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HUMAN AFFAIRS *22*, 31–42, 2012
DOI: 10.2478/s13374-012-0004-5

WHEN PISA DOES NOT MATTER? THE CASE OF THE CZECH REPUBLIC AND GERMANY

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Abstract: The present paper gives an overview of the reflections of and reactions to publishing the results of the first wave of the OECD study *Programme for International Student Assessment* (PISA) in the Czech Republic and in Germany. The choice of these two countries enables us to document how the same results could be perceived very differently in diverse country contexts and could lead to a different reaction from policy-makers. In spite of large reforms and numerous policy measures being adopted in Germany in reaction to the PISA results, compared with no response from policy-makers in the Czech Republic, it is argued, that in both countries policy-makers failed to tackle the major problem of their educational systems—its selective nature. In the final section we discuss various mis(uses) of PISA and its supranational and global character influencing local policies.

Keywords: PISA, OECD, Germany, Czech Republic, policy-making, neo-liberalism, tracking

Germany and the Czech Republic: similar results in the PISA study

The Czech Republic and Germany participated in all free rounds of the OECD PISA study (PISA 2000, 2003, 2006). The PISA 2000 study placed Germany below the OECD average in all three areas of competence measured: reading, mathematics and scientific literacy. In subsequent rounds of the PISA study (2003, 2006) Germany has improved its ranking and got into a group of countries not significantly different from the OECD average, and in the case of scientific literacy, the results of German students in 2006 were even above the OECD average. The results of the Czech Republic in PISA 2000 were placed below the OECD average only in reading literacy. The Czech Republic reached average results in Math and above average results in Science. The good results of the Czech students in Math and Science were confirmed by the PISA study in 2003 and 2006 and they correspond with very good results of the country in the TIMSS study in these domains. The Czech results in reading literacy however tend to be constantly rather low, when compared to other OECD countries. In spite of the differences in ranking and the placing of Germany or the Czech Republic in to different groups of countries (below, on, or above OECD average) for the present study it is important to stress, that the differences between the average scores of students in both countries are not statistically significant (see Table 1—the results were

statistically different only in the case of science in PISA 2000 and 2003 and also in reading literacy in PISA 2006). We could thus say that the results of Czech and German students in reading literacy and math in PISA 2000 were very similar. The overall results of the Czech Republic and Germany were also very similar to the results of the other countries in the central-European region (namely Hungary, Slovakia, and Austria).

Table 1. Results in PISA 2000-2009 surveys for the Czech Republic and Germany

	PISA 2000			PISA 2003			PISA 2006			PISA 2009		
	Read	Math	Sci	Read	Math	Sci	Read	Math	Sci	Read	Math	Sci
Czech Republic	492 (2.4)↓	498 (2.8)○	511 (2.5)↑	489 (3.5)○	516 (3.5)↑	523 (3.4)↑	483 (4.2)↓	510 (3.6)↑	513 (3.5)↑	478 (2.9)↓	493 (2.8)○	500 (3,0)○
Germany	484 (2.5)↓	490 (2.5)↓	487 (2.4)↓	491 (3.4)○	503 (2.4)○	502 (3.6)○	495 (4.4)○	504 (3.9)○	516 (3.8)↑	497 (2.7)○	513 (2.9)↑	520 (2.8)↑

Legenda for each cell:
1. Mean
2. S.E. (in brackets)
3. Relation to OECD average (↓ below OECD average, ○ not different from OECD average, ↑ above OECD average)
4. Means of the Czech Republic and Germany are statistically significantly different (grey background).

