

ŠVIETIMO POLITIKA IR PRAKTIKA

The PISA Phenomenon: The Many Faces of International Student Assessment

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Abstract. *The aim of this article is to explore the phenomenon of PISA – the Programme for International Student Assessment. The PISA study is a unique initiative in the contemporary educational world. Initiated in 2000 by OECD, currently it includes 65 countries and territories from all over the world. We decided to identify the multiple aspects, or, speaking metaphorically, the many faces of PISA, which carry different messages and are subject to different value judgements by various interest groups. In our publication, we discuss ten different aspects of PISA. PISA can be perceived as a symbol of globalisation, as a manifestation of neoliberal ideology in education, as a methodological controversy, as a research database, a benchmark, a league table, as promotion, as punishment, as business, and, finally, as policymaking. We conclude that the key actors of an educational domain should use various aspects of PISA survey in a more skillfull and selective way for achieving their goals and securing their interests.*

Keywords: *Programme for International Student Assessment (PISA), globalisation, neoliberal ideology, benchmarking, league table, policymaking.*

Introduction

The Programme for International Student Assessment (PISA) has become an outstanding phenomenon of the contemporary educational world. Initiated in 2000 by OECD, currently it includes 65 countries and territories from all over the world. PISA is the only international educational survey to measure so far as the knowledge and skills of 15-year-olds, an age at which students in most countries are nearing the

end of their compulsory time in school. Subject to severe criticism as well as the source of inspiration for educationalists, policymakers, journalists and other interest groups, PISA plays a significant role in the contemporary educational landscape. No matter whether we are supporters or critics of PISA, it is difficult to deny the scope of the influence of this international project. However, when discussing PISA, opponents usually consider various aspects of this phenomena, therefore the arguments

for and against PISA are directed towards different dimensions of the survey. The inability to address the same dimension of PISA by discussants evokes numerous misunderstandings, which may result in misleading conclusions. The object of our study – the phenomenon of PISA. Our aim was to identify the multiple dimensions, or, speaking metaphorically, the many faces of PISA, which carry different messages and are subject to different value judgements by various interest groups.

PISA as a symbol of globalisation

The global education reform movement is gaining momentum and, in the understanding of critically-minded educational researchers (Meyer and Benavot, 2013), PISA has become a global “super-ministry of education”, which reflects the global trend of seeking for universal standards and common ways of the development of education systems. Common educational space enables making global measurements of national education systems and PISA provides an opportunity for participating countries to become comparable on a global scale. “PISA is creating global standards for the knowledge required to function in what OECD defines as the everyday life of a global economy. By shifting the emphasis from national curricula to global needs, PISA is defining educational standards for a global economy” (Spring, 2009, 62). In a global perspective, PISA or other similar international comparative surveys are inevitable. If, for example, the OECD, in response to critique (or for any reason), refuses to continue the PISA project, the initiative will be certainly undertaken by other international agencies, e. g., the World

Bank or IEA (International Association for the Evaluation of Educational Achievement). We may find lots of examples of global rankings in higher education as well as in other spheres of social life, e. g., world university rankings, rankings of economic freedom or human development indices. Secondary education is by no means an exception. “Around the world, countries are using the results of international tests as a kind of Academic Olympiad, serving as a referendum in their school system’s performance (Baker and LeTendre, 2005, 150). It just happened so that PISA and not some other project became perhaps the most recognisable symbol of globalisation in education. To criticise PISA as a symbol of globalisation means to confront globalisation as a phenomenon which exists independently from our will and it makes no difference for the global development of the post-modern world whether we like that or not. Such critique is just another reflection of the voluntaristic attitude in theory and practice of education.

