

The Problem of the Skills Gap Agenda in Canadian Post-secondary Education

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Abstract

The mismatch between graduates' skills and the needs of the labour market is a continuing discourse in Canada and on a global scale. Yet, arguments on how to restructure PSE are not united. Given these competing discourses, we ask the following research questions: What should we make of the various representations of the skills gap, and how are contemporary PSE students positioned in this discursive space? We use Bacchi's problem representation approach to policy analysis to examine four policy actors' statements influencing Canadian PSE to examine the discourses surrounding the perceived skills gap in Canadian PSE. We argue that, while these policies call for disparate PSE reforms, they are all underpinned by the same neoliberal rationality. The different calls for reform reflect a harmonized and complementary set of discourses that reify PSE students as a single subject—a one-dimensional, homogenous, economic subject, devoid of difference. We suggest discourses that position PSE students as political actors in determining their education and roles in a democratic society are needed.

Keywords: skills, post-secondary education, discourse analysis, Bacchi, subjectification, equity, democracy, policy analysis

The mismatch between university graduates' skills and the needs of the labour market is an emerging discourse impacting post-secondary education (PSE) on a global scale. The notion of a skills gap agenda unfolds in a time when neoliberal rationalities have taken hold of university and public sector life (Brown, 2015). In many Western countries striking outcries about the educational failures of PSE to meet the demands of the labour market ring out in the midst of pressures for PSE reform that will bring the foundation of education more fully in line with labour interests. Consequently, concerns raised by organizations across sectors about the pressing need for PSE institutions to address a skills gap are alarming in that they implicate the very nature of PSE institutions and the students who attend them.

In the Canadian context, the federal government has released a series of budgets targeting skill development of young people to address both workforce needs and national reputation on the global stage. The most recent federal budget explicitly addressed a need for a "horizontal skills review," aiming for skill development for young Canadians, both in country and at a global level (Government of Canada, 2019).¹ Yet, arguments on the skills gap, labour shortage, and the corresponding role of PSE are not united. On the one hand, the narrative of a shortage of skilled workers in Canada dominates public policy discourses. For example, the Canadian Chamber of Commerce (2015) warns that labour shortage is the most pressing barrier to improving Canadian competitiveness, and PSE is not educating for skills needed to grow the economy. On the other hand, the very existence of a skills gap is questioned, with studies citing no mismatch between the supply of science, technology, engineering, and mathematics (STEM) skills and

¹ While the federal government does not specifically define the age range of young people, this category in the budget includes PSE students, given that specific items target PSE programs.

labour needs (Council of Canadian Academies, 2015). Additionally, increasing youth unemployment and underemployment, coupled with decreases in employment prospects for immigrants, raise doubts about a labour shortage (McQuillan, 2013). Furthermore, there have been important critiques of the notion that Canadian PSE should be restructured to focus on skills training as it reduces the multidimensional aspects of learning (Porter & Phelps, 2014; Fenwick, 2006).

Our interest in the skills agenda, and the discourses surrounding it, was piqued when we attended the Conference Board of Canada's Skills and PSE Summit in November 2015. At this third annual summit, over 100 Canadian organizations of diverse types (e.g., business, government, community, education) both listened and contributed to discussions about what is needed in the context of a Canadian strategy aimed at coordinating PSE skill development. The work of think tanks, such as the Conference Board, should not be undervalued in their contribution to shaping public discourses, as they bring together elite actors in order to circulate ideas aimed at influencing public policy (Savage, 2016; Viseu, & Carvalho, 2018). Indeed, the concept of a national strategy is curious in Canada, given that education remains a provincial, rather than federal, jurisdiction. While the federal government is becoming increasingly involved in higher education research and funding (Viczo & Tascón, 2016), the Summit and the proposed coordinated PSE skills strategy offered an opportunity to examine which actors were advocating for a more comprehensive strategy, what it would include, and, also, who and what were excluded in the process. We noticed that, aside from a small coalition from a local PSE organization, there was a glaring absence of PSE students. This observation was striking, given the implication of the strategy on PSE students' education and post-graduation work life. That is, a room of over 100 executives, administrators, entrepreneurs, lobbyists, and educators were pitching their competing ideas about what PSE students needed in order to graduate as "skilled," with little consideration for the effects of these discourses for students themselves beyond developing employability skills.

Given the competing discourses about the skills agenda we observed in the broader public space and in our attendance at the Summit, in this paper we ask the following research questions: What should we make of the various representations of the skills gap and PSE reform in Canada, and, furthermore, how are contemporary PSE students positioned in this discursive space? In this research, we aim to examine the discourse(s) surrounding a perceived skills gap in Canadian PSE. We align with critical policy scholars who view policies as discourse by calling attention to "the way in which policy ensembles, or collections of related policies, exercise power" (Bacchi & Goodwin, 2016, p. 8). We use Bacchi's (2009) problem representation approach to policy analysis to examine competing discourses about the skills gap by analyzing an ensemble of policies from four different kinds of actors influencing Canadian PSE.

