PISA’s Influence on educational governance situated in the institutional setting of South Korea

Journal:	*Policy Futures in Education*
Manuscript ID	PFIE-21-0169
Manuscript Type:	Original Article
Keywords:	Programme for International Student Assessment (PISA), educational governance, institutionalism, South Korea, political structure, cultural context
Abstract:	The Programme for International Student Assessment (PISA) has instigated educational changes and reforms globally, intensifying accountability, datafication and the influence of the OECD on educational governance of test-taking countries and beyond. PISA outcome impacted upon the educational governance of South Korea as well, however, the changes were rather different from what have been observed in other contexts. Framed by institutionalism, and drawing on previous research reports and literature, the paper explores how PISA outcome was appropriated by the progressive parties, in the context where education is centrally managed but the governmental power is checked by the public through elections, and where education is everybody’s concern and perceived as public goods. After reviewing the context, Korea’s responses to the PISA outcome is presented, along with their shapers. The paper highlights how the responses differ from previously reported directions, while acknowledging that its planned new relationship with PISA may turn their course.

SCHOLARONE™
Manuscripts

PISA's Influence on educational governance situated in the institutional setting of South Korea

Abstract

The Programme for International Student Assessment (PISA) has instigated educational changes and reforms globally, intensifying accountability, datafication and the influence of the OECD on educational governance of test-taking countries and beyond. PISA outcome impacted upon the educational governance of South Korea as well, however, the changes were rather different from what have been observed in other contexts. Framed by institutionalism, and drawing on previous research reports and literature, the paper explores how PISA outcome was appropriated by the progressive parties, in the context where education is centrally managed but the governmental power is checked by the public through elections, and where education is everybody's concern and perceived as public goods. After reviewing the context, Korea's responses to PISA outcome is presented, along with their shapers. The paper highlights how the responses differ from previously reported directions, while acknowledging that its planned new relationship with PISA may turn their course.

Keywords

Programme for International Student Assessment (PISA), educational governance, institutionalism, South Korea, political structure, cultural context

Introduction

The Programme for International Student Assessment (PISA) has triggered various reactions from different countries, scandalization, shock, glorification, promotion, surprise, and indifference, to name a few. The different responses to PISA imply diverse impact upon national policies (Steiner-Khamsi, 2004; Grek, 2009; Meyer, 2014). In many countries, as an important political resource, PISA contributed to the transformation of education policy (Knodel, Windzion and Martens, 2014). To illustrate, in Germany, the lower than expected results in PISA sparked a heated debate about education policy and reform the education to focus on measurable competences (Erti, 2006). Similarly, Japan experienced a 'PISA shock' when its ranking dropped in 2003. In response to this, the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) reversed a contentious *yutori* (low pressure) curriculum policy and introduced national assessment testing (Takayama, 2012). In contrast, the UK, New Zealand, and the United States did not show any noticeable change in national education policy agenda in response to PISA rankings (Breakspear, 2012). Stakeholders within the same country interpreted and used the PISA results in diverging ways to suit their own needs; that is, they tried to justify and legitimize or oppose proposed reforms based on evidence from internationally comparable data (Grek, 2009; Takayama, 2012).

PISA not only changed individual education policies nationally but also shifted education governance globally. The PISA study has identified test-based accountability as the most dominant way to improve educational quality across borders (Meyer, 2014; Rizvi and Lingard, 2010; Kim, 2020). It is said to be stemmed from PISA that test-based education governance has been strengthened around the world. Because PISA produces various data represented by numbers, the test results have become one of the most important pieces of evidence in education policy-making (Wiseman, 2010). As PISA results are important in many countries, data-driven school reforms are widely spreading, resulting in new paradoxes, unexpected developments, and unintended effects (Mintrop and Sunderman, 2013). The Organization for Economic Co-operation and Development (OECD), the host of PISA, has promoted the globalization of education policy. As an epistemic community (Haas, 1992), and as a reference for domestic decision-making, the OECD has exerted soft power to many countries through comparative reporting, the exchange of ideas, and conferences (Bieber, 2016). As Sellar and Lingard (2014) argue, PISA, and more broadly, the OECD's education work, have facilitated new epistemological and infrastructural modes of global governance in education.

South Korea, one winner of the Global Academic Olympics (Spring, 2011), has also undergone education policy and governance change because of PISA. However, the mode and degree to which PISA has influenced the direction of policy and governance in South Korean education differ somewhat from that of many western countries. In this respect, South Korea can be another case of 'vernacular globalization' in education policy (Lingard, Martino, and Rezai-Rashti, 2013). In the remainder of the paper, it first reviews the global context of governance change resulting from PISA, to situate the Korean responses. Then the framework that has guided the understanding of the polity's responses is presented, as well as its local context, before the PISA performance of the country is reported. It is followed by its responses to the outcome in terms of educational governance focusing on the actors and the tools. Finally, drawing on institutionalism, the features which have shaped the impact are discussed.

