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Noah D. Arney and Hilary P. Krygsman

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Article abstract

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Work-Integrated Learning Policy in Alberta: A Post-Structural Analysis

Noah D. Arney¹ & Hilary P. Krygsman²

¹Thompson Rivers University, ²Bow Valley College

Abstract

In late 2020 the Government of Alberta's Ministry of Advanced Education sent a guidance document to Alberta post-secondary institutions to lay out how work-integrated learning was to be conducted. This document also informed the institutions that work-integrated learning should be included in all future program proposals. The guidelines were sent without the context or purpose stated. This paper applies Carol Bacchi's "What's the Problem Represented to be" post-structural policy discourse analysis to the Ministry of Advanced Education guidelines. There is a broad consensus in work-integrated learning research that work-integrated learning is beneficial for participants beyond employment outcomes. However, this analysis shows the Ministry of Advanced Education's representation of the problem displays an assumption that the purpose of work-integrated learning is to improve labour market outcomes. The analysis also spotlights that the likely effects of the policy have more to do with making work-integrated learning programs easier to assess than to improve student education. This paper proposes an alternative framework that would integrate the constructivist and humanistic origin of work-integrated learning and allow institutions to develop appropriate experiential learning components for their programs while still standardizing work-integrated learning components across and within institutions. This proposed framework can improve work-integrated learning programs in Canada by widening the focus beyond human capital theory.

Keywords: Work-integrated learning, experiential learning, post-structural analysis, provincial government educational policy

Work-Integrated Learning Policy in Alberta: A Post-Structural Analysis

The Government of Alberta's Ministry of Advanced Education (hereinafter referred to as the "Ministry") announced that the first of the *performance-based funding (PBF)* metrics being rolled out in Fall 2021 (French, 2021) would be *work-integrated learning (WIL)*. Performance-based funding (PBF), as its name implies, is funding based on performance. Specifically, in this context, funding is coming from the Ministry to the post-secondary institutions (PSI) based on a PSI's ability to meet specific performance targets (Usher, 2019c). Work-integrated learning (WIL) is "a model and process of curricular experiential education which formally and intentionally integrates a student's academic studies within a workplace or practice setting" (CEWIL, 2021b). Work-integrated learning falls under the umbrella of *experiential learning (EL)*, learning through reflection on experience. In advance of the WIL metric coming into place under PBF, the Ministry sent a framework called "Guidelines: Work Integrated Learning" (Alberta Ad-

vanced Education, Post-Secondary Programs Department, 2020, p. 1) to the public PSIs in the province. This document is to provide guidance on the creation, form, requirements, and reporting of WIL components in a post-secondary program. By analyzing this document, we can see the way the government envisions WIL benefiting students and the province.

We applied Carol Bacchi's "What's the Problem Represented to be" (Bacchi, 2009, p. 1) (WPR) method of post-structural policy analysis to the "Guidelines: Work Integrated Learning" (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 1) using the Viczko et al. (2019) methods. Through the application of WPR based on the "the deep-seated conceptual logics" (Bacchi, 2015, p. 5) informing the guidelines, we looked at the meaning and "political implications" (p. 5) of the document. The focus is not on the identification of a potential problem that exists outside of context, but on identifying what problems the government sees, or problematizes, in post-secondary WIL using a post-structural understanding of problems (Bacchi, 2015).

We identified two problems being put forward by the Ministry through the solutions this new document advances. First, post-secondary programs are not adequately aligned with the workforce. Second, there is too much variation in WIL at PSIs in Alberta for the Ministry to properly assess them. The underlying assumptions laid bare by this are that the Ministry sees post-secondary education as solely a method of workplace preparation and that the Ministry lacks trust in the PSIs of Alberta. We then recommend an alternative framework that uses a broader understanding of WIL's benefits and aligns closer to national and international models.

Work-Integrated Learning Overview

Work-integrated learning is a term used by PSIs to describe a type of experiential learning where students are engaged in meaningful work in their field and supervised by someone in their field. Students gain an authentic (Choy, 2009) learning experience where they can develop their skills, abilities, and self.

The benefits of WIL have been studied in depth. These benefits include improved retention and grades (Ramji et al., 2016), skills development (Ferns et al., 2019; Jackson, 2013; McRae et al., 2019), both transferable and technical, enabling students to grow and construct their identities (Ferns et al., 2019), and engaging students in transformative (Choy, 2009) experiences. Work-integrated learning also provides students with a better understanding of the labour market (Lim et al., 2020), though it is still debated whether it has a direct impact on student's labour market outcomes (Jackson & Collings, 2018).

Theory of Work-Integrated Learning

Work-integrated learning (WIL) generally has its history traced to the experiential theories of Dewey (1938) (McRae & Johnston, 2016). Dewey explained almost a hundred years ago that experience is educational when it provides the ability to learn from an experience and leads to future learning and experiences (Dewey, 1938). True education from Dewey's (1938) perspective must always be connected to growth. True education is not preparation for the future, but preparation for the experiences of the present, and those experiences will lead to future experiences.

The theories of Dewey have since then shaped the other major thinkers that have influenced modern WIL scholarship, with Engeström (1987), Kolb (1984), and Mezirow (1991) bringing a solidly "constructivist orientation" (McRae & Johnston, 2016, p. 339) to the work. Kolb took Piaget's theories of assimilation and accommodation (Piaget, 1936) and developed it further by identifying the role of meta-cognition in education (Kolb & Kolb, 2009) and the iterative (Kolb & Kolb, 2009) aspects of education. Kolb (2009) identified how in EL, each time a person goes through a similar experience to one they have had before, the reflections and experiences of the past come to bear on it and the learning continues.

