# The PISA Syndrome: Can we Imagine Education without Comparative Testing?

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### Introduction

nlike "normally" by citing academic books and journals - I am starting this article by recalling relatively recent criticisms of OECD's PISA testing addressed to wider public. The fact that this criticism is recent does not imply that it is also entirely new. The logic of this criticism, which has been detectable almost ever since the inception of PISA - and indeed since much earlier pioneering IEA studies like FIMS, TIMSS, and so on in more than just governmental settings - had been conducted, has gone public on a grand scale. The Guardian, Tuesday 6th May 2014, published a letter addressed to PISA director Dr Schleicher under the title "OECD and Pisa tests are damaging education worldwide." The letter was signed by many distinguished academics from universities (mostly American and European) and some other interested public personas. This academic public gesture had a quite strong echo in world press. However, answers by the PISA director and by members of a global network, consisting of researchers, who actually work on designing and implementing PISA testing, were much less published in the world press. Another case of recent public criticism of PISA is Erwin Wagenhofer's film documentary Alphabet (2013), which actually commences with a strong point on how educational achievements of Shanghai schools were under the influence of PISA testing. The type of education, which is adapted to achieving high scores in PISA testing, especially in the fields of mathematics and natural sciences, presumably – as it is stated at the beginning of the film – flattens children's creativity, ability to think critically and independently. Both of these critical statements aimed at policy makers, and even more to the broader public, expose what they see as a dubious nature of ranking of results that inscribe PISA into the foundations of the neoliberal extension of market competition to all avenues of life. However, exactly the rankings, as they are presented in league tables in a somewhat quick succession once in three years, made PISA so "popular" and influential. Therefore, any abandoning of such presentations of the results seems quite unimaginable. On the other hand, a dilemma on whether these rankings are consequences or causes of what has been seen as educational transformation in favour of global neoliberalism seems pertinent, but hard to answer.

In this paper, I shall just briefly discuss the main lines of argument in the above mentioned public outcries against PISA and in the next step I shall take a look at some examples of academic deliberations on PISA testing. Further on, I will be exploring on the paradigmatic level for "deeper" reasons for such disputes and insuperable differences, concerning cultural, methodological and theoretical aspects of these considerations. At the end of the paper, I shall try to open questions on how PISA testing nevertheless makes sense.

## Questions and Answers

The views, which are expressed in *The Guardian* letter (Andrews, 2014), represent an important step in discussions about standardised testing precisely because they are communicated to a larger public. This means that we can take them to be an attempt to make an impact on public policies, as well as trying to influence a critical understanding of such procedure as PISA testing and its results. In all fairness to the signatories' good intentions, it should be noted that they do not a priori reject the very method of testing itself and, in spite of the rather harsh criticism; they give suggestions on how PISA should proceed in its work to attain socially and educationally more acceptable impact. The signatories assert that PISA "/.../has contributed to an escalation in such testing and a dramatically increased reliance on quantitative measures," which has, in their view, resulted in many negative effects. Just three years assessment cycle shifts attention to short-term policies, which are mostly inappropriate in various cultural contexts. PISA is further, in the signatories' opinion, too focused on measurable aspects and so it "takes away attention from the less measurable or immeasurable educational objectives." PISA is then, among other problematic effects, blamed for an increase of "public-private partnerships," which sustain for-profit educational services in America and project them also in Africa. After avowing some more harmful consequences of PISA, such as it is conducted for last 13 years, the authors of the Guardian letter make seven "constructive ideas and suggestions." Since my intention is not to deal with the whole spectrum of problems, which these "ideas and suggestions" touch upon, let me only mention that the first suggestion requires from OECD to "develop alternatives to league tables" and to "explore more meaningful and less easily sensationalised ways of reporting assessments outcomes." The letter is concluded by questioning the legitimacy of OECD as an organisation for becoming a "global arbiter of the means and ends of education." The authors of the letter find that the "international competition for higher test scores" harms diversity among cultures and traditions.