We argue that the results of the Czech Republic and Germany in PISA 2000 (and similarly in following waves of the study in 2003 and 2006) show many similar patterns. It is not only that the country averages are close to each other and differences are mostly statistically insignificant. In PISA 2000 and 2003 the only difference between Czech Republic and Germany was found in science results. There was no statistically significant difference between the average score of students in both countries in reading literacy and math. In the PISA 2006 study the significant difference was found again in just one domain, in this case in reading. It is only in PISA 2009 where the results of Czech and German students are significantly different in all three domains. This is due to a decline in the results of Czech students since PISA 2000 in contrast to increases in scores for German students. However, what is well known as the German "PISA shock" stimulated the implementation of "new policies" and is reflected in the results of the first wave, or potentially in the second wave of PISA testing. In previous years, results of both countries were very similar.

Similarity in other patterns of the results of Czech and German students has to be stressed as well. Of particular importance to PISA is the (in)equality of students' results within each country. It has long since been recognized that all advanced societies show a positive correlation between students' achievement and their social-cultural-economic family background. Children from more advantaged family backgrounds tend to have better results in tests and they achieve higher levels of education compared to their counterparts from less affluent family backgrounds. However the PISA study brought attention once again to the

fact that the influence of social origin and family background on student achievement varies in strength between individual countries and their educational systems.

From this point of view Germany's PISA 2000 score shows the largest variation of results among individual students (difference between the 90th and 10th percentiles was the highest among the OECD countries), large differences in results between different types of schools and individual schools (Germany was placed among those countries in which a large part of the observed variation in student performance in reading literacy is accounted for by differences between schools) and Germany shows a strong dependency of students' results on family background. What was said about Germany holds true for the Czech Republic (see Table 2), even though there are small differences in the magnitude of problems, both countries are usually placed close to each other in the graphs presenting these different aspects of educational inequalities, as shown in students' PISA results (in most of the statistics they stand close to other countries in the region—Hungary, Slovakia and Austria). All these countries show wide disparities in student performance, large differences in performance between individual schools and a strong relation between the results and family and school socioeconomic background.

Table 2. Between-school and within-school variance in student performance (SP) - PISA 2006, science

	Variance in SP between schools	Variance in SP within schools	Variance explained by the PISA index of economic, social, and cultural status of students (ESCS)		Score point difference associated with one unit on the ESCS
			Between-school variance explained	Within-school variance explained	
Czech Republic	62.4	55.9	12.7	1.7	51
Germany	66.2	50.8	11.6	1.4	46
USA	29.1	94.0	12.7	7.7	
UK	23.5	97.8	8.6	6.1	
OECD average	33.0	68.1	7.2	3.8	40

Source: PISA 2006.

The unequal distribution of results revealed by the PISA study is being attributed to the selective nature of the educational systems in these countries (*Education at a Glance* 2002, 81+, *Education Policy Analysis* 2002, 51-56[1]). The Czech Republic and Germany (with Hungary, Slovakia, and Austria) are the countries with the most selective educational systems

[1] We are referring to the OECD publications primarily, because they were the source that influenced mostly the public debates and were widely reflected in media. However there is a bulk of research papers suggesting the ineffectiveness of selective education systems (e.g. Duru-Bellat and Suchuat 2005, Haahr et al. 2005, Gorard and Smith 2004).

which apply early differentiation (tracking) of students into different types of schools (or classrooms) based on students' previous attainment and measured abilities. First selection in Germany is at the age of 10 (as well as in Austria) and in the Czech Republic at the age of 11 (as well as in Hungary and Slovakia), which is the earliest institutional differentiation among OECD countries (*Education Policy Analysis* 2002, p. 55). Even though the OECD study placed the first age of selection in the Czech educational system at the age of 11, the truth is that Czech students can take their first entrance examinations at the age of eight, when they apply for admission to classes or schools with extended curricula of foreign languages, math or science (for more see Kotásek, Greger, Procházková 2004, Straková 2007). The next selection occurs at the age of eleven or thirteen when fifth- or seventh-grade students (10% of the age cohort) move to a multi-year gymnasium (a long academic secondary track). The results of the PISA study show that there is a wide gap between the results of the students in selective and non-selective streams (see Table 2—the same is true for the tripartite system of upper-secondary schooling as shown in the same table) and that the gap is steadily rising (if we take as an indicator the difference in the PISA score difference between 2000 and 2006—the results of selective multiyear gymnasia rose from 582 in PISA 2000 to 609 in PISA 2006, while during the same time period the average score for the basic, non-selective, school decreases).

