

The OECD and Educational Policy Reform: International Surveys, Governance, and Policy Evidence

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Abstract

Over the past 50 years, the Organisation for Economic Cooperation and Development (OECD) has increasingly influenced the nature and scope of education policies in primary, secondary, and tertiary sectors around the world. Policy suggestions in these sectors primarily stem from the results of their various international surveys such as the Programme for International Student Assessment (PISA), the Teaching and Learning International Survey (TALIS), and the Programme for the International Assessment of Adult Competencies (PIAAC). This paper discusses the etiology, key developments, and policy discussions associated with OECD's international surveys in compulsory and higher education settings within Canada and abroad. The authors examine the influence of the OECD on educational governance and the contested nature of international policy evidence in the educational policy sphere.

Introduction

Over the past 50 years, the Organisation for Economic Cooperation and Development (OECD) has increasingly influenced the nature and scope of education policies in primary, secondary, and tertiary sectors around the world. Policy suggestions in these sectors primarily stem from the results of their various international surveys such as the Programme for International Student Assessment (PISA), the Teaching and Learning International Survey (TALIS), and the Programme for the International Assessment of Adult Competencies (PIAAC). The utilization of these surveys is supported by extensive databases that include reports, policy briefs, as well as monograph series such as *PISA in Focus*, *Teaching in Focus*, and *Education Indicators in Focus*, which directly link national and cross-national survey results with features of the “best” performing education systems around the world. These briefs complement other web resources such as their free *OECD Data Factbook* app and *Education GPS* website¹ that provides comparable data and analysis on education policies and practices, opportunities and outcomes. An interesting feature of *Education GPS* is that it provides the latest information, in real time, on how countries are working to develop high-quality and equitable education systems. Collectively, the various international surveys have allowed the OECD to establish an empirical basis to support policy recommendations across various sectors for education systems around the world.

This paper discusses the etiology, key developments, and policy discussions associated with

1 Found at <http://www.oecd.org/publications/oecd-factbook-18147365.htm>

the OECD's international surveys in compulsory and higher education settings within Canada and abroad. The authors examine policy discourses and the contested nature of the OECD's influence on global educational governance. An analysis of the Canadian context, which possesses a unique governance structure in relation to the international community, is warranted. The present analysis also complements existing studies which have focused exclusively on PISA (see Klinger, DeLuca, & Merchant, 2016; Volante, 2013).

The OECD's International Education Surveys: Rationale and Substance

The OECD's interest in education dates back to 1964, when this transnational organization provided the impetus for an area of study that is now commonly referred to as the Economics of Education (Svennilson et al., 1962). The OECD's various meetings on the Economics of Education in the 1960s ushered in the notion that economic growth may depend as much on increases in human capital (at that time measured by the number of years of education) as on the discernible changes in physical capital (e.g., machines, buildings, infrastructure). Over time, the framing of human capital evolved from the mere number of years of schooling as a determinant of economic prosperity to a greater appreciation of the importance of the quality of learning environments within national education systems. In order to gauge the quality of learning within and across member states, education ministers in the 1990s at the OECD turned to international surveys starting with PISA (OECD, 1995, 1997), which was later followed by TALIS and PIAAC. Since their inception, participation and interest in these surveys has continually expanded. Not surprisingly, cross-country comparisons are often reported widely within the academic community and increasingly referenced by popular media sources that publish league tables which provide ordinal rankings of countries.

The OECD argues that the relevance of the knowledge and skills measured by their international surveys for future educational success and success in the labour market is confirmed by longitudinal studies in a growing number of countries (OECD, 2009, 2015a). Not surprisingly, the meaningfulness of these "key" knowledge and skills is aligned with Human Capital Theory and validated through the OECD's research activities. For example, in their PISA 2012 analysis, the OECD noted that "if all students attained Level 2 proficiency in mathematics the combined economic output of OECD countries would be boosted by around USD 200 trillion" (OECD, 2014b, p. 9). It is worth noting that these types of analyses utilize the Education Production Functions led by the work of Hanushek (see, for example, Hanushek, 1979; 2013; Hanushek, Ruhose, & Woessmann, 2016; OECD, 2015a). Despite the transparency of the statistical techniques used to draw these relationships, many academics have criticized the narrow curricular focus of the OECD and contested the empirical basis for Human Capital Theory. Tan (2014) for example argues that Human Capital Theory has comfortably survived in the face of these criticisms precisely because these have tended to be fragmented and disorganized with seemingly no rival theory or equally robust framework to replace it. Thus, it seems likely that PISA, TALIS, and PIAAC scores will continue to be used as a proxy for future economic growth and/or the quality of education systems across a range of international jurisdictions.