PISA as a manifestation of neoliberal ideology in education

Neoliberal ideology, which directs education towards greater efficiency and accountability, competition and market orientation, is reflected in many educational initiatives of the last decades, and PISA is a typical example of trying to make national educational systems compete and provide evidence of their effective functioning. Proponents of neoliberal ideology often refer to PISA when they urge to assess the effectiveness of educational services provision. Wayne Ross and Gibson (2006) note that neoliberal educational reforms strongly focus on

the creation of standards and accountability. “The dominant approach to educational accountability is an “outcomes-based bureaucratic” one (i. e., the most often mandated testing)” (Wayne Ross and Gibson, 2006, 4). According to the authors, neoliberalism is the prevailing political economical paradigm in the world today and is embraced by parties of the political spectrum from right to left. Neoliberalism seeks to reform education in order to serve the economical purposes of the contemporary world in the best possible way, and the PISA survey of students’ competences in literacy, science and maths is a typical example of an outcome-based model of accountability. PISA results demonstrate to what extent do the nation states manage to prepare the students for the needs of the global labour market. According to Spring (2009), the assessments used by PISA ignore specific national curricula and focus on what test designers consider as the basic skills needed to function in a global knowledge economy. In this respect, the opponents of neoliberalism gain an opportunity to criticise PISA from the ideological standpoint. If we look at the international survey from the leftist point of view, then ideologically, PISA is an instrument which serves the purposes of global capitalism. PISA ignores cultural differences as well as national curricula and is oriented towards the development of internationally recognised competences demanded by the global labour market.

PISA as a methodological controversy

On the one hand, PISA uses sophisticated methods of sampling and statistical analy-

sis, and on the other, it often makes one wonder how valid are conclusions based on a survey of a two-hour paper-and-pencil testing of students. In addition, students fill out a 20-minute background questionnaire about themselves, their family and home, and school principals complete a 20-minute questionnaire concerning key characteristics of their schools. Evidently, it’s a relatively subjective opinion survey, relying on which researchers make a set of rather far-reaching conclusions. This is one of the key reasons for the criticism expressed by different authors. Perhaps the best known document of this kind is an open letter to Andreas Schleicher, the OECD director of the PISA programme. The authors of the letter note that “by emphasizing a narrow range of measurable aspects of education, PISA takes attention away from the less measurable or immeasurable educational objectives like physical, moral, civic, and artistic development, thereby dangerously narrowing our collective imagination regarding what education is and ought to be about” (Meyer and Zahedi, 2014). They also complain that PISA has significantly contributed to an escalation of standardised testing and dramatically increased reliance on quantitative measurements. Of course, all kinds of criticism in relation to the method of standardised testing in general can be also applicable to the PISA survey. However, many measurements of this kind are taking place in an educational domain and the findings are widely used in educational research. So it’s up to the reader to decide whether to trust the methodological approach used in the PISA survey or not.

PISA as a research data base

PISA provides a vast research database, where researchers can follow the progress of participating nations in literacy, science and maths achieved during the three year period which lasts from one survey to another, compare different countries, regions or educational models. No matter whether we accept the ideological or methodological rationale of PISA or not, the existing data base can provide a lot of useful information not only about students' achievements in literacy, science and maths, but also about the social and cultural context of schooling. We must acknowledge that it's by all means a valuable resource for researchers in the field of comparative education. It is especially important for countries like Lithuania, which do not have a long history of comparative research in education. In this respect, PISA remains one of the few available resources for various kinds of comparisons. Unfortunately, at least in Lithuania, the PISA database is rarely used by educational researchers. We can only guess what are the possible reasons for such ignorance, but so far there have been very few publications by national researchers that were based on statistical analysis of PISA database.

PISA as benchmarking.

PISA is increasingly being adopted as a global measure to benchmark students' achievement at the end of compulsory education (Sahlberg, 2011). In particular, PISA has been acknowledged as an official benchmarking tool by the European Commission and member states are urged to follow the target of 15 year-old students

achieving a certain level of basic skills in reading, maths and science by 2020. EU member states are encouraged to reduce the percentage of low achievers (level 1 or lower in PISA study) in reading, maths and science down to 15 per cent in 2020 (European Commission, 2009). Lithuania still does not meet the target by having respectively 19,6 per cent in reading, 22,2 in maths and 17,7 per cent in science, according to the latest PISA study (Nacionalinis egzaminų centras, 2013). There are also significant differences in the country between boys and girls and between students in urban and rural areas. This means that Lithuanian education will experience certain political pressure from the European Commission in order to reach the established benchmark. PISA results are also used by the OECD for the assessment of the progress of its member states. Lithuanian educational authorities will have to take it into account and exercise more efforts to improve its level of achievement of basic skills as one of the goals of the country is to become an OECD member by 2018.