PISA and governance turn: global context

PISA is a product of performativity, sometimes referred to as a technology of contemporary governance (Ball, 2006). Performativity is a "technology and a mode of regulation that employs judgments, comparisons, and displays as a means of incentives and control based on rewards and sanctions" (ibid., p. 144). Numbers, rankings, and statistics, which are the outputs of PISA, are central to the technology of performativity (Lingard, 2011). Numbers externalize the achievement of education, which for a long time seemed to be invisible. Numbers can not only transparently show the degree of students' achievement, but also the merit of teachers, as well as schools. Rose (1999) said that "numbers have achieved an unmistakable political power within technologies of government" (p. 197). He made interesting points about political numbers. Firstly, the relationship between numbers and politics is "reciprocal and mutually constitutive" (p. 198). He states that acts of social quantification are politicized because politics decide not only what, how, and how often of various measurements but also how to interpret the results. Secondly, numbers, as inscription devices, constitute the domain of politics numerically, that is, as a form amenable to the application of calculation and deliberation (p. 198). Finally, as a part of "the techniques of objectivity that establish what it is for a decision to be disinterested" (p. 199), numbers sometimes make areas of political judgment become depoliticized. Standardized test scores can obscure the persistence of continued inequality and block many profound questions about the causes of achievement gaps and the relationship between education equity and social inequality (Rutledge, Anagnostopolous and Jacobsen, 2013). In addition, according to Torrance (2006, p. 825), PISA and other international tests have a danger in that they assess "what you can assess, what it is (relatively) easy to assess, rather than what you should assess." Humanity and civic participation are placed behind narrow academic achievement in many international tests.

With data-driven technologies such as student information systems (SIS), the 'policy as numbers' phenomenon is becoming more sophisticated (Halverson and Shapiro, 2013). Networks and databases that make schools visible and knowable have ignited the recent dominant techniques of governing (Ozga, 2009; Ozga et al., 2011). As Fenwick, Mangez, and Ozga (2014) maintained, data can transform such a complex education arena into practices of calculation. Unfortunately, within the world of datafication of education, children are doomed to be reduced to the school's statistical raw materials, rendering schools to become exam factories (Hutchings, 2015; Roberts-Holmes and Bradbury, 2016). Furthermore, while the infrastructure of accountability promotes new levels of cooperation among policy actors, under the test-based accountability which is supported by new tools and techniques, "teachers subordinate their professional judgments and commitments to the cultural authority of data", relinquishing their professional judgement (Rutledge, Anagnostopolous and Jacobsen, 2013, p. 215; see also Hardy, 2020).

Meanwhile, comparisons are now a basis of governing (Nóvoa and Yariv-Mashal, 2003) and they are well suited for quantification. Nóvoa and Yariv-Mashal (2003) stated that comparable measures create a 'mutual accountability', which creates a sense of sharing and participation and makes each country compare themselves to each other perpetually. As one of the most important sources of comparison in education, PISA forms a global education policy field and within the field, educational policies of some countries tend to converge toward the 'best practice' (Andere, 2008). In the past, policymakers were only responsible for the "national eye", but now since the international comparative tests, they have no choice but to check the "global eye" as well (Lingard, 2011). At the same time, as Henry et al. (2001) argue, "the OECD acts as an international mediator of knowledge rather than as a comparative forum alone" (p. 57). The OCED encourages member states to naturally accept the advice or suggestions and exercises the power to define "what can be thought and said". The OECD induces voluntary policy convergence, not by force of imposition of legal harmonization, but by soft governance such as transnational communication and competitive pressure (Bieber, 2016). Looking back over the past two decades, the OECD has played a key role in spreading neoliberal policies (Henry et al., 2001).

In sum, PISA, sponsored by the OECD, is beyond any test. Over the past fifteen years, PISA has been institutionalized as the primary engine in global accountability reform (Meyer and Benavot, 2013). In many countries, PISA strengthened output orientation in education and promoted evidence-based policy-making based on data, especially in terms of the recent phenomenon of policy by numbers (Bieber, 2014; Lingard, 2011; Lingard, Martino and Zezai-Rashti, 2013; Wiseman, 2010). After PISA, the mode of test-based, top-down accountability in education has risen (Lingard, Martino and Rezai-Rashti, 2013). Test-based accountability has prompted states to develop large-scale information systems that collect, process, and disseminate data on schools, teachers, and students' characteristics and performance. Data from these systems are being made available to a growing number of people and is being used to inform decisions both within and outside of the educational system (Hardy, 2020). A powerful infrastructure of accountability that describes the numerous types of surveillance and control methods used in contemporary schooling (Anagnostopoulos, Rutledge and Jacobson, 2013; Hardy, 2020) has been built up in many countries. PISA contributed to promoting the globalization of education policy. Hosting PISA, the OECD played a very important role in the new global governance in education (Woodward, 2009). By comparison, based on numbers, the OECD could constitute a kind of *global panopticon* (Lingard, Martino and Rezai-Rashti, 2013). The OECD has turned the globe into “a commensurate space of measurement” (Lingard, Martino and Rezai-Rashti, 2013, p. 540), and as a new and important policy actor, has a great influence on the education policy of each country.

Analytical framework

Governance is a polysemous concept. Governance refers to a form of social adjustment to solve the problems of any group or organization (Rhodes, 2000). According to Milward and Provan (2000), governance is concerned with “creating the conditions for ordered rules and collective action, including agents in the private and nonprofit sectors, as well as within the public sector” (p. 3). The researchers stated that “the essence of governance is its focus on governing mechanisms that do not rest solely on the authority and sanctions of government” (p. 3). Such governance is shaped up by the actors with diverse degrees of political power and by resources available in the context to mobilise, such as moral (e.g., public sentiments), material (e.g., financial resources) and information (e.g., knowledge) (Knodel, Windzio, and Martens, 2014). In this paper, therefore, the change in governance of education in response to the PISA regime will be analysed based on the central questions of ‘who, by what, how is education governed?’