PISA

The PISA triennial survey assesses the performance of 15-year-old students in the areas of reading, mathematics, and science, in OECD member states and in a growing number of non-OECD countries and economies. An important feature of the PISA framework is that each of three "life skill" domains – reading literacy, mathematical literacy, and scientific literacy – is assigned as a major testing domain on a rotating format and, as a result, is assessed in greater detail. Each literacy domain has an achievement range from *level 1* to *level 6*. It takes three testing cycles, or nine

years, to make cross-national comparisons in relation to a major literacy domain. In addition to the major and minor literacy domains, PISA has regularly introduced new tests to assess skills relevant to modern society, such as creative problem solving and financial literacy (introduced in 2012), and collaborative problem-solving (introduced in 2015).

There has been ample discussion on broadening the array of measurements in PISA to also include elements such as social responsibility and citizenship or behavioral characteristics which are shown to be important for life (Heckman, Humphries, & Kautz, 2014). However, this was technically not feasible for a large cross-national survey, so the research community has tended to rely on particle studies or the relations between PISA measurements and broader measurements.

Since the initial administration of PISA in 2000, participation has gradually expanded to include more than 70 economies in the most recent administration. The OECD asserts that the PISA survey “assesses the extent to which students near the end of compulsory schooling have acquired key knowledge and skills that are essential for full participation in modern societies” (OECD, 2014a, p. 1). Andreas Schleicher, the current director of PISA, has argued that results offer “policy-makers and practitioners with helpful tools to improve quality, equity and efficiency in education, by revealing some common characteristics of students, schools and education systems that do well” (Schleicher, 2007, p. 356). PISA has been referred to as “one of the largest non-experimental research exercises the world has even seen” (Murphy, 2014, p. 898) and has even been likened to the “Olympics of education” by the Canadian media (see Alphonso, 2013). Canada has consistently achieved higher than the OECD average on each administration of PISA and is often the top English speaking nation. In the most recent administration, PISA 2015, Canada placed 2nd, 10th, and 7th in comparison to the international community for reading, mathematics, and science literacy. Perhaps more importantly, Canada is generally lauded in the international community for having one of the narrowest gaps between their high and low achievers – a result suggesting that fairly equitable outcomes characterize our diverse nation.

TALIS

Angel Gurria, the Secretary General of the OECD, asserted that “beyond the influence of parents and other factors outside the school, teachers provide the most important influence on student learning” (OECD, 2014d, p. 5). Thus, it is not surprising that the OECD would be keen to develop an international survey of teacher practices. Initially administered in 24 countries in 2008, TALIS is the first international education survey to focus on the working conditions of teachers and the learning environments within primary and secondary schools. The survey tries to better understand the complex factors that influence teaching and learning in schools such as the changing demographics of the teaching profession, types of leadership practices demonstrated in schools, impediments to teachers’ professional development, teacher appraisal systems, as well as factors related to positive teacher self-efficacy and job satisfaction (OECD, 2008). An interesting feature of the most recent administration of TALIS in 2013, which included 34 OECD countries, including Canada, was that it provided the option to link PISA-TALIS surveys. The latter was accomplished by having countries that participated in PISA 2012 exercise the option to implement TALIS in the same schools that participated in PISA (OECD, 2014c). Thus, it was possible to link student learning outcomes from PISA to teachers’ characteristics which were surveyed in TALIS (OECD, 2014d).

The OECD notes that TALIS “sheds light on which [teaching] practices and policies can spur more effective teaching and learning environments” (OECD, 2013a, p. 3). The OECD also asserts that the TALIS analyses provided to participating countries enables them to see more clearly where imbalances might lie and also help teachers, schools, and policy-makers learn

from the practices they utilize within their own nation. From a human capital lens, teachers are important precisely because they prepare students to become life-long learners and provide them with the skills necessary to become active and engaged members of society (OECD, 2014d). Thus, for the OECD, improvements in teaching can lead to better student learning and more effective education systems – which undoubtedly should lead to better economic prosperity (OECD, 2014d). It is worth noting that Canada has agreed to participate in the next administration of the TALIS in 2018, which will expand to include 47 countries (OECD, 2016).