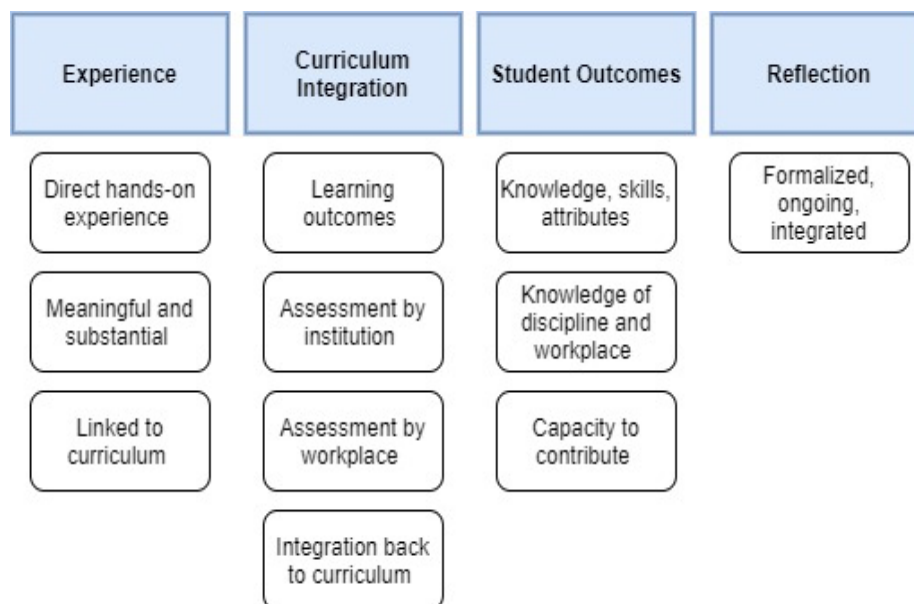
As a person goes through the process of having an experience and reflecting on it (Kolb, 1984) they must either adapt to the new idea, gaining experience in the process, or discard it, reinforcing prior experience (Mezirow, 2012). Mezirow's (2012) humanistic theory of transformative learning explained how experiences which include a "disorienting dilemma" (p. 86) can trigger true critical reflection and result in a transformed worldview. Engeström (1987) explained that each person has a different response to new ideas because their lived and socio-cultural experience is unique.

Based on these theorists, McRae and Johnston (2016) built a global WIL framework. Their frame-

work proposed a language that can help PSIs across the world “situate their particular model” (2016) in a way that can be compared to other models and methods of offering WIL programs. This model was the basis of Co-operative Education and Work-Integrated Learning (CEWIL) Canada’s model of WIL (CEWIL Canada, 2017). It gives the outline seen in Figure 1 for a curricular WIL program. McRae and Johnston (2016) also identified several curricular WIL programs that are common today including “Applied Research, Sandwich Education, Clinic, Curricular Community Service Learning, Co-op, Internship, Field Placement, Practicum/Clinical Placement, [and] Work Experience” (p. 345).

Figure 1

Global WIL Framework (McRae & Johnston, 2016, p. 345)



There are concerns that WIL can become merely a method of career training or preparation for economic participation (Hyslop-Margison & Naseem, 2007). This train of thought is continued in Johnson’s (2011) article, “Interrogating the Goals of Work-Integrated Learning: Neoliberal Agendas and Critical Pedagogy,” where she explained that while WIL can be a method of emancipatory education, it is often instead simply a method of reproducing neoliberal concepts within students. Further to this point, though Freire’s (2018) problem-posing education is in line with theory behind WIL, the major benefit to the economy over the individual exists in opposition to emancipation for the oppressed. The addition of “critical inquiry about economistic discourses” (Milley, 2016, p. 126) into WIL programs could provide a counterpoint to the human capital focus of most WIL programs and bring them more in line with the critical tradition.

Alberta Context of Work-Integrated Learning

Work-integrated learning is a growing initiative not only across Canada, but worldwide, as PSIs are moving towards including these opportunities for their learners across all programs. Within Canada, many provinces have looked to Ontario’s model of WIL, turning as well to CEWIL Canada as a leading source for information and resources (CEWIL Canada, 2021a). The Ontario government’s directive to all public PSIs is to offer each learner an EL opportunity by the time they graduate; for example, Université de Hearst in Ontario has their EL metric read as the “number and proportion of graduates in programs, who participated in at least one course with required Experiential Learning (EL) component(s)” (Government of Ontario, 2020, section 7, item 5). Experiential learning is one of several metrics that is tied to Ontario’s PBF for PSIs. The difference between EL and WIL is that EL includes a much more expansive number of offerings including curriculum-integrated activities such as simulations, and co-curricular activities

such as peer tutoring.

Over the last several years the economy of Alberta has suffered from the decline in the oil and gas industry and the economic downturn caused by the pandemic. These factors have resulted in the Government of Alberta attempts to support the recovery of the economy by improving employment outcomes (Government of Alberta, 2021). Today, employers are looking for what candidates have to offer, and what they are looking for most is experience (Wyonch, 2020). To be able to provide this experience, PSIs have made it a priority to offer EL opportunities to learners, especially WIL.

Alberta is bringing in its own version of PBF (French, 2020) in an attempt to ensure PSIs are delivering on specific outcomes. PSIs will need to enter into an agreement with the Ministry that states the PSI's target for the number of learners, or the number of programs, engaged in a WIL experience. This agreement is called an Investment Management Agreement. Based on the PSI's ability to meet these self-set WIL targets, the Ministry will either decrease that PSI's funding or keep it the same. Alberta's model is based on Ontario's "all-stick and no-carrot" (Usher, 2019a, para. 4) model which is designed around attaching dollars at risk to various metrics. Whether or not it will be effective is in doubt (Usher, 2020).

Alberta's PBF was set to start in the 2020-2021 academic year but was delayed one academic year because of the pandemic (French, 2020). However, the Alberta government will begin PBF in Fall 2021 with the first and only metric being the number of programs that have WIL (French, 2021). At one author's place of employment, a public college in Alberta, WIL is becoming a mandatory requirement for graduation for all career programs. The benefit to learners is that they are gaining experience in their field, applying their classroom learning to the real-world, and building their professional network. The drawback to mandatory WIL is that learners who have the experience and just need the certification may have to spend additional time and money to complete their program. In some organizations, a credential is necessary for employment or a promotion, regardless of experience. This reflects Jacobs' (2004) notion of credentialing for the purpose of getting better job opportunities, rather than its past purpose of educating curious students and developing their critical thinking and capacity for deeper understanding.

The focus of the PBF being put forward by the Ministry speaks to the provincial government's desire to get more people employed and boost the economy. The Ministry's own business plan identifies "training opportunities they need to prepare for the workforce" (Government of Alberta, 2021, p. 3) as the purpose of the provincial post-secondary system. The federal government has invested millions of dollars into WIL opportunities before the pandemic and have only increased this funding throughout the pandemic (Kalvapalle, 2019; McGill Reporter Staff, 2020). Similar funding has not been put forward by the Government of Alberta. Post-secondary leaders have been working collaboratively to build capacity for WIL within the province.