We argue that while these policies appear, on the surface, to problematize the skills gap differently and call for disparate PSE reforms, they are all underpinned by the same neoliberal rationalities. These policies reflect a harmonized and complementary set of discourses that reify a fictitious subject—the PSE student—as a one-dimensional, essentialized *homo oeconomicus*: devoid of differences in capital, which ultimately produces various inequitable effects. Essed and Goldberg (2002) have suggested that a normative preference for sameness produces inequity in modern thinking in fields such as education (as well as politics, law, management, and media). We suggest it is the role of universities and academics to replace this discourse with a recognition of the nuance and differences in PSE students, and to reaffirm the capacity and responsibility of PSE to educate for democracy, such that all citizens are prepared to participate in society, not solely in pursuit of economic goals but as political actors determining their education and roles.

The Skills Gap Agenda: Canadian and Global Policy Discourses

While debates over the skills gap and PSE sector percolate, the mobilization of policy networks, in response to this discourse, is emerging in Canada and abroad. At the global level, The Organization for Economic Co-operation and Development (OECD) released its Skills Strategy in 2011 to assist in the design and implementation of national governments' skills policies. In this document, the OECD argued the need to develop "a whole-of-government approach to formulating and implementing sound skills policies, involving ministries of education, migration, family, science and technology and employment" (OECD, 2011, p. 4). Central to this approach is the engagement of trade unions, employer organizations, chambers of commerce, non-governmental organizations, and PSE.

At the national level, the skills gap agenda has been recurring in Canadian policies. In 2002, Human

Resources Development Canada (HRDC) launched *Knowledge Matters: Skills and Learning for Canadians*, a document that outlines the skills and learning challenges facing the country's engagement in the global knowledge-based economy of the 21st century. HRDC recommended a series of national goals and milestones against which progress can be measured and reported on regularly to Canadians. Over ten years later, the Conference Board of Canada (2018b, 2014, 2013) has released several reports and discussion papers outlining the state of skills development across Canada and the role of PSE in addressing national economic and social well-being. In 2014, at a speech to the Economic Club of Canada, the president of the Association of Universities and Colleges Canada (later called Universities Canada) articulated the power of organizations, such as Mitacs, which link student researchers with industry partners to facilitate internships that build necessary employability skills, as adept in facilitating the "best paths to the labour market" (UC, 2014, para. 30). In the same year, the Canadian Governor General has called for a global-minded approach to the skills gap based on a "diplomacy of knowledge" (DFATD, 2014, p. 15) suggesting that Canada should work strategically with partnering countries in the flow of knowledge and the development of social, ethical, and economic innovation (DFATD, 2014).

In looking at the disparate nature of the skills gap discourses, the networked nature of actor influence reflects contemporary shifts towards networked governance through a polycentric state structure (Ball, 2012; Rizvi & Lingard, 2010), whereby the nation-state is no longer the solitary actor in governance, but instead relies on a dispersed network of non-state actors for its work. In such governance practices, the increasing role of private and non-state actors has become a key mechanism by which educational governance over PSE requires external partners to initiate and carry out activities which contribute towards the overall functioning of education, resulting in state steering from a distance (Shore & Wright, 2011; Wright & Øberg, 2008, 2019). State steering is of concern in federal jurisdiction, such as in Canada, where education remains under the authority of the provincial government, yet multi-actor discourses about education co-exist (Jungblut & Rexe, 2017). Furthermore, as Blackmore (2011) has noted, increasing involvement from a plurality of actors is not a guarantee of a more democratic governing structure, as networked governance fits within the corporate rationalities of neoliberal policy agendas. Consequently, the extent to which such arrangements frame and respond to problems of equity in PSE intuitions remains of concern. It is under these conditions that interrogation of multiple actor discourses is important to understanding governance of issues in PSE, and it is through this interrogation that we have engaged this research.

Neoliberal Rationality and PSE: What's the Problem?

This latest manifestation of the skills gap agenda unfolds at a time when neoliberal rationality governs the fabric of PSE (Brown, 2015; Olssen & Peters, 2005; Rhoades & Slaughter, 2006). In her most recent book, *Undoing the Demos: Neoliberalism's Stealth Revolution*, Wendy Brown (2015) argues that neoliberalism is more than an ideology or an economic policy; it operates as a governing rationality that

disseminates market values and metrics to every sphere of life and construes the human itself exclusively as *homo oeconomicus*. Neoliberalism thus does not merely privatize – turn over to the market for individual production and consumption – what was formerly publically supported and valued. Rather, it formulates everything, everywhere in terms of capital investment and appreciation, including and especially humans themselves. (p. 176)

Brown goes further than others who have argued about the emergence of *homo oeconomicus* through neoliberal reforms. Building upon, but demarking a separate entity, Brown suggests that the subject of politics (*homo politicus*) and the subject of right (*homo legalis*) have been entirely "displaced by the specifically neoliberal formulation of *homo oeconomicus* as human capital" (p. 78). That is, human subjects are exclusively human capital. Further, she states, "as humans become capital for themselves, but also for others...their investment value, rather than their productivity, becomes paramount; moral autonomy and hence the basis of sovereign individuality vanishes; and the spaces and meaning of political citizenship shrink" (p. 78). Brown explains that the substitute of the political citizen (concerned with the public good) for the citizen as *homo oeconomicus* (with no concerns apart from economic matters) means the possibility of democratic institutions, cultures, and imaginaries concerned with justice, equity, and rule by the people is eliminated.