In understanding the background to the responses, this paper intends to make use of the framework of institutionalism. The analytical framework is based on two theoretical arguments. First, the characteristics of a country’s institutional setting influence the policy actors’ responses to change. An ‘institutional setting’ includes both 1) formal political structures and 2) cultural contexts. When we analyze formal political structures, it is important to analyze the ‘accessibility of a political system’, which refers to ‘the formal institutional arrangement of a political system’ (Knodel, Windzio, and Martens, 2014, p. 17). They are classified as a strong state and a weak state. The former is highly centralized, relatively closed, and has very limited opportunities for non-government actors to become involved in the political process. The latter is, in contrast, decentralized, more open, and has more opportunities for various interest groups to engage in the policy; the cultural contexts concern the public sentiments and historical relationship toward an issue at hand (anonymised reference 1).

The Institutional setting of Korean education

Formal, political structure: coexistence of a centralised control of schooling and power checking systems

Korean education features a strongly centralized education governance system (C Lee, S Kim, W Kim and Y Kim, 2010). The government has the authority to decide key issues in education, such as curriculum, staffing, and budgeting. The educational finances of Korea are more dependent on national taxes than local taxes, and the government has been striving to avoid financial inequalities in regions and schools, in part through funding both public and private schools. Thus, both public and private schools have to follow the same national curriculum and textbooks. Since the first Education Law was enacted in 1949, Korea has maintained a national curriculum. As for staffing, Korean law regulates everything from qualifications, promotions, in-service training of both private and public. In employment and promotion systems, private schools are given more autonomy, while those in public schools are strictly regulated by the government. Teachers in public schools rotate among schools every four or five years, and teachers in private schools under the same sponsors also rotate among their schools. Such highly centralized education system has contributed to equalizing education conditions across the country.

Despite such centralised decisions on curriculum and teacher quality (e.g. Lim, 2016; T Kim, 2020), there is an effective system of checking the power of the government on educational matters. Since the 1990s, several parents' organizations and educational NGOs began to be formed. In 1999, the teachers' union was legalized and began to vigorously participated in the educational policy process. Other teachers' associations have exerted considerable influence on education policy as well. A major change, however, took place in 2007 with the direct election of Education Governors of different regions. The Education Governors, based on the increased democratic legitimacy, began a policy competition with the Ministry of Education (MoE). With these changes, while the government was previously the only policy actor, various policy actors such as superintendents, the teachers' union, parents' organizations, and NGOs have now appeared on the stage of policymaking. As a result, the policy process has become more complicated and the decision-making have become more democratised. Conflicts grew between the MoE which is politically right-wing and Education Governors who support the progressive party (T Kim, 2020). Educational issues have become politicised: the MoE and conservative groups and professionals have strongly supported the accountability-based education reforms. On the contrary, the Education Governors and the teachers' union have opposed them. Whether the proposed policies concern standardized tests, information disclosure, teacher evaluations, and high school diversification, the two groups have always been in tension (anonymised reference 2).

Cultural contexts

Egalitarianism, competition, and high stakes testing. Egalitarianism is one of the most remarkable socio-psychological characteristics of Koreans (Song, 2006). The Korean War deprived Korean people of the consciousness and practice around social class, as well as property and social status that had been inherited from the past. The war also reminded Koreans that everyone is equal. The authoritative military regime devoted itself to suppressing freedom, not suppressing egalitarian aspirations. Rather, the military regime, in the name of equality, criticized the political failure of the previous regime (Song, 2006). Standing on the ruins after the war, everyone stood at the same starting point, and they all began their race for success. As the social class structure had fallen apart, education in Korea had played a role in class formation, instead of reproduction. In this respect, the characteristic of the expansion of education in Korea is like that of Japan (Kariya, 2001) and differs from that of many western countries.

Under the widely spread atmosphere of egalitarianism, diploma and school grades were regarded as the fairest criteria that could be used in distributing social positions. Since the mechanisms of social screening were not well developed, schools became the most popular selection device. It was natural for many parents to try to get their children into a better school, leading to the fierce competition. Although the Korean government intended to mitigate competition by using a few populist policies, such as abolishing the high stakes entrance examinations to middle school and high school in 1969 and 1974 respectively, such policies were ineffective. Now the competition simply moved its arena to the entrance exam for higher education.

Education fever vs. humanitarian discourses. It is *Kyoyukyul* (education fever) that characterizes the most prominent feature of Korean education. *Kyoukyul* refers to "the strong socio-psychological motivation of Korean parents to educate their children" (J Lee, 2010, p. 362). The unique education institution and culture of Korea resulted in *Kyoyukyul* (J Lee, 2010; Oh, 2015). First, the open school system and the way to select students, irrespective of their socio-economic status, prompted parents to invest heavily into education. Unlike countries where the opportunity for education is distributed based on the social positions of people, the open school system induced almost all Koreans to enter the competition for more and better schooling. Second, Koreans' preoccupation with credentials and school background (*hakbul*) has strengthened and reinforced *Kyoyukyul*. In Korea, a credential society, the educational background of people affects their marriage, daily social relationships, as well as career prospect. In addition, strong educational nepotism was another cause of *Kyoyukyul* (J Lee, 2010). Despite fierce criticism, school-based nepotism has continued and many parents have been willing to devote their wealth and energy to prepare their children to enter prestigious universities.