Methodology: Policy Discourse and Post-Structural Policy Analysis

Carol Bacchi's "What's the Problem Represented to be?" (Bacchi, 2009, p. 1). (WPR) approach is a method of analyzing policies using post-structural theory (Bacchi, 2015). It examines policies not from the perspective of what it attempts to do or what it does, but rather from the perspective of what problem it tries to solve and how the proposed solution defines the problem. Bacchi explained that "we are governed through problematizations (not policies)" (2010, p. 4) and that it is in studying the way the problem is explained that we understand the way a policy will be used. The "solutions" (p. 10) proposed in a policy allows researchers to identify the problem that the solution is trying to solve because the policy will "give shape to" (Bacchi, 2009, p. 1) the problem. This allows the WPR approach to examine assumptions built into a policy and tease out issues in a policy based on blind spots that the framers may not have considered. Bacchi's WPR method understands the pragmatic (Hallsworth et al., 2011) nature of modern policy making and provides the tools to assess it. "What's the Problem Represented to be?" is conducted through six questions:

1. What's the 'problem' (for example, of 'problem gamblers', 'drug use/abuse', 'gender inequality', 'domestic violence', 'global warming', 'sexual harassment', etc.) represented to be in a specific policy or policy proposal?
2. What presuppositions or assumptions underpin this representation of the 'problem'?
3. How has this representation of the 'problem' come about?
4. What is left unproblematic in this problem representation? Where are the silences? Can the

‘problem’ be thought about differently?

5. What effects are produced by this representation of the ‘problem’?
6. How/where has this representation of the ‘problem’ been produced, disseminated and defended? How has it been (or could it be) questioned, disrupted and replaced. (Bletsas & Beasley, 2012, p. 21)

These questions help understand how “meaning is created” (Bletsas & Beasley, 2012, p. 27) in and through policy through an understanding of the way the “policy makers” (p. 32) created and framed a problem to which the presented policy is the solution. A policy, then, defines how the policy makers understand and problematize the problem they are attempting to solve. This is communicated using the “deep-seated conceptual logics” (Bacchi, 2015, p. 5) that those forming policy adhere to. That understanding is then accepted by those who use or administer the policy, often uncritically. A further explanation of these six questions is provided below.

What’s the ‘Problem’ Represented to be in a Specific Policy or Policy Proposal?

What problem is the text attempting to address or solve? How does the text describe the problem directly or indirectly? If the problem is not stated, what is determinable about the problem from the text? This question allows the researcher to examine the “problem representation” (Bacchi, 2009, p. 4) that the framers imply by the way they frame the policy.

What Presuppositions or Assumptions Underpin this Representation of the ‘Problem’?

What “presumptions and presuppositions” (Bletsas & Beasley, 2012, p. 32) are built into the representation of the problem? This is not assessing an intentional presentation of ideology of the policy makers or a statement about what the makers claim to intend, but rather the unintentional “key concepts and categories” (Bletsas & Beasley, 2012, p. 45) that are built into the representation. This is done by determining what is “taken-for-granted” (Bacchi, 2009, p. 5) by the “problem representation” (p. 5).

How has this Representation of the ‘Problem’ Come About?

The context of the representation of the problem. This is where the explicit and ideological perspectives of the policy makers come in. The researchers are able to look at the history of the problem based on its representation and the history of the presuppositions that are built into the policy. This question also examines the “power relations that affect the success” (Bacchi, 2009, p. 11) of policies and similar policies in the past.

What is Left Unproblematic in this Problem Representation? Where are the Silences? Can the ‘Problem’ be Thought About Differently?

Where are the blind spots of the policy and what is accepted by it, uncritically? Or, as Bacchi (2009) described it, “what fails to be problematised?” (p. 12). This is an examination of not only the places the text is silent but what it presents without explanation. It brings comparisons with other policies or past procedures by the institutions and governments affected by the policy. It also examines how policies by other organizations have handled similar problems.

What Effects are Produced by This Representation of the ‘Problem’?

What are or would be the effects of the “problem representation” (Bletsas & Beasley, 2012, p. 39) in the space in which the policy will be active? How will it “limit or enable access to resources, or cause or relieve emotional or material distress” (Bletsas & Beasley, 2012, p. 39)? What is the impact of the policy in the real world? In this, the “effect” (Bacchi, 2009, p. 15) of a policy is more important than the intended “outcome” (p. 15) and the effect will be different for different groups of people.

How/Where has this Representation of the ‘Problem’ Been Produced, Disseminated, and Defended? How Has it Been (or Could it be) Questioned, Disrupted, and Replaced?

When looking at the way the problem is represented rather than the policy itself, where else has this representation been used in other policies or texts? In what way is this representation the “dominant” (Bletsas & Beasley, 2012, p. 31) representation, and what is the ideology behind it? What are other potential representations of the same problem and in what ways do they contradict or interact with the representation in the policy? What would a policy based on the alternative representation look like?

Working with these interpretations of the six questions, we undertook a process of reflexive discourse. Our practice was based partially on the research method used by Viczko et al. (2019) in their application of WPR to the “skills gap agenda” (p. 118). This research method involved the researchers independently analysing a policy based on Bacchi’s first four questions and then coming together to engage in reflexive discourse on the findings including where they differed or aligned. Where we differed from their work was that after further reflection on the first four questions, we then jointly analysed the document using the final two questions through further reflexive discourse. Once we had completed the analysis through the WPR questions, we engaged in dialogic meetings examining how the document could be questioned or replaced. Since we both support WIL in Alberta, reflexive discourse was a core aspect of this method; as Bacchi and Eveline (2010) stated, “we are inside the processes we are examining” (p. 156). For this reason, dialogue with the self and between ourselves (Bacchi & Eveline, 2010) was foundational to our analysis.

Government of Alberta Work-Integrated Learning Guidelines

In late 2020, the Ministry sent a set of guidelines to the public post-secondary institutions of Alberta. These guidelines describe and lay out the process for WIL and were communicated not as suggestions, but as mandatory for future program approvals.

