Making the Connection.
Growing Collegiality and Collaboration Between K–12 and PSE Educators
Making the Connection: Growing Collegiality and Collaboration Between K–12 and PSE Educators
Elizabeth Martin

Preface
The expansion of post-secondary education (PSE) in recent decades has made the need for cohesion between primary/secondary education (K–12) and PSE more obvious. One way to improve the connectivity of the K–12 and PSE sectors is to encourage collegial relationships and collaboration between educators in the two sectors. In collegial environments, K–12 and PSE educators can expand their networks and identify potential collaborators who contribute to their teaching or their development as an educator. Working collaboratively, K–12 and PSE educators address issues of mutual importance as peers, through activities that have them creating and learning together.

This report offers examples for supporting collegial environments in which K–12 and PSE educators can collaborate. It offers recommendations that policy-makers, K–12 and PSE leaders, and providers of educator professional development can implement to improve the K–12/PSE connection.
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About the Centre for Skills and Post-Secondary Education

The Conference Board of Canada’s Centre for Skills and Post-Secondary Education is a multi-year initiative that examines the advanced skills and education challenges facing Canada today. While education is a provincial/territorial government responsibility, improving Canada’s skills and post-secondary education performance is a national priority. The Centre examines important themes and issues in post-secondary education from a pan-Canadian perspective. The Centre involves a broad collaboration of public and private sector stakeholders. Together, we aim to address the future of work and the drivers of change in the educational landscape.

For more information about the Centre for Skills and Post-Secondary Education, visit www.conferenceboard.ca/spse.
EXECUTIVE SUMMARY

Making the Connection: Growing Collegiality and Collaboration Between K–12 and PSE Educators

At a Glance

- The expansion of post-secondary education (PSE) in recent decades has made the need for cohesion between primary/secondary education (K–12) and PSE more important.

- This report profiles three examples of collegiality and collaboration between K–12 and PSE educators in the arts, humanities, and social sciences. These case studies offer insights for improving connections between K–12 and PSE.

- One way to build connections between K–12 and PSE is by supporting partnerships and networks of educators in the K–12 and PSE sectors.
In Canada, the expansion of post-secondary education (PSE) in recent decades\(^1\) has made the need for cohesion between primary/secondary education (K–12) and PSE more obvious. Though the sequential ordering of primary, secondary, and post-secondary education seems logical, the journey is not always smooth for the learner transitioning from secondary education to PSE. Because K–12 and PSE are planned and governed separately, there can be bumps, roadblocks, and wrong turns for the learner. Ultimately, poor preparation and missed connections from secondary to PSE results in learners not reaching their desired destinations. One way to improve the connectivity of the K–12 and PSE sectors is to encourage collegial relationships and collaboration between educators in the two sectors.

This report examines connections that create collegial opportunities for K–12 and PSE educators to collaborate. In collegial environments, K–12 and PSE educators can expand their networks and identify potential collaborators that contribute to their teaching or their development as an educator. Working collaboratively, K–12 and PSE educators address issues of mutual importance as peers, through activities that have them creating and learning together.

Fostering collegiality between K–12 and PSE educators offers benefits to educational institutions, educators, and students. Connected educators share insights into different approaches to teaching and assessment, introduce new approaches into their classrooms, and help prepare students for success in higher education.

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\(^1\) In Canada, the number of post-secondary institutions (universities, colleges, and training institutes), programs, students, and graduates has grown steadily over the past several decades, consistent with a global trend of increased demand for higher education.
Collegial relationships and opportunities for collaboration can be nurtured by formal partnerships between K–12 and PSE institutions. Communities of practice (in education, groupings of practitioners that share an area of interest or teaching focus) can offer venues and activities that bring educators together, nurturing the development of partnerships and collaborations.

Using three case studies, the report examines concrete ways that K–12 and PSE sectors can promote collegiality and create collaborative opportunities for educators in social sciences, humanities, and arts disciplines. The case studies offer examples of partnerships and communities of practice that have nurtured collegial relationships and stimulated transformative collaborations. The three examples profiled in this report are:

- **The History Education Network / Histoire et éducation en réseau (THEN/HIER) and the Historical Thinking Project (HTP).** These two separate but related networks aimed to connect history educators across Canada and achieve change in the way historical research was incorporated into teaching at all levels.

- **The California Subject Matter Project (CSMP) and The California Arts Project (TCAP).** A state-wide consortium of disciplinary communities of practice makes up the CSMP, of which TCAP is one of the disciplinary communities. CSMP and TCAP cultivate partnerships and collaborations between K–12 and PSE, in addition to developing teacher leaders and stimulating innovative pedagogy.

- **The School College Work Initiative’s (SCWI) partnerships between school boards and colleges in Ontario.** SCWI creates opportunities for secondary school students to learn about college programs and related careers. In doing so, it also connects secondary school teachers and college instructors in collaborative initiatives, such as team-taught dual credit courses.

These case studies offer several insights into improving connections between K–12 schools, PSE institutions, and their respective faculty.

- **Formal and informal partnerships between educational institutions and educators can provide the conditions that nurture relationships.** Communities of practice, formed around subject areas or educational...
objectives, can offer venues and activities that motivate educators to bridge divisions and find colleagues in the other sector.

- Simple collegial relationships can develop into longer-term collaborations. Events that bring educators together, such as general meetings, workshops, and summer institutes, provide opportunities for K–12 and PSE educators to meet. These are frequently a starting point for organic collaborations to develop.

- School–PSE collaborations can have connective, generative, and transformative results. Each of the case studies demonstrates examples where new knowledge, teaching approaches, or curricula were developed.

- Developing meaningful school–PSE connections demands investment of time and resources. Time is the most finite resource that strains the ability of educators to collaborate. Participating in collegial networking and collaborative activities can come with other costs for teacher release time, travel expenses, and fees.

From these findings, this report offers four recommendations for education leaders:

1. Encourage the creation of networks between K–12 and PSE educators.
2. Adopt a broader notion of professional development for educators.
3. Reward collaborative activities.
CHAPTER 1

Introduction

Chapter Summary

- The K–12 and PSE sectors operate separately in Canada, but there are compelling reasons for connecting the two.
- This report examines opportunities for greater collegiality and collaboration between educators in the K–12 and PSE sectors.
- This report highlights partnerships and communities of practice that develop relationships and collaborations between K–12 and PSE educators who teach in the arts, humanities, and social sciences.
Making Connections Between K–12 and PSE

If success in adulthood starts with a solid early childhood education,¹ then success in post-secondary education starts there too, and continues through K–12. In Canada, as in most developed nations, primary/secondary education (K–12)² and post-secondary education (PSE) prepare learners for roles in society and work. The linear, sequential route is designed for learners to gradually develop and augment their skills, knowledge, and experience over time.

In Canada, the expansion of PSE in recent decades—with an increasing number of high school graduates continuing to PSE for advanced study and preparation for careers—has made the need for cohesion between K–12 and PSE more important. Though the sequential ordering of education seems logical, the journey is not always smooth for the learner transitioning from secondary education (in the K–12 system) to PSE.³ K–12 and PSE are planned and governed separately in Canada. As well, an argument could be made that the two sectors further other missions in addition to preparing learners for roles in society and work. As a result of these divides in governance and mission, there can be bumps, roadblocks, and wrong turns for the learner. Ultimately, missed connections between secondary and PSE can result in learners not reaching their desired destinations.

One solution to this problem would be to transform education so that K–12 and PSE are unified. Another option is simpler and faster: We can build more and better bridges between K–12 and PSE. Where there are

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1 See Alexander and others, Ready for Life.
2 In Canada, primary/secondary education includes junior kindergarten (age 4, offered in some jurisdictions only), kindergarten or senior kindergarten (age 5), and grades 1–12.
3 Furthermore, many learners entering PSE do not have a complete K–12 education, such as those who dropped out of K–12 and those who arrived in Canada with only partial education. This report does not address this disjuncture.
shared issues and pressure points, it makes sense to create intentional connections. Teaching, as one of the core functions of both K–12 and PSE, is one of the obvious areas where intentional connections could be constructed, paved, and maintained, with benefits for student achievement and advancement to higher learning and meaningful roles in society.

Focusing on the professionalism of teachers has been credited for the high achievement of students in top-performing education systems, including Finland’s. Among the complex web of factors that contribute to the consistently high performance of Finnish students on international tests is the depth and rigour of professional engagement among educators, including strong expectations that K–12 educators participate in curriculum development, cooperative peer assessment, and evaluation activities, all guided by critical analysis and research. The “enthusiastic and contagious involvement in the collaborative activities developed in networks of professional communities” of Finnish educators is rooted in a culture that values the teaching profession. Inspired by peer countries with exemplary education systems, this report focuses on networks of professional communities of educators. It examines why and how Canada’s education systems should support opportunities for K-12 and PSE educators to interact professionally as colleagues and collaborators.

Collegiality—in the context of educators and their professional development—has been described as a working condition that promotes working with one’s peers. This condition is opposite of autonomous conditions, where educators work independently and there is little peer influence on their teaching or professional approaches. In this report, we discuss collaboration and collaborative activities between educators that result from efforts to create conditions of collegiality. In collegial environments, K–12 and PSE educators can expand their networks and identify potential collaborators who contribute to their teaching or their development as an educator. Working collaboratively, K–12 and PSE educators address issues of mutual importance as peers, through activities that have them creating and learning together.

4 Darling-Hammond, Chung Wei, and Andree, How High-Achieving Countries Develop Great Teachers.
6 Clement and Vandenberghe, “Teachers’ Professional Development.”
About This Report

This report discusses the rewards and challenges of fostering collegiality and collaboration between K–12 and PSE. Connected educators share insights into different approaches to teaching and assessment, introduce new approaches into their classrooms, and help prepare students for success in higher education.

Collegial relationships and opportunities for collaboration can be nurtured by formal partnerships between K–12 and PSE institutions. Communities of practice (in education, this refers to groupings of practitioners who share an area of interest or teaching focus) can offer the venues and activities that bring educators together, thus nurturing the development of partnerships and collaborations. These connections can be a launching point to more effective professional development and educational reform. Creating opportunities to connect educators in K–12 and PSE is, therefore, a strategy to catalyze change across Canada’s education systems.