Brown (2015) outlines the revolutionary impact neoliberalism has had on PSE, asserting that although it was "once about developing intelligent, thoughtful elites and reproducing culture, and more recently, enacting a principle of equal opportunity and cultivating a broadly educated citizenry, higher education now

produces human capital, thereby turning classically humanist values on their head” (p. 24). She argues there are four related effects of neoliberal rationality on public institutions of PSE. First, she describes that, in neoliberalism, “*public goods* of any kind are increasingly difficult to speak of or secure” (p. 177). That is, market metrics make it difficult for universities to be publicly accessible and publicly run, and rather, the rationality is that the onus of PSE costs should be on those who “consume” it. Thus, those who choose to be university students are considered “investors or consumers” (p. 176) rather than citizens sharing in and contributing towards a public good.

Second, Brown (2015) asserts that “*democracy* itself has been radically transformed by the dissemination of neoliberal rationality to every sphere” (p. 177). The result of this transformation is that PSE’s contribution to democracies is no longer the education of citizens in “public life and common rule” but rather the delivery of “technically skilled human capital” (p. 177).

Third, Brown (2015) explains that, in neoliberalism, “*subjects*, including citizen subjects, are configured by the market metrics of our time as self-investing human capital” (p. 177). It is no longer realistic to conceive of individuals as citizens participating in PSE as dictated by their interests, but rather as human capital that must self-invest in PSE by analyzing the changing markets and attempting to capitalize on perceived opportunities that will optimize their market value. Connell (2013) suggests, “in a neoliberal university, the answer to a policy problem will *always* be expanded markets, more competition, more flexibility, more entrepreneurialism and more private ownership” (p. 285).

Fourth, Brown (2015) indicates that, in the neoliberal university, “*knowledge, thought, and training* are valued and desired almost exclusively for their contribution to capital enhancement” (p. 177). In this sense, the knowledge available from PSE is not sought, for example, to develop one’s capacity as a citizen, rather knowledge is not sought for any other purpose than “positive ROI - return on investment” (Brown, 2015, p. 178).

Bacchi and Goodwin (2016), however, caution against viewing contemporary discourses of neoliberalism as monolithic and determining. Rather, they argue, it is necessary to understand how policy work is embroiled with neoliberal discourses, and to examine what Ball (1997) calls “pockets of resilience and counter-discursive activity” (p. 261). As Connell (2013) reminds us, educational research is needed to overcome the tendency of neoliberal policymaking to proceed “as if it already knows the answer to policy problems” (p. 285). That is what we aim to do here: to understand the ways in which these policies regarding the skills gap in Canadian PSE are embroiled with neoliberal discourses, but also to examine how they might be questioned, disrupted, and replaced (Bacchi & Goodwin, 2016).

Our focus in this paper is to understand how the problem of the skills gap is represented in different policies and how students have come to be positioned through these problem representations. This research draws on Bacchi’s (2009) policy analysis approach that asks, “What’s the problem represented to be in policy?” (WPR). Bacchi challenges us to consider an approach that is different from rationalist or interpretivist approaches, and instead adopt a form of post-structural politics to interrogate how policy problems are represented through the actual texts of policies. That is, Bacchi’s approach focuses on how policies create, rather than respond to, problems, regardless of the intentions or understandings of problems that policy actors may have. Such an approach enables an examination of the ways in which policies exercise power in the subjectification of students, for example, through the intersections of policy discourses, but also how these discourses can be shifted and disrupted. The following WPR questions informed our analysis.

What’s the problem represented to be? In order to understand how a problem is constructed in a particular policy, Bacchi (2009) “recommends ‘working backwards’ from concrete proposals to reveal what is represented to be the ‘problem’ within those proposals” (p. 3). The task here is to understand how “problems” are *made*.

What assumptions underpin this problem representation? Here, the meanings of the problem, or the conceptual logics that are required for the problem to make sense, and the ways in which those meanings are constructed, are called into question (Bacchi, 2009). Considering the use of particular language strategies, such as key concepts, binaries, and categories can be helpful to examine these meanings, whereby discourses as knowledges function to construct subjects and objects of policy.

What is left unproblematic in this problem representation? Where are the silences, tensions, and contradictions? The argument here is that “policies are constrained by the ways in which they represent the ‘problem’” (Bacchi, 2009, p. 13). Here, a critical analysis is invoked, one in which the point is to high-

light limitations or inadequacies in the problem representation, such that the issues and perspectives being silenced can be brought into the discussion.

What are the effects of this problem representation? The objective here is to examine the unequal benefit or harm to some social groups implicated in policy representations (Bacchi, 2009). It is important to consider a problem representation's: discursive effects, "the limits on what can be thought and said" (p. 15); subjectification effects, "the ways in which subjects and subjectivities are constituted in discourse" (p. 15); and lived effects, "the impact on life and death" (p. 15).

