

Presentation note

THE N-MOVES OF PISA.

An introduction to “PISA and educational Public Policies”

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This *Dossier* includes contributions from a European research project — “The role of knowledge in the construction and the regulation of health and education policy in Europe” (*KNOWandPOL*) — set out in order to broaden existing understanding on knowledge-policy relations, in a social and cultural context characterized by an increase in the volume, plurality and circulation of knowledge in public action (AA.VV, 2006; Delvaux & Mangez, 2008)¹. One of the analytical strands of the project deals with the issues of the production, dissemination and appropriation, in the course of public action, of knowledge regulation tools (KRT) — that is, technical-social instruments that diffuse a particular kind of knowledge in order to shape the behavior of actors in a given policy domain (Freeman *et al.*, 2007). Among the different versions of KRTs — from auditing devices to self-evaluation, from best practices to accreditation schemes, from training programs to benchmarks, rankings and statistical comparisons — the (Education sector) research teams decided to focus their case studies on the fabrication, circulation and use of the OECD’s *Programme for International Student Assessment (PISA)*².

WHY PISA?

PISA is an international compared assessment project carried out under the auspices of the Organization for European Economic Cooperation (OECD). It was officially launched, at the end of the nineties,

as the agency response to the requirements of member countries to regularly provide reliable data on the knowledge and skills of their pupils and the performance of their education systems. Its “chief aim” is to provide “a stable point of reference against which to monitor the evolution of education systems” (OECD, 2007, p. 17). The Program is structured around a triennial assessment; and each edition comprises a main survey which includes a core module (compulsory for all participant countries) focusing on one literacy domain (e.g. reading, mathematical, science literacy). It is oriented towards the “need of governments to draw policy lessons” (OECD, 2007, p. 1) and includes specific knowledge generation practices: “(...) is a collaborative effort, bringing together scientific expertise from the participating countries, steered jointly by their governments on the basis of shared, policy-driven interests. (OECD, 2007, p. 10). To sum up, the Program has an overt policy orientation and develops under an explicit “policy-(expert) knowledge” relationship.

Besides these attributes, other reasons justify our “case selection”: the features that differentiate PISA from its competitors, like the regularity and flexibility of the application, and the singularity of the object — the literacy competences (see Bottani, 2006); the continuous expansion of participating countries (32 in *PISA 2000*, 41 in *PISA 2003*, 57 in *PISA 2006*, and a total of 67 countries expected to take part in the fourth cycle, 37 of them non-OECD countries); the growing — and varied — academic

interest in the Program, spanning from acceptance to denunciation³. Nevertheless, it was mostly the teams' shared perception *about the conspicuous — albeit not similar — presence of PISA in public action* that led to its choice. Thus, our research interests converge towards the idea of following (and understanding) the “N-moves” of PISA: the tool is fabricated at supranational level in bringing together individuals and organizations from very different social spaces; the tool often reaches national public action; different social groups are interested by the instrument; (and) yet they are differently relating with and using — even shifting — the object.

PISA — A KRT

KNOWandPOL studies address PISA as a knowledge regulation tool (KRT): an instrument (based on knowledge and that generates knowledge) that backs up and takes part in the task of coordinating public action in education (Freeman *et al.*, 2007; Pons & van Zanten, 2007). Policy tools are sites of/for recurrent materialization of interpretations about “reality” and models for appropriate agency (see Draelants & Maroy, 2007). The reasons through which students, national societies and education systems are described, compared and assessed in PISA certainly engender scripts for acting in the educational sector.

PISA operates over several institutional categories of schooling: (re)defining students as life-long learners in alignment with OECD aims for education; (re)defining teaching-learning relationships in alignment with cognitive learning and post-industrialization theories; redefining school-knowledge towards utilitarian knowledge and protecting a post-disciplinary school organization; redefining the locus of the assessment of school systems — from internal to external criteria (Carvalho, 2009, see also Mangez, 2008). The frames, questions and indicators used in the assessment of “literacy performances” define young people’s characteristics and expected modes of action or repertoires of “competent” attitudes and behaviors. What is more, this sketch of a common expected background of performance and engagement in social life is, also, an imagination of a common (transnational) society.