Table 3. Differences between various types of schools—reading literacy, the Czech Republic

	PISA 2000	PISA 2003	PISA 2006
School type	Mean (S.E.).	Mean (S.E.).	Mean (S.E.)
ISCED 2 - lower secondary level			
Basic school	474 (3.8)	469 (4.2)	457 (4.3)
Multi-year gymnasium	582 (5.6)	593 (5.4)	609 (3.9)
Special schools[2]	268 (10.6)	300 (12.2)	314 (21.5)
ISCED 3 - upper secondary level			
Gymnasium	592 (4.8)	584 (5.4)	603 (11.0)
Secondary technical schools	525 (3.4)	517 (3.7)	522 (4.9)
Secondary vocational schools	436 (4.4)	433 (6.3)	386 (12.1)
Czech Republic Total	492 (2.4)	489 (3.5)	483 (4.2)

Not only do the average results differ between the two types of schools, so does the social composition of student intake. Detailed information collected on students' family background

[2] Special schools represent the separate provision (in opposition to mainstreaming) which is intended for students with special educational needs. It is intended mainly for pupils with severe mental disabilities, multiple disabilities or autism. According to Key data on education in Europe (2005) publication, the Czech Republic is the country with the highest proportion of SEN students educated in a separate stream (5% of student cohort).

within the PISA study makes it possible to analyse the socio-economic composition of the different type of schools within a selective school system. Multi-year gymnasia are attended by students from more affluent family background compared to students in basic schools.[3]

A similar unfavourable picture was drawn about the German selective school system by the researchers using PISA data. It was shown (see Table 3) that in terms of the tripartite structure of German lower-secondary schooling, pupils at the *Gymnasium* scored substantially higher than pupils at the *Hauptschule* and *Realschule*[4] (PISA Konsortium Deutschland 2003). Similarly to the Czech Republic the differences in results between various types of schools tend to rise. It was shown that the overall improvement of the German average score in PISA 2003 was mainly due to improvements by Gymnasium pupils therefore, the difference between high- and low-scoring pupils increased; also the PISA data in Germany revealed the selective nature of the student composition in gymnasium as was also shown to be the case in the Czech Republic.[5]

Table 4. Differences between various types of schools—reading literacy, Germany

	PISA 2000		PISA 2003	
School type	Mean	S.D.	Mean	S.D.
Gymnasium	582	66	587	64
Realschule	495	72	501	77
Hauptschule	395	79	406	84

Source: PISA Konsortium Deutschland (2003).

The lesson learned from the PISA 2000 study was that the best results on average were achieved in countries with the least selective systems and the weakest effect of social origin on the students' results (*Education at a Glance* 2002). Conversely, among the countries that attained above-average results, only two countries (Austria and Belgium) showed a high degree of selectivity and a strong effect of family socio-economic status on the students' results. The international PISA 2000 report pointed directly to this institutional

[3] The children coming from the two lowest quintiles (bottom 40%) of the socio-economic and cultural status make up only 15% of the students at multi-year gymnasia, while the children coming from the two highest quintiles (top 40%) represent 70% of the student body at these schools (Matějů and Straková 2005).

[4] *Realschule* represents the intermediate, the *Hauptschule* the lower level school type in the German tripartite system of secondary schooling. Both school types are geared towards preparing young people for vocational education in the so-called dual system of training. The *Gymnasium* provides pupils with an academically-oriented education, geared towards preparation for higher education (for closer discussion on German ed. system see Ertl, Phillips 2000).