PISA as a league table

Perhaps the most familiar face of PISA for the wide public is that of a league table. Like a benchmarking, it is also about comparing, but while in benchmarking results of the countries are compared against set targets, in this case the countries are compared with one another (OECD, 2013). Without getting much into details, politicians, journalists and authors of popular publications provide information and commentaries about the place the country stands on a list of participating countries

in reading, maths and science. We can often observe public discussions whether the country is leading or lagging behind when compared with other nations of the same region or similar level of socio-economic development. Usually, the country ranking is considered satisfactory if the country is among the top 10 scorers. Lower positions are often considered as failure. Perhaps the more objective point of view would be to find out whether the country is above or below average. However, in this case, one has to decide on which average seems to be relevant: the PISA average, the EU average, the average of the OECD countries, etc. Another aspect, which usually is not taken into account by the wide public, is the fact that the differences between countries may be statistically insignificant. For example, in the PISA 2012 reading survey, Lithuania is in the 37th place; however, the score of the country does not differ significantly from the countries which stand in places from 31 to 40 in the ranking. The neighbouring Poland is 9th in the ranking of the PISA 2012 science survey, but its score differ significantly from the countries which stand in places from 8 to 17 in the ranking. Should they celebrate or not? The 9th place in the ranking is fine, but strictly speaking, it's statistically equal to the 17th place. Using results of the PISA survey as a league table is highly disputable and judgements based on the countries' rankings are usually very subjective.

PISA as a promotion

Education is not among the most popular topics for mass media; therefore, one of the occasions when education is in the

focus of everybody's attention is the day when PISA results are announced and, perhaps, the focus is maintained over several following months of the announcement. PISA results help to maintain public interest in education and keep education on the agenda of national policy at least for some time. Usually, interpretation of the results of a PISA survey depend on the subjective understanding of those who inform the society about the findings. It would be too optimistic to think that many people, even among the educationalists, will read the technical report; therefore, the way the data are perceived by the Ministry of Education and Science and the way the journalists present the results to the wide public are of crucial importance. For example, the results of the PISA 2012 survey in Lithuania were presented during a press conference at the Ministry of Education and Science in December 2013. Three main Lithuanian press web pages reported about the results they were acquainted with during the press conference in their publications. A heading in *Lrytas.lt* declared: "Literacy in maths of Lithuanian 15-years olds is the same as in the USA". Apparently, it sounds like a rather positive message. However, a heading in *15min.lt* inspires much less optimism: "Literacy in maths of Lithuanian 15-years olds lags behind Poland, Latvia and Estonia". In spite of the abovementioned, probably the most dramatic headline could be found in *delfi.lt*: "Sinking to the bottom: the study revealed how schools prepare our 15-years olds". Three main Lithuanian internet sites sent three different messages to their readers and created different images about the effectiveness of national educational system.

However, in all cases, the positive aspect is that education, at least for a short period of time, attracted the attention of journalists as well as the readers. Judging by the references in foreign publications, the presentation of PISA results in other participating countries is also an important event which attracts the attention of a wide audience and evokes discussions about the quality of education in respective countries.

PISA as punishment

PISA results are often used as an argument in order to prove the ineffectiveness of those in charge of national education. Critique is not always adequate as PISA results are announced several years after the survey was conducted and unsatisfactory results could be the outcome of wrong policy decisions made by previous political leaders. However, opponents usually use national failure in PISA (and usually it's considered a failure, even if the country shows average results) as a strong argument against those who are currently responsible for the state of education. Those in charge of national education usually await PISA results without much optimism and experience a certain level of anxiety. With a few exceptions (e. g., Finland), the outcomes of PISA survey often provide a good reason to blame and criticize them, and we can trace such waves of criticism in the US, Germany, Denmark and other countries. In particular, Hanushek (2014), in his review of the PISA 2012 results, concludes that the US are not doing well, falling well behind most of the countries that Americans would like to compete with. In a similar discussion on the German perfor-

mance, Breakspear (2012) observes that lower-than-expected results triggered a sustained public debate in Germany about education policy and reform that came to be known as the "PISA shock". A similar reaction occurred in Denmark. Egelund (2008), for example, notes that the results of PISA raised serious questions about how the well-funded Danish education system yielded only middle-range outcomes. In Lithuania, however, lower than average performance in PISA survey do not seem to cause a serious threat for those who manage the Lithuanian system of education. The critique is moderate and mainly has a short-term nature. Other problems in the domain of education, e. g., low salaries of teachers or the process of consolidating school network, seem to be much more used as an object of criticism.

