data that all point to the same conclusion: participants are more skilled and confident because of their FUSION experience. We also have experienced that our networked approach to radical sharing and innovative implementation works to more rapidly affect the kinds of culture changes that ensure an enduring legacy on how our universities prepare students for the future.

The expansion of the FUSION initiative includes several additions to the initial project aimed at situating our work in the context of systemic challenges in the Canada ecosystem. Our proposed pan-Canadian FUSION industry roundtable will more directly link the innovation of the network with the specific needs of the employers most likely to engage our graduates. Our proposed work around assessment

innovation and work to create an industry-recognized microcredential framework each address one of our key identified gaps—making student skill development in the university context transparent in ways our traditional transcripts have not. The pan-Canadian nature of our institutional partners helps us prepare our students for success wherever they work—something we recognize as increasingly valuable as Canada’s workforce becomes increasingly mobile compared to generations past.

## B. Innovation and evidence

**Project Successes.** In Round 1, the Future Skills Innovation Network carved out its role as a leader in cross-university collaboration and innovation at the intersection of career services and teaching and learning. Our successes in innovation include

- **Prototyping, implementing, and rapidly sharing new FUSION skill-development initiatives.** In our first round, these initiatives included:
  - *Developing the FUSION Skill-Development Curriculum model and successfully piloting the initial three FUSION skill modules.* Evaluation data from students who have engaged show statistically significant gains in skills from the beginning to end of their experience. Students confirm the value of the curriculum in their responses to exit surveys, their reflective writings, their spontaneous feedback, and in post-participation interviews.
  - *Humanities Plus* – Connecting humanities students to future employers and skill-development opportunities to help future graduates maximize career outcomes.
  - *Indigenous Student Design Labs* – Creating spaces for Indigenous Students to connect to and develop their cultural strengths and inform universities on best ways to support skill-development programming for Indigenous Peoples.
  - *StartupReady* – Helping students develop their understanding of what it takes to be innovative and entrepreneurial while enhancing employability skills for the Startup world and beyond.
  - *FUSION + Job Seeker Alumni Workshops* – Skill-development support workshops for recent graduates, alumni, and job-seekers.
- **Surpassing our initial goal of enrolling 1,500 participants in FUSION initiatives across out six universities.** We project that we will have 1,700-2,000 participants by the end of Round 1.
- **Bringing an equity lens to FUSION work.** We centre equity by developing content with attention to representation and accessibility, by actively recruiting equity-deserving students traditionally under-represented in experiential learning, and by designing programming aimed at improving our offerings for equity-deserving students.
- **Investing in implementation at FUSION universities and building on the FUSION ethos of radical sharing.** We approach these activities by continuing

our investment in *implementation leads* at each our partner institutions.

- Implementation leads are responsible for ensuring that the resources developed by the network are accessed by as many students as possible. They do this by educating their university communities on available resources, developing networks and communities of practice for adopters, recruiting EL and other programs to embed FUSION curricula in student experiences, providing technical assistance to facilitators, and engaging directly with students to support their progress through FUSION.
- Implementation leads are critical to the radical sharing ethos of FUSION. They regularly meet to innovate, troubleshoot, and co-develop FUSION processes/resources. Implementation leads also share innovative practices in the career services and teaching and learning spaces at their universities, identifying opportunities for rapid cross-university adoption of emerging successful practices.

**Evidence of Impact.** As a network, we have collected an impressive constellation of qualitative and quantitative impact that we are making a difference, both in helping students develop/articulate their skills.

We have engaged in extensive research and evaluation at each institution and as a network to try to understand the impact of the curriculum and the user experience. As part of this work, we interviewed over 50 participants, asking them a series of questions about the quality, effectiveness, and implementation of the curriculum. In addition, we analyzed the surveys of participants in which they rated the quality of the modules, the fit with student needs, and perceptions of impact. We also performed analyses of pre- and post-test data from student self-assessments of skills at the beginning and end of their experience.

The University of Saskatchewan collected quantitative data from student self-assessment of skills at the beginning and end of their FUSION experience. Students received scored feedback on their perceived skills in eight sub-domains of metacognition and problem solving. Initial inferential statistical tests (paired t-tests) revealed that students experienced significant gains in EVERY subdomain across the two skills. This triangulated the student reports of perceived skill-gains through the end-of-course surveys.

Across the network, students consistently reported an increased ability to identify and articulate their own skills. Students highlighted that the skills developed were applicable to employment and career goals, but also to their academic and personal goals. We also learned from interviews that students valued the efforts of FUSION staff to supplement the asynchronous curriculum with synchronous facilitated workshops.