How can this problem representation be questioned, disrupted, and replaced? Critique as means for emancipation comes to the fore here, as consideration is given to how to challenge or resist harmful problem representations, as well as to "the discursive resources available for re-problematization" (Bacchi, 2009, p. 48).

Research Methods

To identify which policies to analyze, we first completed an environmental scan in December 2015 to map key actors involved in mobilizing the skills gap agenda in the Canadian PSE policy landscape. To do so, we utilized the digital method of search as research (Rogers, Sánchez-Querubín, & Kil, 2015). This method "repurposes an [internet] engine's search capabilities for social research" (Rogers et al., 2015, p. 33). The idea is that because internet search engines, such as Google, "work according to principles of relevance based on website inlink count, user popularity as well as source freshness and longevity" (Rogers et al., 2015, p. 34), these same search engines offer a way of identifying hierarchies of sources and societal concerns through the ranked sources they return for a query (Rogers et al., 2015; Rogers, 2019).

To conduct our search for public and private organizations and institutions with policies aimed at addressing the skills gap, we used the following search as research protocol as adapted from Rogers (2019). First, we entered our query of the keywords "skills" and "higher education" into Google's local domain for Canada (google.ca) within a browser that was prepared for research, that is, one that has been cleared of its history and cookies so as to ensure the least filtered results possible (Rogers, 2019). We then carefully reviewed the returned results/sources to ensure they met our inclusion criteria of: (a) being organizations that were national and Canadian in scope (i.e., neither regional nor international); and (b) offered publicly available English-language policies related to the skills gap agenda (including institutional plans, strategies, and position statements).

From this review, we identified approximately 15 organizations that dominated the search results. We then relied on purposive sampling to identify four sources from the results that met our aforementioned criteria, but that came from actors representing four different sectors: (1) Business Council of Canada, an organization of chief executive officers; (2) Conference Board of Canada, a think-tank; (3) Universities Canada, a membership organization for universities; and (4) Mitacs, a non-profit organization with government funding. The results/sources of our search as research process was consistent with our experience at the 2015 Skills and PSE Summit, in which these four types of actors—and, in fact, these four *particular* actors—played prominent roles. The choice of which policies to select from these identified actors/sources was made by returning to the search as research ranked results to select those policies that ranked highest in the search results from that actor (the policies are described in the following section). With the actors and policies now identified, we turned to Bacchi's (2009) series of analytical questions that make up the WPR approach to policy analysis.

Our application of Bacchi's (2009) WPR approach began with all three researchers reading each of the four actors' policies independently. Each policy was then analyzed by at least two of the researchers, who attended to Bacchi's first four questions. More specifically, for each of the four policies, our independent analysis of Bacchi's first four questions reflected the following process. To begin, in our consideration of the first question (i.e., what's the problem represented to be?), the policies were read and re-read to look for the text's proposed changes or solutions, stated either explicitly or implicitly, so that we could then "'read off' implicit problem representations from specific proposals" (Bacchi, 2018, p. 18). We used Bacchi's (2009) suggested technique of looking at how funds are targeted in a policy to help us identify proposed changes or solutions. In terms of the second question (i.e., what assumptions underpin this problem representation?), the policies were reviewed again, and a discourse analysis was conducted to identify: (a) where binaries were used and how they worked to shape understanding of the problem representation; (b) the key concepts used in the problem representation and the meanings assigned to them;

and (c) which categories were used to give meaning to the problem representation (Bacchi, 2009). We kept Bacchi's guiding question of "what meanings need to be in place for [this problem representation] to happen" (p. 5) in mind. Then, as Bacchi has suggested, our consideration of what is left unproblematic in this problem representation involved reflection on the findings of the discourse analysis in the previous step. In particular, we asked how the reductive nature of binaries used may distort the issue, as well as how the issue would change if other meanings were assigned to the key concepts used and also if other categories were used? Finally, to address the fourth question (i.e., what are the effects of the problem representation?), we reflected on Bacchi's prompts

What is likely to change with this representation of the 'problem'? What is likely to stay the same? Who is likely to benefit from this representation of the 'problem'? Who is likely to be harmed by this representation of the 'problem'? How does the attribution of responsibility for the 'problem' affect those so targeted and the perceptions of the rest of the community about who is to 'blame'? (p. 18)

These initial individual findings were subsequently reviewed, negotiated, and refined in a series of group meetings. Then, together, we considered what the policies shared, and deliberated Bacchi's final question about how the policies' common problem representation might be questioned, disrupted, and replaced, with particular attention to Brown's (2015) considerations of student subjectification in the rationality of neoliberalism.

The Policies

Business Council of Canada: A Problem of Data Gaps

The Business Council of Canada (BCC) is a non-profit, member organization of 150 chief executives and entrepreneurs with an interest in shaping public policy. Among its activities, the BCC lobbies the federal and provincial governments on issues such as trade agreements, economic strategies, and budgetary concerns from business organizations. We analyzed a BCC policy entitled *Labour market information: An essential part of Canada's skills agenda*, authored by Drummond and Halliwell (2016).

