

# PISA TEACHERS: THE HOPE AND THE HAPPENING OF EDUCATIONAL DEVELOPMENT

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*ABSTRACT:* Programme for International Student Assessment (PISA) activities and their effects are diverse, and it can be said that PISA both creates and forms a specific reasoning (HACKING, 1992) about how to argue, talk, and think about education. In this study of PISA activities, ideas about teachers, the activities they perform, and how these are conceptualized within a textual PISA narrative are analyzed. The results show that teachers are highlighted as being important in and crucial for educational transformation and development. Teachers are also interpreted as being essential for closing a measured "achievement gap" among students in terms of how they perform in PISA tests. Moreover, "good" teachers and "effective" teaching are described as teachers and strategies that facilitate the closure of measured "achievement gaps". Consequently, the main PISA reports emphasize teachers as developers of education and educational strategies, rather than deliverers of state determined policy. As such, teachers are regarded as indicators of the effectiveness of the education system, and as important factors for raising the performance standards, thereby regarding them as the hope and the process of education.

*Keywords:* PISA. Teachers. Teaching.

## **PROFESSORES DO PISA: A ESPERANÇA E A REALIZAÇÃO DA EDUCAÇÃO**

*RESUMO:* As atividades do Programme for International Student Assessment (PISA) e os seus efeitos são diversos, sendo possível dizer que o PISA cria e forma uma fundamentação específica (HACKING, 1992) para discutir, falar e pensar sobre a educação. Neste estudo sobre as atividades do PISA, são analisadas as ideias sobre os professores, as atividades que realizam, e como estas são conceitualizadas no interior de uma narrativa própria ao PISA. Os resultados mostram que os professores são apresentados como sendo importantes e cruciais para a transformação e para o desenvolvimento da educação. Os professores também são representados como sendo essenciais para reduzir as "disparidades no

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desempenho” dos alunos medidas pelo teste PISA. Ademais, os “bons” professores e o ensino “eficaz” são descritos como os professores e as estratégias que conduzem a tal redução. Consequentemente, os principais relatórios do PISA enfatizam uma imagem dos professores como os atores que desenvolvem a educação e o ensino, e não como executantes de políticas determinadas pelo Estado. Deste modo, os professores são considerados como indicadores da eficácia dos sistemas de educação e importantes para elevar os padrões de desempenho, sendo assim considerados como a esperança e a realização da educação.

*Palavras-chave:* PISA. Professores. Ensino.

### **LES ENSEIGNANTS DU PISA: L'ESPOIR ET LA RÉALISATION DE L'ÉDUCATION**

*RÉSUMÉ:* Les activités du Programme for International Student Assessment (PISA) et ses effets sont nombreux, et on peut dire que PISA crée et forme un raisonnement spécifique (HACKING, 1992) pour discuter, parler et penser à l'éducation. Dans cette étude sur les activités du PISA, on analyse comment le récit propre au PISA conceptualise les idées des enseignants et les activités qu'ils accomplissent. Les résultats de l'étude montrent que les enseignants sont présentes comme importantes et déterminantes pour la transformation et le développement de l'éducation. Les enseignants sont également vues comme essentielles pour réduire les « écarts de performance » des élèves, mesurés par le test PISA. En outre, les « bons » enseignants et l'enseignement « efficace » sont décrits comme les enseignants et les stratégies qui conduisent à une telle réduction. Par conséquent, les principaux rapports PISA mettent l'accent sur une image des enseignants comme les acteurs qui développent l'éducation et l'enseignement, et non comme exécutants de certaines politiques de l'État. Ainsi, les enseignants sont considérés les indicateurs de l'efficacité des systèmes d'éducation et importants pour élever leur niveau de performance, donc ils sont regardées comme l'espoir et la réalisation de l'éducation.

*Mots-clés :* PISA. Enseignants. Enseignement.

## Introduction

**E**ver since Programme for International Student Assessment (PISA) was introduced by the Organization for Economic Co-operation and Development (OECD), both the assessment and its results have been widely discussed and disseminated in the media. However, the media is not the only actor in this respect. Administrative and political actors also

respond to the assessment (PETTERSSON, 2008). In explaining the PISA phenomenon, Grek (2012) states that its success is due to the test being created at the right time. In the 1990s, when the test was founded, all the essential components were in place — an education industry, an open method of coordination, a consensus of neo-liberal ideas, numerous national experts and statisticians, and a consensus on the linkage between education and the labour market. PISA became a node in this disparate body of policymaking. This has been explained as: “The PISA charts became the totemic representation of the new governing regime, excluding caveats or any awkward knowledge in order to offer policy makers what they are always after – fast-selling policy suggestions” (GREK, 2012, p. 244). This development has even been characterized as a datafication of governance (HANSEN, 2015).