This introduction is followed by Chapter 2, which discusses the reasons that motivate K–12 and PSE institutions and educators to establish connections with one another—and the factors that prevent them from doing so. The chapter also outlines several ways in which the K–12 and PSE sectors could establish connections that foster collegiality and create collaborative opportunities for educators. It considers partnerships and the community of practice model as options for organizing and encouraging more connections between K–12 and PSE educators.

Chapter 3 offers three case studies of partnerships and communities of practice that are connecting K–12 and PSE educators in the arts, social sciences, and humanities disciplines. Chapter 4 discusses the lessons that these case studies offer. (See “Case Studies.”) Drawing on literature on school–PSE partnerships, and interviews and focus groups with

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7 Gulamhussein, Teaching the Teachers; Yoon and others, Reviewing the Evidence; Sandholtz, “Inservice Training or Professional Development.”

8 Throughout, the term educator is used to refer to K–12 educators and PSE educators as one group. When it is necessary to distinguish, the specific term is used.
educators and leaders of K–12/PSE networks, communities of practice, and partnerships (see “Focus/Working Groups”), the final chapter examines opportunities for collaboration between K–12 and PSE educators.

Case Studies

Case studies were conducted on three initiatives:

1. The History Education Network / Histoire et éducation en réseau (THEN/HiER) and the Historical Thinking Project (HTP). These two separate but related networks aimed to connect history educators across Canada and achieved change in the way historical research is incorporated into teaching at all levels.

2. The California Subject Matter Project (CSMP) and The California Arts Project (TCAP). A state-wide consortium of disciplinary communities of practice makes up the CSMP, of which TCAP is one of the disciplinary communities. CSMP and TCAP cultivate partnerships and collaborations between K–12 and PSE, in addition to developing teacher leaders and stimulating innovative pedagogy.

3. The School College Work Initiative’s (SCWI) partnerships between school boards and colleges in Ontario. SCWI creates opportunities for secondary school students to learn about college programs and related careers. In doing so, it also connects secondary school teachers and college instructors in collaborative initiatives, such as team-taught dual credit courses.

The case studies include a review of relevant documentation and literature on the initiatives, and interviews with the program participants. Each case study was selected, in part, for variety in terms of disciplinary diversity (e.g., covering history, English/communications, and arts); coverage of educators (e.g., university scholars, college instructors, secondary teachers of various backgrounds); the educators’ use of interventions that have led to collaboration at local, regional, and national levels; and the nature of approaches designed to attain collegiality and collaboration. It is not known how representative the chosen case studies are of K–12/PSE collaborations.

Source: The Conference Board of Canada.
Focus/Working Groups

One focus group and one working group were facilitated by the MacPherson Institute at McMaster University, Hamilton, Ontario, on behalf of The Collaborative. Transcripts were shared with and analyzed by The Conference Board of Canada.

The focus group, which was held April 24, 2017, comprised eight participants, all K–12 educators from area schools. Participants were recruited by a consultant working with the Hamilton-Wentworth School Board. The focus group discussion centred on participants' experience with and interest in collaborating with PSE educators.

The working group, which was held October 4, 2017, comprised a total of nine participants from McMaster University, Brock University, Lund University (Sweden), the Toronto District School Board, and an education technology consultant group. The discussion lasted approximately two hours and focused on the topics of engagement and collaboration between K–12 and PSE educators.

Source: The Conference Board of Canada.

Limitations

Evidence of these collaborations has been limited to findings from focus/working groups with educators primarily based in Ontario; six interviews with participants of the three case studies examined; and relevant literature collected during the course of the research. This methodology should be taken into consideration when making broader interpretations of the report's findings. It is hoped that the evidence presented will be helpful in future efforts to obtain a more robust picture of the state of K–12/PSE collaboration in Canada.

9 The Collaborative (http://www.yourcollaborative.org) is a pan-Canadian network of university and K–12 educators working to foster good practice in humanities and social sciences education across the K–12 and post-secondary levels.
This report focuses on the K–12/PSE connections that aim to have an impact on teaching and learning in the arts, social sciences, and humanities disciplines. Other subjects not touched by this report could warrant their own studies, such as K–12/PSE connections to improve teaching and learning in other fields (e.g., science, technology, engineering, mathematics (STEM); physical education) or to address the transition from K–12 to PSE.

There are two reasons for the chosen focus on teaching and learning in the arts, social sciences, and humanities disciplines. First, learning in these subjects is often regarded as providing the basis for the development of “soft” skills and attributes—traits such as relational skills, communication skills, ethical character, civic-mindedness, and good reasoning, which are regarded as necessary for success in any role in society. Development of soft skills through the arts, social sciences, and humanities has broad ramifications for learners’ achievement in PSE and participation in society, no matter the discipline or vocation they pursue beyond the secondary level. Strategies for connecting educators who teach these disciplines may have applications in other disciplines.

Second, K–12/PSE connections in these disciplines are not as well-known or well-developed as some initiatives in other disciplines. Better-known, perhaps, are initiatives by national organizations such as Let’s Talk Science and Actua that aim to improve teaching and learning in the STEM fields; these two initiatives have well-developed public and educational outreach campaigns and a long-standing presence at cooperating colleges, universities, and schools.10 In addition to offering professional learning opportunities such as workshops and summer institutes,11 the programs also gain attention for their direct interventions with students, including summer camps, contests, and mentoring.

Given the attention these types of initiatives garner from corporate investors, government funders, and media,12 it is no wonder that STEM

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10 See Let’s Talk Science, “Find Local Outreach”; Actua, “About: Network Members.”
11 See Let’s Talk Science, “Professional Learning for Educators.”
programming is at the forefront when discussing connections between schools and PSE institutions. This phenomenon invites questions. Are there equivalent or similar connections between K–12 and PSE in the arts, social sciences, and humanities? If so, do these initiatives support collegiality and collaboration among educators? This report offers insights that address these questions.
CHAPTER 2
School–PSE Connections for Educator Learning

Chapter Summary

- There are many reasons why the K–12 and PSE sectors can, and do, establish connections. One objective is to facilitate learning and development opportunities for in-service K–12 and PSE educators.

- K–12 and PSE educators can connect with one another in a number of simple ways, many of which offer direct benefits to students.

- Formal partnerships and communities of practice for K–12 and PSE educators can offer environments where collaboration flourishes.
Reasons for K–12 and PSE Connections

The K–12 and PSE sectors in Canada are not entirely disconnected. For nearly as long as universities have held responsibility for pre-service teacher education, they have relied on partnerships with local school districts and schools to provide practical learning opportunities to teacher candidates.1

K–12 and PSE institutions have also partnered to provide mentorship to new K–12 educators, as well as to help established K–12 teachers master teaching specific skills or new curricula,2 such as coding and technology.3 Within this cooperative partnership between faculties of education and schools, new developments in curricula, teaching and assessment approaches, and school reform have also been tested.4 As Bartholomew and Sandholtz write, “The underlying benefit of successful partnerships is that they offer a means of ending the fragmented approach to teacher education, professional development, and school improvement.”5

Often, schools and PSE institutions in close geographical proximity partner on initiatives that have beneficial outcomes for their shared community. Schools have historically been open to partnership arrangements with not only PSE institutions but also businesses, civic organizations, and community agencies and community volunteers as a means of obtaining resources that contribute to the learning experiences of their students.6 For example, a partnership between researchers from York University’s Faculty of Education and the York Region District

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2 Chung Wei and others, Professional Learning in the Learning Profession, 3. See also the case study discussed in Bartholomew and Sandholtz, “Competing Views of Teaching in a School–University Partnership.”
3 See, for example, Van Ginkel, “BC Teachers Get a (Fun) Crash Course in Coding.”
5 Bartholomew and Sandholtz, “Competing Views of Teaching in a School–University Partnership,” 156.
School Board aimed to improve learning outcomes for underachieving and marginalized students by facilitating information exchange between schools and linguistic-minority families.\(^7\) Schools have long been the sites of observation and experimentation for PSE researchers in domains other than education as well (e.g., cooperating with academic researchers to study everything from cognition and emotional development to nutrition and group dynamics).

Partnerships between K–12 and PSE are frequently facilitated by external organizations, such as charities with mandates to improve student outcomes (e.g., graduation rates or achievement in the STEM disciplines). Examples in Canada include Let’s Talk Science, Actua, and Pathways to Education,\(^8\) all of which establish partnerships with a range of volunteers and organizations, including K–12 schools and PSE institutions. Thus, schools and PSE institutions establish loose connections and more formal partnerships for a variety of reasons. (See Exhibit 1.)

### Exhibit 1
**Motivations for School–PSE Connections**

| Educator development | • Initial teacher education  
|                      | • Educator mentorship  
<table>
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<th>• Mastering of teaching content</th>
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</table>
| Student-centred      | • Resource-sharing  
|                      | • New teaching approaches  
|                      | • Student recruitment to PSE and career exploration |
| Other objectives     | • Applied research  
|                      | • Curriculum development and design  
|                      | • Community initiatives |

Source: The Conference Board of Canada.

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\(^7\) McKean, *Beyond Citations*, 9–10.

There is value for K–12 and PSE educators to engage as co-learners in activities across sectors.

Among the most common reasons why K–12 and PSE institutions connect is for pre-service teacher education, new teacher mentorship, and improving established educators’ knowledge of curriculum content.\(^9\) Less well documented are connections that build collegial relationships among educators in different sectors.\(^10\) The reasons for this apparent deficit may lie in the challenges that prevent these connections from taking off in the first place (see the section below on “Missed Connections”). This also suggests that where these connections are happening, knowledge mobilization may not be an integral component of the activities.

**Benefits of Collegiality and Collaboration Between K–12 and PSE**

K–12 and PSE educators interact infrequently in a professional context. Yet, there is value for K–12 and PSE educators to engage as co-learners in activities across sectors.\(^11\) Interviewees and focus group participants identified several specific motivations for PSE educators to engage as colleagues and to collaborate with K–12 educators.

> In university, in a first-year program … what do assessment tools look like? I think [secondary educators] are experts in that kind of stuff.