In this document, skills are defined as "not just technical knowledge but also so-called 'soft-skills' such as collaboration and teamwork, problem-solving, relationship building and an openness to change" (Drummond & Halliwell, 2016, p. 2). Their document suggests the skills gap should be addressed through collaboration amongst "the business community, the federal government, all governments...and educational institutions" (Drummond & Halliwell, 2016, p. 5). The solution proposed is two-fold: (a) the generation of appropriate labour market information (LMI) that can be analyzed and disseminated, and (b) ensuring this LMI data is used to guide decision-making by all the aforementioned actors. Consequently, the problem of the skills gap is represented to be one of data, specifically that LMI data "is fragmented, often hard to access, and has many gaps" (p. 2) and thus is "not robust enough to support an effective skills strategy" (p. 3). The BCC's proposal to increase LMI also highlights the application of LMI to student choices about education, with frequent reference to "appropriateness," job matching (as opposed to the current state of mismatching), and the "fit" of the student to their education, job, and needed skills.

An assumption inherent in this problem representation is that education actors, such as students, would have the means, capital, and inclination to use LMI data to become investors in their own human capital, as Brown (2015) appropriately warns is the dominant rationality in neoliberal PSE. The way the document uses the key concepts of "LMI data" and "mismatches" has the discursive effect of suggesting that there are "most appropriate choices" (Drummond & Halliwell, 2016, p. 8). This inference has the subjectification effect of placing students in the dichotomous positions of either (a) informed, rational, sensible consumers of LMI data and PSE skills training, or (b) uninformed, irrational, poor decision makers. Another related effect includes the streaming of students based on a perceived or imposed appropriate fit. Given the potential for inequitable access to LMI data, and to skills development opportunities or other formal educational opportunities, the discourse of appropriate fit and matching may perpetuate those inequities by limiting possibilities for students.

This representation of the problem leaves as unproblematic the other factors that affect an actor's education choices such as interests, abilities, commitments, culture, history, beliefs, values, and so on. Moreover, this problem representation assumes equity in how all actors would be able to access and con-

sume this LMI data, and that this data would inform “appropriate” choices. This problem representation is silent about the reality that better and more accessible LMI data will still only be consumed relative to an actor’s available capital to access and understand that data.

Universities Canada: A Problem of Lack of PSE Engagement

Universities Canada (UC), an organization representing 97 Canadian universities, aims to advance the mission of these universities in a unified way at the federal level (UC, 2018). Our analysis explored two UC policies, including a fact-sheet on the state of skills and PSE in Canada (UC, 2013), and an opinion piece written by UC’s president (Davidson, 2014).

The UC (2013) fact sheet conceptualizes the skills desired by today’s employers to include “global awareness, critical thinking skills, problem-solving abilities and strong communication and interpersonal skills” (para. 3). The document also suggests that all of these skills are “developed and honed through a university education” (para. 3), and that up to 70% of new jobs in the near future will require a university degree. However, UC’s president points out in his opinion piece that “Canada has fallen from fifth in university participation to 15th amongst OECD countries (for 25- to 34-year-olds)” (Davidson, 2014, para 7). Thus, according to these UC documents, the problem of the skills gap is a lack of engagement in PSE that results in a workforce without the skills employers desire. The solution to this problem representation, then, is to increase participation in PSE to develop the skills employers prefer, as well as become equipped with the ability to adapt to changing labour market needs, both of which these UC documents suggest are services uniquely provided by PSE (Davidson, 2014).

To communicate this problem representation, the UC documents rely heavily on the creation of a binary between those who are “university educated” versus “non-university educated” and/or “skilled tradespeople,” and explicitly indicates that young peoples’ futures will vary primarily as a result of which group they fall into. This binary is forwarded by the documents’ use of the key concept of “job growth.” For example, in his opinion piece, president Davidson relays that, even in resource-rich Alberta, since 2008, “56 percent of net new jobs have been for university graduates. That’s almost double the number of net new jobs for college grads and more than triple those for tradespeople” (Davidson, 2014, para. 9). The key concept of “skill set breadth” is also used in these documents to forward the “university educated” versus “tradesperson” binary, with the assumption being that university education provides a broad skill set while college/polytechnic education provides a narrower skill set. As president Davidson suggests in his opinion piece, “narrowly defined skill sets aren’t enough. Employers already require a wide array of skills and abilities, including in technical positions” (Davidson, 2014, para. 10).

This problem representation leaves a number of realities unproblematized. For instance, these documents do not specify whether, or how, job growth rates differ depending upon the field of study university students pursue (e.g., social sciences and humanities versus STEM), nor do they consider the differences between the quality or type of education received at varying types of universities (e.g., small teaching-focused institutions versus large research-intensive institutions). Perhaps most importantly, these documents do not acknowledge the very real barriers to pursuing PSE, such as an individual’s lack of financial resources, or that some individuals may be best suited to, or more interested in, pursuing a career that does not require a university education.