However, PISA is not just a test. In connection with the test, meetings are held to discuss both the test and its results. The results are then published in reports that are disseminated globally. A huge number of actors from different countries are also involved in PISA activities, including public and private research centres, national and international policymakers, different OECD professionals, and various bureaucrats and technicians. PISA is therefore a conglomerate of activities, objects, and actors that together generate diverse activities in different social spaces at different levels (CARVALHO, 2012). Consequently, PISA activities and their effects are diverse, and not always as linear as they might first appear. PISA also creates and forms a specific reasoning (cf. HACKING, 1992) about how we argue, talk and think about education. In addition, the assessment creates specific educational “facts” and “truths” (cf. LINDBLAD, PETTERSSON, & POPKEWITZ, 2015). Here, the teacher is obviously important and, in a global discourse on education, is often regarded as crucial for successful and effective schooling (cf. HATTIE, 2009). Thus, this article investigates how the teacher is constructed, or even “fabricated” (cf. CARVALHO, 2012), and narratively expressed in the PISA sphere.

More specifically, we look at how ideas about teachers and the activities they perform are conceptualized in a textual narrative of PISA reports. The approach of “language game” is used to show how PISA discursively constructs a specific view of how teachers are understood and filled with content. Wittgenstein (1965) describes the “language game” as humans being entangled in various language networks that make it impossible to achieve objectivity. Rather, people link the meanings of different words to specific social conventions that facilitate mutual understanding (cf. POLKINGHORNE, 1989). In this, it is important to acknowledge that PISA is not just a test, but is also part of international curriculum work based on aggregated comparative data, which is transformed into a narrative about, for instance, teachers. This narrative is constructed for a reason, for example, to explain and connect

the relevance of teachers to “achievement gaps,” differences in “learning opportunities” and attitudes toward learning (for a discussion about educational matters constituted by PISA, see LINDBLAD, PETTERSON, & POPKE-WITZ, 2015). We argue that PISA reports are involved in an international “language game” that is both based on, and dependent on comparative data on students’ performances to fill the concept of teachers with meaning. We are aware that PISA is only one of the constructors in an international “language game” on education, but nevertheless regard PISA as an important node for this activity.

## PISA: a constructor of educational “facts” and “truths”

Together with other organizations, OECD has become part of what is theoretically described as internationalization, globalization, borrowing, and lending. This has been widely commented on by many educational researchers (e.g. STEINER-KHAMSI, 2004, OZGA & LINGARD, 2007, SCHRIEWER & MARTINEZ, 2003). Although OECD is primarily concerned with economic policy, education has become increasingly important due to the fact that over the last 40 years, education has been reframed to include economic competitiveness in an economic discourse related to human capital and the “knowledge economy” (PETTERSSON, 2014). The case of OECD is interesting, partly because it has no legal instruments with which to promote policymaking at a national level. Despite this, OECD has framed an international policy discourse through its rankings, publications, international knowledge assessments, and national and thematic policy reviews. Martens (2007) contributes by suggesting a “comparative turn,” which is a scientific approach to political decision-making. By means of statistics, reports and studies, OECD has activated a slumbering “common sense” in political decision-making by saying that scientific “proofs” are indisputable (MARTENS, 2007).

Further, Martens (2007) argues that OECD’s greatest impact can be seen in its agenda with indicators and its role in constructing a global policy field of governance by comparison (cf. GREK *et al.*, 2009), which can be discussed in terms of a datafication of governance (HANSEN, 2015). OECD is one of the constructors of what can be called a comparative curriculum code (FORSBERG *et al.*, 2015). Nóvoa and Lawn (2002) state that comparisons like these should not be regarded as methods, but can in fact be seen as policy. The policy is driven by an expert discourse that, by means of comparative strategies, tends to impose natural or common sense answers in national settings (e.g. STEINER-KHAMSI, 2004; TAYLOR, *et al.*, 1997). While OECD serves national policymakers well with a comparable discourse in terms of statistics,

it also provides them with a global policy lexicon concerning what education is and ought to be.

PISA provides comparisons of the competencies of 15-year olds that are said to be relevant for everyday adult life, rather than simply evaluating knowledge based on the curriculum (OECD, 2001). It is also said that assessments of curriculum knowledge only measure internal efficiency, and reveal little about how schools prepare students for adult life (OECD, 2001). As such, PISA can be seen as a platform for policy construction, mediation, and diffusion at the national, international, and even global level (RIZVI & LINGARD, 2006). It can therefore be said that PISA shapes an international discourse and is in turn shaped by the discourse.