Fierce competition between students has led to many side effects. The number of students suffering from academic stress has increased, and some students have even committed suicide. In addition, many parents are overburdened with private education fees. According to C Lee, et al. (2010), the total amount spent on shadow education is equivalent to nearly half of the government's education budget in Korea. It has been the number one policy goal of the government to reduce private education expenses. In the mid-1980s, when the quantitative expansion of education in Korea was achieved (Joo, Oh and Yun, 2010), it was argued that Korean education is deeply troubled and that the direction of education should be shifted. Some teachers established the teachers' union to lead educational change, with the aim to humanize education. The sayings, "Test scores and entrance exams are not all", "Students must be rescued from the test halls", and "Happiness does not equal test scores" were widespread at that time, and they have contributed to the basis of President Park, Keun-Hye's Happy Education, instituted in 2014, and Assessment-Free Year Policies, which was trialled in 2014 as a semester programme. The latter then expanded to a year progarmme in 2016 (SW Kim and LY Kim, 2021).

PISA performance of Korea: unbalanced success

Korean students have shown outstanding performance consistently in various comparative studies of achievement, including PISA (See Table 1) and the Trends in International Mathematics and Science Study (TIMMS).

Table 1 Korea's overall ranking of PISA performance among OECD countries.

	2000	2003	2006	2009	2012	2015	2018
Math	3rd	3rd	1st	4th	1st	1st -4th	1st -4th
Science	1st	4th	7th	6th	2nd -4th	5th -8th	3rd -5th
Reading	6th	2nd	1st	2nd	1st-2nd	3rd -8th	2nd -7th

According to the PISA results from 2000 to 2012, Korea has large proportions of students performing at the highest level, with relatively few students at the lower level (OECD, 2010a). In addition, the gap between high- and low-performing students in Korea is much narrower than that in other OECD countries (OECD, 2010a). Notably, many international tests indicate that student achievement in Korea is not strongly related to the socioeconomic status (SES), compared to students in other OECD countries (OECD, 2010b), showing that the schooling in Korea is relatively equitable in comparison to other countries.

In contrast to the competitive performance in the series of tests, which was acclaimed internationally, Korean students showed fairly low interest and confidence in learning. Educators, the MoE, and the media commonly noted their surprisingly low level of happiness (in 2015, the country ranked second last among 72 participating countries and economies), and far-below-average level of academic confidence and interest. Their ratings of the affective domains of learning, such as learning motivation, interest, and self-efficacy of self-directed learning, have also been noticeably low (K Kim, 2010). Thus, whenever the PISA results are released, Korean media always report the result with paradoxical emotions.

Korea's responses to PISA outcome

PISA as a political resource

PISA functioned as a political resource, which has (1) proven the excellent academic achievement of Korean students despite then critical discourse about the direction of educational policy, and (2) revealed the existing problems of the affective aspects of education, such as learning interest and motivation. Educational policy has long been a political matter than an educational one. Traditionally, the conservative parties have created and promoted policies that reflect elitism and competition, while the progressive ones have supported egalitarianism, equality and support for marginal groups of students (anonymised reference 2). Before the outcome from the 1st PISA test was released, the conservative had argued that because of the High School Equalization Policy, which has been implemented for over 30 years, Korean students' overall academic performance had deteriorated. The PISA results debunked this claim, strengthening the foundation for progressive educational policies to be maintained. It is also noteworthy that PISA affirmed the often discussed issue of students lacking learning motivation and confidence, urging the government to take more aggressive actions to resolve the issue.

In parallel, PISA changed the reference contexts for policy borrowing. Prior to PISA, Korea had been drawing reference from the education policies in Japan through the means of 'silent borrowing' (Waldow, 2009); soon after the Korean War, Korea also started to draw reference from that of the US (Park and Im, 2018). While the results in PISA 2009 aroused the interest of European educators to study the education policies in Shanghai (Sellar and Lingard, 2013), Korea turned its eyes to Finland, which was one of the top-ranking countries in PISA 2003 and 2006. The 'Finnish boom' led many educators and policymakers to conduct research in Finland, which was still fending off neoliberal educational reforms (Takayama, 2010). As the Korean media portrayed Finnish education under the title "There is no competition in Finnish education" and "There is no standardized test in Finland", it provided progressive educators in Korea with moral resources to promote the slogan "from ranking to growth and happiness" and "not education for the test but education for the whole person", gaining support from the vast majority (SW Kim and LY Kim, 2021). The success of Finnish education in PISA, thus, provide another argument for the progressive to maintain existing equality policies and institute new ones.

Provision of such moral resources plays an important role in setting the direction of educational policy for the following years. In the mid to late 2000s, Korean education was at the crossroads of either accelerating neoliberal policies or completely shifting the policies' direction. In Korea, NAEA, a standardized nation-wide test is being used in data-based policymaking, and identifying children with poor academic achievement to provide them with supplemental education programs. Although the MoE had no plan to keep track of individual student achievement, the Korea Institute of Curriculum and Evaluation (KICE, n.d.) tested and announced individual schools' achievements every year, and the media often cited the outcome and suggested the directions of policy, to which the MoE would respond. From 2009 to 2016, all schools were tested instead of a sample of them. It is worth noting that while the test results were not tied to teacher merit pay or school evaluation initially, from 2011, 20% of teacher merit pay, nonetheless, was later decided to be based on the test results. However, with the endorsement of the progressive line of policies by the public through a series of elections, and with the continuous resistance by the Korean Teachers' Union, the school performance criterion was abolished from teachers' merit pay as of 2016 (Anon, 2015). The turn of the events show how easily datafication under the accountability-driven policies can instigate the neoliberal turn of policy, though for the Korean case, it was stopped with the public support through election and through some select teachers' unionised, collective action.