PIAAC

The PIAAC builds on previous surveys administered by OECD such as the International Adult Literacy Survey (IALS), first administered in 1994 and later replaced by the International Adult Literacy and Life Skills Survey (IALLS), administered in 2003, and then again between 2006 and 2008 (Morgan, 2011). First administered between 2011 and 2012 in 24 countries, PIAAC is promoted as the “PISA for adults” by examining foundational information-processing skills in adults between 16 and 65 years old in three key areas: literacy, numeracy, and problem-solving. The PIAAC also provides information on various generic skills such as cooperation, interpersonal communication, and organizing one’s time. The OECD asserts that these skills are essential for the development of other higher-level skills required for adults in home, school, work, and community settings (OECD, 2015a). In line with similar statements related to the PISA and TALIS surveys, OECD asserts that PIAAC helps governments in assessing, monitoring, and analysing the level and distribution of skills among their adult populations (OECD, 2013b). They further contend that the tools that accompany the PIAAC survey are designed to support countries as they develop, implement, and evaluate the development of skills and the optimal use of existing skills (OECD, 2013c).

Results from the initial PIAAC administration suggested that a significant proportion of adults around the world scored at the lowest levels of proficiency. The OECD (2013c) also noted:

There are wide variations in the mean proficiency among older adults across countries, suggesting that the lower average scores in this group are affected not only by the process of biological ageing, but also by differences in education and labour-market structures that can enable adults to develop and maintain their skills as they age. (p. 106)

Similar to PISA and TALIS, the PIAAC survey draws a direct causal link between the effectiveness of national education systems and the acquisition and development of “foundational” adult competencies. Canadian performance on PIAAC is best characterized as average given that we performed slightly higher than the international average in problem-solving, average in literacy, and below average in numeracy. Not surprisingly, these flat results have prompted calls for improvements in all areas covered by PIAAC, particularly for those Canadians who are most likely to have skill deficits (Parkin, 2015). The apparent disconnect between the Canadian PISA and PIAAC performance naturally leads to different policy implications and questions related to the robustness of compulsory versus adult education sectors, an issue we return to in the next section.

Clearly, the OECD has developed an impressive range of international education surveys designed to inform educational policymaking. Indeed, the “better policies for better lives” tagline that accompanies their various webpages, resources, and video clips suggests they readily embrace the prominence of their global policy role. This privileged position in the education policy sphere is likely to expand as each successive administration of PISA, TALIS, and PIAAC has included greater participation from OECD and non-OECD nations. In addition, new international surveys also seem to be routinely considered as evidenced by the recent call for tenders posted

on the OECD website to develop an International Early Learning Study (IELS), which would test five-year-old children. Not surprisingly, the OECD has suggested that the IELS findings will assist countries to adjust early childhood education policies, modify early schooling policies, and introduce and/or adjust programmes for parents to support children's early learning. Overall, OECD is developing a cadre of international surveys to direct educational policymaking for 5-65 year-olds around the world. Many academics have criticized the excessive influence of the OECD on national education policymaking processes (Andrews et al., 2014). Given the expanding influence of the OECD, an analysis of prominent policy discussions that have been observed in cross-cultural contexts, including Canada seems warranted.

Large-Scale Reform: Cross-Cultural Trends and the Canadian Context

Policy discourses and responses to the OECD's international surveys can be divided into two broad categories: PISA and TALIS which address compulsory public education; and PIAAC which relates to competencies of adults with different levels of education. It should be acknowledged at the outset that much of the available English literature on this topic originates from Western educational jurisdictions, particularly OECD member states. These educational jurisdictions have a longer history of participation and subsequent analysis of the impact of international achievement studies within and across their national education systems. Less is known about other important parts of the world such as the Middle East, South America, and Africa where fewer research studies have been reported that would be widely available to non-Western scholars. However, given the expanding influence of the OECD, the growing shift to open access publication venues, and the increasing options to publish articles in multiple languages, a more thorough analysis of policy discourses within these non-Western regions will likely be possible within the near future.