PISA assessments have been conducted on several occasions. Students' knowledge of reading, mathematics, and scientific literacy is tested, together with their interests and backgrounds. The emphasis on "real-life" circumstances and the capacity to enter the labor market with the relevant skills has shifted PISA's focus away from less explicit educational aims that are more complicated to measure (PETTERSSON, 2008). PISA also easily connects to the idea of the self-governance of active subjects, which expands governance into a system of individual self-regulation (cf. BALL, 1998).

## Theoretical perspectives

The point of departure in this study is to analyze how PISA, with the aid of aggregated data, reports on what are regarded as prerequisites for students' performances and the construction of "teachers" in what Rouvroy (2012) calls a process of "data behaviourism." This is a way of producing knowledge about future preferences, attitudes, behaviour, and events without considering the subjects' psychological motivation, speech, or narratives, but instead relies on aggregated data. As Hansen (2015) states, we seldom think about how numbers and the social activities they entail shape our everyday practices.

Further, data that are used to describe a certain phenomenon are often regarded as a representation of people, objects, and relationships, which has implications for those who take the authority of the representations for granted as well as for those who contest it (HANSEN, 2015). Similarly, statements about teachers based on PISA performance data are not a perfect representation of how things "really are." This is because full transparency, here understood as unmediated or unfiltered human access to reality, is an illusion (e.g. DRUCKER & GUMPERT, 2007). Rather, representations create narratives about how phenomena are interpreted and understood, which

in this study relate to how representations of teachers, based on aggregated comparative data, create a specific narrative in the PISA reports.

Teachers can be framed in different ways, which means that teacher autonomy can be constructed differently. Teacher autonomy can be defined as the freedom and responsibility given to the teaching profession to plan teaching based on professional decisions and justifications (GERRARD & FARREL, 2013; SCHOLL, 2012), for example, by constructing teachers as deliverers or developers of teaching and education (PRIESTLEY, ROBERTSON, & BIESTA, 2012). Framing teachers as deliverers or developers construct different types of teacher autonomy, that is, restricted or extended autonomy (MØLSTAD, 2015). Autonomy is central to teaching, because teachers' professional knowledge involves making decisions that are informed by knowledge and understanding of the unique context in which they work (GEWIRTZ *et al.*, 2009). This autonomy can be defined by the possibility to be creative and responsive (GERRARD & FARRELL, 2013). However, Priestly *et al.* (2012) argue that the policy rhetoric that appears in the more recent curriculum places the teacher at the forefront of curriculum development, which implies a return to teacher autonomy. This is based on an argument that curricula focusing on dialogic pedagogies, active learning, individual learning, and learner autonomy enhance the professional role of teachers (PRIESTLEY, ROBERTSON, & BIESTA, 2012). In other settings, teachers' expertise can be measured by the effectiveness of their teaching. Hence, the teacher who is most efficient "is the one who gets his students to 'stand up and deliver' at the right time" (HOPMANN, 2003, p. 472). In our study, it is important to locate how teachers and the activities they perform are constructed in the PISA reports as educational "facts" or "truths" that explain why some students perform better than others on the knowledge test.

## Methodological approach

The study has a text analytical approach, which involves using NVivo® software to sort and filter the texts. The studied texts are the international reports from the different PISA tests (OECD, 2001, 2004, 2007, 2010, 2014). Methodologically, text analyses do not reveal very much about policy implementation, although they do tell us which content is in the foreground and which is not. As such, content is constructed as "real" by policymakers and others, but at the same time narrows the space for alternative views. Content is brought to the fore in the PISA reports and, as a result, perpetuates political views of social reality (MUNTIGL, 2002).

By showing how teachers are conceptualized in the PISA reports, we also illustrate the different ways in which student performance data are trans-

formed into constructions of concepts and how this affects the understanding of teachers and their activities. As stated above, we are not suggesting that the conceptualizations of teachers that are constructed automatically lead to policy change. Rather, we suggest that policy texts can be seen from the angle of a “language game,” that does not just describe social processes and structures but also creates and supports them (HACKING, 2007; SAARINEN, 2008). Studies of concepts are important for our understanding of how international discourses on teachers are constructed.

In the following, NVivo® is used to map and categorize the reports of the different PISA tests. The results have been categorized into different sections, each involving a conglomerate of statements and conceptualizations. The sections have been developed analytically by submerging the different categories mapped in NVivo®. Together, they make up PISA claims and the “facts” and “truths” of what should be considered as “good” or “bad” education. This then frames how the concept of teachers is constructed in the investigated discourse.