PISA as a business

PISA is financed through direct contributions from the participants' government authorities, typically the ministries of education. The organisation and implementation of a PISA survey requires a wide array of different human and material resources and attracts a large number of temporary or permanent employees. The OECD also acknowledges that it contracts specific technical services out to individual academics, institutions or companies. For each PISA survey, international contractors (usually made up of testing and assessment agencies) are involved for the design and implementation of the survey. In this sense, one may consider PISA an important business with a relatively large financial income. PISA accounts for approximately 30 per

cent of the Education Directorate's budget inside the OECD (Grek, 2009). However, OECD claims that no individual academic, institution or company gains any commercial advantage from this, since all PISA results are placed in public domain. There are also many consultancy firms which claim to know how to improve PISA results and offer their services for their potential customers. Of course, the OECD can bear no responsibility for such kinds of services. Having in mind the prevailing tendency of marketisation in education, it would be unusual to not come across any signs of such commercial structure activities. Doing business on behalf of international assessment is one of the reasons for criticising the PISA survey.

PISA as policymaking

PISA data are often used as a basis for further development of national educational policies. Policy papers refer to PISA when defining possible trajectories of education reforms. However, PISA results do not always have a straightforward effect on national education policies. They are interpreted and reinterpreted by local politicians in order to fit the already suggested and/or implemented policy solutions. Takayama (2015) notes that the PISA effect is largely shaped by those who appropriate the data: the effect of PISA materialises only when its data are enacted by national and subnational policy players. Besides that, there is also a strong external influence on policy processes which national policymakers can by no means ignore. International bodies urge national states to use PISA data for policymaking and to undertake necessary measures in order to

improve education. For example, the European Commission in its Education and Training Monitor for Lithuania refers to PISA results and states that "so far there have been no concrete government initiatives to address either the relatively poor performance in basic skills or gender differences in educational performance" (European Commission, 2013). Similarly, the Education Policy Officer for Lithuania, Poland and Denmark Joanna Basztura urges: "In 2012, PISA results showed that Lithuania's share of low achievers in reading and maths was above the EU-average and particularly high for boys, and for children in rural areas" (Basztura, 2016, 5). The Lithuanian education strategy for the years 2013-2022 also acknowledges that the achievements of Lithuanian 15-years olds are below the EU and OECD averages. Among the benchmarks for the year 2017, the percentage of 15-year olds who achieve at least the 3rd level in reading should be no less than 47 per cent, maths – 49 per cent, and science – 55 per cent. For the year 2022, the targets are 49 per cent in reading, 51 per cent in maths and 56 per cent in science. The percentage of 15-year olds who do not achieve the 2nd level should be reduced by 2007 to 22 percent in reading, 24 percent in maths and 15 per cent in science. The percentage achieved by the year 2022 should be 19 per cent in reading, 20 per cent in maths and 14 per cent in science (Lietuvos Respublikos Seimas, 2013). However, the strategy does not indicate what policy decisions should be done and what steps should be undertaken in order to achieve the indicated benchmarks. Apparently, there is no roadmap for improving the achievements of Lithuanian students. We can make a

general conclusion that, unlike in many other countries, PISA does not make any significant impact on the process of policy-making in Lithuania. Certainly, it is up to the reader to decide whether it is a positive or a negative feature of national educational policy. Some will consider it a shortcoming of those in charge of education, and some others will support it as a reflection of independent policymaking in deciding the future of Lithuanian education.