**Anonymous teacher, Ontario\(^12\)**

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10 Ibid.
11 Bartholomew and Sandholtz, “Competing Views of Teaching in a School–University Partnership,” 156; interview findings; focus group by the MacPherson Institute at McMaster University for the Collaborative for Research and Innovation in Social Sciences and Humanities Education, April 24, 2017 (unpublished; findings shared with The Conference Board of Canada). See also Barbas-Rhoden and Brunow, “Developmental Relationship-Building for Civic Challenges.”
12 Focus group findings.
In a broad sense, PSE educators are driven to connect with colleagues in the K–12 sector because they are looking to gain knowledge in three main areas:

1. PSE educators want to be better prepared for high school graduates entering PSE directly. This means understanding their new students’ behaviours, learning preferences, and expectations for PSE.
2. PSE educators want to understand how the curriculum objectives in secondary school are being addressed in subject areas. They are interested in how the curriculum content in K–12 sets the groundwork for courses taught in PSE.
3. PSE educators want to learn about teaching strategies from K–12 educators, as well as the approaches that educators are using in the classroom. They want to understand what works and what could be translated to their own classrooms and teaching.

Some K–12 educators see themselves as being able to offer PSE educators this practical knowledge and more. In interviews and focus groups, K–12 educators spoke of being able to provide PSE educators with insight into provincial educational policy and curriculum requirements for specific subjects, knowledge of school district administrative processes, applications of different teaching strategies and assessment approaches, classroom management strategies, and experience working with a wide range of students. Teachers often possess connections to other resources that can be helpful to PSE educators.

“They [PSE instructors] have all these students coming in and I think … that’s part of their responsibility to understand who is their learner. Seeing what strategies [students] are used to, what kind of instruction and assessment. I think it would help [instructors] to familiarize them with what’s going on at the secondary level.”

Anonymous teacher, Ontario

13 Ibid.
K–12 educators also spoke about topics they would appreciate exploring alongside PSE educators if they had the opportunity to connect. K–12 educators see PSE educators as being able to illuminate issues such as:

- PSE-level expectations for student performance
- methods of assessment used in PSE
- specific disciplinary knowledge
- PSE admission requirements
- programs of study
- career pathways

Additionally, both groups can bring knowledge of classroom technology and expertise in content and content delivery in their fields. (See Exhibit 2.) Visits to each other’s respective campuses expose educators to different ideas about learning spaces, techniques, technology, programs, teaching professionalism, and school culture.14

“I’d love to see a situation where profs are coming into the high schools and just sitting in on classes and then vice versa, so then after seeing a lesson … you can say, ‘What were you thinking here? Why did you do that?’ Actually have just a frank conversation about some strategies utilized, the resources that were distributed.

Anonymous teacher, Ontario15

Aside from the professional benefits that educators take into their teaching, some also derive personal benefits from collaborating with other educators. One interviewee, a college instructor, expressed that he used to be anxious about the thought of his own children going into high school. Collaborating with a high school teacher helped to alleviate some of these concerns. Another interviewee, a coordinator of co-learning opportunities for PSE and K–12 educators, has seen new collaborations develop as a result of bringing the two groups together, such as co-authored books and artistic collaborations, as well as long-standing friendships.16

15 Focus group findings.
16 Interview findings.
The literature on school–PSE collaborations validates these comments from educators. Educators do attain direct personal and professional benefits by collaborating with other educators across sectors. Understandably, many of these collegial relationships are forged out of the belief that students will benefit, too. It is taken for granted that collegial relationships and collaboration between educators should have a positive impact on student outcomes. However, significant evidence of this effect is still limited. There are certainly strong perceptions that school–PSE collaborations benefit students (by improving their readiness for PSE, for example), but more research in this area is still needed.

The lack of evidence in support of student impact is not a reflection of the value of school–PSE collaborations. Rather, it reflects the level of complexity involved in showing the impact of educator professionalism on student learning interventions when there are many intervening variables at play. Perhaps because of this challenge, there is not a broad base of research on the impact of educator professional on student learning.

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### Exhibit 2

**K–12 and PSE Educators Bring Expertise to Collegial Relationships**

<table>
<thead>
<tr>
<th>K–12</th>
<th>PSE</th>
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<tbody>
<tr>
<td>• Provincial curriculum and mandated learning outcomes</td>
<td>• Deep subject matter expertise</td>
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<tr>
<td>• Differentiated approaches to teaching and learning</td>
<td>• PSE admission requirements, programs, and career pathways</td>
</tr>
<tr>
<td>• Public school administrative processes</td>
<td>• PSE performance expectations and keys to PSE success</td>
</tr>
<tr>
<td>• Use of technology, learning management systems</td>
<td>• Use of technology, learning management systems</td>
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<tr>
<td>• Approaches to assessment</td>
<td>• Approaches to assessment</td>
</tr>
<tr>
<td>• Local community networks</td>
<td>• Broad (often international) networks</td>
</tr>
</tbody>
</table>

Source: The Conference Board of Canada.

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17 See Barbas-Rhoden and Brunow, “Developmental Relationship-Building”; Sandholtz, “Inservice Training or Professional Development.”
18 See Wess, “Partnerships for College Readiness”; Lym, “Strategies for Improving Vertical Alignment.”
19 Guskey, “Does It Make a Difference?”, 50; Gulamhussein, *Teaching the Teachers*; Yoon and others, *Reviewing the Evidence*. 
I don’t know about the level of skill that’s required in a first-year English class. I can just kind of remember what it was like when I was in university years ago. I feel a little bit lost sometimes because I’m teaching Grade 12 and I’ll teach them how to cite properly and how to do an MLA-formatted bibliography, but is that what they use [at university]? [University] just seems like a whole different world to me. I’d love to have dinner with a university professor and say, ‘When you see first-year students coming in, what gaps are there that we could be addressing?’

Yvonne McNulty, high school English teacher, Ontario

Nevertheless, the limited research does reveal the kind of interventions that have the greatest impact on the teaching approaches of educators. The U.S. research shows that opportunities for professional development are often determined by an educator’s employer (without input from the educator) and are constrained by conditions other than the needs of the educator. As a result, training is often too general, simplistic, brief, and infrequent. The research on what is effective in educator professional development shows where collegial relationships and collaboration could offer the greatest impact for educators and students. Allison Gulamhussein has summarized effective teacher professional development as adhering to the following five principles:

1. It is of significant duration to allow educators to grapple with a complex problem and the implementation of a solution.
2. There is support throughout the process to address specific classroom challenges.
3. There is engagement by the teacher in adopting and testing a new concept in real contexts.
4. There is an element of coaching and modelling of effective practices.
5. The content is specific to the teacher’s needs, such as the discipline or grade level.

20 Interview findings.
21 A note of caution: Much of this research comes from the U.S., where there are some significant jurisdictional differences.
23 Gulamhussein, Teaching the Teachers, 14–17.
Professional development that applies these principles has been found to be effective at changing the classroom approaches of educators (principles 1 to 5) and improving student learning (principle 5).24

We have a huge push about [inquiry-based learning] in our schools, and there has been some resistance from students and even from our colleagues, because it’s a change and it’s difficult. I’d also like to be able to talk with [PSE faculty using inquiry-based learning]. How do they use class discussions, which is one of the strategies they use in the first-year course, what does it look like, and how can I use that in my class? What [about] assessment and evaluation—what does that look like for you guys? We can honour that and we can prepare [students] for that. And not just students going into university but also just us sitting down, and finding out this is what we’re doing and this is what you’re doing. Not you telling us the way you run it. I think also it has to come from both ends.

Anonymous teacher, Ontario25

These principles can be embedded in collegial activities and collaborative opportunities for K–12 and PSE educators. In fact, critiques of educator professional development have called for “newer, more collaborative models”26 that “move beyond the traditional model based on the transmission of information from someone in authority.”27 Suggested alternatives are approaches such as school–PSE partnerships that “emphasize the importance of nurturing learning communities within which educators try new ideas, reflect on outcomes, and co-construct knowledge about teaching and learning in the context of authentic activity.”28 In the following sections of this chapter and the case studies in Chapter 3, this report examines options for collaborative activities that allow opportunities to embed these principles.

24 Ibid.
25 Focus group findings.
26 Butler and others, “Collaboration and Self-Regulation in Teachers’ Professional Development,” 436.
27 Sandholtz, “Inservice Training or Professional Development,” 815.
28 Butler and others, “Collaboration and Self-Regulation in Teachers’ Professional Development,” 436.
Missed Connections

There is no shortage of justifications for improving connections between schools and PSE, but making and sustaining the connection is less easy.\(^{29}\) There are, of course, the structural and purpose-driven differences that can make the two sectors distinct. For example, K–12 schools and PSE institutions frequently operate within geographical areas and have their own separate campuses. Though the geographic markets they serve may overlap, their physical operations are rarely integrated.\(^{30}\) Furthermore, K–12 schools and PSE institutions differ slightly in terms of the age group served. Many research-intensive institutions place greater emphasis on teaching and research at advanced levels, including graduate study, further distinguishing the student audience they emphasize. Increasingly, PSE institutions are serving the demand for education from mature students, professionals returning to education, and re-training individuals.

But aside from differences in mission and purpose, there are still further divisions that deter educators in the K–12 and PSE sectors from establishing connections across sectors. These differences are as follows (see Exhibit 3):

1. **Perceptions of status difference.**\(^{31}\) These perceptions can be rooted in the differences in training between K–12 and PSE educators. Whereas K–12 educators are licensed teaching professionals, PSE educators are regarded as scholar-instructors, often thought of as more subject matter experts than teaching specialists. Although this is not always true—as in the case of teaching-track PSE educators and others with years of experience teaching—PSE educators as a group have widespread experience and interest in teaching.

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29 Bartholomew and Sandholtz, “Competing Views of Teaching in a School–University Partnership,” 156.

30 One exception to this is K–12 schools that are designed as the sites of pre-service teacher training, such as University School in Calgary (http://schools.cbe.ab.ca/b237/about.htm) and professional development schools across the United States (https://napds.org/). Another exception is the emergence of integrated secondary-tertiary schools, with one notable example in New Zealand (see Martin, *Higher Education for Disengagers*).