## Conceptualizing teachers and teacher activity

Below, three different sections describing teachers are presented that are said to promote better student performance. For reasons of clarity, the three sections are separated, although in actual fact they are highly interwoven. In the PISA reports, teachers are described as actors performing activities that are important for reaching the goals set for education.

The analytical separation into three sections also serves as an indication of the frames constituting what is perceived as “good” education and the role that teachers play in the construction of this. In all these cases, “good” education is connected to the betterment of student performance – measured and visualized by performance data. The results are presented in relation to various quotes and sayings. The quotes represent typical examples of how teachers are connected to the knowledge that is expected to guide their teaching, the roles they play in transforming education to better performances and ensuring long lasting educational reforms. Also, when possible, textual examples from Brazil are used to show how PISA reasoning appears in that national context.

## The “enlightened” teacher

While investigating important knowledge for the improvement of students’ performances, we found that several topics could be included in a specific narrative that can be described as a “language game” about ensuring

teachers' knowledge for the better student performance. In this, discussions about teachers' roles as deliverers or developers (PRIESTLEY *et al.* 2012; MOLSTAD, 2015) are evident. One of the questions raised in connection with this is whether the reasoning about teachers' knowledge leads to specific "data behaviourism" (ROUVROY, 2012) among teachers and policymakers, and as such further promotes a specific PISA knowledge.

In our analysis it was found that statements about the above topics have the following components: "Comparative international assessments can extend and enrich the national picture by providing a larger context within which to interpret national performance. They can provide countries with information to judge their areas of relative strength and weakness and to monitor progress. They can also stimulate countries to raise aspirations. And they can inform national efforts to help students to learn better, teachers to teach better, and schools to become more effective" (OECD, 2007, p. 3). This quote portrays PISA data as important for teachers to be aware of and have knowledge about. What is expressed in the citation is a strong belief that awareness about these issues can lead to better student performances. The reasoning seems to be that if teachers recognize and appreciate the PISA tests then students' performances are likely to improve. In a way, the PISA reasoning becomes self-referential and self-authorizing, in that if educational actors are aware of the importance of the knowledge promoted by the PISA reasoning, students' performances will improve. When it comes to improving performances in the tests, it is argued that when countries know more about the promoted knowledge, their education systems develop and teachers become more effective. Discussions such as "teaching to the test" or whether PISA actually measures the right knowledge are not presented.

Knowledge about the construction of the tests and extensive knowledge about the strengths and weaknesses of comparing performances between nations and schools are also important (e.g. OECD, 2014, p. 34). Statements relating to these issues in the PISA reports highlight the PISA reasoning and present a rather multi-faceted picture about what the test stands for in terms of benefits and deficits. We consider these textual representations as being involved in a "language game" to construct "education." Hence, the reasoning revolves around an educational "fact" and a "truth" that PISA promotes better student performances and that this is more likely to happen if teachers are aware of and can reflect on the issues raised and transform this knowledge into teaching. Consequently, the message is that PISA as a phenomenon, if acknowledged and used, will ensure teachers' knowledge and lead to better student performance.

The various reports also include descriptions of teachers meeting the challenges of instructing socio-economically disadvantaged children. This is



portrayed as a challenge that teachers have to deal with (e.g. OECD, 2014, p. 36) in terms of the knowledge that is required, the issues themselves and the planning of the teaching. The PISA reasoning is also illustrated by the “fact” that social inequality leads to “achievement gaps” amongst the students. However, effective teaching is also linked to questions about how to close these “achievement gaps.” Here, “effective” teaching is portrayed as teaching that eliminates social inequality.

The concept of teaching is sometimes also portrayed as instruction, as in the following example: “Comparative international analyses can extend and enrich the national picture by providing a larger context within which to interpret national results. [...] they can provide evidence to direct national policy, for schools’ curricula and instructional efforts and for students’ learning” (OECD, 2004, p. 3). This quote makes it explicit that universal policies rely on raising the standards for all students. It is discussed that in countries with less difference in student performance, universal policies will play a greater role. Such policies are said to include altering the content and pace of the curriculum, improving instructional techniques, introducing full-day schooling, altering the school-entry age, or increasing the time spent on language classes (OECD, 2007). Despite the rather strong emphasis on reasoning about social inequality, some examples concern the teaching that students receive, such as in the following example, this time expressed in terms of instruction: “By implication, much of the difference in the literacy and numeracy proficiency of young adults today is likely related to the effectiveness of the instruction they received in primary and lower secondary school” (OECD, 2014, p. 33).