All of this work provides a solid basis for the expansion of the FUSION initiative, particularly our plan to expand the original three FUSION skills to a robust FUSION skill library of curricular support which will have eighteen FUSION skills by the end of phase 2.

**Phase 2 Innovations.** We are poised to rapidly expand the innovative enterprise of the project in our expansion phase. We do this by

- Tripling the number of students engaged in FUSION curricular offerings, enrolling at least 3,000 new participants across the six partner universities, with a special focus on recruiting equity-deserving students from traditionally underrepresented groups.
- Expanding the FUSION skill curricular library from the initial three FUSION Skills to eighteen flexible skill-development opportunities focused on enhancing the skills necessary for 21<sup>st</sup> century success.
- Creating and engaging a pan-Canadian FUSION industry roundtable to inform FUSION priorities with business representatives from a diverse cross-section of industries and locations represented by our network,
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- Making FUSION resources freely available to the rest of the Canadian post-secondary ecosystem through a FUSION skill repository,
- Promoting the scholarship of teaching and learning with a focus on skill-development opportunities for higher education.

**New Knowledge.** In phase 2, we invest in rich opportunities to generate and disseminate new knowledge. Embedded in our proposal is our commitment to contribute to the Scholarship of Teaching and Learning. We do this by investing in a post-doctoral fellow to engage in concerted and organized study of the ongoing impacts of FUSION innovations. We also anticipate that the FUSION Pan-Canadian Industry Roundtable will lead to important and transferrable learnings that we can share with the broader Canadian ecosystem. We expand the impact of all of this acquired learning by making our curricular resources freely available to Canadian institutes of higher education.

## C. Learning

FUSION has generated learning in a variety of ways in our first round of funding. We identified three key questions that we wanted to explore through our initial

collaboration. 1) Does additional instruction as part of an Experiential Learning (EL) activity improve students' ability to recognize and articulate core future skills?; 2) Given the differences across our network, what other factors influence students' recognition and articulation (and translation?) of these skills?; and 3) What inclusive practices are needed to broaden access for equity-seeking students endeavoring to participate in EL activities (with additional instruction, i.e., EL. & wraparound).

We have generated significant learning around each of these questions. As discussed in the section above, we have generated robust quantitative and qualitative evidence that the FUSION curriculum does indeed improve student skill development, as well as their ability to recognize and articulate how their university EL experience provides the opportunity to connect skill development to curricular learning.

We have also learned that engaging in these questions as a cross-institutional network greatly accelerates our ability to understand what other institutional factors can be utilized to enhance student skill-development. Each university has piloted innovative new ways to use FUSION offerings to support student skill development. Every week we engage in collaborative planning of new applications for our offerings and learn from the approaches at other universities. Our network ethos of radical sharing has meant that we move faster and farther together than we could separately.

We have engaged in systematic learning about the practices needed to broaden access for equity-seeking students. This has taken several forms, including engaging with Indigenous campus leaders to co-design de-colonized experiential learning opportunities for Indigenous Students, preparing a report on barriers for equity-seeking students in experiential learning, engaging equity-seeking students in feedback sessions, and working with accessibility and inclusion experts on campuses to ensure that FUSION resources are accessible and include representation of the diverse identities of participants in relation to culture, gender, race, and ability.

In the next phase of the project, we anticipate generating new knowledge in the following areas:

1. Identifying the strengths and weaknesses of multiple approaches to assess skill mastery in existing and newly targeted FUSION skills.
2. Learning from industry partners what key skills students will need to be competitive and flexible in the evolving labour market, as well as how to best support the development these skills through a FUSION framework for a microcredential which could be adopted by network members.
3. Deepening our understanding around best practices in engaging our various university communities in the work of skill development.

## D. Equity, Diversity, and Inclusion

Our next phase of the project will continue to incorporate the perspectives of our diverse stakeholders. We will continue to pay particular attention to the needs of groups that have traditionally faced systemic barriers on our campuses. We are committed to principles of equity, inclusion, and accessibility in the design of FUSION resources.

We will further the learning from our FUSION Indigenous Student Design Lab by replicating this work on other FUSION campuses with the necessary infrastructure, and by making available our model of cross-cultural collaboration that has allowed this project to be a success.

We will continue to actively and strategically recruit traditionally underrepresented groups of students to participate in FUSION offerings. This includes a focused push on engaging racially minoritized students, Indigenous students, and students with disability in opportunities to share their experiences with university leadership.