[5] Baumert, Schümer (2001, 355) show that children from the highest social class (upper managerial) are about five-times more likely to attend *Gymnasium* than children from the lowest class (unskilled manual workers). More studies reflecting on the social composition of different types of German secondary schools are reported in Ertl 2006, 620).

embeddedness of educational inequalities in Germany and the Czech Republic, while writing that "discounting differences between school and programme types reduces the between-school variation in Germany from 75 to 10 percent (and similarly it is true in Austria, Hungary). … discounting differences between general and vocational schools, and between upper secondary and lower secondary programmes, reduces the between-school variation form 52 to 7 percent in the Czech Republic" (OECD 2001, p. 63). The OECD Education Policy Analysis (2002, p. 54-56) went even further in analysing the disadvantages of selective systems compared to the systems where the first selection is not realized before the children reach 16. The authors of the report are conscious of the limitations of cross-sectional studies such as PISA and thus point rather to several possible explanations of the reason why selective systems tend to perform worse than comprehensive educational systems.

These findings constituted the biggest challenge to selective systems and send a message to policy-makers in the Czech Republic as well as in Germany, that the selective nature of their educational systems explains large disparities in the students' results and their overall low performance in comparison to other countries. In the second part of this paper we will argue, that this finding was one of the soundest findings learned from the PISA that was in line with research findings on the effects of tracking/streaming on pupils' achievement based on the experimental research designs mainly from the USA and UK. In spite of the strong evidence of PISA and other studies on the drawbacks of early selection and homogeneous pupils' grouping based on ability, policy-makers did not propose structural changes in educational systems. On the other hand, measures being adopted in Germany in reaction to low PISA results were advocated as evidence-based policies, even though the evidence for these policies based on PISA or other research was far less (if ever) convincing.

Reception of PISA results and responses to PISA by national policy-makers

In the first part of this paper we have argued, that the PISA 2000 results (and also those from 2003 and 2006) of German and Czech 15-year-olds students were in many ways similar. However the perception in Germany and the Czech Republic was dramatically different. Czech researchers and also the official national PISA reports interpreted the overall Czech results rather positively[6], mostly stating, that Czech students at the age of compulsory schooling typically tend to achieve relatively high average performances, when at the same time, the Czech Republic exhibits a relatively strong relationship between student achievement and family background. One of the reasons for the positive interpretation of the Czech results is probably the placing of the Czech Republic among the OECD average in math and above average in Science. However we should bear in mind, that even though the Czech Republic was placed in the group of OECD countries that achieved relatively average results and Germany was placed in the group of countries with below average results in Math, the difference between the mean scores of both countries are in fact statistically

[6] Mostly the reference was made to low financial resources invested in education and relatively good results in PISA. The 2003 Czech National PISA report thus put it: "Czech Republic belongs to the countries (with Finland, Korea, Japan, Australia, Canada and Netherlands) where the decent results of students is reached with a relatively few resources, thus more effectively" (Koucký et al. 2004).

insignificant. This points to the risks of simplistic data presentation by country rankings. The other interpretation of the different reception of similar results in Germany and the Czech Republic highlights the different expectations or aspirations the two countries have had, Germany expecting itself to perform at "the top", while the Czech Republic did not have such high expectations.

We could think of a more fully developed interpretation of why the responses in the two countries differed so much, however the truth is, that the publishing of the PISA 2000 results is in Germany most often referred to as a "PISA shock". Some other authors even compared the consequences of PISA on education in Germany with the Sputnik shock in the USA or even with the French Revolution (for referred works see Ertl 2006, p. 621). The results of PISA in Germany were perceived as crises of educational systems and there was a broad societal consensus that reforms of the systems were inevitable.

In contrast to the German situation, the Czech results were received positively in broad terms and there was no call for reform. The PISA study has entered scientific discourse, but it did not stimulate a significant public debate on education. A few articles have been published in newspapers, mostly about the PISA results and ranking of both countries in the "PISA Olympics", however there has not been any pressure for change from the media. The great time for change in the Czech Republic was in the early 1990s when the post-Communist transformation started. It was the time, when the majority of parents and the general public were unsatisfied with the state of education (for data see Kotásek, Greger, Procházková 2004). Nowadays more than two thirds of parents and the general public are satisfied overall with the level of education, as recent opinion polls show. However the situation in Germany after the publication of the PISA results was rather similar to the early 1990s in the Czech Republic and it opened great opportunities for policy-makers to introduce reforms in the climate of waiting for change.