What appears in the analysis of the reports is a strong reasoning about teaching as a way of solving what is perceived as “achievement gaps” that are normally connected to performance data and differences in social background. In the reports, teachers are seen as solutions to closing the measured “achievement gaps” connected to social inequality. This description is presented as a universal educational “fact” that is important for understanding differences in student performances. In line with this reasoning, “good” teachers are those who can recognize differences among the students and adapt their teaching to help students from less favoured social backgrounds to perform better. Therefore, what is seen as a strategy for ensuring knowledge is that teachers should know and understand what an international knowledge assessment like PISA can offer in terms of insights into the strengths and weaknesses of their teaching. This is presented in the reports as a way of improving student performance and as a strategy for closing the “achievement gaps” caused by social inequality. To summarize, if teachers know why “gaps” in student performances appear, and have strategies for dealing with them, they will be more able to adjust their teaching in a way that improves student

performance. Teachers are thus pinpointed as developers of strategies to close “achievement gaps” in education.

## The “transformational” teacher

The reports contain strong statements about the importance of educational transformation for the betterment of students’ performances. This takes different forms and is stated differently when relating to different issues. When analyzing the different textual statements, an observation is that the results are presented with a view to providing different actors in various educational systems with “facts” and “truths” for transforming weak performances into strong ones. Hence, it is obvious that aggregated performance data help various actors to transform education. Depending on which educational actor is being addressed, different solutions are presented. For instance, when the reports are aimed at policymakers, curriculum and educational state reforms are emphasized. When aimed at teachers, the emphasis is on teaching and evaluation as ways of improving students’ performances.

One example of how the transformation of education is covered in the reports comes from Brazil. Using examples from different nations for this purpose is normal practice in the reports. This is based on two major concerns: presenting “best evidence” and legitimizing the PISA test by presenting what are perceived as successful transformations of education:

[...] the central government has been a key actor in driving and shaping education reform. Over the past 15 years it has actively promoted reforms to increase funding, improve teacher quality, set national curriculum standards, improve high school completion rates, develop and put in place accountability measures, and set student achievement and learning targets for schools, municipalities and states. [...] raised teachers’ salaries, increased the number of teachers, increased the length of teacher-preparation programs, and contributed to higher enrolments in rural areas. A conditional cash-transfer program for families who send their 7-14 year-old children to school (Bolsa Escola) lifted many families out of subsistence-level poverty, encouraging their interest that their children receive an education. (OECD, 2014, p. 77)

Interestingly, it is not clear that these reforms are dependent on Brazil’s participation in the PISA tests. Rather, when the report presents the reforms it is argued that PISA has been instrumental in them. Here, it is

important to remember that enterprise is an important component of PISA activity. In order to sell PISA solutions, you have to legitimize the test and promote a feeling that participating is important for achieving a transformation of the educational system. As such, PISA is important for national policymakers in terms of legitimizing national reforms and for the PISA administration by promoting their specific reasoning to improve student performance.

Committed teachers are also highlighted as important for achieving educational transformation (e.g. OECD, 2004, p. 226). In this context, the reports state that teachers are crucial for achieving a transformation of education for better student performances. Knowledge about social inequality is also stated as important for achieving this transformation. Most importantly, however, teachers are assigned the role as developers of strategies for achieving this transformation.

Teaching is highlighted in the reports as an important aspect of the transformation of education, which is seen in the following citation: “Students who leave school with the autonomy to set their own learning goals and with a sense that they can reach those goals are better equipped to learn throughout their lives” (OECD, 2004, p. 110). This indicates that teachers are perceived as important for students’ learning and helping them to become autonomous so that they can take responsibility for their own learning. Consequently, a “good” teacher is one who is able to teach students to do just this. This reasoning is discussed in several ways, where, for example, the importance of attainment, problem solving, and interest among students are highlighted. Teachers and the activity of teaching are also seen as transformation agents for managing better performances among students. Teachers are thus rhetorically highlighted as being important for educational transformation. The role can be interpreted as being essential due to their ability to close students’ so-called “achievement gaps,” which are said to be dependent on social inequality. In line with this reasoning, “effective teaching” is presented as the solution for closing such “gaps.” The transformation of education is conclusively understood as closing the “gaps” by teaching under-privileged groups in a way that these “gaps” will decrease or diminish. Teachers are thus seen as developers of strategies for closing performance “gaps.”