Policy Discourses and Responses: PISA / TALIS

Criticism of the PISA survey is particularly acute, as evidenced by a well-publicised letter that appeared in *The Guardian* (British national daily) newspaper by a group of high-profile academics from around the world (Andrews et al., 2014). This letter was addressed to the director of the PISA, Andreas Schleicher, and outlined a litany of concerns with the impact of this international survey. In particular, the letter argued that the PISA:

1. shifts attention to short-term fixes designed to help a country quickly climb the rankings, despite research demonstrating that enduring changes in education practices take decades to come to fruition;
2. takes attention away from the less measurable or immeasurable educational objectives like physical, moral, civic, and artistic development, thereby dangerously narrowing our collective view regarding the purpose of education;
3. is naturally biased in favour of the economic role of public schools versus how to prepare students for participation in democratic self-government, moral action, and a life of personal development, growth, and wellbeing;
4. with its continuous cycle of global testing, harms children and adversely impacts classrooms, as it inevitably involves more and longer batteries of multiple-choice testing, more scripted "vendor"-made lessons, and less professional autonomy for teachers. In this way, PISA has further increased stress levels in schools, which endangers the wellbeing of students and teachers (Andrews et al., 2014).

The letter concluded with a call to halt the next round of PISA testing in 2015. Interestingly, these points were reiterated in another open letter where the list of signatories grew from the initial 80 to more than 130, as of May 6, 2014 (Meyer & Zahedi, 2014).

The list of concerns previously noted, along with the overall tone of *The Guardian* article

(Andrews et al., 2014) suggested that the impact of PISA is fairly universal. Nevertheless, research which has examined policy effects, suggests that national responses to the PISA are fairly diverse, often in the form of political rhetoric and seldom in the form of major reforms (Ritzen, 2012). Although some countries tended to be more “reactive” to the PISA benchmark measure when contemplating policy reforms, this is not a universal phenomenon. For example, Breakspear’s (2012) study, which examined the policy responses of 37 countries to PISA, indicated that the degree to which this survey informed policymaking was insignificant in some countries to extremely high in others. Overall, Breakspear’s exploration of the normative effects of international benchmarking found that PISA international rankings led to, or inspired substantial debate in 19 countries/economies and led to moderated debate in an additional 11 countries/economies. Thus, over 80 percent of the countries examined reported some degree of influence on their educational policies, albeit on a continuum. The nature of the ensuing reforms (if any) has been widely recognized and legitimized by PISA.

More recent research conducted by Volante (2016) with a group of academics from Canada, United States, England, Scotland, Ireland, Sweden, Netherlands, and New Zealand converges with Breakspear’s (2012) findings. The research suggested a gradient of policy responses to PISA existed across the various nations listed. Germany, for example, seemed to be particularly reactive when contemplating reforms, and used PISA to significantly alter the structure of schooling. PISA is largely credited with ushering in an evidenced-based policy orientation within Germany through the introduction of national standards, centralized assessments (that mirror PISA), and education monitoring structures. Some have gone so far to suggest that the “PISA-shock” that resulted from mediocre German results in PISA 2000 facilitated the greatest shift in national educational policies to occur since the fall of the Soviet Union (Bank, 2013). However, Raidt (2009) cautions that the role of PISA may have been more to legitimize already intended reforms than generating a new paradigm for education delivery. Interestingly, Takayama (2008) provides a similar picture for Japan by noting how PISA results were used to justify the introduction of curriculum policy reforms that were under consideration by the Ministry of Education prior to the release of PISA’s 2003 data. The latter suggests that governments are not averse to selectively drawing on international findings when it is politically expedient to do so.

National profiles from other countries such as England, Ireland, and New Zealand suggest that while these countries were not particularly reactive, the salience of PISA in the educational policy arena is becoming more prominent and likely to be a catalyst for large-scale reform in the future (Volante, 2016). The Canadian profile by Klinger, DeLuca, and Merchant (2016) suggested that the influence of PISA varies significantly across regions. The latter is partly attributable to the unique educational governance structure within Canada where the responsibility for education rests solely with provincial governments. Provinces such as Ontario and Alberta seem to be particularly keen to improve or maintain their international standing on PISA – a fact that is reflected in their provincial policy statements. Despite provincial differences, the most recent release of PISA 2015 results resulted in an initial flurry of media and ministry statements across Canada – a fact that may become a catalyst for future curricular and/or assessment reforms within particular provinces (see Alphonso, 2016; CBC, 2016; Csanady, 2016; Gordon, 2016; Yarr, 2016).