Governance turn, but unsettled

Along with many other countries, Korea has subjected itself to the PISA-endowed OECD's "global panopticism" (Lingard, Martino, Rezai-Rashti and Sellar, 2015, p. 6), and been governed by the regime through faithful test-taking, as well as being compared, reported on, and issuing educational reforms in response to the changing rankings. However, its responses showed features which are distinctive to that of many western countries. To explore the differences, the central question of "who, for what, and how is education governed?" is discussed below. First, regarding "who governs education", many western countries carried out top-down accountability reforms, which serves the purpose of re-bureaucratizing the education system, granting the state or central government more power (Lingard, Martino, and Rezai-Rashti, 2013; Mintrop and Sunderman, 2013). In addition, evidence-based policymaking and the datafication of education have made private institutions, which mine, produce, process, and analyze various data related to tests, engage in the education policy process (Fenwick, Mangez and Ozga, 2014). In Korea, however, strengthening the authority of the government or bureaucratisation did not happen. It is perhaps because of the following structural and contextual features: the already strong presence of the government as noted above; emerging new actors such as the Educational Governors were decentralising educational policies; teachers and parents were checking the power of the government through strong unions and frequent elections; and upfront participation of private enterprises in education is a taboo. The School-based Management System have also added a high degree of autonomy to individual schools (A Kim, 2005).

Second, "for what" governs education, a large amount of research unveiled that various comparative international tests and international organizations (IOs) like the OECD have decisively contributed to education marketization, and the fierce competitions among countries havefueled the internalization of education through comparative tests (Henry et al., 2001; Pereyra, Kotthoff and Cowen, 2011). On the other hand, in Korea, although international competitiveness has been a critical driving force, the number of people, who think that it is time to educate individual students for their growth and happiness, not education for national development, has been consistently increasing. The above discourse was in fact supported by the PISA outcome, whichplaced Korean students as one of the unhappiest (So and Kang, 2014).

Third, when it comes to "how" education is governed, many countries internalised and replicated the PISA mechanism of comparisons, that is, the policy as numbers, datafication of education, and evidence-based policymaking (Anagnostopoulos, Rutledge, and Jacobson, 2013; Fenwick, Mangez, and Ozga, 2014; Grek, 2009; Lingard, 2011; Lingard, Martino, and Rezai-Rashti, 2013; Nóvoa and Yariv-Mashal, 2003; Ozga, 2009; Ozga, Dahler-Larsen, Segerholm, and Simola, 2011; Steiner-Khamsi, 2014). In Korea, however, the move to datafication, quantification, and competition started in the 2000s, but lost its impetus in the late 2010s due to the emergence of the direct election of Education Governors, with the result that most of the elected members have progressive educational perspectives. Thus, the NAEA initiative mentioned above became simplified (KICE, n.d.), and school evaluation is conducted at the discretion of the Education Governors (Chung, Kang and Seul, 2017; Han and Kim, 2008). Initiatives such as *Gyowonneungnyeokpyeongga* [Teacher competency assessment], which allowed quantification of teacher quality through a survey conducted with parties such as students and parents, is also to be simplified, and schools will be given more autonomy with its design and the usage (Ministry of Education, 2021). As such, the established monitoring and quality control systems have been gradually and categorically weakening in recent years. As an alternative to the neoliberal control mechanism, educational reformers in Korea have made various efforts to build a professional learning community within schools (M Lee and JKim, 2016; Shin and Son, 2018).

Finally, with the PISA comparison system, while many western countries have paid attention to the output of education andthe test score, Korea has instead put a lot of effort into improving the input and process of education, due to the washback effects of demotivation, low level of happiness and high suicide rates of students, as shown in the PISA results (So and Kang, 2014). This trend is expected to continue, despite the declination of the rankings. Although the performance of the last two tests were less impressive in comparison to the previous rounds, the government's responsibilities, as reflected in the official circular for media and the governmental research institute report, are to improve students' level of happiness and motivation, and make the direction of education to be focusing on 21st century skills such as creativity (Ministry of Education, 2019; Yi et al., 2020).

Concluding remarks

The contrastive performance in PISA, i.e., top performance in cognitive areas and alarming underperformance in affective areas, interacted with the structural and cultural institutional features to create its own path in educational governance. The structural devolution of decision-making and the power-shifting election system empowered educational progressives in Korea. Although not as influential as in some countries, PISA results, as a political resource that made the preservative arguments futile, contributed to the change of direction of Korean education that countered the neoliberal changes, which were gaining strength previously. The resultant new education policies not only halted test-based education and data-driven accountability, but also altered the education dynamics to be more humanized and democratized. In many western countries, the age of professional accountability was replaced by a regime of neoliberal corporate accountability in the governance of education (Ranson, 2003). On the contrary, in Korea, neoliberal accountability is being replaced by 'professional accountability' (Hardy, 2020), which cultivates individual educators' professional judgement and is supported at school and system levels, as So and Kang (2014) suggests. The new burgeoning governance of education in Korea, however, has not been settled yet and at the juncture to evolve into completely different scenarios. One is that the new governance mechanism in Korean education supplies an alternative governance model beyond a neoliberal one; another is Korean education falls into the swamp of the teacher republic (Dobbins, 2014); and there may still be other scenarios.