Overview of the Policy

The purpose of the document is to give guidelines to PSIs for developing WIL and addressing how WIL will be recognised by the Ministry. The document explains the goal of WIL as helping prepare students for the labour market: “Work Integrated Learning (WIL) is a growing national trend in post-secondary programs with increasing need to prepare students for the labour market” (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 1). Work-integrated learning is identified as being important enough that the presence of a WIL component within a program will be considered for approving any new program proposals in the future. The guidelines state that WIL should be of high quality and the type of WIL should be appropriate for the program. A quality WIL opportunity will both “enhance learning and increase opportunities for learners to connect with the labour market” (p. 1). Other than that statement, the rest of the document focuses not on enhanced learning, but on the connections built between students and the labour market. The thrust of the document is that improving Albertan students’ access to WIL can improve the economic situation of Alberta by preparing work-ready graduates who will be contributing members of Alberta’s economy. The document is very specific about engagement with employers but only mentions reflection once, in a quote of CEWIL’s definition of service learning. Kolb (2009) illustrated reflection as the essential component in experiential learning.

The first ask from the Ministry with these guidelines was to have PSIs align their WIL types to the WIL types they had laid out in their guidelines. One of the underlying purposes of these guidelines is to have all PSIs in Alberta have a common understanding and shared way of defining WIL. This has been known to be a concern across Canada and the guidelines could serve as an attempt to resolve this for Alberta. More overtly, the guidelines provide required processes PSIs must go through with the Ministry in the “Provider and Program Registry System (PAPRS)” (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 1) to have WIL as an approved component in their programs.

The guidelines indicate that PSIs are encouraged to have WIL as a part of all current and new programs, a goal of the Alberta Adult Learning System (p. 1). The guidelines outline what PSIs must consider when incorporating WIL into programs, including program development, consultation with

industry and regulators, and components of a placement agreement. This document serves as a guideline for PSIs to consult when developing and implementing WIL.

What is the 'Problem' Represented to be?

As in most policy documents (Bacchi, 2009), the problem is not explicitly stated but is instead implied. This document implies two problems, first that there is not enough alignment between post-secondary programs and the workforce, and second that the WIL components at various PSIs are so different that the Ministry cannot properly assess them.

The purpose of the guidelines is to guide PSIs in developing WIL that will be recognised by the Ministry. The scope for the document includes all programs at public PSIs other than apprenticeship which “require ministry approval” (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 1). As previously noted, the focus of the document is on how WIL acts to connect students to the labour market in an attempt to improve the economy of Alberta. The implementation of WIL then is the Ministry’s solution to their represented problem of Alberta’s PSIs not having enough of an alignment between programs and the workforce. This is seen through the section on considerations for developing WIL components where the important considerations for WIL are “Program Development, Discussions with Employers and Regulators, and Placement agreement” (p. 2). Notably two of the three considerations are from labour market or employers. The one that is fully under the auspices of the PSI is then explained as being how “the program could prepare and connect students to the labour market” (p. 2). None of the program development section mentions the impact on student learning, only if there are likely to be enough “placements” (p. 2) in the local area.

The second problem that is represented then is that public PSIs in Alberta use different methods to describe and implement WIL. This prevents the Ministry from assessing the WIL programs between and within PSIs for quality. This is a problem because the Ministry wants all “existing and planned (or new) programs of study” (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 1) to include WIL. The problem is that there is not a unified framework which will allow the Ministry to assess quality in the way the Ministry wants to. The guidelines lay out explicitly the ways in which PSIs will report to the Ministry on WIL components and how they are to structure the paperwork connected to it, such as the “placement agreement” (p. 3) PSIs must sign with employers.

What Presuppositions or Assumptions Underpin This Representation of the 'Problem'?

The core assumption of this problem is that PSIs are not incorporating WIL into their programs in the same way as each other or implementing it in enough programs. The assumption that follows from that is that PSIs are not doing enough to get their graduates employed, which shows that the “key concept” (Bacchi, 2009, p. 8) is that WIL leads to employment. From that assumption come other assumptions about WIL in Alberta.

The document assumes that a quality WIL program is one where students are able to engage in the labour market, something mentioned in every section of the document, as part of their education. This shows a philosophy that the purpose of higher education is to get citizens employed and contributing to the economy. The document sees a quality WIL component as one that “meets the competencies required by employers, professional organizations, regulatory bodies, advisory committees, employers, and/or industry, when applicable” (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 2), mentioning employers twice but not discussing education explicitly except in how the placement is “linked to the student’s theoretical learning” (p. 3). This also shows an assumption that every post-secondary program can be mapped to specific industries, regulatory bodies, professional organizations, or employers.

The document excludes private PSIs from the same level of reporting, alignment, and quality of WIL as public PSIs in the “scope” (p. 1) section. This shows an assumption that the problems represented by the policy do not impact private PSIs, implying that a primary goal of the policies is less about WIL and more about alignment for assessment under PBF.

The guidelines list specific documents that must be generated by the PSI, such as the previously mentioned placement agreement, and signed by a member of the institution, the employer, and the student.

These documents lay out the roles, supervision, evaluation, timeframe, and other aspects of the WIL opportunity. Every institution will be required to include the same information on their documents. This shows an assumption that a Ministry specified paper trail is required to ensure the accountability of the PSIs.

The final assumption of the guidelines is that all WIL opportunities can align with the listed types: Co-op, Internship, Service Learning, Field Placement, Mandatory Clinical Placement, Directed Field Study. Furthermore, WIL types that are not defined by one of the types listed are assumed to fall under the Other category which would have to be defended by the institution to be recognized and accepted by the Ministry.

These assumptions align with the two core assumptions. First, that PSIs' WIL offerings are not aligned with each other, which impacts the assessment of them, and that WIL offerings outside government specified types make alignment difficult. Second, that the purpose of WIL is to improve student employment outcomes, and that to improve them, PSIs should directly connect post-secondary education programs to specific career or industry outcomes.

How Has this Representation of the 'Problem' Come About?

Due to the decline of oil and gas, the pandemic, and the general state of the economy in Alberta, the Government of Alberta wants to implement policies that get people employed (Government of Alberta, 2021). Across the world, EL and WIL are increasing initiatives, often (Jackson, 2013) because WIL is seen as improving labour market outcomes, though some research casts doubt upon that (Jackson & Collings, 2018).