By analysing the reflections on PISA in the press in several countries, G. Schmidt (2004) comes to conclusion, that in many articles in the press in different countries the regular centralized monitoring, often including school achievement tests was perceived as a promising measure in the spirit of the PISA study. The PISA survey thus served as a justification for the national testing system already implemented in many countries and as a justification for reform in this direction. This was especially strongly pronounced from official sources close to government, and the UK, Netherlands and Sweden have been put forward as good examples proving that national educational systems with overall good results have been using testing for many years. And the new regimes of accountability and performativity were to be implemented in order to lead to improvements in the quality of education. The policy of borrowing approaches has been used to introduce testing and national standards into Germany, which until recently had rather underdeveloped evaluation and test cultures and where the broad use of tests had encountered resistance, similarly in the Czech Republic.[7]

[7] Germany and the Czech Republic did not use national testing schemes; therefore the results of the PISA study were the most solid and generally only information about the educational performance in these countries based on large samples. The impact of the PISA data and its power was therefore much higher than in countries with a culture of collecting data on a regular basis, e.g. UK. Czech Republic

In response to the poor results of Germany in PISA the Federal Ministry of Education and Research (BMBF) reacted by taking a number of policy measures, however none of them were aimed at structural issues or on abolishing early selection in the German educational system. Instead, the Ministry commissioned the Klieme Report on the development of national standards in education. Authors of the report stated, that "the development of nationally uniform educational standards and performance criteria represents a very drastic turning-point within the federal system of the Federal Republic of Germany" (quoted in Ertl 2006, 622). Even though many observers were sceptical about the possibility of its introduction, from 2004/05 school year all Länders introduced national standards for the German language, Mathematics and for the first foreign language as a basis for the development of a new curriculum and for initial and continuous teacher training. Since 2006, nationwide student assessment aims to examine whether all Länder are meeting these standards. For that purpose the Institute for Quality Development in Education (*Institut zur Qualitätsentwicklung im Bildungswesen*) was founded in 2004. As H. Ertl (2007) argues, without the impact of the PISA study, the agreement on national educational standards at federal level and on an institutionalised structure to ensure that the standards are observed, would have been inconceivable.

Lessons learned from the two country case studies

In this paper we have been looking at how the results of the international assessment of students' achievement (PISA) were perceived in two neighbouring countries which have had quite similar results and whose educational systems traditionally and historically share a number of similarities (e.g. early selection, strong vocational orientation). We have showed that in the Czech Republic there was almost no reaction to PISA in public debates or among the policy-makers to the first two waves of the PISA study (2000 and 2003), contrary to Germany where the results pointed to a "crises of German education" and led to demands for reform. Policy-makers in Germany introduced a number of measures that aimed to put Germany back on top of the ranking. The most visible reform—the introduction of the educational standards at the federal level—has been briefly described above.

Despite the range of measures introduced in Germany in reaction to the PISA shock (e.g. project LiD *Lesen in Deutschland* for promoting reading in Germany, project SINUS directed towards maths and science teaching, and various measures for students from migrant families in Germany—all-day schools, education and career guidance, intercultural training for teachers) it did not propose any solution to the major problem identified by PISA—the strong relation between the socio-economic background of students and their educational achievement. The reform in Germany thus ignored the need to rethink early selection in the tripartite structure of education. Thus the unique climate for change arising from the societal agreement on the need for change in education was not used to change the selective educational structure, even though it was repeatedly pointed out by the PISA study as a potential direction for change in the low performing selective school systems.