## The “reformable” teacher

The reports also contain several examples of how to ensure a valid realization of reforms for transforming the education system to ensure better educational performances. Normally, teachers are placed at the centre of discussions for managing societal challenges. What is emphasized in these discussions is the importance of well-educated teachers who are “reformable,”

that is, willing to adopt new knowledge and adjust their teaching to it. In the reports, this is discussed in terms of teacher quality. When the reports discuss these issues, a specific reasoning can be identified in terms of developing a specific “data behaviourism.” This “data behaviourism” is characterized as promoting teachers’ willingness to adopt knowledge and develop strategies for closing the “achievement gaps.” In line with this reasoning, the reports promote specific “tracks” for developing teachers. One example comes from the Brazilian context and relates to the importance of teacher quality:

Improving the quality of teachers has also been at the centre of Brazil’s reform initiatives. [...] Subsequent reforms in the late 2000s sought to create standards for teachers’ career paths based on qualifications, not solely on tenure. [...] Although universities are free to determine their curriculum for teacher-training programs, the establishment of an examination system to certify teachers sends a strong signal of what content and pedagogical orientation should be developed. (OECD, 2014, p. 77-78)

This citation can be discussed in the same terms as the former Brazilian example. Brazil is mentioned as a successful example of how to raise teacher quality, although it is not clear whether these reforms have anything to do with PISA. Still, what is manifested is a strong belief that competent teachers lead to better performances among the students. In fact, the idea that teachers’ knowledge and education lead to better teaching is strongly expressed in all the reports. The reasoning is framed within a “knowledge paradigm,” which is discussed in terms of a close connection between teachers’ knowledge and student performance. Dependent on the connection between teachers’ knowledge and student performance, a specific “data behaviourism” emerges, which is that teachers’ knowledge needs to be improved in order to achieve better performances among the students.

As mentioned above, case studies from countries that have transformed their educational systems are systematically used in the reports. Examples of “best practice” countries are Poland, which reformed its education system by delaying the age of selection into different programs, and Germany, which moved toward reducing the levels of stratification across education programs. Also, nations like Estonia, Poland, Brazil, Colombia, Japan, Mexico, and Israel are mentioned as having been successful in this respect. The reports often focus on certain policies for improving the quality of teaching staff, for example, by increasing the requirements for a teaching licence, providing incentives for high-achieving students to enter the profession, raising salaries to make the profession more attractive, offering incentives for teachers to engage in in-service teacher-training programs,

or by changing the criteria and benefits associated with teachers' career advancement (OECD, 2014).

Brazil is highlighted as an example of the employment of successful strategies for transforming the education system to achieve better performances:

The school- and teacher-evaluation systems have also been reformed. Since 2010, the teacher-evaluation system, which was developed to improve teachers' professional capacities, was expanded to all schools. Results from the evaluation lead to customized training programs for teachers, depending on their results. Given the greater autonomy granted to school principals, evaluation information will be made public and regional offices of education will oversee monitoring, focusing more on output-oriented criteria. (OECD, 2014, p. 190)

What becomes apparent is the reasoning about the importance of data, and that if nations followed the advice derived from the PISA tests, better performances would be possible. The importance of raising standards among teachers is also stressed. Consequently, teachers are not only seen from the perspective of the knowledge they have, but are also discussed in terms of their characteristics. In these discussions, specific characteristics for promoting better performances are highlighted. Based on the results in the PISA tests, a "data behaviourism" is created that includes teachers being open-minded enough to change their teaching methods in order to close the aforementioned "achievement gaps."

## "A teacher phoenix": the hope and the happening of educational development

Narratives based on aggregated performance data highlight different aspects of education. In this study, we have looked at how the PISA reports relate to teachers and the activities they perform in school and how these aspects can be discussed and understood as parts of an international "language game" communicating educational "facts" and "truths." In this, we have used Hacking's (1992) work and his discussions about different styles of reasoning for understanding how "language games" promote certain narratives, for example, about what constitutes "good" teachers and "effective" teaching.

The results are presented in three different sections, which should be understood as analytical categories that make it possible to discuss the various PISA narratives that are produced. The analysis of the PISA reports on teachers sets out to explore how "facts" and "truths" about educational matters are told. The analysis explores the principles of a "language game"

on education, focusing on the conceptualization of teachers and the activities they perform on a daily basis. What can be noted in the reports is that they become self-referential in the sense that they highlight the importance of teachers having knowledge about the “facts” and “truths” that are deduced from the tests in order to improve students’ performances in the tests. This also enables the OECD through the PISA tests, to legitimize and stress the importance of the knowledge that is tested, and this is also seen as important knowledge for the future.