The underlying assumptions of the problem then show that the framers of these guidelines see a post-secondary education as a method of job training and improving the labour market. All current and future programs are supposed to begin including WIL components, and the purpose of the WIL component is specifically and explicitly to increase the student's interaction with the labour market. This is connected to a human capital conception of education, seeing education as a method of increasing "economic growth" (Masino & Niño-Zarazúa, 2016, p. 53) in a region. This is one of the hallmarks of a neoliberal (Johnston, 2011) ideology in practice.

Since 2019, the Alberta government has decreased PSE funding multiple times (St-Onge, 2019). The defence of this has been that Alberta had received higher funding for PSE when compared to other provinces, and thus these cuts were to bring Alberta PSE expenses in line with other provinces (Fletcher, 2020). In addition to the cuts, the use of mandated accountabilities, including paperwork and paper trails, implies that the framer of the document does not trust the self-determination or self-reporting of PSIs. Since requirements are being given only to public PSIs implies that the purpose is to ensure a method of tracking and assessing institutions in comparison to themselves and others. This ties into the Ministry's stated goal of using WIL as a metric for PBF (Fletcher, 2020).

Performance-based funding is being incorporated into how PSIs are run in Alberta as of Fall 2021. The only metric currently is WIL. Ontario's performance-based metric is EL, not WIL specifically. EL is more inclusive of a variety of curricular and co-curricular opportunities. WIL is a narrow form of EL that has a number of criteria that are harder to meet. Experiential learning currently exists across PSIs throughout Alberta. This would be an easy metric for Alberta PSIs to meet.

WIL creates an opportunity for the Government of Alberta to both increase their workforce to help the economy and to tie their PSE spending to activities that they see as improving the labour market, which they have identified as the mandate (Government of Alberta, 2021) of the post-secondary system.

What is Left Unproblematic in this Problem Representation? Where are the Silences? Can the 'Problem' be Thought about Differently?

Left unproblematic by these guidelines are questions of what PSIs do if a program they want to develop cannot meet the criteria due to either economic or structural problems. There has been no financial support offered by the Ministry for WIL, unlike other provinces, while the ministry has asked all PSIs to have all learners engage in WIL. It also does not answer the question of when PSIs are intended to include WIL in all their programs, though this has been made a goal. The responsibility for engaging with employers has been left to PSIs by this document with no mention of how the Ministry intends to

support this engagement and what input employers and industry have had on the guidelines.

The guidelines borrow heavily from CEWIL's definitions in its appendix on WIL attributes. It lays out six types of WIL: "Co-operative Education[,], Internship[,], Service Learning[,], Field Placement[,], Mandatory Clinical Placement[, and] Directed Field Study" (pp. 5-6). It excludes two types of WIL that CEWIL includes. The first being that the guidelines remove professional practicums from WIL and include only Clinical placements. This may be an error of omission and it may be that non-clinical practicums are intended to be included under this category. It also excludes applied research, where "students are engaged in research that occurs primarily in workplaces" including "consulting projects, design projects, [and] community-based research projects" (CEWIL Canada, 2021b, para. 3). The use of most of the CEWIL categories (CEWIL Canada, 2021b), which are based on the global WIL framework, and excluding these two types is startling.

The exclusion of private PSIs implies that the document is not to align all WIL, but rather to make WIL offered by public PSIs easier to assess. By not including apprenticeships under their WIL plans, the Ministry makes a distinction between the pre-existing apprenticeship program and implies that there are no parts of the apprenticeship program that they wish to alter in public PSIs. This runs counter to earlier discussions by the Alberta government (Graney, 2019) about broadening apprenticeships beyond traditional trades programs.

Finally, and most glaringly, the singular focus on preparation for employment is problematic. It shows that the Ministry does not see the purpose of post-secondary to be transformative, critical, or humanistic, where education is for the improvement of the person. Rather, the Ministry sees education as a training program for complex professions and sees each program, and by extension each course, as needing to align with a potential future employment opportunity. This is exactly the problem that Johnston (2011) foresaw, that the political and social relevance of education is dismissed in the economic language of measurement and quantification – a situation that may lead away from the transformative impact of education in favour of economic participation. The document is also silent on learner, faculty, and staff supports for WIL programs as well as being silent on the skill and personal development aspects of WIL.

What Effects are Produced by This Representation of the 'Problem'?

By using WIL as the solution to the Ministry's problem of aligning programs with the workforce, PSIs will be creating WIL with that ideological purpose in mind rather than the other purposes of WIL, such as the gaining of transferable skills, construction of identity, development of critical consciousness (Freire, 2018), or personal development. In this way PSIs will be designing WIL components based solely on its use as a method of labour market development and intrenching the human capital, or neoliberal, concept of education. The "subjectification effect" (Bacchi, 2009, p. 15) of this is to move away from the transformative potential of WIL. Because there are conflicting studies (Jackson, 2013; Jackson & Collings, 2018; Wyonch, 2020) around the labour market outcomes of WIL, but there is no debate around the other benefits of WIL, it means that PSIs will be developing WIL components with an outcome that may not actually be supported by evidence. This may in turn impact historically excluded students by replacing transformative experiences with easier to administer job training or by increasing unpaid WIL opportunities. It promotes seeing students as potential employees rather than as holistic individuals.

The guidelines create a "discursive effect" (Bacchi, 2009, p. 15) on how PSIs develop WIL within the institution by putting pressure on the PSI to choose WIL types based on aligning with the categories laid out. The "other" (Alberta Advanced Education, Post-Secondary Programs Department, 2020, p. 6) attribute category defined in the guidelines leaves PSIs confused and uncertain as to what to submit to this broad category. The guidelines define "other" WIL as "this applies to WIL attributes that do not fall within the attributes defined above" (p. 6). With uncertainty around whether PSIs' "other" category submissions will be accepted by the Ministry, PSIs are being delayed in developing WIL because they have to wait to make sure their "other" WIL will be accepted. With PBF coming into effect in the fall, this leaves PSIs with a short turnaround time to be able to predict the number of programs that will have WIL year over year. Based on the PSI's ability to meet their own predicted measurements, the Ministry would either reduce their funding or keep their funding the same. This domino effect with WIL and PBF leads to anxious PSIs that are tied up in Ministry bureaucracy, taking up time that should be dedicated to building authentic, meaningful experiences for learners. Furthermore, PSIs may be nervous about

submitting to the “other” category for fear of rejection, which may lead them to developing a WIL type that aligns with one of the Ministry’s categories but is not fitting to the program. This could lead to PSIs providing a WIL type that is not authentic to the program or meaningful to the learner, a “lived effect” (Bacchi, 2009, p. 15) that may “impact unevenly” (p. 18) on historically excluded students.