31 Interview and focus group findings; Barnett and others, “A Typology of Partnerships for Promoting Innovation”; Goodlad, Soder, and Sirotnik, *Places Where Teachers Are Taught*; Restine, “Partnerships Between Schools and Institutions of Higher Education.”
2. Differences in support and incentives for professional development and learning. For example, PSE educators in universities are rewarded more for their scholarly contributions (research, publications) than for professional learning and non-academic collaborations. In K–12, the types of activities that are supported are product-driven or have an applied nature (e.g., lesson plans and curriculum guides), which, on their own, may not satisfy expectations for outputs from a scholarly point of view.

3. Differences in curricula and learning objectives. This can make it difficult to draw sensible connections between educators and their needs as they pertain to teaching content.

4. Requirements to justify engaging in collaborative activities outside one’s one institution. Some amount of paperwork and negotiation may be required for an educator to obtain permission to participate in order to justify participation costs, travel costs, and teacher release time.

Source: The Conference Board of Canada.
5. **Lack of time.** K–12 educators, especially, lack flexibility to incorporate any activities over and above their classroom and preparatory obligations, and stipulated professional development requirements. According to the OECD, Canadian K–12 educators spend significantly more time teaching than teachers in some of the world’s top-performing education systems, including Finland, Japan, and Korea. (See Table 1.) The implication is that educators have less time available for classroom preparation and professional development activities. PSE educators must also frequently balance demanding teaching, research, and administrative loads. Collaboration with colleagues across sectors can be informal and embedded in other activities, but forging and maintaining meaningful collaborations does require an investment of time.

6. **Lack of knowledge of whom to connect with.** Teaching is sometimes regarded as an innately solitary occupation, with educators infrequently collaborating with others, even within their own institution. Educators often have little knowledge of potential collaborators outside their institution and educational sector.

### Table 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Primary education</th>
<th>Lower secondary</th>
<th>Upper secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>797</td>
<td>742</td>
<td>743</td>
</tr>
<tr>
<td>England</td>
<td>942</td>
<td>817</td>
<td>817</td>
</tr>
<tr>
<td>Finland</td>
<td>677</td>
<td>592</td>
<td>550</td>
</tr>
<tr>
<td>Japan</td>
<td>742</td>
<td>610</td>
<td>511</td>
</tr>
<tr>
<td>Korea</td>
<td>658</td>
<td>548</td>
<td>551</td>
</tr>
</tbody>
</table>

Source: Organisation for Economic Co-operation and Development.

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37 Interview and focus group findings; Gulamhussein, *Teaching the Teachers*; Darling-Hammond, Chung Wei, and Andree, *How High-Achieving Countries Develop Great Teachers*.


39 Darling-Hammond, Chung Wei, and Andree, *How High-Achieving Countries Develop Great Teachers*.

40 Interview and focus group findings; Clement and Vandenberghe, “Teachers’ Professional Development.”

41 Clement and Vandenberghe, “Teachers’ Professional Development.”

42 Interview and focus group findings.
"I … partnered with the university to have students learn about what a historian does and actually use their library to conduct their own research. I would like to do more of this but, as I feel that I have to cover all the knowledge and understanding outcomes, I have had to limit these opportunities.

Anonymous social studies teacher, Alberta

Despite the challenges, educators see the benefits of collaborating with colleagues for the potential to offer richer learning opportunities for students and to enhance their own professional learning. Teachers have worked with PSE institutions (including educators and students) to arrange activities such as campus tours, lectures, guest speakers, and tutorials.

Ways K–12 and PSE Educators Can Collaborate

K–12 and PSE educators bring their strengths, expertise, and skill sets to relationships that find them learning together and from one another. Educators collaborate across sectors through various activities. The most successful of these, in terms of developing educators’ learning, are activities that have the educators “studying, doing and reflecting” and sharing their observations with each other. Ideally, activities should be part of a deliberate collaboration that embeds elements of the five principles of effective professional development.

43 Alberta Teachers’ Association, The Future of Social Studies, 43.
45 Darling-Hammond, Powerful Teacher Education, 2.
46 See earlier section of this report, “Benefits of Collegiality and Collaboration”; Gulamhussein, Teaching the Teachers, 14–17.
One of the problems at my school for bringing in outside people is it has to link to the school initiatives, which don’t always mean the goals of my course, so to get permission to have a guest speaker in there’s a series of boxes that need to be ticked off and it just feels artificial. I know a lot of people have just stopped trying to make those connections or [put] square pegs into round holes.

Anonymous teacher, Ontario

There are at least 11 approaches that educators can use to engage with one another across sectors. These activities can be undertaken with varying degrees of investment. These range from relatively brief activities that can stand alone or can be part of a longer-term collaboration or partnership (e.g., career days, guest lectures/exchanges) to more sophisticated activities that take place over a longer period of time (e.g., team teaching, mentoring/coaching). Some activities engage educators with students from the other sector, providing direct, immediate benefits to the students (e.g., career days, team teaching, extracurricular activities). (See Table 2.) Other activities are educator-centric—that is, the core activity involves only educators, and may involve students minimally or not at all (e.g., mentoring/coaching, content alignment, training/workshops).

47 Focus group with the MacPherson Institute at McMaster University for The Collaborative, April 24, 2017 (unpublished; findings shared with The Conference Board of Canada).
Table 2
Activities for Peer-to-Peer Collaboration Between K–12 and PSE Educators

<table>
<thead>
<tr>
<th>Activity</th>
<th>Educator-to-educator interaction</th>
<th>Educator-to-student interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training/workshops</td>
<td>High</td>
<td>None</td>
</tr>
<tr>
<td>Mentoring/coaching</td>
<td>High</td>
<td>None</td>
</tr>
<tr>
<td>Interest groups/extra-professional activities</td>
<td>High</td>
<td>None</td>
</tr>
<tr>
<td>Content alignment</td>
<td>Moderate</td>
<td>None</td>
</tr>
<tr>
<td>Teaching/classroom observations</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Sharing resources</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Campus tours/visits</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Career days</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Guest lectures and exchanges</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Team teaching</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Extra-curricular activities</td>
<td>Moderate</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: The Conference Board of Canada.

“I think for me personally it’s knowing who to contact, and then the contacts change frequently…. There is little, no time in any secondary school teacher’s day—it’s next to impossible. When you get a chance to do it at night, you can’t contact someone, right? How do we make that line of communication accessible for both? If you want this to work you have to invest something so it becomes easy for both secondary school teachers and post-secondary educators, because they are busy and they need help setting up this partnership.

Anonymous teacher, Ontario48
Training/Workshop Sessions
Perhaps the most common activity in which K–12 and PSE educators can participate together are training/workshop sessions that focus on a topic of mutual interest, such as deeper understanding of teaching and assessment approaches in a given discipline. Summer-intensive workshops can often accommodate large numbers of both K–12 and PSE educators. In the following chapter, each of the partnerships profiled has some element of training/workshops that simultaneously enrol K–12 and PSE educators.

Mentoring/Coaching Opportunities
Mentoring and coaching are learning models used in numerous professional and educational contexts. Mentoring and coaching opportunities can be established informally or formally between a K–12 teacher and a PSE instructor. The relationship is likely to revolve around a topic or issue where the mentor/coach is regarded as knowledgeable and the trainee wishes to develop relevant skills, knowledge, and experience. These relationships are usually longer in duration than training/workshop sessions, and the focus is on the one-to-one relationship between the mentor/coach and trainee.

Interest Groups/Extra-Professional Activities
Similar to extracurricular activities for students, interest groups and extra-professional activities are opportunities for educators to share interests that go beyond the curriculum. These activities do not have teaching and classroom objectives, although they might have indirect benefits. The main objective is that they encourage collegiality and, ideally, lead to further collaborative opportunities. Examples include educators participating together in book clubs, dinner clubs, art lessons, and sports. The California Arts Project, profiled in the next chapter, has seen these types of interest-based activities develop as a result of its partners wanting to create more informal learning opportunities for PSE and K–12 educators.

49 Mentoring and coaching are distinct activities in some contexts; in other contexts, the differences are difficult to distinguish. Here, we have discussed them together because of the similarities.
50 Interview findings.
Content Alignment

Content alignment is the activity of drawing purposeful connections between two or more courses in the curriculum. (Alignment between secondary and post-secondary courses can also be referred to as vertical alignment.) PSE and K–12 educators usually align their course content for the purpose of helping to improve student achievement in post-secondary education. Instructors might also engage in this activity as they prepare to collaborate in other ways, such as through team-teaching a dual enrolment course or hosting a guest lecture. Strategies for content alignment include:

- introducing texts and concepts in secondary courses that students will encounter in PSE;
- using similar teaching strategies at both levels, such as peer study groups and online discussion forums;
- synchronizing expectations at both levels, such as in relation to plagiarism.

Teaching/Classroom Observations

This activity involves one instructor attending a course taught by the other. The purpose is to observe the teaching and learning, and to offer constructive feedback on specific elements, such as content delivery, classroom management, and presentation skills. This activity might be paired with mentorship, content alignment, team teaching, or faculty-sharing activities.

Sharing Resources

Schools and PSE institutions might engage in sharing large capital investments such as a library or digital media lab. Sharing resources between PSE institutions and schools can provide a more cost-effective use of resources. At the same time, resource-sharing provides learning opportunities for students and educators. The institutions may also share personnel to train others in the use of equipment and facilities.

51 Lym, “Strategies for Improving Vertical Alignment.”
52 Ibid., 1055–56; interview findings.
Campus Tours and Visits
This is an activity that requires minimal investment, and which many educators discussed participating in or wanting to pursue.\(^{53}\) Simply visiting the campus of a host educator/institution can help break down the mystique of the other institution and stimulate ideas for future potential collaboration. Students can be involved in campus visits. Activities can be planned as part of the visit, including attendance at a lecture or career fair, talks with campus representatives, and trials of campus facilities (media and science labs; athletics).