Perhaps the most significant impact of PISA across Canada is related to the Pan-Canadian Assessment Program (PCAP). The Council of Ministers of Education Canada (CMEC) is responsible for the administration of this survey, along with international achievement surveys such as PISA. According to CMEC, PCAP is a cyclical test of student achievement in reading, mathematics, and science for 13-year-old students across Canada. PCAP is meant to provide provinces and territories with a basis for examining their curriculum and improving their as-

assessment tools. CMEC also stated that on a program level, provincial jurisdictions can validate the results of their own large-scale assessments against PCAP results as well as those of PISA (CMEC, n.d.). Morgan (2016) has argued that policy discursive practices and techniques led to the creation of PCAP – a PISA-modeled assessment – within the decentralized structure of the Canadian education system. Klinger et al.'s (2016) examination of PCAP supports this view as they noted the similarity of key features across these two assessments which include a focus on competency assessment in identical subject areas, 3-year testing cycles, testing complete classes of students to facilitate sophisticated analyses/multilevel modelling, and the testing of one major and two minor domains per administration. Thus, it is fair to say that PCAP, which assesses 13-year-old students across Canada, mimics the general structure of the PISA survey, which assesses 15-year old students around the world.

Unlike PISA, policy responses and critiques of TALIS have been less pronounced around the world. Indeed, there is very little evidence, to date, to suggest the TALIS findings have been consistently utilized to direct national educational policymaking. Interestingly, the European Commission proposed a set of new “political priorities” for education and training that stemmed directly from the TALIS 2013 results (see European Commission, 2014). However, member states within the European Union (EU) are not obligated to act on these recommendations and there is scant evidence that TALIS has directly influenced the policymaking process. However, the prominence of TALIS is likely to change as efforts to link teacher characteristics via this survey are connected to student learning outcomes reported on PISA. The latter would enable governments around the world to draw correlational links between the characteristics of their teachers and students’ academic performance – thereby providing a seemingly strong justification for the introduction of new accountability measures which may be manifested through the imposition of a set of specific pedagogical and leadership practices.

Not surprisingly, teachers’ unions have resisted efforts by the OECD to develop assessments of teaching via the TALIS, including national and provincial teacher federations across Canada (Alberta Teachers Association, 2013; Froese-Germain, 2011; Lingard, Martino, Rezai-Rashti, & Sellar, 2016). The Ontario Teachers’ Federation, which is the largest federation in Canada, even instructed the former Minister of Education, Liz Sandals, to not commit the province to participate in TALIS 2018 (Ontario Teachers Federation, 2016). Given the size of Ontario’s teaching workforce, it would be difficult to launch TALIS 2018 if members are instructed to not support the administration of this survey. If the latter occurs, it would represent one of the largest international challenges to the OECD’s expansion – particularly since the rest of the world has traditionally held a favourable opinion of the Canadian education system. National and international scholars (and policymakers) would be wise to follow this evolving situation since it may provide the foundation for other international jurisdictions contemplating similar action.

Policy Discourses and Responses: PIAAC

Policy responses and critiques of PIAAC have been fairly mute in the educational policy sphere. Similar to TALIS, the European Commission has provided policy suggestions to their member states based on their analysis of findings within the EU. Their analysis grouped the PIAAC findings into seven key areas: (1) 20% of the working age population has low literacy and numeracy skills; (2) one in four unemployed adults has low literacy and numeracy skills; (3) adults with low proficiency are often caught in the “low skills trap” and are less likely to participate in learning activities; (4) there are significant differences between individuals with similar qualifications across various member states; (5) 25% of adults lack the skills to effectively make use of ICT; (6) adult skills tend to deteriorate over time if they are not used frequently; and (7) sustaining skills brings significant positive economic and social outcomes (European Commission, 2013). Despite the European Commission’s efforts, there seems to be little evidence that these findings

have had a noticeable influence on policymakers in Europe (Volante & Ritzen, 2016).

Canadian reactions to PIAAC results seem to be more pronounced, as evidenced by the veracity of news reports and critiques offered in the popular media (see Brown, 2014; Cappon, 2013; CBC, 2013; Hazlewood, 2016; Johnson, 2013; Wells, 2013). In general, the average to below average results on the PIAAC survey, particularly within mathematics, have drawn attention to the quality of graduates from Canadian post-secondary institutions. Perhaps the most unanticipated finding is that the worst numeracy performers across Canada were graduates of teaching programs – a result that raises concerns for the quality of mathematics teaching within compulsory schools. Not surprisingly, these results have drawn attention from pan-Canadian organizations such as the Conference Board of Canada, which developed provincial report cards in relation to the PIAAC results. The Conference Board has urged post-secondary institutions across Canada to increase their efforts in these foundation areas (Conference Board of Canada, n.d.).