When these documents present the binary of the “university educated” versus “non-university educated” person, and correlate it to the quality of one’s potential future without an acknowledgment of the barriers to university participation, the discursive effect is to reinforce class-based inequities. Furthermore, the potential lived effect is to promote the undertaking of debt to finance a university education that one may or may not be successful at or fulfilled by. Additionally, when these UC documents present the solution of the skills gap to be engagement in PSE for its broad skill set development and job growth potential, the discursive effect is to suggest that universities are places intended to produce employees, with the corresponding subjectification effect being to present those that are university educated as having invested in their future, and those that are not as not having done so.

The Conference Board of Canada: A Problem of the Quality of Skills in PSE

The Conference Board of Canada (CBoC)—an independent, not-for-profit research organization that describes itself as specializing in Canadian economic trends, organizational performance, and public pol-

icy—has recently identified skills and PSE as a major research priority (CBoC, 2018a). Our analysis examined a report by CBoC researchers Munro, MacLaine, and Stuckey (2014) entitled, *Skills – Where Are We Today? The State of Skills and PSE in Canada*.

In this document, Munro and colleagues (2014) invoke the broadest definition of skills across the documents in this analysis. They define skill as

acquired or developed through education, training, and/or experience which provides a person with the potential to make a useful contribution to the economy and society. This definition incorporates not only expert knowledge and professional or technical skills for specific occupations and activities, but also the broad range of generic employability skills (such as communication, teamwork, and personal responsibility), literacy and numeracy, critical and analytical skills, creativity, and life skills. (p. 5)

According to this document, the problem of the skills gap is represented to be one of PSE quality, rather than quantity or access (Munro, MacLaine & Stuckey, 2014). This problem is demonstrated in the document's statement that "Canada is doing quite well in producing people with university, college, and trades credentials, but our actual skills attainment is underwhelming and there are challenges to sustaining and enhancing the performance of the [PSE] system" (p. ix). Despite the document's broad definition of skills, the way in which the key concept of skill "quality" is presented is primarily via OECD measures of "literacy, numeracy, and problem-solving skills in technology-rich environments... but not technical or occupation-specific skills, knowledge, or innovation and employability skills" (p. 8). One of the solutions suggested for this problem representation is to focus "more attention and measurement on issues of quality in PSE and skills development than has been the norm" (p. i).

This document's representation of the skills gap as related to limits in the quality of skills attained in PSE, and its proposed solution as increased measurements of quality and skills attainment in PSE, suggests a lived effect of increased accountability exercises for PSE students in which they will be required to illustrate the quality of those skills, perhaps as measured through large-scale assessments increasingly making their way into educational evaluation domains. The introduction of the Programme for the International Assessment of Adult Competencies (PIAAC) by the OECD with data first released in 2013, has demonstrated the increasing interests of measuring and comparing the quality of students' skills on a national basis in higher education (OECD, 2016). The solution to increase quality measures aligns well with such policy trends.

This document also leaves as unproblematic the subjectification effects the increased surveillance involved in these quality accountability measures may have on PSE students. For example, these accountability measures may function as a "dividing practice" (Foucault, 1982, p. 208, as cited in Bacchi, 2009, p. 16) that places students in the subject position of a sufficiently skilled and meaningful contributor to Canadian society, or as an insufficiently skilled non-contributor. Such effects emphasize the quality of education as measured by the quality of students' achievement scores and measures related to externally determined criteria. More attention given to measurement, as advocated through the CBoC report, renders the student subject as a technical subject whose performance is ripe to be ranked, measured and compared.

Mitacs: A Problem of Experiential Learning Gaps in PSE

Mitacs is a non-profit organization that connects industry and PSE in Canada through collaborative industry-based research internships. The organization receives significant funding from the Canadian federal and provincial governments. The Mitacs policy analyzed was a 2012 report prepared by Annan in cooperation with the Canadian Association of Graduate Studies and is entitled *Research Internships and Graduate Education: How applied learning provides valuable professional skills and development for Canada's most highly trained students*.

This document defines skills as professional capabilities needed for graduates entering the work force, in contrast to the "highly advanced technical skills and knowledge" (Annan, 2012, p. 3) graduate students gain in PSE. The document suggests the solution to the skills gap is to "promote research internships as a valuable complement to traditional graduate training" (p. 3). Consequently, the problem of the skills gap is represented to be a failure of graduate programs to confer experiences for professional skills development. The subjectification effect of this representation is that students leaving PSE with the most advanced degrees, but without time spent in an experiential learning program, are positioned as deficient. The document states, "Canada's graduates – particularly those with post-graduate degrees – lack the diversity of

skills required to transition effectively from academic training into professional careers” (p. 3). To represent the problem in this way, “professional skills and experience” and “academic and technical skills” are presented as binaries. Similarly, academia and academic careers are presented as dichotomous to industry, public, and not-for-profit sectors and careers. This binary serves to fracture the world of learning and the world of work, thereby creating the problem of the under-educated student who lacks appropriate skills to transition from one world (of learning) to another (of working). Useful here is the key concept of “research internships” and their collaborative research projects that involve “professional skills training” and “professional network development” as the solution to bridging the gap of the previously mentioned binaries.