Career Days
This activity has direct benefits for students. Sometimes paired with campus tours or faculty exchanges, career days bring educators and PSE students into K–12 schools to discuss career pathways and programs. Career days can also involve K–12 students exploring potential career pathways at a PSE institution. Educators can use career days as an opportunity to learn about career and educational pathways, and to deepen their connections with their counterparts in the other sector.

Guest Lectures and Exchanges
This activity involves an educator attending a class as a guest lecturer, facilitator, or presenter. There is also the possibility of schools contracting PSE educators, and vice versa, to teach whole courses.\(^{54}\)

Team Teaching
Similar to guest lectures and exchanges, team teaching pairs two or more educators to deliver a course together. The level of educator interaction is generally higher in a team-teaching setting than in a guest lecture or exchange arrangement, as the educators share responsibility for the course content and delivery. Team teaching usually requires some amount of planning and collaboration outside of class time. During class time, the team teachers may actively team together or may divide

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53 Interview findings; focus group findings.
54 See Rideout, “Partnerships in Education,” 22. This activity is likely uncommon due to regulations around teacher certification in public schools.
sections of the curriculum between themselves. In the following chapter, the third case study documents team-teaching activities between an Ontario high school teacher and college instructor.

**Extracurricular Activities**

Extracurricular activities include clubs, associations, sports, and music and theatre performances scheduled outside regular school hours/curriculum. When K–12 and PSE educators collaborate on extracurricular activities, it is often out of genuine interest for the activity. As well, these activities frequently give the students exposure to the secondary school or PSE institution. Examples include borrowing a PSE music educator to conduct a high school orchestra or coach a sport team, or involving students in the other institution’s theatre productions or travel club.

**School–PSE Partnerships for Co-learning**

While individual relationships are at the heart of school–PSE collaborations, efforts to create a culture of sustained collegiality and collaboration between educators require an organizing framework. Partnerships can provide the framework for establishing sustainable collaborations between peers (K–12 and PSE educators) and between educational institutions.55 Judith Haymore Sandholtz explains, “School/university partnerships can create opportunities for teachers to increase their professional interactions with colleagues.”56 Partnerships between K–12 and PSE can be designed for success when they meet the following objectives:57

- are designed in response to a clear need;
- are goal-driven;
- involve a relationship-building process and a process for product creation;

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56 Sandholtz, “Inservice Training or Professional Development,” 817.
57 Barbas-Rhoden and Brunow, “Developmental Relationship-Building for Civic Challenges.”
are supported at critical junctures;
include safe spaces for innovative ideas.

The possibilities for school–PSE partnerships can be characterized in terms of how independent the partners are, what the objectives of the partnership are, and who owns or originates the partnership. In Barnett’s continuum, for example, school–PSE partnerships can take the form of cooperation (the loosest form of partnership, where each partner is a clearly independent entity), move to a coordination phase, and then end in collaboration (where partners are interdependent). (See Exhibit 4.)

Exhibit 4
Continuum of Educational Partnerships

<table>
<thead>
<tr>
<th>Cooperative</th>
<th>Coordinated</th>
<th>Collaborative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Short-term, fixed goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fully independent partners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Partners have distinct goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Benefits are not equally weighted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Existing budgets are used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Longer-term goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Some goals are shared</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• An intermediary may help broker the partnership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Initiative might continue without the contribution of one partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Long-term, mutual goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Distinct budget for activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sustainability is an objective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Partners are interdependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Partners have equal authority</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Barnett and others.

58 Partnership and collaboration are two terms that are frequently used interchangeably in discussing school–PSE relationships, although some theories suggest that collaboration is a distinct type of partnership. See Barnett and others, “A Typology of Partnerships for Promoting Innovation,” 14.

In cooperative partnerships, the objective is usually short-term, focused, and not always mutually beneficial; sometimes, the benefits are not equally weighted and existing budget funds are used (e.g., co-hosting a conference). Coordinated partnerships are longer-term and might involve an intermediary/interagency, but the two partners remain independent. Collaboration involves sustained contact and established processes, and a distinct budget for collaborative activities. Partners have equal authority, derive mutual benefits, and convey mutual concern for the collaboration and for each other.

Other ways of conceptualizing partnerships include:

- **The objective of the partnership**: Does the partnership mean to exchange information (connective), generate new knowledge and applications (generative), or transform whole approaches (transformative)?

- **The originator of the partnership**: Is the partnership initiated by a PSE institution (especially, for example, a partnership that has been created for the purpose of initial teacher education)? Is it led by a school? Is it led by a separate agency or network? Is it a true mix of more than one of these?

One strategy that can help spawn peer-to-peer and institution-to-institution partnerships in K–12 and PSE is the community of practice model. Communities of practice (and the similar concept of professional learning communities) are groups of people sharing similar characteristics who interact regularly with the purpose of sharing knowledge, enhancing individual professional development, and/or developing a collective identity. Smith and McKeen define communities of practice as having the following characteristics:

1. **Their objective** is to share knowledge and promote learning in a particular area.
2. **Membership** is self-selected and includes part-time and marginal members.

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60 Jones and others, “Successful University—School Partnerships.”
61 Furlong, “Re-defining Partnership.”
62 Wenger, McDermott, and Snyder, *Cultivating Communities of Practice*.
63 Smith and McKeen, “Creating and Facilitating Communities of Practice.”
3. The organizing structure is informal and self-organizing, and the leadership varies according to the issues.

4. Termination happens when interest lapses.

5. The value of the community is based on exchanges of knowledge and information among members.

6. The role of management is to support connections between members, ensuring topics are fresh and valuable.

Research on professional learning communities (PLCs) of educators has found that the model can have a positive impact for both students and teachers. PLCs of educators have the greatest impact when they embrace collaboration as a means to improve student learning. Successful PLCs also embody what Wenger and others define as the seven principles of communities of practice (CoP).

1. Designed for evolution: The community begins with a simple design that allows for additional elements to be added as time progresses. A CoP for K–12 and PSE educators might originate with a simple objective of matching educators for conversations about teaching, and over time might add elements such as a resource repository and a website.

2. Foster dialogue between inside and outside perspectives: Individuals’ experience and perspectives are valued, and outside perspectives that refresh or challenge dominant perspectives within the community are sought.

3. Invite different participation levels: Individuals can choose their degree of involvement, from contributing to the administrative functions of the community to participating in core activities or observing activities on the periphery. In a CoP for K–12 and PSE educators, some will play an organizing role, some will be participants, and (being a voluntary arrangement) some educators will choose to not be involved.

4. Develop public and private spaces for convening: Connections happen through group interactions and events open to the peripheral community, as well as through more intimate events.


65 Ibid. The authors note that more collaboration between teachers and academics is required to document the impact of PLCs. Though the evidence of impact is encouraging, there are fewer impact studies than expected.

66 Wenger, McDermott, and Snyder, Cultivating Communities of Practice.
5. **Focused on value:** They bring value to the individuals and the community at large.

6. **Combine familiarity and excitement:** Familiar spaces are comfortable and safe, free from the pressures of work life. The spaces of excitement are momentous events. In the context of K–12 and PSE communities of practice, momentous higher-stakes events could be general meetings and conferences; familiar lower-stakes events might be peer-to-peer meetings.

7. **Create rhythm for the community:** Rituals and the celebration of milestones create a sense of ebb and flow, progress, and marking of the passage of time, all of which sustain the community’s vibrancy and vitality. (See Exhibit 5.)

Exhibit 5

**Seven Principles of Communities of Practice**

1. Designed for evolution
2. Foster dialogue between inside and outside perspectives
3. Invite different participation levels
4. Have public and private spaces for convening
5. Are focused on value
6. Combine familiarity and excitement
7. Create rhythm for the community

Sources: Wenger, McDermott, and Snyder; Goodnough.

In the following chapter, three case studies of school–PSE collaborations are profiled, each of which has been sustained in some form by the support of a community of practice.
CHAPTER 3
School–PSE Collaboration for Teaching the Arts, Humanities, and Social Sciences

Chapter Summary

• In this chapter, three case studies show how collegiality and collaboration between K–12 and PSE educators is encouraged by initiatives that have connected educators in the arts, social sciences, and humanities.

• Networks and communities of practice help to broker connections between educators.

• Sustaining collegial networks for K–12 and PSE educators comes with challenges. Among the most significant challenges are cost and the investment of time.
Three Case Studies of Collaboration

School–PSE partnerships that promote collegiality and collaboration between K–12 and PSE educators are the focus of this chapter. Here, three case studies of partnerships and communities of practice are presented. Each example demonstrates an effort to connect K–12 and PSE educators in the arts, social sciences, and humanities disciplines. This chapter discusses the conditions that led to the creation of each partnership/CoP; the core activities; the outcomes; and considerations for future sustainability or replicability.

The first case study documents a community of practice that connects history educators. The History Education Network / Histoire et éducation en réseau (THEN/Hier) and the Historical Thinking Project (HTP) developed a pan-Canadian network of history educators, launching numerous opportunities for collegial networking and collaboration. Learning activities sponsored by THEN/HiER and HTP included intensive summer institutes where K–12 and PSE educators (along with educators from other sectors) explored ways together to introduce their students to the concepts of historical thinking.

The second case study is another example of a subject-specific community of practice for K–12 and PSE educators. The California Arts Project (TCAP) offers useful insights into a professional learning model that receives state and federal education funding and requires significant contributions from post-secondary institutions as the sites of regional programming. The regional delivery aspect of TCAP could be tailored for adoption by provincial associations or ministries of education.

The third case study draws from the example of a provincial network. The School College Work Initiative is funded by the Government of Ontario with the aim of encouraging secondary school students to consider apprenticeships and college training after high school. It is,
among other things, a community of practice formed around college- and career-readiness. Through the funding of team-taught dual credit courses, which put a college instructor and high school teacher in front of the same class of high school students, the program indirectly promotes collegiality and collaboration between secondary school and college educators.

### A Pan-Canadian Network of History Educators

Two major federally funded initiatives to improve teaching and learning of history were launched in the first decade of the 2000s, establishing a widespread, pan-Canadian community of practice that continues to connect history educators across sectors, including educators in K–12 schools, academic departments of history, education faculties, and other institutions, such as museums.