A direct answer to these allegations under the title "OECD's PISA under Attack!" signed by almost 400 above all "researchers of school performance" (as they chose to present themselves) from all continents is without any doubt an illustration of the fact that the academic sphere is divided on most questions raised in The Guardian letter. Of course, I have no intention to judge who is right in this dispute. The answer to *The* Guardian letter is obviously an upshot of a quite quick reaction. Therefore, the answer mainly succeeds in demonstrating that, at least, there is a strong misunderstanding on the matter between members of research communities, which are supposed to know what is there to know about the testing of school achievement. Still, I would dare to say that the answer seems somewhat weak. It essentially boils down to this assertion: "PISA student assessments, like other similar kinds of tests around the world, have the same function of a thermometer in medical diagnostic." (Ichino, 2014) We can take this as a statement on PISA being essentially just a "neutral" instrument. The medical metaphor, which is further elaborated, seems to be unsatisfactory as an answer. Beside this, as it appears to me, the answer imputes to *The Guardian* letter an intention, which it did not have, saying that it was "clearly aimed at excluding comparable evidence of student performance from educational decision-making." The "coming out" into the open public space of the two academic groupings points towards a need to rethink the role of PISA testing not only in order to fight social battles in the academic arena, but also in order to distinguish between research results and its (ab)uses, and then to at least recognize differences in justifiable approaches to such complexities as educational in-

The signatories of the answer to *The Guardian* letter probably meant to address not just the academic community and, therefore, they picked a linguistic short-cut to readers. Still, it should be pointed out that metaphors can be tricky. Let me cite just one example of many similar notices (of which early examples can be found also in Plato / Socrates dialogues): "Metaphor is helpful (and even indispensable) as vehicle to think about abstract phenomena, but one should be careful not to mistake the metaphors for the 'reality' they try to describe." (Boers, Demecheleer, 1997, p. 116) It is also interesting that medical metaphors are very much used in many discourses on economy.

stitutions. This would make possible to tell apart intellectual, social and political phenomena from genuine research problems.

Another example of recent criticism of PISA, aimed at larger public in the form of the movie *Alphabet* (2013), can be taken as an interesting case of opening the eternal question of goals and senses of education. I tend to agree with those observations of the film, which see its grasp of education in today's global world as a bit simplistic, pretentious, biased and even misleading, but still the movie could be commended in its main intention to sound an alarm about current developments in education and its role in globalisation. Still louder sounds the alarm, which the film raises in view of the forms of domination on the level of social practice in corporate management.

"Wagenhofer's actual beef appears to be not with schools but with the system itself, which emphasizes bloodthirsty, profit-driven competition over the prenatal connection humans feel to their mothers. With apparent alarm, the film cites studies showing that people lose their capacity for 'divergent thinking' over time, which, it doesn't take a divergent-thinking genius to realize, necessarily follows from standardized education." (Debruge, 2014)

This perceptive observation, taken from the film review, published in one of the most prominent film magazine, applies to the problems and paradoxes, which PISA could not avoid even if it tried no matter how hard. As a part of the activities of OECD in the field of education, the whole structure of PISA is having a stable support and necessary institutional authority, but this also brings about suspicions of apparent adjusting of the research profile to the broader politics of this intergovernmental organisation such as OECD is. Declarations by PISA advocates that the testing, as it were, happens to be "just a neutral instrument" rouses ceaseless arguments about the ethics of research, which concerns social research even more than the research in natural sciences, since the effects of the results might be hypothetically more complex and prone to manipulation. The rankings apparently generate various kinds of competitions within and between countries and in a "trickle down" effect strengthen debateable "neoliberal" socialisation of youngsters. However, at the same time PISA produces a huge amount of varying data, which many researchers, independently of their political views, find almost indispensable. Unfortunately, politicians and policy makers see their usages in their own way, which the researchers cannot always control.