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had no national level testing or examination at any level of the education system till this year, when for the first time state tests where administered as part of the upper-secondary leaving examination (so called maturita).

The situation in the Czech Republic was quite different. Early selection was re-introduced in the Czech educational system in the early 1990s, with reference to its more developed western neighbours (Germany and Austria) and to the pre-Communist (pre-war) tradition of high quality schooling in the Czech Republic. It had already been recognised by educational experts at the end of 1990s that its reintroduction was a step made few years back with a consequence in rising educational inequalities in the Czech Republic. Therefore in 2001 (before the publication of the PISA results) a new education bill was prepared by the Social Democrat minister that proposed to abolish early selection and introduce a comprehensive lower secondary school. But because of strong opposition to this proposal in the media, by educated parents with high social capital, gymnazia directors and Czech elites, the selective multi-year gymnazia has been retained in the system (for a fuller discussion see Greger 2005, Greger,Walterová 2007).

Since then, the PISA results as documented in part 1 of this paper repeatedly show that the multi-year gymnazia contribute to the intergenerational transfer of educational and social inequalities and that the achievement gap (and thus the problem that gymnazia constitute) is widening. Compared to the situation in 2001, nowadays majority of the experts in education agree, that the gymnazia should be abolished or at least gradually disappear, a position that was not advocated a few years ago. The mounting evidence in this respect was provided by the various analyses of the PISA data. The new development is that also many politicians now agree with the research findings in this area. However it is still seen as politically dangerous to aim at abolishing these selective schools since this proposal has already proved to be highly politicized and not welcomed by the "general public". An opinion poll executed by our institute on a representative sample of more than 1200 respondents in a way confirms the fact that the Czech general public is rather in support of the differentiation of students by ability. It found that 67 % of Czech adults agreed with the statement that "separating students into different types of schools based on their ability is good for all pupils". In the direct statement on selective multi-year gymnasia they show rather positive attitudes towards that selective type of school. 76 % of Czechs supported the statement, that "it is good, that the talented and gifted students could study at multi-year gymnazia, because the teachers at mainstream basic schools could not pay attention to their talent", 75 % of respondents also agreed, that multi-year gymnazia provide markedly better education in comparison with mainstream basic schools and less than one third of respondents agreed, that it is unfair that some students are selected for this much better education and that others cannot attend them. These responses of the Czech general public support the ability-mentality (rather than effort-mentality), which is in favour of early differentiation and elitism and is widely supported (Walterová et al. 2010)

Therefore in spite of the growing evidence provided by PISA, there is no room to manoeuvre (policy-makers would say) and thus the selective nature of educational systems constitute for policy-makers an area where PISA does not matter! Neither in the Czech Republic, nor in Germany, and the same could be said of other countries in the region (mainly in Hungary).

On the other hand, the idea of governance and performance measures, educational standards and accountability would be at stake probably even without the PISA study, as part of the globalised neoliberal practices of state regulation and the accountability movement.

Thus we could question whether the introduction of the national standards in Germany as a reaction to its poor result is "evidence-based" reform and it leads us back to the fundamental question that this paper touches briefly upon: Does PISA matter? PISA matters both in the Czech Republic and in Germany in the sense that it is very often used by policy-makers as a reference point and justification for policy reforms or measures. However, I have argued throughout the paper, that PISA in both countries does not matter as an evidence-based policy tool, because the most serious finding of the problematic nature of selectivity and early differentiation of students within Czech and German education systems is not taken seriously by policy-makers and has not lead to structural reforms.

Conclusions: Moving beyond the two case studies—PISA as a policy tool

There are many studies and texts to date, that critically reflect the role PISA plays in international and national discourses on education, in shaping our thinking and in managing the global education arena. In order to explore the wider relevance of these two particular case studies, we will provide some links to the works of other authors.