THEN/HiER was funded by the Social Sciences and Humanities Research Council (SSHRC) from 2008–16 at a value of $2.1 million.¹ The objective, according to its director, University of British Columbia professor of education Penney Clark, was to promote collaboration and knowledge-sharing of history education research, and to encourage the integration of this research into teaching by history educators.² THEN/HiER awarded project funding to innovative knowledge-sharing projects and hosted networking and knowledge-sharing events.

A co-existing, complementary network established around the time of THEN/HiER’s early development was the Historical Thinking Project (HTP). HTP launched in 2006 as a partnership between the Historica Foundation and the University of British Columbia’s Centre for the Study of Historical Consciousness. With major funding from the Department of Canadian Heritage from 2008–14, HTP aimed to change the way history is taught in schools. Education professor Alan Sears explains the rationale behind HTP this way:

¹ Funding was awarded under the Strategic Knowledge Clusters program as a knowledge mobilization project.
² Interview findings.
History teacher education, both pre-service and in-service ought to engage students in doing history. Many teachers, even those with majors in history, have little or no first-hand experience with the processes of doing history. They haven’t struggled to define a new, significant question about the past, sat with a pile of diverse sources trying to weigh their relative merits and build an argument, or tried to make judgements about the moral actions of historical agents in particular times and places. They haven’t, in other words, had to think historically but rather have been relatively passive observers of others’ attempts to do so.3

HTP sought to achieve this change by sparking conversation about history curriculum within provincial ministries of education, offering professional learning to history educators, and generating resources and classroom materials to support the teaching of historical thinking concepts. THEN/HiER funded HTP for some of its activities that convened educators for meetings and learning.

**Collegial Engagement and Collaboration**

The most significant professional development component of HTP was its summer institutes, intensive training sessions for educators, which were funded in part by THEN/HiER. The summer institutes offered a training ground for history educators across sectors to come together for intensive in-person sessions over five days to master historical thinking concepts and develop classroom teaching strategies. Using a train-the-trainer approach, the summer institutes included training on the concepts of historical thinking, guest speakers, hands-on activities (such as participating in an archaeological dig), and field trips to historic sites. Each summer institute engaged a different host partner. (Past host partners have included the Canadian Museum of History, Library and Archives Canada, Ontario Institute for Studies in Education, Canadian Museum of Immigration at Pier 21, and Centre for Social Innovation.4)

It soon became clear that there was demand for professional workshops at the local level. In response to the demand, HTP staff identified

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3 Sears, as quoted in Seixas and Colyer, *From the Curriculum*, 15.
4 Seixas and Colyer, *From the Curriculum*, 7.
and trained educators to lead workshops on behalf of HTP. Forty-five workshops were delivered across the country to approximately 1,805 educators.5 Annual general meetings of HTP and regional THEN/HiER conferences also served as important networking opportunities.

Other smaller-scale activities were funded by THEN/HiER (though distinct from HTP) that supported the development of collegial relationships and collaboration. These included activities as simple as a university professor hosting a high school history class on campus for a day (which included a history lecture, guided discussions, and a campus tour) or a two-week visit by a doctoral student to another university. According to THEN/HiER Director Penney Clark, before this, there had never been coordinated funding available for networking and learning activities that were small-scale, yet deeply impactful and directly beneficial to educators and students.

**Results and Successes**

HTP and THEN/HiER epitomized the concept of a transformative educational partnership.6 Not satisfied with merely connecting educators, HTP sought to fundamentally change the way that educators approach the teaching of history. If changes to provincial curriculum can be relied on as an indicator of this transformation, then the project succeeded. The work of HTP, enabled by THEN/HiER, resulted in the adoption of historical thinking concepts into provincial social studies and history curriculum in several provinces, most notably in Ontario and British Columbia.7

It is unclear, however, whether THEN/HiER and HTP affected any significant change in the way history is taught in PSE. Although historians were involved through all aspects of HTP and THEN/HiER, PSE educators who teach history were not as prominent an audience for learning activities as were academics from faculties of education.8 However, an important contribution of HTP and THEN/HiER stems from their five scholarly books, edited by historians, history education

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5 Ibid.
6 Jones and others, “Successful University–School Partnerships.”
7 Seixas and Colyer, From the Curriculum, 13; interview findings.
8 Interview findings.
scholars, and museum educators. These collections and individual chapters are used by PSE educators and are cited in scholarly articles.

THEN/HIER sponsored one-to-one connections between history educators that would not have otherwise been possible given usual budgetary limitations, geographic distances, and cultural divides between schools and PSE institutions. Historian and professor Alan Sears commented that the projects can be commended for achieving “collaboration across educational boundaries that used to be fairly impermeable.”9 According to THEN/HIER project director Penney Clark, the work of the network carries on through continued collaborations, as some peer-to-peer and institutional connections have outlasted the existence of HTP and THEN/HIER.10

Challenges and Replicability

Establishing a pan-Canadian, collegial network of history educators across sectors was a goal of HTP. Given the network's focus on achieving transformative change in the history curriculum, engaging educators across K–12 and PSE, as well as elsewhere (such as in museums), was a necessary component.11 However, it was a challenge to involve participants across all sectors and across the country in live events. The national spread of the network and the significant costs involved in taking educators away from their daily work proved to be a logistical challenge and involved considerable expense. Compared with general meetings, the week-long summer institutes provided a way to connect educators for a significant time period. THEN/HIER recognized that national gatherings were insufficient to develop significant connections between educators, and so organized regional meetings as well.

Since the termination of the HTP’s and THEN/HIER's federal funding, however, aspects of the networks continue to carry on. In July 2017, the annual summer institute returned for another year (funded in part by Canada’s History Society), with learning activities in Ottawa at the Canadian Museum of History and the Canadian War Museum, under

9 Sears, as quoted in Seixas and Colyer, From the Curriculum, 14.
10 Interview findings.
11 Ibid.
the theme “Thinking Historically About Canada 150.” The THEN/HiER website still serves as a resource to educators looking to connect. It provides a listing of network members, thus offering a starting point for educators looking for others to connect with. THEN/HiER project director Penney Clark hopes to see the network revived eventually.

A Regional Community of Practice in the Arts

For more than 30 years, the State of California has funded a sophisticated web of networks of K–12 and PSE educators. The California Subject Matter Project (CSMP) involves nine discipline-based communities of practice that were designed “to improve student achievement and learning by providing comprehensive, content-focused professional development for teachers, by building teacher leadership, and by creating and maintaining collaborative networks of K–12 teachers and university faculty.” (See “The California Subject Matter Project.”) Each subject matter project focuses on research-based approaches to improving teaching in specific subjects, and cultivating leadership in teaching and curriculum development. Regardless of the discipline, the individual subject-specific networks focus on three objectives:

1. Combine professional learning in subject-specific content with innovative pedagogy: The practical, leadership, and subject matter expertise of teachers is leveraged in developing programming.
2. Cultivate School–University partnerships and collaboration between teachers and university faculty: In CSMP programming, K–12 teachers and university faculty share equal status as learners and teachers.
3. Cultivate teacher leadership: Programming is designed to empower teachers to participate in activities that impact education beyond their classrooms.

12 Ibid.
13 Ibid.
14 California Subject Matter Project, “About CSMP.”
15 Interview findings.
16 California Subject Matter Project, “About CSMP.”
The California Subject Matter Project

Nine disciplinary sub-networks make up the CSMP, a state-funded mega network of K–12 and university educators working together to improve teaching and learning in the state. The nine networks are:

- The California Arts Project (TCAP)
- California History–Social Science Project
- California International Studies Project
- California Mathematics Project
- California Physical Education–Health Project
- California Reading & Literature Project
- California Science Project
- California World Language Project
- California Writing Project

Source: California Subject Matter Project.

Collegial Engagement and Collaboration

Activities and programs sponsored by the network are designed by and for university educators, teacher leaders, and teacher practitioners. Organized networking and collaborative opportunities vary depending on the discipline. For example, activities of TCAP include the following:

- A leadership development program covers topics related to expanding teachers’ leadership knowledge and skills. Examples of the variety of leadership programs include the following: understanding change in practice needed for implementation of California’s educational standards; working with adult learners; learning presentation skills; collaborating with peers; supporting teachers throughout their careers; and developing disciplinary content and pedagogy.

- State-wide professional learning workshops allow arts educators to brush up on skills in their teaching areas. TCAP offers workshops on teaching visual art, dance, music, and theatre. Workshops are offered to people with a range of skill levels, to account for the variety of types of arts educators in California (from generalists, to single-discipline educators
with extensive training, to career and technology educators with professional experience). School administrators and non-arts educators looking to integrate arts approaches into their teaching also participate.

- Regional professional learning activities are available at school, district, and regional sites. Regional sites also offer extra-professional events for educators to practise their artistic interests (e.g., drop-in painting sessions).

One example of an organized activity for collaborative learning is the Collaborative Design Institute. In this activity, small groups of discipline-specific cadres of K–12 and PSE educator participants convene throughout the year to design, deliver, evaluate, and present on an instructional approach to teaching a unit in their discipline.¹⁷ In the initial phase (usually over the summer), one cadre works on designing the instructional unit, using tools such as creative inquiry, reflection, and feedback from other cadres to aid in the design process. As a group, participants negotiate what content to focus on and the assessment approaches to include.

In the next phase, each cadre member takes the unit into his or her classroom and experiments with teaching the unit. All cadre colleagues attend the class as observers of the instruction and student learning. In a debriefing session, colleagues then discuss ways to improve the design. Subsequent cadre members teach the unit, and the process of debriefing and revision continues. In the final phase, the cadre develops a presentation for other educators, summarizing the final instructional unit and lessons learned from the research, design, and implementation phases.¹⁸

Five universities comprise the regional sites of TCAP program delivery and contribute the venues for learning. This brings K–12 educators out of their own schools and onto university campuses, where they can experience a different setting and different resources for teaching.