### PISA, Neoliberalism

Anyway, many of these aspects were and keep being discussed in the global research community in less publicly exposed, but nevertheless strongly controversial discourses. Many disputes, divergent studies, books and articles predominantly in less agitated discourses ponder the social role, impacts, advantages and shortcomings of PISA and also of other similar assessments of education, done by methods of testing; many doubts are raised as well about the benefits of rankings and benchmarking, as consequences of testing. Other aspects of debate touch upon the impact, which PISA has on the structure of the curriculum, for instance, in a direction of stronger emphasis on one type of knowledge at the expense of the other: favouring natural sciences and mathematics and diminishing the importance of humanities and critical thinking. Publications concerning PISA are, of course, abundant, but one can quickly discern between those studies, which more or less take the results of PISA tests for granted and use them in order to come to terms with what is going on in educational systems and those discourses, which take a critical distance and observe in various degrees of criticism ostensibly worrying effects of PISA. These criticisms cannot be easily typified, but they are mainly based on similar, albeit much more elaborated, theses as the main points of The Guardian letter. With a dose of simplification one can say that a part of world's researchers in the field of education and a number of scholars, mostly from humanities, take PISA to be above all an agency of globalisation along the lines of global capitalism and its neoliberal ideology. Many critical authors would agree with such propositions as this: "When we speak of neoliberal policies throughout the world, it is not only because they exist in the platonic world of ideas or only because they constitute a space of possible options, but also, and perhaps above all, because we put some of them into action, and they are followed by effects." (Hilgers, 2013, p. 78) Further on, similarly to Joel Spring, many authors are increasingly naming the bearers of these options: "Neoliberalism is an important part of educational discourses in IGOs, such as the World Bank, OECD, and WTO, and within national governments." (Spring, 2008, p. 343) Propagation of (curriculum and/or culture) uniformity and unfair competition, which is induced through rankings of countries according to a level of students' "success", seems to be the most frequent reproaches. "At the school level, Program for International Student Assessment (PISA) is the best known example of international rankings and is an interesting example of how a transnational organization such as the Organization for Economic Cooperation and Development gains influence in different ways over national educa-

tion reforms in both its member and non-member countries." (Parmenter, 2014, p. 203) I cannot present here the whole spectrum of such criticisms, of which some happen to be quite sophisticated and many of them would probably deserve at least the benefit of a doubt also from PISA designers themselves. As I mentioned in the introduction to this paper, critical attitudes in comments on PISA are not new, therefore the signatories of The Guardian letter could easily point to a large basis of theoretical arguments on which their argument was built. One of the most heard voices among the critics of the tendencies in education policies in the German-speaking world belongs to the Austrian philosopher of education Konrad Liessmann, who became especially upset because of the PISA rankings in league tables. "All relevant and also publicly widely debated decisions of educational policies from last years are either motivated by an inferior position on the league table or by a wish to attain a better position on the list." (Liessmann, 2006, p.74)2 Liessmann's points, of course, do not end with this. His whole argument concerns the confronting of all them agents of the neoliberal world and education, such as it has been conducted after recent changes of curriculum and school management styles, to the tradition of the Enlightenment and goals of education, as they are comprised in the notion of Bildung, which is characteristically almost untranslatable to English.

"Instead of the educational aims of the Enlightenment – autonomy, self-consciousness, and spiritual comprehension of the world –, instead of the educational goals of the reformist pedagogies – real-life orientation, social competence and joy of learning –, instead of the educational goals of the politicians of neoliberal school – flexibility, mobility and employability – there is only one educational target: to withstand PISA!" (Liessmann, 2006, p. 75)

It should be noted that Liessmann's observation ascribes to PISA that it even transcends neoliberalism and its social aims by narrowing its focus just on competition.

Written not much earlier, the book of Christian Laval had a large echo and public impact in the French-speaking world, the book claiming that "school is not an enterprise", which analysed the "neoliberal attack on public school." It goes without saying that in Laval's criticism, PISA is blamed for its contribution to the cult of efficiency, for the practice of benchmarking and for culture of evaluation as a system of control. (Laval, 2004) Mojca Štraus and Neja Markelj represent a different case of indicat-

<sup>2</sup> Since Liessmann's work isn't translated in English both citations in this article are my own translations from German. Therefore, I am accountable for anything that gets lost in translation. The same goes for other translations of citations from Slovene and French in this paper.

ing the same general change in perceptions of a social role and the meaning of education due to PISA. In the context of their study on what PISA results could mean for the decision makers in Slovenia, they wrote: "Orientation to the development and measuring of competencies seem to be a reflection of the emphasis on the function of education as the production of human capital. Relocation of emphasis from knowledge to competences can also be seen as an example of the aforementioned research to support decision-making in education." (Štraus, Markelj, 2011, p. 37) To conclude this part of examining examples of criticism of PISA testing, let me cite a bit longer fragment, which confirms the point on the difference in perceptions of PISA.