How/Where Has This Representation of the ‘Problem’ Been Produced, Disseminated, and Defended? How Has It Been (or Could it Be) Questioned, Disrupted, and Replaced?

The desire to connect postsecondary to the labour market has been widespread. This comes out in human capital theory and beyond but is not limited to that. Students’ main reason for wanting to go to post-secondary is almost always access to employment. This also shows up in the discussion around micro-credentials (Usher, 2019b) and skills development (McRae et al., 2019) as well as in the discussions around apprenticeship (Graney, 2019). Other ways this problem has been solved include a drive toward credentialing (Jacobs, 2004), encouraging WIL or EL (McRae & Johnston, 2016), and the implementation of co-curricular records (Schaffer & Wiens, 2019). The encouragement of WIL and EL has been done in many different ways, but the method being used by the Ministry implies that all future PSI programs will be required to include WIL rather than the more expansive EL category and all current programs are strongly encouraged to implement it, with the PBF as a punishment if they do not. This hardline approach is not common in other areas. The implementation of co-curricular records, although usable as a tool for this, has mostly been used as a way of helping students understand how their skills gained outside of the classroom can transfer to other areas of their life, such as the workplace. A better approach would be to begin from a more constructivist or humanistic perspective. A framework that fully embraces the national and international standards and recognizes the benefits of WIL beyond labour market outcomes would be a substantial improvement.

Performance-based funding has been contemplated by other provinces in Canada, including Manitoba, Saskatchewan, and New Brunswick, with Ontario currently having it in place (Canadian Association for University Teachers, 2020). The United States also has been using PBF in the majority of the states (Ortagus et al., 2020; Usher, 2021). The use of PBF, and by extension the assessment methods that come with it, is based on an “accountability systems” (Ortagus et al., 2020, p. 521) ideology. The purpose of PBF policies is to encourage PSIs to focus on certain outcomes the government deems important in a way that does not directly impinge on academic freedom.

Accountability via PBF has been used in many states and with many different methods. Unfortunately, in most cases (Ortagus et al., 2020) it has been ineffective in achieving the stated goals of improving student outcomes more than other methods, such as increasing the level of student support. There has been some discussion that systems which provide bonuses (Usher, 2021) for improvement, as opposed to funding cuts for failing to improve, have been more beneficial in regions. There have been attempts to implement best practices and program alignment, such as ACE-WIL and the BC Comparative Matrix (McRae & Johnston, 2016), that have not been implemented with the threat of funding cuts, but instead trusting PSIs to have the best interests of the students in mind.

If PSI’s funding was based on a model where they were positively rather than negatively incentivised, this could improve PSI’s outlook on PBF as well as desire to be innovative. Since the current PBF model is “all stick-no carrot” (Usher, 2019a, para. 4) this means that if PSIs meet their requirements, the reward is to not lose funding, but there is no additional funding given. Positively incentivizing institutions who meet and go beyond their requirements by presenting additional funding could result in PSIs feeling more positively and optimistic about PBF. This would also allow the Ministry to take a role in standardization and development of processes in a non-confrontational way. By doing so they would be able to bring the stakeholder institutions onboard to imagine how not just their PSI could improve, but how education could be improved for the entire province. We now outline an alternative policy framework for WIL in Alberta, one which accepts the problem of needing to increase alignment in how institutions describe and assess WIL while pushing back against the problem of a lack of labour market development being built into post-secondary programs. It would allow PSIs to better align experiential learning components with the educational purpose of the program instead of using a one-size-fits-all model.

An Alternative Work-Integrated Learning Policy Framework

Background and Assumptions

Work-Integrated Learning (WIL) is a form of experiential learning (EL) where students engage in authentic meaningful work experience that is connected to the curriculum of their program. WIL provides an opportunity for transformative learning through reflection on experience. The intended outcomes of WIL are improved learning and understanding, as well as helping students in their self-development and self-reflection. The integration of EL and especially WIL is a priority for the Post-Secondary Programs branch of the Ministry of Advanced Education.

All WIL programs in Alberta should align with the Global WIL Framework (McRae & Johnston, 2016) in that they include “direct hands-on experience ... [that is both] ... meaningful and substantial ... [and is] ... linked to curriculum” (p. 345). All WIL components must have specific “learning outcomes” (p. 345) that are assessed by the post-secondary institution (PSI) as well as the employer or supervisor and must be designed so that the learning will support students’ program learning. The quality of WIL components in programs should be assessed based on how well it connects students to labour market experiences, how well it supports their gaining of new learning, and the quality and engagement of the reflective component.

Objective

To give PSIs a common language to use when describing their WIL components. This provides a way for PSIs to collaborate for the improvement of post-secondary education in Alberta as well as a way to assess the quality of the WIL components put forward by PSIs.

Guiding Principles

1. Work-integrated learning is based on a constructivist, humanistic, experiential, and transformative understanding of education. Though WIL may help labour market outcomes, this is not to be the primary understanding of its use in education.
2. Work-integrated learning in Alberta PSIs will align with both the Global WIL Framework and the Co-operative Education and Work-Integrated Learning (CEWIL) Canada’s definitions.
3. Work-integrated learning must include a substantial reflective component which may also include critical inquiry.
4. Programs where other experiential learning components are more in line with the program outcomes than WIL components do not need to add a WIL component.
5. The provincial government will work with PSIs to financially support the increase in WIL opportunities for students.

Work-Integrated Learning Types and Attributes

Post-secondary institutions are to develop their WIL using CEWIL Canada’s WIL types and attributes (CEWIL Canada, 2021b). This will ensure alignment with other WIL programs in Canada. All types and attributes identified by CEWIL are acceptable. The PSI is responsible for choosing which WIL type(s) and accompanying attribute(s) would be the best fit for each of their programs.