While the OECD's influence has been significant, in recent years, the policy recommendations of the OECD have begun to be critically reviewed. The fact that the newly revised national curriculum in 2015 actively accepted the concept of competency proposed by the OECD, is evidence of the impact of the OECD on Korean education. At the same time, rather than simply subjecting itself to the comparative panoptic regime created by PISA, the MoE is taking a cautious stance in interpreting and using the outcome in making policy decisions. As the state is realised in an intricate balance among multiple factors, the direction may change suddenly to a direction unanticipated. Also, how the fact that Korea has participated in the PISA for Development project (PISA-D) as a mentor country, and that in the future, IOs including the OECD are sure to demand more roles from Korea, will affect her own educational governance remain to be seen, as Korean education is expected to be incorporated more deeply into the Global Education Policy Field. However, as for the time being, the Korean case shows that PISA in itself is not the harbinger of neoliberal, datafication of educational governance.

References

Anagnostopoulos D, Rutledge S and Jacobson R (eds) (2013) *The Infrastructure of Accountability: Data Use and the Transformation of American Education*. Cambridge, MA: Harvard Education Press.

Andere E (2008) *The Lending Power of PISA: League Tables and Best Practice in International Education*. Hong Kong: Comparative Education Research Center.

Anon (2015) Hakgyoseonggwageub pyeji naenyeonbuteo jeog-yong …gyoyugbu gaeseonbang-anbalpyo "“haksaengjido jalhaneun gyowon udae" [Abolishment of the item of school evaluation from teachers' merit pay from next year…MoE will promote "student care" instead]. *The JoongAng, 3 Septmeber, 2015*. Available at: https://www.joongang.co.kr/article/18587068#home (accessed 23 September 2021).

Ball S (2006) *Education Policy and Social Class: The Selected Works of Stephen J Ball*. London: Routledge.

Bieber T (2014) Cooperation of conflict? Education politics in Switzerland after the PISA study and the Bologna process. In: Martens K, Knodel P and Windzio M (eds) *Internationalization of Education Policy: A New Constellation of Statehood in Education?* Hamspire: Palgrave Macmillan, pp.179-201.

Bieber T (2016) *Soft Governance, International Organizations and Education Policy Convergence: Comparing PISA and the Bologna and Copenhagen Processes*. London: Palgrave Macmillan.

Breakspear S (2012) The policy impact of PISA: an exploration of the normative effects of international benchmarking in school system performance. OECD Working Papers, No. 71. Paris: OECD Publishing. Available at: https://www.oecd-ilibrary.org/education/the-policy-impact-of-pisa_5k9fdfqffr28-en (accessed 23 September 2021).

Chung KY, Kang DS and Seul HS (2017) An Analysis of Relationship among Evaluation Domains, Evaluation Indicators and Evaluation Results: Focusing on a Case of Office of Education. *Holliseutigyunghapgyoyugyeongu* [Holy convergence education research book] 21(3): 81-99.

Dobbins M (2014) French education politics after PISA and Bologna – rupture or continuityé? In: Martens K, Knodel P and Windzio M (eds) *Internationalization of Education Policy: A New Constellation of Statehood in Education*? Hamspire: Palgrave Macmillan, pp.115-141.

Erti H (2006) Educational standards and the changing discourse on education: the reception and consequences of the PISA study in Germany. *Oxford Review of Education* 32(5): 619-634. DOI: 10.1080/03054980600976320.

Fenwick T, Mangez E, and Ozga J (eds) (2014) *World Yearbook of Education 2014: Governing Knowledge: Comparison, Knowledge-Based Technologies and Expertise in the Regulation of Education*. London: Routledge.

Grek S (2009) Governing by numbers: The PISA effect in Europe. *Journal of Education Policy* 24(1): 23-37.

Haas P (1992) Introduction: epistemic communities and international policy coordination. *International Organization* 46(1): 1-35.

Halverson R and Shapiro R (2013) Technologies for education and technologies for learners: how information technologies are (and should be) changing schools. In: Anagnostopoulos D, Rutledge S and Jacobson R (eds) *The Infrastructure of Accountability: Data Use and the Transformation of American Education.* Cambridge, MA: Harvard Education Press, pp.163-179.

Han YK, and Kim EY (2008) Hakgyopyeonggajedo byeonhwaui sinjedojuuijeok bunseok [The Analysis of School Evaluation System from the Perspective of New Institutionalism]. *Gyoyukjeongchihangnyeongu* [*The Journal of Politics of Education*] 15(1): 79-101.

Hardy I (2020) *School Reform in an Era of Standardization: Authentic Accountabilities*. London and New York: Routledge.

Henry M, Lingard B, Rizvi et al. (2001) *The OECD, Globalization and Education Policy*. Oxford: Pergamon.

Hutchings M (2015) *The impact of accountability measures on children and young people, emerging findings*. Available at: http://www.testconfident.com/cms/wp-content/uploads/2016/04/nut-accountability-findings-30-march-_final-mh.pdf?x45784 (accessed 23 September 2021).

Joo HJ, Oh BH, and Yun CI (2010) An analysis of the relationship between the quantity and quality of education: Focusing on Korea and OECD Countries. *Policy Futures in Education* 8(6): 607-618.

Kariya T (2001) *Kaisōka Nippon to kyōiku kiki - fubyōdō sai seisan kara iyoku kakusa shakai e -*. [Layered Japan and the Crisis of Educuation]. Tokyo: Yushindo.

KICE (n.d.) *Gukgasujun gyoyukseongchwido pyeongga gibon gyehoek* [Basic Plan for National Level Education Performance Assessment]. Available at: https://naea.kice.re.kr/prtl/eval/history (accessed 23 September 2021).