Conclusions

The PISA phenomenon requires a much more detailed analysis. We tend to agree with Sotiria Grek, who claims that “PISA appears to occupy an important symbolic space and to establish significance *without* being backed up by extensive analyses or in-depth discussions of its content” (Grek, 2012, 251). Similarly, Jakupec and Meier (2015) warn that it is risky to take the causal statements of PISA findings at face value.

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It is important to keep in mind that PISA results should not be used superficially. Different actors in educational domain should apply the various aspects of a PISA survey in a more skillful and selective way for achieving their goals and securing their interests. Educational researchers should be more involved in using PISA as a research database and use all of the opportunities it can provide. Those involved in educational policy should analyse the impact of PISA on educational policy decisions and, if they find it acceptable, provide guidelines for future policy development. Representatives of mass media should use PISA results as a means of raising public awareness of the importance of education for national development. Of course, everyone is free to criticise PISA for its methodological shortcomings or inadequate use of its results as a league table. At the same time it would be unfair not to acknowledge the importance of the role PISA plays in the contemporary global educational landscape.

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PISA FENOMENAS: DAUGIAVEIDĖ TARPTAUTINIO MOKSLEIVIŲ VERTINIMO PROGRAMA

Rimantas Želvys

S a n t r a u k a

Tarptautinio moksleivių vertinimo programa, kurios angliškojo pavadinimo santrumpa PISA yra gerai žinoma Lietuvos edukologams, jau seniai tapo išskirtiniu šiuolaikinio švietimo fenomenu. Programą 2000 metais inicijavo Ekonominio bendradarbiavimo ir plėtros organizacija (EBPO), o dabar joje dalyvauja 65 pasaulio šalys ir teritorijos. PISA yra vienintelis tarptautinis lyginamasis tyrimas, kurio metu vertinami 15-mečių moksleivių pasiekimai skaitymo, matematinio ir gamtamokslinio raštingumo srityse. Šis tyrimas yra tapęs tiek edukologų, politikų ir žurnalistų įkvėpimo šaltiniu, tiek ir dalies mokslininkų aršios kritikos objektu. Nesvarbu, esame šio tyrimo šalininkai ar priešininkai, negalėtume nuneigti didžiulio šio tarptautinio tyrimo poveikio švietimui. Tačiau debatų apie PISA metu išsakdami savo argumentus diskutantai dažnai turi omenyje skirtingus PISA aspektus, todėl, vertinant šį tyrimą, nėra lengva rasti bendro sutarimo. Šis tyrimas yra daugiaveidis: tai reiškia, kad vienu metu PISA atlieka daug skirtingų vaidmenų. Šiame straipsnyje mūsų nagrinėjimo objektas buvo PISA fenomeno raiška. Tikslas: išsiaiškinti skirtingus šio tarptautinio tyrimo atliekamus

vaidmenis edukologijos teorijos ir praktikos lauke. Mes identifikavome dešimt skirtingų tarptautinio 15-mečių tyrimo vaidmenų: PISA kaip globalizacijos simbolis, PISA kaip neoliberalizmo apraiška švietime, PISA kaip metodologinė kontroversija, PISA kaip tyrimo duomenų bazė, PISA kaip švietimo pasiekimų matavimo priemonė, PISA kaip reitingavimo sistema, PISA kaip reklamos būdas, PISA kaip baudžiamoji priemonė, PISA kaip verslas ir PISA kaip švietimo politikos formavimo instrumentas. Pagrindinė išvada, prie kurios priėjome, skamba taip: skirtingų interesų grupių atstovai, siekdami savo tikslų arba norėdami apginti savo interesus, turėtų dėmesingiau ir selektyviau pasitelkti į pagalbą skirtingus PISA tyrimo aspektus. Vieni tyrimo aspektai jiems gali būti labiau naudingi ar patrauklūs, kiti – mažiau, tačiau vargu ar įmanoma ignoruoti patį PISA tyrimo fenomeną, neabejotinai turintį didelį poveikį šiuolaikinio švietimo raidai.

Pagrindiniai žodžiai: Tarptautinio moksleivių vertinimo programa (PISA), globalizacija, neoliberalizmo ideologija, švietimo pasiekimų matavimas, reitingavimas, politikos formavimas.

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