¹⁷ The groups include four participants (a mix of K–12 and PSE educators) and one leader (from K–12 or PSE).
¹⁸ Interview findings.
Results and Successes

The impact of activities such as the Collaborative Design Institute is immediate, with educators applying their learning directly to their classroom teaching. Other impacts have taken time to evolve. According to Kris Alexander, TCAP’s executive director, the connections made between K–12 and PSE educators provided a starting point for conversations around revising University of California and California State University admission requirements for their arts programs.21 Relationships among educators carry on after they have completed a leadership development course or workshop, with some turning out to support each other’s artistic projects or collaborating on later projects.

A much smaller proportion of university educators take part in TCAP programming relative to school educators, at a ratio of roughly one to nine.20 PSE participants from arts disciplines predominate.21 Given that programming is developed to interest and benefit K–12 and PSE educators alike, a difference in cultural attitudes toward cross-sectoral networking and professional learning could account for the different participation figures. University faculty may see less professional benefit to networking with K–12 educators, because academic incentives are more frequently tied to research, rather than to knowledge-sharing, collaboration, and professional learning.

Challenges and Replicability

TCAP and CSMP receive financial support from state and federal education funding.22 Given TCAP’s and CSMP’s inherent ties to state and federal entities and TCAP’s role in supporting educational policy shifts, they also face challenges at times. Policy changes that directly impact classrooms also affect TCAP’s activities, whereby TCAP programs must reflect policy changes as well as help teachers understand the rationale for the policies and make the necessary changes in order to implement...
A challenge for TCAP is the pace of educational policy change and the implications this has on TCAP’s work.  

One of the biggest barriers to participating in TCAP activities is educators’ lack of time. Over the lifetime of TCAP, it has been observed that the demands on educators have mounted, making it more difficult for educators to fit networking and professional learning activities into their schedules. Although intensive, longer-duration development activities are known to be more effective and transformative than brief encounters, very few educators can make these fit into their schedules. Alternative approaches to intensive, long-duration activities are being trialed. For example, rather than a two-week summer session, the same programming is being offered in shorter, multiple-day chunks over a stretch of weeks or months. Another barrier is that in a state-wide network, teacher leaders across the state are required to convene at regular intervals, which can be taxing to educators’ schedules and funding resources.

Team-Teaching for College Preparation

The School College Work Initiative (SCWI) is a network of colleges, schools, industry, educators, and education leaders with an interest in improving students’ awareness of pathways to college, skilled trades, and employment after high school. SCWI is jointly funded by the Ontario ministries of Education and of Advanced Education and Skills Development, and administered by the Council of Ontario Directors of Education. Under the SCWI banner, a number of targeted initiatives are offered to Ontario secondary students, including opportunities to take dual credit courses and get a head-start in an Ontario college program. Secondary and college educators, as well as education leaders, have opportunities to engage with each other through summer institutes, an annual symposium, regional planning meetings, training sessions, and webinars.

23 Interview findings.
24 Ibid.
25 Ibid.
Collegial Engagement and Collaboration

One of the major projects of SCWI is funding and coordinating dual credit courses between secondary schools and Ontario colleges. Offering dual credit courses requires collaboration between college and secondary educators, who develop and deliver the courses. While some dual credit courses are taught entirely by one high school teacher or one college instructor, another approach is for the two instructors to team-teach the same dual credit course. The SCWI network facilitates matches between college and secondary school educators, identifying those who are likely to be interested in collaborating and those whose subjects would make a good match for a dual credit course.

Once a match is established, the two educators work together to align their course content and objectives. They negotiate how to deliver the course: who will teach which components and when, which assessment tools will be used, and who will provide assessments. The two educators must work through challenges such as how to uphold college-level expectations and how to meld different teaching approaches.

Results and Successes

One outcome team-teachers note from their collaboration is a shift in their perceptions of their colleague’s educational sector. Clayton Rhodes is an instructor at Durham College who has team-taught several iterations of a Communications/English dual credit course alongside teachers from the Durham District School Board. At first he was wary of taking on a team-taught course. Skeptical of the state of teaching and learning in contemporary high schools, he explained, “We [college instructors] like to blame the high schools for not preparing students,” but being on the inside of a high school classroom gave him a new understanding of where students are coming from when they get to college. Likewise, Yvonne McNulty, an educator from the Durham District School Board who team-taught the secondary English curriculum alongside Mr. Rhodes, says the experience gave her exposure to college programs, courses, and potential career pathways for students. Now,

26 A dual credit course successfully completed by a student can count toward his or her high school diploma and toward a college credential.
she said, she can speak more confidently about college options and expectations to her students.

“For many years teaching, I had no clue what college was even like. I would say [to my students], ‘[This is] really important for post-secondary education,’ but not really know. That was not even on my radar when I was in high school; my path was always directed to university.”

Yvonne McNulty, high school English teacher, Ontario

Team-teaching allows two instructors the opportunity to swap professional advice about tools and resources for teaching and, in some cases, share access to these tools. For example, when they paired up to team-teach, Mr. Rhodes provided Ms. McNulty and her students with guidance in using Desire2Learn, the college’s learning management platform for hosting online discussions, submitting assignments, and posting grades.

Team-teaching also can invigorate an educator with new thinking, approaches, and energy. In the Ontario dual credit courses, the college instructor is placed in front of a different audience than he or she is used to and (frequently) in a different environment. According to Mr. Rhodes, it is an exhilarating challenge for an educator to have to adjust approaches for a different group, and to learn the workings of a public school.

“As a college instructor, it’s easy to teach the same thing year-in [and] year-out. You get a little too comfortable. Team-teaching breaks the routine. It allows you to sharpen your skills.”

Clayton Rhodes, college instructor, Ontario

27 Interview findings.
28 Ibid.
Each team-taught course is the original co-creation of the two educators involved, and the results can vary widely.

The SCWI network has taken note that team teaching has benefits for students. Students in the McNulty/Rhodes team-taught course said that memorable aspects included the opportunity to tour the Durham College campus, easier access to an instructor (there are two educators in the room on team-taught days), and learning how to use the college’s learning management system and online discussion boards. Students also got a preview of what it is like to be a college student by being held to the same expectations as Mr. Rhodes’ college students.

Challenges and Replicability
Each team-taught course is the original co-creation of the two educators involved, and the results can vary widely. Team-teaching requires a considerable amount of collaboration and negotiation between the two educators, and this does not always work well if the two educators are not well-matched in terms of personality, teaching approaches, or experience. Team-teaching a dual credit course is voluntary—and it is not for everyone. Mr. Rhodes describes the ideal team teacher as having a flexible, open-minded, easy-going disposition. College instructors who are more set in their ways and do not want their teaching approaches challenged would struggle in such an environment. Furthermore, not all college instructors view team-teaching as beneficial to their careers. Team-teaching may not necessarily lead to financial benefits or professional advancement, and some might see the experience as an undue burden to their usual teaching routine.

Team-taught dual credit courses are offered by colleges and school boards across Ontario. The offerings vary year to year, based on student interest, as well as interest from educators. Not all subjects are appropriate for team-teaching as a dual credit course; there needs to be a minimum level of overlap between learning outcomes and subject matter needs to be complementary. The Communications/English course team-taught by Mr. Rhodes and Ms. McNulty integrated the grammar and fundamental communications objectives of a first-year college

29 Interview findings; School College Work Initiative, SCWI News, 17.
30 Interview findings.
31 Ibid.
32 Ibid.
course with the Ministry of Education curriculum objectives for high school English. Other courses might mesh less easily, or could require more compromise of course content or learning activities than the teaching partners are open to.
CHAPTER 4

Making the Connection

Chapter Summary

- The examples of K–12 and PSE partnerships and communities of practice offer lessons for improving the connection between K–12 and PSE.

- Stakeholders could support more school–PSE educator collaborations by encouraging the development of discipline-specific communities of practice, adopting a broader notion of professional development, rewarding collaborative activities, and using innovative digital tools to augment efforts to connect K–12 and PSE educators.
Lessons for Successful School–PSE Collaborations

The three preceding case studies demonstrate national, regional, and local approaches that have supported the development of collegial connections and collaboration between K–12 and PSE educators. These three examples offer valuable takeaways for education stakeholders interested in creating more opportunities to connect K–12 and PSE educators.

**Communities of practice, networks, and partnerships offer frameworks for collegial relationships and collaborations to develop.** Collegial relationships and collaborations developed in each of the case studies because an existing network, community of practice, or partnership helped to facilitate relationships between peer educators. In each case, the network existed as a third-party entity that did not represent the exclusive interests of either the PSE or K–12 sector. Rather, it existed to bring together both sectors equally (and sometimes educators in other sectors). This design is likely important for creating a community where educators in the two sectors are viewed as peers with the same professional status. Maintaining such a culture is vital to developing viable collaborations. The independent existence of the community of practice/network also offloads some of the effort of any one institution, and helps keep the network expansive.

**Simple collegial relationships can develop into longer-term collaborations.** Organized events such as general meetings, workshops, and summer institutes provided venues for K–12 and PSE educators to meet and develop informal, collegial relationships. These are frequently a starting point for organic collaborations to develop, if not nurtured, by a more deliberate matching process.
School–PSE collaborations can have connective, generative, and transformative results. Each case study demonstrated networks and communities of practice whose objectives were connective and generative—they had dual aims of connecting educators as colleagues and, from there, establishing collaborations that would generate new knowledge, teaching approaches, or curricula. The college preparation network in Ontario generated the creation of team-taught courses; The California Arts Project generated co-created lessons for arts educators; and THEN/HiER and HTP generated educator resources and training to support teaching new history curricula.

Depending on how one views transformation, these case studies could also be seen as achieving transformative results. Through the collaboration of history educators, HTP and THEN/HiER achieved the eventual redesign of social studies curricula in several provinces. TCAP’s work fed into post-secondary institutions’ changes to arts education requirements for new university entrants from high schools. And team-teaching activities of the SCWI have transformed participants’ perceptions, with high school and college educators gaining a better understanding of each other’s environment.