In the reports, the role that the teachers play in raising educational standards is very explicit. In fact, teachers are more or less presented as “key figures” in the raising of educational standards. Teachers are therefore important as individuals and for the activities they perform to ensure educational transformation and educational reform. In this reasoning, hierarchies are established between “good” teachers and “effective” teaching. When it comes to the characteristics of the teachers, the reports especially highlight teachers who can adopt teaching approaches that help to close the “achievement gaps” among students. Moreover, “good” teachers and “effective” teaching are constituted as teachers and strategies that enable socially disadvantaged students to catch up with more advantaged students, thereby leading to the closure of the “gaps.” Consequently, the reports emphasize teachers as developers of education more than deliverers of policy. This is not to say that policy or governmental reforms are unimportant, but rather that these are important for adjusting the educational system so that teachers can develop strategies for closing the recognized “achievement gaps.” Teachers thus become indicators of the effectiveness of the education system and important factors for raising performance standards. In one way, there is an explicit striving to raise teachers from yesterday’s ashes into a new “teacher phoenix”; someone who adapts to what is seen as tomorrow’s knowledge.

To summarize, in the PISA reasoning, teachers are seen as important for transforming education for better performances. The activities that are highlighted as contributing to this are teaching to reduce social inequality, and the acquisition of knowledge about educational matters presented as “facts” and “truths” in the PISA reports. Teachers are also regarded as actors who can transform educational systems and are highlighted as “key figures” in the development of educational systems for improved performance. Last but not the least, teachers are also regarded as important agents for reform. In order to initiate such reforms, the education and reputation of teachers are emphasized, as well the specific characteristic of the “reformable” teacher. As such, in the PISA reports, a new kind of teacher is sought — a teacher phoenix who is an “enlightened” and active developer of educational transformation, which includes the reduction of social inequality and an ability to adjust his or her teaching

so that “achievement gaps” are closed. Hence, teachers are regarded as important agents for transforming and developing an education of quality and an equality-based educational system that is in line with PISA thinking. Based on the PISA narrative, policymakers who are responsible for making educational decisions can promote teachers as important actors for achieving educational transformation and, at the same time, can also blame them if the education system that is produced does not improve student performance. At the end of the day, teachers are thus both the hope and the happening of educational transformation and development.

## References

- BALL, S.J. Big policies/small world: an introduction to international perspectives in education policy. *Comparative Education*, v. 34, n. 2, p. 119-130, 1998.
- CARVALHO, L.M. The fabrication and travel of a knowledge-policy instrument. *European Educational Research journal*, v. 11, n. 2, p. 172-188, 2012.
- DRUCKER, S., J. & GUMPERT, G. Through the looking glass: illusions of transparency and the cult of information. *Journal of Management Development*, v. 26, n. 5, p. 493-498, 2007.
- FORSBERG, E., PETTERSSON, D., NIHLFORS, E. et al. Codification of present Swedish curriculum processes – linking educational activities over time and space. *AERA 2015 Annual Meeting*, “Toward Justice: Culture, Language, and Heritage in Education Research and Praxis”, Chicago, Illinois, 16-20 April 2015.
- GERRARD, J. & FARRELL, L. Remaking the professional teacher: authority and curriculum reform. *Journal of Curriculum Studies*, v. 46, n. 5, p. 634-655, 2013.
- GEWIRTZ, S., MAHONEY, J., HEXTALL, I., & CRIBB, A. Policy, professionalism and practice: understanding and enhancing teachers’ work. In: GEGRWIRTZ, S., MAHONEY, J., HEXTALL, I., & CRIBB, A. (EDS.). *Changing teacher professionalism: international trends, challenges and ways forward*. London: Routledge, 2009. p. 3-17.
- GREK, S. What PISA knows and can do: studying the role of national actors in the making of PISA. *European Educational Research journal*, v. 11, n. 2, p. 243-254, 2012.
- GREK, S., LAWN, M., LINGARD, B., et al. National policy brokering and the construction of the European Education Space in England, Sweden, Finland and Scotland. *Comparative Education*, v. 45, n. 1, p. 5-21, 2009.
- HACKING, I. ‘Style’ of historians and philosophers. *Studies in the History and Philosophy of Science*, v. 23, n. 1, p. 1-20, 1992.
- HACKING, I. Kinds of people: moving targets. *Proceedings of the British Academy*, v. 151, p. 85-318, 2007.
- HANSEN, H.K. Numerical operations, transparency illusions and the datafication of governance. *European Journal of Social Theory*, v. 18, n. 2, p. 203-220, 2015.