"PISA results are frequently discussed and debated in the policy world and among education researchers. While PISA supporters paint a bright picture of PISA and how it can bolster education in today's globalized world, its critics draw attention to the negative consequences of PISA. Education has, thanks to PISA, moved away from the enlightenment ideal of promoting personal development and creating reflective and culturally aware citizens, towards an ideal of education in the interest of economic growth, promoting performativity, standardization, and decontextualization – according to some of its critics (cf. Carvalho, 2012; Lawn, 2011; Mangez and Hilgers, 2012). Advocates of PISA do not consider this shift negative. On the contrary, benchmarking education systems and testing the life skills needed in today's world are claimed to be a great help, informing policy for education system development (Schleicher, 2013)." (Hanberger, 2014, p. 2)

These observations bring us to a question of causes and effects. Did PISA cause the advancement of neoliberal politics into the sphere of education or did the complex development of neoliberal capitalism open the research space for PISA? Is a shift from evaluating knowledge to testing competencies "restructuring" school as an institution and its complex role in any society? However, while discussing criticism of PISA, one cannot avoid worries, expressed in a different register. From the "epic" times of the first few cross-national studies, which were conducted by *The International Association for the Evaluation of Educational Achievement* (IEA), a threat of cultural homogenization was indicated by many writers. PISA, which stepped quite a bit later into the amphitheatre of international assessment of school achievement, only strengthened such fears.

## PISA, Culture

What has just been said unties a little bit the strictness in the relationship between PISA and the notion of neoliberal capitalism, since the fears around the cultural impact of cross-national assessments of education appeared already at the time, when neoliberalism was just an obscure theory, cultivated by a group of scholars, economists and some philosophers, who joined their ranks under the name of Mont Pelerin Society. Of course, many reflections on PISA are enunciated in the context of post-colonial studies, gender studies and other contemporary forms of critical thinking that are often associated with political anti-globalisation movements, which also include a range of alternative education practices and experiments. However, I am not entering in these interesting debates since their stress on complexities and sometimes their attention to details, exceed the main focus of this paper. Although the kind of criticism that brings up problems of cultural impact is much more multifarious than just the criticism of "PISA's neoliberalism," there is a starting point, which could be expressed, as follows:

"What are the politics and sociology and anthropology of the international testing movement as if 'educational results' were a sporting event? The second comparative puzzle, which attaches to PISA is: in what sense is it 'comparative education'? At what point do numbers become or represent or stand for cultures, and what needs to be explained about the cultures/numbers symbiosis?" (Pereyra et al., 2011, p. 3)

However advancing from such points, opinions get increasingly different. Obviously, more than establishing any firm evidence of PI-SA's transforming impact on cultures, PISA represents a reference point, which arranges quite a number of discourses on a relationship of culture and education in our complex world. South Korea was always excelling in (not only in PISA) cross-national schools assessments and at the same time educators there seem to be "culture sensitive." Surprisingly, the Korean critic sees as a threat exactly that educational tendency, which in view of most PISA critics is more supressed than promoted by testing.

"In this tendency toward individualized and differentiated educational processes that are assumed to foster students' creativity and independent thinking, it is natural to criticize 'traditional' Korean education, which is portrayed to have limited students' exposure to individualized and differentiated curricula and instruction. However, as I have shown in my work, the recent educational reform for individualized and differentiated education has actually reduced the strength of 'traditional' Korean education, which helped low achieving and socioeconomically disadvantaged students maintain a comparatively high level of academic achievement compared to corresponding students in other countries." (Hyunjoon, 2014, p. 3)

Perceptions of PISA's "cultural impact" actually vary since most authors are aware that there are other agencies of a global "cultural homogenization" that might have benefited from PISA, which indeed tends to be "culture-blind." Educational systems and their elements (like curricula, teaching methods, school management, and so on) of course change, and, of course, they are always making part of cultural context. "/.../for many countries in the world that has happened is a shift in what could be called the topography of education. Between the early nineteenth century and the early twenty-first century, the map of 'education' itself has changed. Its contents, its institutions, and the people who populate it have been reconfigured." (Cowen, 2011, p. 30) A quick "meta-analysis" of PISA impacts would probably show that educational systems still conform to their local social and cultural contexts — which are in their turn changing either in a progressive or conservative direction — in spite of responding to some "incitements" from PISA results. China's case is typical in this respect.