The Association for Universities and Colleges Canada (AUCC) has offered more fine-grained analysis of the PIAAC results to guard against “misleading signals” from the media. The AUCC argued that the percentage of immigrants who were educated outside of Canada (39%), compared to the OECD average (14%), suggests that the solution to Canada’s lagging PIAAC scores rests in greater investments in adult literacy and numeracy education programmes for immigrants (Charbonneau, 2014). Thus far, it is difficult to see a discernible pattern in the reception of these diverse policy recommendations in Canada.

One of the more interesting developments with the utilization of PIAAC results is that an increasing number of scholars outside of education are making use of this benchmark measure. For example, researchers within the United States have used the PIAAC results to draw direct causal links between literacy and public health outcomes (Feinberg, Greenberg, & Frijters, 2015; Lunze & Paashe-Orlow, 2014). In some respects, this body of research promotes a triadic relationship between education – economic prosperity – and public health, which has also been recognized within the Canadian context. The previously noted Conference Board of Canada (n.d.) report argued that results of PIAAC have profound social consequences besides economic prosperity that directly affect health, political efficacy, and participation in volunteer activities. In other research, a link has been established between the longitudinal, accumulated flow of educational investment and competencies (Cathles & Ritzen, 2017) and between PIAAC competences and sectoral productivity (Sasso & Ritzen, 2017). Thus, PIAAC has seemingly broadened the discourse associated with international surveys to include a range of other important domains beyond education.

Educational Governance via Policy-Evidence

The OECD is a transnational organization that is comprised of sovereign states which possess autonomy in the development and implementation of education policies across their various sectors. It is important to remember that the OECD does not possess a legislative mandate from the peoples within member states. Thus, policy recommendations are not enacted via compliance measures – rather the OECD relies on providing an evidence base for policy recommendations. This might be considered persuasion that naturalizes the idea that performance in a series of measurement exercises represents educational quality (Mahon & McBride, 2008; Morgan & Volante, 2016). In other domains (like European student mobility) the term “soft law” is used to indicate that decisions of the court created the legal basis for a mobility policy. Soft law is enforceable, even if it has not been approved by Parliament. The policy evidence of OECD is not soft law since policy recommendations are non-binding, nor are they enforceable. In fact, the OECD’s policy suggestions are more or less persuasion. This persuasion strategy seeks to inform the policy production process while also legitimizing the use of comparative benchmark data as

a policy tool in governing education (Lingard et al., 2016; Pereyra, Kotthoff, & Cowen, 2011).

Woodward (2009) distinguishes between the OECD's cognitive governance which is built through its network of like-minded communities of practices versus its normative governance which is gained through the spread of its norms, ideas, and knowledge. It is perhaps the latter of these two forms of governance that many within the education community find most troublesome given that the "E" in OECD stands for economic not education. As a result, many fear the norms, ideas, and knowledge associated with education will come to service solely the economic functions of schools. Given that the OECD is not an autonomous body but an organization made up of member states, it is ultimately representatives of national governments that decide the direction and content of the OECD's priorities. If citizens and/or academic groups question the OECD's interpretation of the role of education, then their national parliaments have the opportunity to influence this position as they have representation on the OECD Governing Board.

Despite the previous statement, there is still widespread concern, particularly among education scholars, that the OECD's global educational policymaking role ultimately promotes a narrow view of education (see Benavot, 2013; Kamens, 2013; Goldstein, 2014; Lingard et al., 2016; Meyer, 2014; Sellar & Lingard, 2013). This is understandable when one considers that the participating countries demanded that the OECD adopt a neoliberal approach in the 1980s to recommend "positive adjustment policies" that relied on market mechanisms for the allocation of labor and capital, in line with the prevailing thinking in OECD countries. New managerial practices were adopted from the private sector to help turn various sectors of the education system into efficiently run organizations that could do more with less. However, the OECD as a whole is not a monolithic organization (Mahon & McBride, 2009). Indeed, an examination of their policy discourses since the inception of PISA suggests they have moved away from a neo-liberal prescription of welfare cuts and structural adjustment for education (Mahon, 2010). The OECD's advocacy of public investment in child development programs has come to be seen as a critical component of their education policy outlook. Moreover, their focus on equity and equitable education outcomes has helped galvanize awareness of the importance of policies that support children, adolescents, and adults who are struggling with the development of basic skills. Although the means utilized to achieve this goal are open for debate, the goals of enhanced child development programs and more equitable learning outcomes are difficult to challenge.