Conclusion

By using Carol Bacchi’s “What’s the Problem Represented to be?” (Bletsas & Beasley, 2012) method, we assessed the Government of Alberta’s “Guidelines: Work Integrated Learning” (Alberta Advanced Education, Post-Secondary Programs Department, 2020). It revealed an assumption that the purpose of WIL is to connect students with the workforce rather than taking on a constructivist or humanistic perspective. It also revealed that the Ministry is working toward making WIL easier to assess between and within institutions at a macrolevel, especially for purposes of PBF being rolled out in Fall 2021. Since much of the stakeholder engagement conducted by the Ministry on this topic has not been public, the framework is limited in how it integrates the perspective of employers. More research should be done into employer perspective on the benefits of WIL in Alberta and on the use of accountability systems

such as PBF to encourage WIL.

We propose an alternative framework that integrates both the constructivist origin of WIL and humanistic theories. The alternative embraces the national and international standards and frameworks for WIL and would be a strong step away from the punishment focused method the Ministry will be using in its PBF model. It also recognizes that while experiential learning is important, there are productive and high-quality methods of EL that are not WIL which may be a better fit for some post-secondary programs. It is hoped that this alternative framework can provide a different path forward for the Ministry which will improve WIL opportunities for post-secondary students in Alberta and across Canada.

References

- Alberta Advanced Education, Post-Secondary Programs Department. (2020). *Guidelines: Work integrated learning* [Unpublished report].
- Bacchi, C. (2009). *Analysing policy: What's the problem represented to be?* Pearson.
- Bacchi, C. (2010). *Foucault, policy and rule: Challenging the problem-solving paradigm*. Institut for Historie, Internationale Studier og Samfundsforhold, Aalborg Universitet. FREIA's tekstserie No. 74. <https://doi.org/10.5278/freia.33190049>
- Bacchi, C. (2015). The turn to problematization: Political implications of contrasting interpretive and poststructural adaptations. *Open Journal of Political Science*, 5(1), 1-12. <http://dx.doi.org/10.4236/ojps.2015.51001>
- Bacchi, C. L., & Eveline, J. (2010). *Mainstreaming politics: Gendering practices and feminist theory*. University of Adelaide Press. <https://doi.org/10.1017/UPO9780980672381>
- Bletsas, A., & Beasley, C. (Eds.). (2012). *Engaging with Carol Bacchi: Strategic interventions and exchanges*. University of Adelaide Press. <http://www.oapen.org/download/?type=document&docid=560097>
- Canadian Association for University Teachers. (2020, April). *Rise of performance-based funding*. <https://www.caut.ca/bulletin/2020/04/rise-performance-based-funding>
- Choy, S. (2009). Transformational learning in the workplace. *Journal of Transformative Education*, 7(1), 65–84. <https://doi.org/10.1177/1541344609334720>
- Corporative Education and Work-Integrated Learning Canada (CEWIL Canada). (2017, May 31). *CAFCE town hall - Exploring the expansion of our mandate*. CEWIL Canada. <https://cewilcanada.ca/CEWIL/Members-Only/CAFCE-CEWIL-Archives/Event-Archive/Events---Professional-Development/Past-Events-Folder/CAFCE-Town-Hall.aspx?Website-Key=70188082-f13b-461c-8c8d-74e0e6c01c18>
- Corporative Education and Work-Integrated Learning Canada (CEWIL Canada). (2021). *About CEWIL*. CEWIL Canada. [https://www.cewilcanada.ca/CEWIL/About%20Us/CEWIL/About-Us/About.aspx?hkey=5846e9ba-f686-4087-b085-500989b773e9#:~:text=About%20CEWIL&text=CEWIL%20Canada's%20mission%20is%20to,%2Dintegrated%20learning%20\(WIL\)](https://www.cewilcanada.ca/CEWIL/About%20Us/CEWIL/About-Us/About.aspx?hkey=5846e9ba-f686-4087-b085-500989b773e9#:~:text=About%20CEWIL&text=CEWIL%20Canada's%20mission%20is%20to,%2Dintegrated%20learning%20(WIL))
- Corporative Education and Work-Integrated Learning Canada (CEWIL Canada). (2021). *What is WIL?* CEWIL Canada. <https://www.cewilcanada.ca/CEWIL/About%20Us/Work-Integrated-Learning/CEWIL/About-Us/Work-Integrated-Learning.aspx?hkey=ed772be2-00d0-46cd-a5b8-873000a18b41>
- Dewey, J. (1938). *Experience and education*. Macmillan.
- Engeström, Y. (1987). *Learning by expanding*. Orienta-Konsultit.
- Ferns, S., Dawson, V., & Howitt, C. (2019). A collaborative framework for enhancing graduate employability. *International Journal of Work-Integrated Learning*, 20(2), 99–111. https://www.ijwil.org/files/IJWIL_20_2_99_111.pdf
- Fletcher, R. (2020, January 3). In the 2000s, Alberta invested heavily in its universities. In the 2020s, that's about to change. *CBC News*. <https://www.cbc.ca/news/canada/calgary/alberta-university-spending-revenue-analysis-1.5436236>
- Freire, P. (2018). *Pedagogy of the oppressed* (M. B. Ramos, Trans., 50th anniversary ed.). Continuum Press. (Original work published 1970)