"/.../ our analysis of the reasoning surrounding the PISA results reveals that there is a profound discrepancy between local political actors and stakeholders on the one hand and independent researchers and overseas professors on the other. The discourse centring on the PISA 2009 results has reshaped the education discourse in China. The case of China is particularly interesting for education discourse analysis, because the pre-PISA discourse had been characterized by the criticism of the exam oriented education and the scepticism of the effectiveness of the education reform." (Zhang, Akbik, 2012, p. 26)

I am leaving many other aspects of the "cultural problem" of PISA open, since the above-mentioned facets are maybe sufficient to exemplify the type of the problem.

# Paradigmatic Divide

Epistemological questions will always represent issues for differences among researchers. Such questions, of course, open problems of methods, which are unavoidably intellectually funded. Undoubtedly "the syndrome" of PISA consists of many components. As we can gather from many debates, these components are: conceptual differences, political perceptions, and cultural contexts. However, fundamentally PISA is linked to knowledge as is any education-related phenomenon, which means that it cannot avoid paradoxes of "knowledge about knowledge." Philosophy for centuries searched for a universal model of knowledge. Hence, at least two broad different "paradigms" of reflexive knowledge persist. Philosophers – of course with immense number of nuances – basically agree that these different paradigms could be identified as a difference between em-

piricism and rationalism from 17<sup>th</sup> Century, or as the difference between positivism and transcendentalism (or constructivism), or as the gap between Anglo-American philosophy and Continental philosophy. Some would also argue that the split between the two basic paradigms is rooted in Antiquity – for instance in the unfinished dialogue from Plato, *Parmenides*, which left readers with unanswered questions on the relation between the part and the whole – others, would see this split in mediaeval logics, and so on. In modernity and postmodernity, there were many attempts to overcome the divide, but it looks that such attempts mostly contribute to just new elaborations of the rift. One of the modern manifestations of the divide – between positivism and deconstruction – was highlighted by Stanley Cavell, who certainly made a few steps towards creating a field of mutual understanding.

"And I cite their [positivism's and deconstruction's] claims to what may be seen as the discovery of the originariness of writing over voice, of system over individual intervention, of sign over word – since the appeal to mathematical logic for its algorithmic value is an appeal to its sublime inscriptional powers (of alignment, rewriting, iteration, substitution, and so on). Positivism's inscriptionality may be seen as in service of a homogenization of the field of sense." (Cavell, 1994, p. 83)

Cavell's success in bridging the gap between two "universes" of thought made a strong impression in such fields as culture, or, to be more precise, in film theory, as well as in some trends in philosophy itself. We are still waiting for "a Cavell" in the realm of the scientific mind. As it is well known, "positivism" is closely associated with (positive or "exact") sciences. Especially thanks to recent possibilities to acquire and manage large amounts of data, positivism is also re-occupying the space of social sciences, which through the work of Durkheim, critical philosophers, existentialists, and so on, was for a long period a domain of thinking about the world in terms of the notion of totality. PISA is just one of the phenomena in research that makes use of the "positivist" methodologies, which carve out their problem field from the social and cultural complexity. Such methodologies, no matter how well elaborated or specific in their founding they may be, lay claim that the knowledge, which they acquire by applying their rules and "tools", is certain as it is firmly "evidence-based." Usually users of such methodologies - viewed as "partial" by a range of anti-positivist critics - do not hesitate to give the "we don't know" kind of answers for any problems, which are considered to be outside of their methodological framework. However, this insisting on a particular insight, "based on facts," is seen as a synecdoche: the way PISA test results are presented strongly suggests that mathematics and natural

sciences stand for entire knowledge, as well as, that such knowledge is crucial for economic development. Of course, such a supposition can probably not be proved, since such categories of knowledge as historic memory and artistic sense have their role in any social system, and they operate within the economy in a broader sense of the word. On the level of theory, the differences will probably never be settled, since anti-positivists will always insist on an attribute of "instrumentality" of such methods as the ones, used in PISA.

This brief and very superficial explanation of the paradigmatic gap can be taken as just one aspect of many reasons for "misunderstandings" between advocates and adversaries of PISA. However, by taking into account such sophisticated aspects of the differences, one can still find data – no matter how much they are seen to be ideologically constituted, or no matter how they represent only a reduced picture of the "reality," and so on – as representing something. Of course, one is free to decide what they represent. Any decisions of actions in changing the profile of a national education depend on complex local contexts. In spite of credible reproaches, regarding what is voiced as "homogenisation," there is always a space in local policies to advocate "good traditions" against mismatched changes.