Another criticism leveled at the OECD in terms of its global policymaking role is that the organization is naturally politicized toward the adoption of universalistic principles that can perpetuate existing inequalities between different regions of the world (Zurn, 2014). Thus, continents such as Europe and North America, as well as larger member states, may be seen as exerting undue influence on smaller nations. Although this seems like a legitimate concern, thus far, it has actually been countries with relatively smaller populations such as the Netherlands, Finland, Poland, Estonia, Singapore, and Canada that have been promoted as the "reference societies" for the PISA. The OECD has recognized these educational jurisdictions as models to be emulated by other larger nations such as the United States, Germany, England, and France. Interestingly, the OECD observes that despite their efforts to provide evidence, many of their policy suggestions are not implemented. For example, the OECD's *Education Policy Outlook 2015: Making Reforms Happen* report suggested that the reforms "needed" for coming close to the best performing countries and the actual reforms implemented was (very) weak, when they examined some 450 education reforms that were adopted across OECD countries between 2008 and 2014 (OECD, 2015b). Thus, from the OECD's perspective, the impact or influence they exert on global educational governance should not be exaggerated. When one considers the widespread academic criticisms of the OECD's international surveys (see Andrews et al., 2014), it is fairly clear there remains diametrically opposed views on the nature and scope of the OECD's role in the educational policy production process.

Conclusion

The preceding discussion highlighted policy discourses that are associated with the OECD's international education surveys. It was readily apparent that while the prominence of PISA is well established, the role of the TALIS and PIAAC surveys in informing policy discussions around the world is best characterized as an emerging and evolving subject matter, including within Canada. As previously noted, TALIS is likely to attract greater attention in the future within Canada, particularly if the PISA-TALIS data becomes linked for accountability purposes. Conversely, the PIAAC data seems to provoke more discussion in terms of how to interpret the results and the concomitant solutions to Canada's "lagging" adult scores. Collectively, the cadre of surveys administered by the OECD across the various education sectors has been contested for their global educational governance role. This expanding role has both galvanized support for the development of key foundational skills across the life span and been criticized for the narrow focus inherent with the testing of select subject matter. The latter is a long-standing criticism of large-scale assessment programs and international achievement surveys are obviously not exempt from this criticism.

The previous discussion made it clear that the OECD's surveys do not exert a uniform or consistent influence across international jurisdictions. Rather, the research noted suggested that PISA often produces a gradient of policy responses, including across Canadian provinces. We predict that the TALIS and PIAAC surveys will do the same within the Canadian context where provinces may become more "reactive" to scores, particularly in cases where they achieve below the Canadian average. Popular media reports seem to be fueling the salience of these pan-Canadian differences, as evidenced by the veracity of news stories published in select provinces. How these messages spur changes in provincial policies is an important area of study that provides interesting cases for other provinces and the international community. It will be important to monitor how provinces continue to adapt and respond to their relative rankings in future administrations of the PISA, TALIS, and PIAAC surveys – a situation that is constantly evolving and likely to produce more fervent policy discussions from proponents and detractors of the OECD's role in public and higher education governance.

Undoubtedly there is no simple or complex set of mechanisms that will ensure international survey results are interpreted or utilized appropriately. Rather, the available research suggests that it is often the interplay of political, economic, cultural, and educational contextual features that influence the uptake of education policies by government policymakers (Carvalho & Costa, 2014; Martens & Niemann, 2010; Pons, 2012; Volante, 2016). Rather than discount the potential contribution of the OECD's international surveys to policy formation, we encourage the academic community to continue conducting programs of research that shed light on the intended and unintended consequences of international surveys such as PISA, TALIS, and PIAAC. These types of studies elucidate the opportunities and constraints that are associated with the utilization of international benchmark measures and provide an evidence base for public discussion and open debate. The latter is especially important within the Canadian context where provinces have sole autonomy over compulsory and higher education settings.

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