When this document presents the problem of the skills gap as postgraduates lacking the professional skills to effectively transition into the workforce, and research internships are presented as the solution, the discursive effect is to privilege attention on graduate education reform, specifically on the inclusion of internships and other work-integrated learning opportunities. While these work-integrated learning opportunities may be quite relevant in some programs, the limitation of such a focus may blind the ways in which graduate education itself could be restructured to promote the development of professional skills. Another discursive effect of this problem representation is that the postgraduate student who does not complete a research internship is positioned as professionally unskilled, albeit “highly trained” with (ir) relevant PSE. This unskilled student who lacks industry experience is also portrayed as a non-contributor to Canada’s competitiveness as an innovative country. This problem representation places the responsibility for action on the postgraduate student, with the lived effect being that the student takes on additional work to solve the national agenda of creating a competitive Canadian economy. This responsibility is a heavy financial and labour burden for students, especially amid the lack of attention to reforming graduate education on the whole. The focus on the internship places the problem for reform on the student engaged in work external to the university. That is not to suggest that programs could not be appropriately reformed to address professional education, but the positioning of such education outside the realm of what happens in university study itself further entrenches a divide between education within and without formal learning in universities.

Networked Policy Discourses: What’s the Problem Represented to Be?

In this section, we consider, together, the policy documents of these four national actors engaged in the Canadian skills gap agenda. Although these policies are authored by different actors, they are underpinned by the same neoliberal assumptions. Arguments about the disparate nature of the skills gap agenda are true in this analysis, but only superficially in that each of these actors presented different solutions to the problem and, consequently, how they constitute the problem itself. What we aim to draw attention to is how these disparate problem representations serve to mask what they have in common, that is, what their discursive, subjectification, and lived effects do together. The significance is to draw out the ways in which these actors are part of the networked space of higher education governance around the skills agenda in the Canadian context. As such, we draw attention to the ways the policies act together, even in seemingly contradictory ways. As AnneMarie Mol (1999) has suggested, multiple realities may not only co-exist, but there is value in understanding the ways they collaborate and even depend upon each other.

Each policy response is, indeed, steeped in neoliberal principles of economic measures of skills, as each aligns the skills gap agenda with meeting labour market needs. Overall, the term skills, while presented with different meanings in each text, is tied to narrow perspectives that privilege industry and corporate actors’ needs, while placing the responsibility on the student actor to address these needs. The student is both responsible and at fault: responsible to adopt industry-preferred skills by enrolling in programs that build these skills, and at fault by miscalculating what might be needed (i.e., by failing to take LMI into account; by not engaging in PSE; by not equipping him/herself with professional skills; etc.). In this sense, the student, as neoliberal subject, has become true *homo oeconomicus*, whose subjectivity is determined solely by their capacity to engage economically in the world. In what follows, we first show how these discourses work together to create the notion of a fictitious PSE student devoid of differences in capital that ultimately functions to silence issues of equity. We then consider how this shared problem representation might be questioned, disrupted, and replaced.

Homogenizing the PSE Student and the Silencing of Inequities

The skills gap policies from each of the actors analyzed in this investigation present the PSE student as different versions of the same skilled subject of *homo oeconomicus*. Taken together, we see a single subject of *homo oeconomicus* as the student who: is informed (BCC); invests in their education (UC); performs well on skills audits (CBoC); and is experientially educated (Mitacs).

Brown's (2015) warning of the legitimation, and even normativity, of inequity in neoliberal PSE is evident in various forms in all the analyzed policies; they each fail to acknowledge the existence of difference. In the case of the BCC, when their policy suggests that providing individuals with better LMI data will close the skills gap because individuals can then make informed choices, they ignore differences in individuals' cultural capital to access and understand that data. In the case of UC, when their documents suggest the skills gap is due to a lack of participation in PSE and that the solution is to increase that participation, they ignore differences in economic capital needed to finance this expensive endeavor. Similarly, when Mitacs's policy suggests the skills gap amongst graduate students is due to a lack of experiential training and that the solution is for them to engage in industry-centered research internships, they also ignore differences in individuals' economic capital to afford an increased workload and likely longer degree program that translates, ironically, to lost time in the workforce. Finally, in the case of the CBoC, when their policy suggests the skills gap is related to the quality of PSE and the solution is to increase measurements of quality, they ignore differences in individuals' social and symbolic capital to succeed in measurement exercises that have been demonstrated to privilege certain groups. These actors' skills gap policies are constitutive of the subject they describe, a single subject of *homo oeconomicus*, a solely market actor, devoid of interest or need. This reinforces Brown's claims that "inequality, not equality, is the medium and relation of competing capitals" (p. 38), and that "governance according to market metrics displaces classic liberal democratic concerns with justice and balancing diverse interests" (p. 43).