#### Conclusion

It is a truism to say that theoretical and practical constituents of education have always been ingredients of larger social movements. They mark conflicting issues in the politically determined power relations in the educational field. In countless discourses, education keeps recurring as a crucial agency of the social emancipation, both from class or gender oppression and from other forms of cultural exclusion, but also as a precondition for self-accomplishment of an individual. A huge intellectual input into developments, processes and events in educational systems is an inherent force of social-educational movements. As an end of neoliberalism is anxiously hoped for, there is a huge helping backlash of emancipatory educational discourses. However, in light of the question on whether PISA is the cause or effect of structural institutional shifts, adaptations in the economy, and so on, another question on the full pertinence of PISA as a main object of such criticism is relevant. Scholarly volumes of books - let alone journal articles and other not strictly just academic publications - that deal with the role of education in social reproduction and in movements for social change are growing almost exponentially.3 The out-

For instance, I myself wrote some fifteen book reviews for *International Review of Education* (Hamburg, Springer) in the past four or five years, which presented studies on relationship

cry against PISA in The Guardian letter is therefore a kind of cumulative effect of the growing bid for emancipatory education, which again strives to return to a composition of educational ideals instead of the aims comprised in more or less utilitarian and technocratic concepts of increasingly visible failure of such neoliberal projections as knowledge society, human capital, and so on.

"If school has any sense nowadays, it should awaken in all its forms the reason finding out the emancipatory character of knowledge. /.../ Yes, the historical modernity was wrecked within modernism, in which techno-scientific rationality demolished the subject (*sujet*). Let us find anew its initial project in a dialogue between reason and the subject that originated with the Renaissance and the Reformation still alive at Descartes." (Fabre, 2011, p. 42)

Does all this mean that such comparative testing as PISA, as its most outstanding case, becomes obsolete? In spite of all criticism, the answer should be definitely: "No!" It is visible already in *The Guardian* letter that the authors oppose many features of presentations of the results (rankings) and a number of other impacts of PISA, but testing as a relevant research method is not really attacked. In a final analysis the point of the letter boils down - quite like the point of the film Alphabet - to an outspoken condemnation of the neoliberal society. OECD is undoubtedly an organisation of governments, which are entangled by the structures and networks of global capital and such "instruments" as PISA are "taking the pulse" (to use the medical metaphor from the answer to the letter, we talk about here) of education, which operates under such a system. Still, there is no reason to doubt that in the framework of complex methodology, PISA does not deliver very interesting piles of different data. For example, in the volume of "overcoming social background" (OECD, 2010) it seems that the PISA team is trying to react to some criticisms from the agents of "emancipatory currents" since it gives very detailed data in the domain, which is crucial for any thinking about a redemptive role of education. Explicit and well presented - even ranking in this case does not seem harmful - data on correlation between socio-economic background and the performance of students and schools, make it possible for far reaching conclusions. The same goes also for a number of other such reports, which follow after the main and controversial presentation of the results of testing. Slavko Gaber and his co-authors start from the example of France,

of democracy and education, on problems triggered by the economic crisis, and so on. Ideology of neoliberalism and such consequences as social inequalities are analysed and criticised in these books.

where only 38% of a generation who reach the educational credential, accumulate an adequate cultural capital.

"/.../today researchers reinforce their claims about the inadequacy of achievements at the national level with the results of the already well-established international comparisons of knowledge. They don't remain only within data, which show, that in New Zealand and Sweden, there are 80% of those, who 'may hope for a good job,' in Finland, 73% in Poland and Hungary about 70%, but they also take into account the research results of PISA and TIMSS, which allow valid performance comparisons of educational systems and empirically lit analysis of national systems." (Gaber et al., 2009, p. 84-85)

Such comments by researchers of education are not very rare. PISA, therefore, makes possible critical analysis, which even runs against its assumed "neoliberal and homogenising objectives." No matter how well any such criticism is founded, no matter how strong its arguments are, it should be recognised that even so the testing and the acquired data make such criticism and its conceptual achievements possible. Of course, one would like to see more dialogue between different "schools" of comparative research, as well as some pondering on the effects of such presentations as, for instance, the league tables, within PISA organisation itself. On the other hand, one should be aware that controversies in as much as possible unrestrained democratic public space generate breakthrough new ideas and social movements. And this holds true whether controversies are resolved or not.

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