Meaningful school–PSE connections demand an investment of time and resources. Communities of practice allow for varying degrees of involvement. But it is clear from these case studies that as educators move from establishing simple collegial connections with counterparts to more intentional collaboration, there is an increased demand for their time. Many of the flagship collaborative activities of the three networks profiled (the summer institute of the history educators’ network; the collaborative design institute of the arts educators’ network; and team-teaching over a semester in the dual credit network) all require a significant investment of time from the partners. Some collaborations also involve considerable financial expense due to costs for teacher release and travel as well as fees for organized activities, such as workshops and summer institutes. At the same time, the paucity of research on the impacts of these activities on student learning likely

1 Jones’s typology of successful school–university partnerships was used. See Jones and others, “Successful University–School Partnerships.”
makes it difficult for these activities to receive the financial support needed to get off the ground in the first place.

What’s Missing From School–PSE Connections?

Do school–PSE collaborations offer equal benefits to both sectors? Each case study demonstrates some degree of inequity in the participation of PSE educators compared with K–12 educators. Interviewees for each case study remarked that there are barriers inherent to PSE professional culture that deter PSE educators from taking part in initiatives that would connect them with the K–12 sector. The heterogeneity of PSE educators and their different roles within PSE point out part of the reason for the limited involvement of this sector in collaborative initiatives. PSE educators range from senior faculty members with limited teaching responsibility, to contract-employed instructors where teaching is their core responsibility. At one end, senior tenured faculty members may derive limited professional benefits from participating in collaborative activities. At the other end, contract-employed instructors or junior faculty may receive little support and have little time to participate in collaborative activities while pursuing their teaching, research, and administrative duties. Other factors may also be at play, such as lack of awareness of these initiatives among PSE educators or lack of relevance of the organized activities.

As long as these barriers persist, few students in PSE are likely to encounter a faculty member who collaborates with teachers in the K–12 sector. Participation by PSE educators might be increased if there were professional incentives to participate. Junior or mid-career PSE educators might be motivated if collaboration, knowledge dissemination, and co-creation activities with K–12 were recognized as valuable outputs of their own accord, in a separate but similar way that research and teaching are recognized. The prospect of competitive funding to spearhead collaborative activities—administered by external funders—could motivate intrepid PSE educators. PSE institutions can also help by identifying prominent champions of school–PSE collaboration at
leadership levels and by making professional development funds available for participation in collaborative activities. Networks and communities of practice can also improve participation by developing dedicated engagement strategies for PSE.

**Can online and digital tools facilitate school–PSE collaboration?**

In each case study, collegial relationships and collaborations were facilitated by live, in-person meetings of K–12 and PSE educators. Interviewees acknowledged the importance of in-person events, even (or especially) for communities of practice that encompass a region, province, or the whole country. Each of the networks/communities of practice has a web presence and encourages educators to collaborate online, but there was clearly more emphasis placed on in-person networking to develop relationships.

Online learning communities have a place in the educator’s toolbox. They have been used by networks of educators within the same sector to provide an alternate communication venue for communication among members of a CoP. As well, they are facilitated by tools such as listservs (electronic mailing lists), discussion boards (e.g., Teacher Focus), resource-sharing repositories (e.g., the Center for Teaching Quality’s Collaboratory), We the Teachers, and The Teacher’s Corner), blogs (e.g., Live Journal’s hub of teaching-related blogs), and hubs of mini-sites that showcase partnerships and projects (e.g., Yaffle). Tools exist to help educators choose the best approaches to augment their communities of practice with online components. Online learning communities have been found to increase communication and collaboration when paired with face-to-face interaction.
collaboration when paired with face-to-face interaction,\textsuperscript{11} and have been useful in addressing issues faced by isolated educators who have little opportunity to participate face to face.\textsuperscript{12}

However, these online communities are frequently designed for educators within the same sector (e.g., K–12). Could a network or CoP achieve collegiality and collaboration between K–12 and PSE educators if it focused on making initial educator connections online? Are there issues related to trust, expertise, status, access to technology, time, and schedules that might make it more difficult for K–12 and PSE faculty to establish connections online? More research in this area would be valuable.

One Canadian initiative is venturing to explore the potential in this area. The Collaborative of Humanities, Arts and Social Science Educators (The Collaborative) is proposing to develop a digital space and online collaborative environment with the express purpose of matching K–12 and PSE educators.\textsuperscript{13} This initiative will offer the support of facilitators who help to cultivate connections among educators, with the aim of supporting real-life collaborations. The online platform and built-in facilitation/support aims to mitigate some of the challenges that prevent collaborations from taking off, including a lack of awareness of other educators with related interests, lack of time to explore professional development options, and geographic barriers. The platform could encourage and help support a variety of activities as well as interactions and collaborations—such as class visits, resource-sharing, mentoring, and campus visits. A digital platform supporting the creation of a community of practice could allow individual educators to take a proactive approach to finding a collaborator.

\textsuperscript{11} Vavasseur and MacGregor, “Extending Content-Focused Professional Development,” 532.
\textsuperscript{12} Hur and Brush, “Teacher Participation in Online Communities,” 297.
\textsuperscript{13} The Collaborative, “Organisation.”
Recommendations for Supporting School–PSE Collaborations

The challenges that stand in the way of greater connection between K–12 and PSE educators can be overcome. Education policy-makers, K–12 and PSE leaders, and those involved in educator professional development can take a role in creating conditions that generate and sustain partnerships and CoP. Stakeholders could support more K–12/PSE educator collaborations by encouraging the development of discipline-specific communities of practice, adopting a broader notion of professional development, rewarding collaborative activities, and using innovative digital tools to augment efforts to connect K–12 and PSE educators.

1. Encourage the creation of networks to facilitate connections between K–12 and PSE educators.
School–PSE collaborations often happen on a small scale, with individual educators seeking out a partner for an idea. But there are few opportunities for K–12 and PSE educators to meet one another and begin an informal, collegial relationship that could evolve into a collaboration. This challenge could be addressed by discipline-specific networks/communities of practice dedicated to enhancing knowledge-sharing among K–12 and PSE educators. Funding agencies, ministries of education, and PSE and school administrators could all be leaders in helping to support the creation of discipline-specific, cross-sectoral communities of practice.

2. Adopt a broader notion of professional development for educators.
Critiques of in-service educator professional development suggest that some PSE institutions and school boards have limited notions of professional development that do not recognize the potential for informal, collegial connections to create opportunities for learning and development. It is also argued that professional development sessions developed entirely in-house (e.g., organized and led by a school, district,}

14 See earlier section of this report, “Missed Connections.”
In-house professional development sessions could be replaced with time for collaboration between K–12 and PSE educators. 

or teaching department) could be replaced with time for collaboration between K–12 and PSE educators—an interesting suggestion, assuming that the collaborative activities model the principles of effective professional development. Other options for expanding the concept of professional development include:

- encouraging educators to use professional development time to teach each other (as opposed to being taught by learning consultants or administrators) and for other peer-to-peer activities such as mentoring and coaching;
- encouraging educators to address shared problems together and co-create solutions;
- allowing a variety of collaborative activities to be formally recognized as professional development.

Allowing existing professional development allocations to be used for collegial networking and collaborative activities could help to address the barriers of cost and time that prevent connections from being made.

3. Reward collaborative activities.

PSE educators often lack sufficient external incentives to collaborate with the K–12 sector. One solution would be to establish professional recognition for collaborating with K–12 colleagues. Collaborative activities and engagement with a community of practice that extends beyond academia is a valuable professional endeavour that extends the impact of academic work. Academic institutions and scholarly associations could also recognize and promote excellence in building connections and establishing collaborations between an academic discipline and K–12 educators.


It is unlikely that location-based and in-person collegial networking opportunities will be replaced by online options in the near future. The geographical divide of schools and PSE institutions in Canada as well as large provincial education jurisdictions present both challenges and

15 Sandholtz, “Inservice Training or Professional Development?”, 827.
16 Gulamhussein, Teaching the Teachers, 14–17.
opportunities. Meaningfully designed online collaborative environments can support school–PSE collaboration—for example, by allowing potential partners to discover one another, providing them with support or helping them find funders for an idea. Online collaborative environments can be leveraged by collaborators to share the products and successes of their work together. Online environments can also serve as a repository of outcomes, impacts, and good practices in K–12/PSE collaboration. This could help address the paucity of research in this area. Future research should also evaluate the components that make a digitally enabled network most successful. For instance, do digital tools provide the most benefit if there is a human mediator/facilitator involved in brokering connections between users, or is it enough to rely on participants (or computer-mediated algorithms) to initiate connections?

**Conclusion**

The K–12 and PSE sectors in Canada are treated as separate entities in public policy. But there are compelling reasons for these sectors to build bridges and work together more closely. Given the increased need for learners with advanced skills and post-secondary education, Canadian policy-makers need to be concerned with the impact that K–12 has on participation and success in PSE. This is especially true when considering enrolment numbers and level of achievement in specific fields, such as the arts, social sciences, and humanities. Although the number of graduates in these fields is in decline, the future-proof transferable skills that are essential to these disciplines remain in great demand.

This report discussed 11 options for K–12 and PSE educators to connect with each other for the primary purpose of sharing knowledge, learning together, and creating approaches and solutions to meet their needs as educators. Three case studies illustrated what collegial connections and collaboration between K–12 and PSE might look like. They also offered lessons into what is required to develop and sustain K–12 and PSE connections among educators in the arts, social sciences, and

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17 Statistics Canada, CANSIM table 477-0019; Chiose, “As Students Move Away From the Humanities.”
18 Davies, Fidler, and Gorbis, *Future Work Skills 2020*. 
More support for K–12 and PSE educators to combine their shared expertise could be the missing link to achieving system change on a grander scale.

humanities. When it comes to devising approaches that help to connect educators for the purpose of improving student learning, it is important to focus on the subject matter they teach. Future reports could provide intriguing insights into how connections and collaboration can be supported for educators in STEM, skilled trades, and health fields.

It seems intuitive to support connections between the professionals who teach in our K–12 and PSE systems. Yet, too many conditions undermine efforts to permit such connections. Educators at the K–12 and PSE levels have a wealth of knowledge about best teaching approaches and how to harness the passions and interests of the learners they interact with daily. They also have a rich depth of knowledge in their subject specialties, and their own passion and skilful teaching irrefutably impact the quality of learning in their classrooms. More support for K–12 and PSE educators to combine their shared expertise could be the missing link to transforming education and achieving system change on a grander scale.

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APPENDIX A

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