Within the project of Knowledge and Policy (FP7 of EU, http://www.knowandpol.eu.) a comparative study of reflection of PISA in 6 countries has been undertaken (published in a special issue of the journal *Sísifo*; Carvalho 2009). Based on a comparative study of six case studies of PISA national reflections in France, Belgium, Hungary, Romania, Scotland and Portugal, they concluded, that "PISA emerges as a tool with a successful penetration into different contexts, but also as a differently acted tool—the way PISA circulates and is used occurs differently according to specific historical, social, political or scientific traditions and configurations" (Carvalho 2009, 8). In the Czech Republic and Germany, even though the results were quite similar, perception differed substantially and reactions as well. So there are differences from country to country in reacting to the PISA results. In the long run however, there are no countries that could ignore PISA. PISA became so powerful, that its value and attractiveness for national policy-makers is easily traceable.

PISA nowadays works as a policy tool (or as "knowledge regulation tool"; Carvalho 2009) with its own life. It brings new ways of thinking and is linked to the discourses of evidence-based policies and in the framework of school effectiveness research (for further elaboration see Rochex 2006; Kaščák and Pupala 2011). However PISA is used more and more not as a tool for inquiry and a source of knowledge per se, but rather it is used by policy-makers to legitimize "whatever" policy action they choose (Figazollo 2009; Štech 2011). What is more, national policy documents even use PISA not just for the argumentation and justification of their policies, but even as a policy targets. To quote the most recent example, the Irish National Literacy and Numeracy Strategy that was launched in July 2011, sets among the targets for reform to be reached by 2020, the following:

> - Increase the percentage of 15-year old students performing at or above Level 4 (i.e. at the highest levels) in PISA reading literacy and numeracy tests by at least 5 percentage points by 2020
> - Halve the percentage of 15-year old students performing at or below Level 1 (the lowest level) in PISA reading literacy and numeracy tests by 2020 (Department of Education and Skills 2011, p. 18).

This documents the power of PISA, that is the way large-scale studies and their products influence policies, but also illustrates the way in which it shapes argumentation and policy formation. In the case of Germany, federal actions would not be possible without external approval (see Ertl 2007). In order to facilitate the introduction of federal/or national programmes and especially while implementing standards and national assessments, the rhetoric of "crisis of education" is needed. Comparable examples to the German shock caused by PISA, are *A Nation at Risk: The Imperative for Educational Reform,* published in Reagan's administration in 1983, a report that stimulated the accountability movements in the USA (see e.g. Koretz 2008), or for England the release of results from an international large-scale study SIMS (predecessor of TIMSS) in 1981. The disappointing results for England in international tests of Math and Science were used to argue for more centralization, standards and assessments. The same arguments reached Germany with the PISA shock. In the Czech Republic the need to introduce test-based accountability is now being strongly advocated by the current minister of education. Without PISA and other large-scale international studies these moves and changes in Germany and the Czech Republic would probably not be possible.[8]

References

Baumert, J. Schümer, G. (2001). Familiäre Lebensverhältnisse, Bildungsbeteiligung und Komptetenzerwreb im nationalen Vergleich. In Deutsches PISA-Konsortium (Eds.). *PISA 2000, Basiskomptenz von Schülerinnen und Schülern im internationalien Vergleich.* Opladen: Leske & Budrich, 2002, 323-410.

Carvalho, L.M. (2009). PISA and Educational Public Policies: Studies in Six European Countries. *Sísifo: Educational sciences Journal,* no. 10. Available at: http://sisifo.fpce.ul.pt/pdfs/Journal10%20ENG.pdf

Department of Education and Skills. (2011). *Literacy and Numeracy for Learning and Life. The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020.* Dublin: DES. Available at: http://www.education.ie/admin/servlet/blobservlet/lit_num_strat.pdf

Duru-Bellat, M., Suchuat, B. (2005). Organisation and Context, Efficiency and Equity of Educational Systems: What PISA Tells Us. *European Educational Research Journal 4*, No. 3, 181-194.

Education at a Glance. (2002). Paris, OECD.

Education Policy Analysis. (2002). Paris, OECD.