Kim A (2005) Parent-school partnership formation through the School Council in Korea. *Educational Research for Policy and Practice* 3: 127–139. DOI 10.1007/s10671-004-8239-5

Kim K (2010) An international comparison of Korean student achievement on the PISA and TIMMS. In: Lee C, Kim S and Adams D (eds) *Sixty Years of Korean Education.* Seoul: SNUPRESS, pp.259-284.

Kim SW, and Kim LY (2021) Happiness education and the free year program in South Korea. *Comparative Education* 57(2): 247-266. DOI:10.1080/03050068.2020.1812233.

Kim T (2020) Revisiting the governance narrative: The dynamics of developing national educational assessment policy in South Korea. *Policy Futures in Education* 18(5): 574-596.

Knodel P, Windzio M, and Martens K (2014) Introduction: Outcomes and actors' reactions on internationalization in education policy – A theoretical approach. In: Martens K, Knodel P and Windzio M (eds) *Internationalization of Education Policy: A New Constellation of Statehood in Education*? Hamspire: Palgrave Macmillan, pp.1-34.

Lee C, Kang I, Kim D, et al. (2010) *Sagyoyuk: Hyeonsanggwa daeeung*. [Shadow Education: Realities and Countermeasures]. Paju: Gyoyukgwahaksa [History of Education and Science].

Lee C, Kim S, Kim W, and Kim Y (2010) A Korean model of education development. In: Lee C, Kim S and Adams D (eds) *Sixty Years of Korean Education.* Seoul: SNUPRESS, pp.53-106.

Lee J (2010) Kyoyukyul as a force for educational change in Korea. In: Lee C, Kim S and Adams D (eds) *Sixty Years of Korean Education.* Seoul: SNUPRESS, pp.362-416.

Lee M and Kim J (2016) The emerging landscape of school-based professional learning communities in South Korean schools. *Asia Pacific Journal of Education* 36(2): 266-284. DOI: 10.1080/02188791.2016.1148854.

Lim L (2016) Globalization, the strong state and education policy: The politics of policy in Asia. *Journal of Education Policy* 31(6): 711–726.

Lingard B (2011) Policy as numbers: ac/counting for educational research. *The Australian Education Researcher* 38: 355-382.

Lingard B, Martino W and Rezai-Rashti G (2013) Testing regimes, accountabilities and education policy: commensurate global and national developments. *Journal of Education Policy* 28(5): 539-556.

Lingard B, Martino W, Rezai-Rashti G, and Stellar S (2015) *Globalizing Educational Accountabilities*. New York: Routledge.

Meyer HD (2014) Imagining PISA's Policy Futures: a postscript and some extensions to the Open Letter to Andreas Schleicher. *Policy Futures in Education* 12(7): 883-892.

Meyer H-D and Benavot A (2013) PISA and the globalization of education governance: some puzzles and problems. In: Meyer H-D and Benavot A (eds) *PISA, Power, and Policy.* Oxford: Symposium Books, pp.7-26.

Milward HB and Provan KG (2000) How networks are governed. In: Heinrich CJ and Lynn LE (eds) *Governance and Performance: New Perspectives.* Washington, D.C.: Georgetown University Press, pp.238-262.

Ministry of Education (2019) OECD gukje hageopseongchwido bigyo yeongu (PISA 2018) [OECD International Comparative Study of Academic Outcomes (PISA 2018).] [Press release]. Available at: https://www.moe.go.kr/boardCnts/view.do?boardID=294&boardSeq=79191&lev=0&searchType=null&statusYN=W&page=1&s=moe&m=020402&opType=N (accessed 23 September 2021).

Ministry of Education (2021) 2021 *Hangnyeondo gyowonneungnyeokgaebalpyeongga silsi mit jedo gaeseon* [2021 Implementation of Teacher Capacity Development Appraisal and its Revision]. Available at: https://www.moe.go.kr/boardCnts/view.do?boardID=294andboardSeq=84207andlev=0andsearchType=nullandstatusYN=Wandpage=1ands=moeandm=020402andopType=N (accessed 23 September 2021).

Mintrop H and Sunderman GL (2013) The paradoxes of data-driven reform. In: Anagnostopoulos D, Rutledge S and Jacobson R (eds) *The Infrastructure of Accountability: Data Use and the Transformation of American Education.* Cambridge, MA: Harvard Education Press, pp.23-39.

Nóvoa A and Yariv-Mashal T (2003) Comparative research in education: a mode of governance or a historical journey. *Comparative Education* 39(4): 423-438.

Organization for Economic Cooperation and Development (OECD) (2010a) *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science* (*Volume 1*). Paris: OECD Publishing. Available at: https://www.oecd.org/pisa/pisaproducts/48852548.pdf (accessed 23 September 2021).

Organization for Economic Cooperation and Development (OECD) (2010b) *PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume 2)*. Paris: OECD Publishing. Available at: https://www.oecd.org/pisa/pisaproducts/48852584.pdf (accessed 23 September 2021).

Oh S (2015) Hanguginui gyoyugyeolgwa gukga [The Kyoyukyul of Korean and State]. In: Oh S, Kang I, Park H, et al. (eds) *Daehanminguk gyoyuk 70 nyeon.* [*70 Years of Education in Korea*]. Seoul: Daehanminguk yeoksabangmulgwan [Museum of History].