HATTIE, J. *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. London: Routledge, 2009.

HOPMANN, S. On the evaluation of curriculum reforms. *Journal of Curriculum Studies*, v. 35, n. 4, p. 459-478, 2003.

LINDBLAD, S., PETTERSSON, D., & POPKEWITZ, T. S. *International comparisons of school results – a systematic review of research on Large Scale Assessment in education*. Stockholm, Sweden: Swedish Research Council, 2015.

MARTENS, K. How to become an influential actor – the “comparative turn” in OECD education policy. In: MARTENS, K., RUSCONI, A., & LUTZ, K. (Eds.) *Transformations of the state and global governance*. Routledge: London, 2007. p. 40-56.

MOLSTAD, C.E. *State-Based curriculum-making – a study of curriculum in Norway and Finland*. PhD – University of Oslo, Oslo, 2015.

MUNTIGL, P. Policy, politics and social control: a systemic functional linguistic analysis of EU Employment Policy. *Text*, v. 22, n. 3, p. 393-441, 2002.

NÓVOA, A. & LAWN, M. (Eds.) *Fabricating Europe: the formation of an education space*. Dordrecht/Boston/London: Kluwer Academic Publishers, 2002.

OECD. *Knowledge and skills for life: first results of Programme for International Student Assessment*. Paris: OECD, 2001.

OECD. *Learning for tomorrow's world first results from PISA 2003*. Paris: OECD, 2004.

OECD. *PISA 2006 science competencies for tomorrow's world volume 1 – analysis*. Paris: OECD, 2007.

OECD. *PISA 2009 Results: what students know and can do. Students performance in reading, mathematics and science*. Paris: OECD, 2010.

OECD. *PISA 2012 Results in focus: what 15-year-olds know and what they can do with what they know*. Paris: OECD, 2014.

OZGA, J. & LINGARD, B. Globalisation, education policy and politics. In: LINGARD, B. & OZGA, J. (Eds.) *The Routledge-Falmer reader in education policy and politics*. London: Routledge, 2007. p. 65-82.

PETTERSSON, D. Internationell kunskapsbedömning som inslag i nationell styrning av skolan [International knowledge assessments: an element of national steering]. *Acta Universitatis Upsaliensis. Uppsala Studies in Education*. Uppsala: Uppsala universitet, 2008.

PETTERSSON, D. Three narratives: national interpretations of PISA. *Knowledge Cultures*, v. 2, n. 4, p. 172-191, 2014.

POLKINGHORNE, D. Changing conversations about human science. In: KVALE, S. (Ed.). *Issues of validity in qualitative research*. Lund: Student litterateur, 1989. p. 13-46.

PRIESTLEY, M., ROBERTSON, S., & BIESTA, G. Teacher agency, performativity and curriculum change: reinventing the teacher in the scottish curriculum for excellence. In: JEFFREY, B. & TROMAN, G. (Eds.). *Performativity across UK education: ethographic cases of its effects, agency and reconstructions*. Painswick: E&E Publisher, 2012. p. 87-108.



RIZVI, F. & LINGARD, B. Globalisation and the changing nature of the OECD's educational work. In: LAUDER, H., BROWN, P., DILLABOUGH, J., & HALSEY, A. H. (Eds.) *Education, globalization and social change*. Oxford: Oxford University Press, 2006. p. 247-260.

Rouvroy, A. The end(s) of critique: data-behaviourism vs. due-process. In: HILDEBRANDT, M. & DE VRIES, E. (Eds.) *Privacy, due process and the computational turn*. Philosophers of law meet philosophers of technology. London: Routledge, 2012.

SAARINEN, T. Position of text and discourse analysis in higher education policy research. *Studies in Higher Education*, v. 33, n. 6, p. 719-728, 2008.

SCHOLL, D. Are the traditional curricula dispensable? A feature pattern to compare different types of curriculum and a critical view of educational standards and essential curricula in Germany. *European Educational Research Journal*, v. 11, n. 3, p. 328-341, 2012.

SCHRIEWER, J. & MARTINEZ, C. *World-level ideology or nation-specific system reflection? Reference horizons in educational discourse*. Cadernos Prestige, Final Series 3/7. Lisboa: Educa, 2003.

STEINER-KHAMSI, G. *The global politics of educational borrowing and lending*. New York & London: Teachers College, Columbia University, 2004.

TAYLOR, S., RIZVI, F., LINGARD, B., & HENRY, M. *Educational policy and the politics of change*. London: Routledge, 1997.

WITTGENSTEIN, L. *Philosophical investigations*. New York: The Macmillan Company, 1965.

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