- French, J. (2020, March 28). Alberta college and university performance-based funding changes delayed by pandemic. *CBC News*. <https://www.cbc.ca/news/canada/edmonton/alberta-college-and-university-performance-based-funding-changes-delayed-by-pandemic-1.5513467>
- French, J. (2021, March 21). Pandemic prompts Alberta government to pare back post-secondary funding model changes. *CBC News*. <https://www.cbc.ca/news/canada/edmonton/pandemic-prompts-alberta-government-to-pare-back-post-secondary-funding-model-changes-1.5957497>
- Government of Alberta. (2021). *Ministry business plan: Advanced education*. <https://open.alberta.ca/dataset/1a50e092-9b23-4f7c-93a9-a13e9264c1ed/resource/4b5d78b6-eb2f-45cb-921c-d9d5fdc5200d/download/ae-advanced-education-business-plan-2021-2024.pdf>
- Government of Ontario. (2020, November 26). *2020-2025 Strategic mandate agreement: Université de Hearst*. Government of Ontario: Postsecondary Education. <https://www.ontario.ca/page/2020-2025-strategic-mandate-agreement-universite-de-hearst#section-2>
- Graney, E. (2019, September 25). *Government task force to expand apprenticeships, skilled trades*. <https://edmontonjournal.com/news/politics/government-task-force-to-expand-apprenticeships-skilled-trades>
- Hallsworth, M. (2011). Policy-making in the real world. *Political Insight*, 2(1), 10–12. <https://doi.org/10.1111/j.2041-9066.2011.00051.x>
- Hyslop-Margison, E. J., & Naseem, M. A. (2007). Career education as humanization: A Freirean approach to lifelong learning. *Alberta Journal of Educational Research*, 53(4), 347–358. <https://journalhosting.ucalgary.ca/index.php/ajer/article/view/55301>
- Jackson, D. (2013). The contribution of work-integrated learning to undergraduate employability skill outcomes. *Asia-Pacific Journal of Cooperative Education*, 14(2), 99–115. https://www.ijwil.org/files/APJCE_14_2_99_115.pdf
- Jackson, D., & Collings, D. (2018). The influence of work-integrated learning and paid work during studies on graduate employment and underemployment. *Higher Education*, 76(3), 403–425. <https://doi.org/10.1007/s10734-017-0216-z>
- Jacobs, J. (2004). Credentialing versus educating. In *Dark age ahead* (pp. 44–63). Vintage Canada.
- Johnston, J. (2011). Interrogating the goals of work-integrated learning: Neoliberal agendas and critical pedagogy. *Asia-Pacific Journal of Cooperative Education*, 12(3), 175–82. https://www.ijwil.org/files/APJCE_12_3_175_182.pdf
- Kalvapalle, R. (2019, July 25). *Government support for work-integrated learning will accelerate careers*. Government Relations Office. https://gro.utoronto.ca/government_support_for_work_integrated_learning_will_accelerate_careers
- Kolb, A. Y., & Kolb, D. A. (2009). The learning way: Meta-cognitive aspects of experiential learning. *Simulation and Gaming*, 40(3), 297–327. <https://doi.org/10.1177/1046878108325713>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Lim, S. M., Foo, Y. L., Yeo, M. F., Chan, C. Y. X., & Loh, H. T. (2020). Integrated work study program: Students growth mindset and perception of change in work-related skills. *International Journal of Work-Integrated Learning*, 21(2), 103–115. https://www.ijwil.org/files/IJWIL_21_2_103_115.pdf
- Masino, S., & Niño-Zarazúa, M. (2016). What works to improve the quality of student learning in developing countries? *International Journal of Educational Development*, 48, 53–65. <https://doi.org/10.1016/j.ijedudev.2015.11.012>
- McGill Reporter Staff. (2020, July 7). *Funding infusion enables up to 10,000 new work-integrated learning opportunities*. McGill Reporter. <https://reporter.mcgill.ca/funding-infusion-enables-up-to-10000-new-work-integrated-learning-opportunities/>

- McRae, N., Church, D., Woodside, J. M., Drewery, D., Fannon, A., & Pretti, J. (2019). Toward a future-ready talent framework for co-operative and work-integrated learning. *5th International Conference on Higher Education Advances*, 1255–1262. <https://doi.org/10.4995/head19.2019.9319>
- McRae, N., & Johnston, N. (2016). The development of a proposed global work-integrated learning framework. *Asia-Pacific Journal of Cooperative Education*, 17(4), 337–348. https://www.ijwil.org/files/APJCE_17_4_337_348.pdf
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
- Milley, P. (2016). Commercializing higher learning through the discourse of skills in university co-operative education: Tensions and contradictions. *Canadian Journal of Educational Administration and Policy*, (180), 99-134. <https://journalhosting.ucalgary.ca/index.php/cjeap/article/view/42897>
- Ortagus, J. C., Kelchen, R., Rosinger, K., & Voorhees, N. (2020). Performance-based funding in American higher education: A systematic synthesis of the intended and unintended consequences. *Educational Evaluation and Policy Analysis*, 42(4), 520–550. <https://doi.org/10.3102/0162373720953128>
- Piaget, J. (1936). *Origins of intelligence in the child*. Routledge & Kegan Paul.
- Ramji, K., McRae, N., Hancock, R. L. A., & Kines, L. (2016). Indigenous WIL exchange: Lessons from the University of Victoria, Canada – University of Newcastle, Australia experience. *2nd International Research Symposium on Cooperative and Work-Integrated Education*, 163–170. https://www.waceinc.org/uvictoria2016/assets/WACE_IRS_2016_Refereed_Conference_Proceedings.pdf
- Schaffer, K., & Wiens, J. (2019). *Career work in action: Discussions and activities for professionals*. CERIC.
- St-Onge, J. (2019, October 24). Budget 2019: Alberta's post-secondary budget reduced, tuition freeze removed. *CBC News*. <https://www.cbc.ca/news/canada/edmonton/alberta-post-secondary-education-budget-1.5334503>
- Usher, A. (2019, April 23). *Performance-based funding 101: The indicators*. Higher Education Strategy Associates. <https://higheredstrategy.com/performance-based-funding-101-the-indicators/>
- Usher, A. (2019, June 19). *Microcredentials*. Higher Education Strategy Associates. <https://higheredstrategy.com/microcredentials/>
- Usher, A. (2019, August 26). *Getting caught up*. Higher Education Strategy Associates. <https://higheredstrategy.com/getting-caught-up/>
- Usher, A. (2020, December 3). *Ontario's PBF system: Much ado about nothing*. Higher Education Strategy Associates. <https://higheredstrategy.com/ontarios-pbf-system-much-ado-about-nothing/>
- Usher, A. (2021, January 19). *What people are complaining about when they complain about performance based funding*. Higher Education Strategy Associates. <https://higheredstrategy.com/what-people-are-complaining-about-when-they-complain-about-performance-based-funding/>
- Viczko, M., Lorusso, J., & McKechnie, S. (2019). The problem of the skills gap agenda in Canadian post-secondary education. *Canadian Journal of Educational Administration and Policy*, (191), 118–130. <https://journalhosting.ucalgary.ca/index.php/cjeap/article/view/62839>
- Wyonch, R. (2020, January 14). Work-ready graduates: The role of co-op programs in labour market success. *C.D. Howe Institute Commentary 562*. <https://doi.org/10.2139/ssrn.3520206>