Ozga J (2009) Governing education through data in England: from regulation to self-regulation. *Journal of Education Policy* 24(2): 149-162.

Ozga J, Dahler-Larsen P, Segerholm C, et al. (eds) (2011) *Fabricating Quality in Education: Data and Governance in Europe*. London: Routledge.

Park HS (2015) Gukgasujun hageopseongchwidopyeongga, wae boneun geongayo [National level academic performance assessment, why are you looking at it?] *The JoongAng, 10 July, 2015*. Available at: https://news.joins.com/article/18191661 (accessed 23 September 2021).

Park KJ and Im H (2018). *For English Education in Korea*. Seoul: Bini Books.

Pereyra MA, Kotthoff H-G and Cowen R (eds) (2011) *PISA Under Examination: Changing Knowledge, Changing Tests, and Changing Schools*. Rotterdam: Sense Publishers.

Ranson S (2003) Public accountability in the age of neo-liberal governance. *Journal of Education Policy* 18(5): 459-480.

Rhodes R (2000) Governance and public administration. In: Pierre J (ed.) *Debating Governance: Authority, Steering, and Democracy*. Oxford: Oxford University Press, pp.54-90.

Rizvi F and Lingard B (2010) *Globalizing Education Policy*. New York: Routledge.

Roberts-Holmes G and Bradbury A (2016) Governance, accountability and the datafication of early education in England. *British Educational Research Journal* 42(4): 600-631. DOI: 10.1002/berj.3221.

Rose N (1999) *Powers of Freedom: Reframing Political Thought*. Cambridge: Cambridge University Press.

Rutledge S, Anagnostopoulos D and Jacobson R (2013) The infrastructure of accountability: tensions, implications, and concluding thoughts. In: Anagnostopoulos D, Rutledge S and Jacobson R (eds) *The Infrastructure of Accountability: Data Use and the Transformation of American Education.* Cambridge, MA: Harvard Education Press, pp.213-228.

Sellar S and Lingard B (2013) Looking East: Shanghai, PISA 2009 and the reconstitution of reference societies in the global education policy field. *Comparative Education* 49(4): 464-485.

Sellar S and Lingard B (2014) The OECD and the expansion of PISA: new global modes of governance in education. *British Educational Research Journal* 40(6): 917-936. DOI: 10.1002/berj.3120.

Shin JW and Son WJ (2018) School reform practices through building learning community in Korea: Toward restructuring the image of learning. In: Tsukui A and Murase M (eds) *Lesson Study and Schools as Learning Communities: Asian School Reform in Theory and Practice.* London: Routledge, pp.45-58.

So K and Kang J (2014) Curriculum Reform in Korea: Issues and Challenges for Twenty-first Century Learning. *Asia-Pacific Edu Res* 23(4): 795-803. DOI: 10.1007/s40299-013-0161-2.

Song H (2006) *Hangugui pyeongdeungjuui: Geu maeumui seupgwan* [Egalitarianism in Korea: The Habits of the Mind]. Seoul: Samsung Economic Research Institute.

Spring J (2011) *The Politics of American Education*. New York: Routledge.

Steiner-Khamsi G (ed.) (2004) *The Global Politics of Educational Borrowing and Lending*. NY: Teachers College Press.

Steiner-Khamsi G (2014) Understanding policy borrowing and lending: building comparative policy studies. In: Steiner-Khamsi G and Waldow F (eds) *World Yearbook of Education 2012: Policy Borrowing and Lending in Education.* London: Routledge, pp.3-17.

Takayama K (2010) Politics of externalization in reflexive times: reinventing Japanese reform discourses through "Finnish Pisa Success". *Comparative Education Review* 54(1): 51-75. DOI: 10.1086/644838.

Takayama K (2012) Bringing a political 'bite' to educational transfer studies: cultural politics of PISA and the OECD in Japanese education reform. In: Steiner-Khamsi G and Waldow F (eds) *World Yearbook of Education 2012: Policy Borrowing and Lending in Education.* London: Routledge, pp.148-166.

Torrance H (2006) Globalizing empiricism: what, if anything, can be learned from international comparisons of educational achievement? In: Lauder H, Brown P, Dillabough J-A and Halsey AH (eds) *Education, Globalization and Social Change*. Oxford: Oxford University Press, pp.247-260.

Waldow F (2009) Undeclared imports: silent borrowing in educational policy-making and research in Sweden. *Comparative Education* 45(4): 477-494.

Wiseman A (2010) The uses of evidence for educational policymaking: Global contexts and international trend. *Review of Research in Education* 34: 1-24.

Woodward R (2009) *The Organization for Economic Cooperation and Development(OECD)*. Abingdon: Routledge.

Yi SY, Cho SM, Gu NW, et al. (2020) PISA 2018 Gyeolgwae natanan urinara haksaengdeurui seongchwi teukseong [Achievement characteristics of students in Korea shown in PISA 2018 Results] [KICE Position paper]. Available at: https://www.kice.re.kr/boardCnts/fileDown.do?fileSeq=06e60fa2978e5daf4a89220b953ab179 (accessed 23 September 2021).

Notes

1.While a couple of scholars attributes this equitable, competitive performance to the National Assessment of Educational Achievement (NAEA), the yearly conducted, nation-wide standardised achievement test, arguing that it prepares Korean students to international test such as PISA and TIMSS (Kim, 2020), the general disinterest of students in the test (Park, 2015) and the fact that the test has been conducted only with limited number of sample schools since its launch in 1998 (KICE, n.d), disproves this claim.