## E. Capacity

FUSION and its partners are well-positioned for continued success in the pursuit of our goals and objectives. One reason that we have had such remarkable uptake and implementation of FUSION interventions in all six of our partner institutions is the unique buy-in that we have at the administrative level. Our project is strategically led by the academic vice provosts of teaching and learning at our institutions. That level of leadership has been a key driver for securing buy-in from diverse stakeholders and projects across our campuses. We have benefitted from the of leadership, wisdom, and expertise of this group.

The project is also supported by the leadership of our teaching & learning services units, with director or associate-director level in-kind investment in the project across our institutions. This has helped us to ensure that FUSION offerings are aligned to other strategic initiatives and supports, which has helped us ensure that our offerings are able to be seamlessly integrated with other university innovation.

In phase 2, we continue to invest in a project-funded implementation lead at each campus. This commitment has been essential to the success of the project in its initial phase. Campus implementation leads do the heavy lifting of recruiting programs and students to take advantage of FUSION offerings. The implementation leads collaborate weekly to ensure the cross-pollination of ideas and radical sharing that has made FUSION such a success across the network.

Our proposal also includes an investment in the infrastructure required to meet our ambitious goal of having 18 developed FUSION skills by the end of phase two. We invest in instructional design, content creation, subject matter experts, and programming necessary to ramp up the development processes and ensure that we are regularly developing and piloting new and innovative FUSION content.

Finally, we invest in the capacity of the project by continuing to provide the support of a FUSION national director, who coordinates cross-campus collaboration, budgeting, reporting, knowledge dissemination, and other network activities.

## F. Coherence

To meet our project objectives, it will be important for us to regularly engage with all FUSION stakeholders at each stage of the project to ensure that we are continually innovating in ways that are responsive to student needs, identified priorities from the labour market, and the strategic visions of our institutions. We outline our plan for this engagement in our attached work plan.

Initially, it will be important to quickly recruit and organize the FUSION Pan-Canadian Industry Roundtable, which will be a key advisory group to help select the next set of FUSION focus skills, consult on the best ways to assess skill proficiency, and inform the process of establishing the FUSION microcredential.

The initial development of the FUSION modules was at times a slow process as we worked to co-design the initial intervention instructional module with input from our six institutions. In phase 2, we capitalize on the success of the first phase by applying the model that we know works to expand the FUSION skill library from three to eighteen skills. This will require us to lean on the infrastructure that we have worked hard to develop. Based on our prior learnings, we understand that with the appropriate staff, we will be able to develop approximately one skill module per month from February 2021 – January 2022. For each module, we will use the budgeted student honoraria to pilot the module and solicit the feedback necessary to revise and finalize modules before publishing them to the broader Canadian higher education ecosystem.

Our goals are ambitious, so in our budget, we have capitalized on past learning to prioritize the structures and activities that will be necessary to successfully complete the proposed work on time and within our budget.

(3,500 words maximum)

## PART 4 - PROJECT WORK PLAN AND BUDGET

1. Please submit a **one-page work plan** with key milestones and their timeline. **Do not** include detailed activities at this time. If your proposal is selected, we will work with you to develop a detailed work plan.
2. Please complete the project budget template provided to you as part of the application material.
  - a. Include only **new funding** associated with your new project and its additional scope. Please do not include the existing funding that is already part of your current funding agreement with FSC.
  - b. If applicable, identify new funding pending or confirmed for this project from other sources. **This funding should be included as in-kind contributions.** (Please note that funding from other federal sources cannot be counted towards in-kind contributions)
3. Please submit your work plan and budget by sending these files, along with this completed form, to [targetedcall@fsc-ccf.ca](mailto:targetedcall@fsc-ccf.ca).
4. You may use the space below to provide comments to accompany your work plan and/or budget.

(100 words maximum)


## PART 5 - DECLARATION

By submitting an application, the lead organization and its partners agree to the requirements of the following sections, detailed in the guidelines outlined for this funding call, and they affirm that they comply with and/or commit to the following:

- Organization eligibility.
- Active support for co-creating and carrying out an evaluation with an FSC-approved evaluator, if FSC decides an evaluation is appropriate for this project.
- Active engagement in knowledge mobilization activities related to the project.

- Compliance with the Tri-Council Policy Statement on the Ethical Conduct of Research Involving Humans.
- Confidential due diligence inquiries from Future Skills Centre into the applicant.

**Signature**



**Name of signing authority**

David J Hornsby

**Date**

10/11/21