Ertl, 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*, No. 5, 619-634.

Ertl, H., Phillips, D. (2000). The Enduring Nature of the Tripartite System of Secondary Schooling in Germany: Some Historical Explanations. *British Journal of Educational Studies 48*, 391-412.

Figazzolo, L. (2009). Impact of PISA 2006 on the Education Policy Debate. Brussels: Education International. Available at: http://download.ei-ie.org/docs/IRISDocuments/Research%20Website%20Documents/2009-00036-01-E.pdf

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[8] This paper is the output of research grant "Unequal school—unequal chances" (No. P407/11/1556) supported by National Science Foundation of the Czech Republic. This text is a revised and extended version of a paper previously published in French as Greger. D. Lorsque PISA importe peu. Le cas de la République tch que et de l'Allemagne. *Revue française de pédagogie*, n° 164, mai-juin-juillet 2008. ISSN 0556-7807.

Gorard, S., Smith, E. (2004). An International Comparison of Equity in Education Systems. *Comparative Education 40* (1), 15-28.

Greger, D. (2005). *Développement et débat autour du modèle de collège unique en République Tchèque et dans d'autres pays d'Europe centrale et orientale*. Lyon: INRP, 2005. Availaible at WWW: http://ep.inrp.fr/EP/colloques/colloque_construction_deconstruction/david_greger?set_language=fr .

Greger, D., Walterová, E. (2007). In Pursuit of Educational Change: The Transformation of Education in the Czech Republic. *Orbis scholae 1*, 11-44.

Haahr, J., Nielsen, T., Hansen, E., Jakobsen, S. (2005). *Explaining Student Performance: Evidence from the International PISA, TIMSS and PIRLS Surveys.* Danish Technological Institute, www.danishtechnology.dk, accessed August 2005.

Kaščák, O., Pupala, B. (2011). Pisa v kritickej perspektíve. *Orbis scholae 5*, 53-70.

Key Data on Education in Europe 2005. (2005). Luxembourg: European Commission.

Knowledge and Skills for Life. First Results from PISA 2000. (2001). Paris, OECD.

PISA-Konsortium Deutschland (2003). *PISA 2003 Ergebnisse des zweiten internationalen Vergleichs Zusammenfassung*.

Kotásek, J., Greger, D., Procházková, I. (2004). *Demand for Schooling in the Czech Republic (Country Report for OECD).* Paris: OECD, 2004. Available at WWW: <http://www.oecd.org/edu/future/sft/demand>.

Koucký, J. et al. (2004). *Učení pro život: Výsledky výzkumu OECD PISA 2003*. Praha: Tauris.

Koretz, D. (2008). *Measuring Up. What Educational Testing Really Tells Us.* Cambridge, MA: Harvard University Press.

Matějů, P., Straková, J. (2005). The Role of the Family and the School in the Reproduction of Educational Inequalities in the Post-Communist Czech Republic. *Brtitish Jurnal of Sociology of Education 26*, 15-38.

Rochex, J.-Y. (2006). Social, Methodological, and Theoretical Issues Regarding Assessment: Lessons from a Secondary Analysis of PISA 2000 Literacy Tests. *Review of Research in Education 30.* Special Issue on Rethinking Learning: What Counts as Learning and What Learning Counts, 163-212.

Schmidt, G. (2004). Reactions of Participating Countries as Reflected in their Press: A Comparison. *European Education 35*, no. 4, 58-69.

Straková, J. (2007). The Impact of the Structure of the Education System on the Development of Educational Inequalities in the Czech Republic. *Czech Sociological Review 43*, 589-610.

Štech, S. (2011). PISA—nástroj vzdělávací politiky nebo výzkumná metoda? *Orbis scholae 5*, 123-133.

Walterová, E., Černý, K., Greger, D., Chvál, M. (2010). *Školství — věc (ne)veřejná? Názory veřejnosti na školu a vzdělávání.* Praha: Karolinum.

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