The homogenizing discourses of these policies work towards minimizing opportunities for difference in how post-secondary institutions envision the diversity necessary for academic and co-curricular programming aimed at the needs of a democratic society. Essed and Goldberg (2002) have argued that a cloning of cultures inside institutions, like universities, results in homogenizing the socio-cultural environments in a way that leads to "systemic reproduction of sameness" (p. 1067). The homogenous culture within this sameness perpetuates the racial, gendered, and class structures of injustice within these institutions. Similarly, Malinda Smith (2016) has shown the diversity gap in university leadership in Canada, with the majority of positions held by white men, even in the wake of countless programs aimed at diversifying PSE. Smith argues that the "social injustice of sameness" is a problem that stems from the replication of homogeneity, whereby "sameness is rarely questioned by those around the table" (Seatter, 2016, para. 18). The work of these scholars illustrates that the homogenization of PSE institutions leads to social inequities. In the same way, homogenizing discourses of the skills gap, with discursive effects that limit the diversity of student subjectivity, can reproduce the injustices of sameness, as PSE institutions both contribute to and participate in the discourses of the skills agenda.

Questioning and Disrupting the Homogenizing Skills Gap Agenda

How can we question, disrupt, and replace the shared effect these policies produce, that is, the homogenization of the PSE student as *homo oeconomicus*, devoid of capital differences? In order to *question* the effects of this problem representation we turn to examples of data that sit in contrast to this homogenizing discourse that, in turn, recognizes the diversity of Canadian PSE students and the barriers they face in the skills gap agenda. These data are further examples of the "burgeoning research evidence of complexity and diversity in students' experiences in higher education" (Sabri, 2011, p. 665).

There are data to demonstrate that students come to university with different economic means that influence(s) their capacity to finance the type of skills development suggested, for instance, by Mitacs. For example, the Universities Canada Internationalization Survey (2014) indicates that, "although 78 percent of universities provide some funding to support study abroad initiatives, 91 percent [of students] say that lack of funds is one of the top three reasons for low student mobility rates" (Universities Canada, n.d., para. 18). Consequently, only "3.1% of students, or about 11% of students over the course of a degree, undertake an international mobility experience (including exchanges, internships, co-op placements and volunteer opportunities" (Universities Canada, n.d., para. 16).

Additionally, students come to university with differences in social and symbolic capital that influence their capacities to succeed in skill measurement exercises, such as those proposed by the CBoC. Here we may learn from the example of the United Kingdom's experience with the Teaching Excellence Framework (TEF), which is intended to "recognize and reward excellence in teaching and learning, and help inform prospective students' choices for higher education" (Higher Education Funding Council for England, 2017, para. 1). The core metric of the TEF is "student satisfaction expressed through the National Student Survey (NSS), retention rates, and graduate outcomes" (Copeland, 2017, p. 35). However, universities involved in the TEF have recognized how differences in students' social and symbolic capital leads to differences in measurement scores, as "some institutions are already talking about increasing their student-entry requirements and cutting student numbers on specific courses in a bid to reduce their dropout rates" (Copeland, 2017, p. 35). There are also concerns that institutions are "altering their subject mix, such as moving away from creative arts courses, which score lower on short-term labour market outcomes" (Copeland, 2017, p. 35).

Taken together, these data paint a very different picture than the policies analyzed in this investigation—that of a homogenous Canadian PSE student population construed as *homo oeconomicus*, devoid of difference that might affect their skill development. This subject that is discursively created through the policies is necessary for the privileging of the neoliberal rationality embedded in the policy responses to the skills gap. That is, there is a necessary construction of this fictitious subject in order for the policy responses to make sense. Yet, the contrasting data just presented portray differences in skills as influenced by complex disparities in the various forms of capital that students possess.

Given the evidence suggesting that the skill gap discourse of PSE students as *homo oeconomicus* without difference can be reasonably *questioned*, how then can this discourse be *disrupted*? We suggest that, in part, this disruption requires a recognition of the nuance and multiplicity of subjectivities Canadian PSE students hold, and that this recognition needs to be reflected in skills policies. We look to universities as the actors responsible for contributing this more nuanced perspective to policies and dialogue on skills in Canadian PSE. It is important to consider Brown's (2015) assertions that the "survival of democracy depends upon a people educated for it" (p. 200). Thus, we argue it is necessary to recognize both the reality that PSE should be aimed at educating diverse populations of students, as well as its capacity to do so. We argue that such a move would make space for student agency in conversations regarding their skills.

However, we fully recognize the complexity, rather than the simplicity, of what we advocate. We take care to heed Brown's (2015) warning that "democracy does not promise to save us" (p. 209). Therefore, we clarify that our recommendation is not just that the multiplicity of student subjectivities be recognized (such that there exists a level playing field for all students to pursue skills for solely economic goals), but rather that a true inclusion of all subjectivities would respect and nurture differences of pursuit. The seemingly multiple discourses of the skills gap agenda need to be questioned, as their supposed multiplicity does not necessarily lead to different opportunities for students, as might be suggested by the disparate solutions offered among these four actors' policy responses. Rather, as our analysis shows, what unites these responses is what should drive our concern: their discursive effects remove issues of equity necessary to ensuring PSE's role in democracy: to educate citizens that engage their capacities as political actors in determining their education and roles in society.

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