Furthermore, PISA puts forward rules about the qualified and reasonable policy-makers in contemporary times: the ones who govern based in objective diagnostics, the ones who search for competitive advantages by measuring the outcomes of the school system; the ones who adopt solutions based on what works in other countries — thus, who learns about and copies competitors so as to progress; the one who accepts mutual evaluation as a rule for governing (see Carvalho, 2009).

PISA’s comparison situates policy-makers and other public policy actors in an imagined time-line that leads from the industrial society to the knowledge society and, at the same time, in a competitive-cooperative world-wide space. On the one hand, international comparative assessment is a resource for exercising government and for its scrutiny at national level. On the other hand, the device plays a role in structuring a transnational regulation in which the national States voluntarily involve themselves (with other bodies) in the joint production of rules. To sum up, PISA is a *policy technology* (Grek, 2009; Grek & Ozga, 2007) that takes part in (a) fabricating people for an imagined global society and (b) in the making of specific forms of governing it through “knowledge-based” devices.

“KNOWLEDGE FOR POLICY”

In international comparative assessments like PISA, power flows through the culpability and responsibility they generate in national spaces; but it also flows through the hope, optimism and confidence they deposit in the possibility of educational reforms, conducted by policy-makers who are up to date with expert knowledge. PISA is part of a universe of knowledge that “ensures” that a certain educational change can lead each nation into the so-called new global world (see Lindblad & Popkewitz, 2004, pp. xx-xxi).

This “knowledge for policy” is a special type of knowledge, created by specific practices and facing specific criteria — namely of being compatible with the social practices it intends to relate to (see Nahessi, 2008). This type of knowledge is submitted not only to the criterion of scientific “credibility” but also to the “contextuality” — that is, to the

quality or condition of being relevant and able to be handled by the audience; consequently, “knowledge for policy has to be negotiated and effectively communicated (see Lindquist, 1990, pp. 31-35). When we read PISA’s texts as narratives about the making of knowledge for policy, we can find three elements that illustrate that double quest. One relates with the *starting point of the inquiry* — the questions/the aims of the studies are (at least in theory) partially defined by others and the ongoing inquiry work is open to scrutiny. The second, with the idea of a *collective making of knowledge*: it involves, in a collective effort, several groups of specialized knowledge producers and several bodies of specialized knowledge (e.g. curriculum, didactics and learning in science, reading and mathematics, statistics, psychometrics and compared assessment, social psychology, policy evaluation and analysis, school effectiveness). Thus, they generate heterogeneous knowledge for heterogeneous audiences and, what is more, they collectively validate their expertise. The third is related to the absence of a straight problem-solution relationship (a policy problem-a knowledge solution, or a knowledge solution for a policy problem): data/analysis/knowledge are set up to be used by decision makers, who must accept responsibility for the course of their actions (to analyze, to contemplate, to reflect, to draw lessons). The concern is *not only* to put texts on public “language” it is also to get others engaged in specific relationship with data/information/knowledge.

It is important here to note that PISA *is not only a triennial survey with a subsequent triennial report*. The Program involves multiple activities and generates many resources for social action in different social spaces. Alongside the survey, relevant face-to-face activities take place (in meetings, workshops, etc. involving policy makers, bureaucrats, experts, OECD members) and multiple publications — other than the surveys’ main reports — are generated and diffused at supranational and national levels (e.g. manuals, technical and theoretical reports, thematic reports, national reports, databases. etc). All these activities involve a wide variety of social worlds⁴. Therefore, the accomplishment of PISA depends on bringing together and cooperating different actors around a complex flow of activities that guarantee the circulation and legitimacy of a certain

type of knowledge practice — “knowledge for policy” — accepted as appropriate for the regulation of the education sector.

The making of PISA involves intertwined cognitive and social practices: the (re)definitions of educational reality”, of appropriate government conduct, even of appropriate ways of making knowledge for policy, goes hand in hand with the process of creating PISA ecology and achieving coordination and cooperation between the different actors involved (see Carvalho, 2009). Thus, PISA has to be seen as involving a complex connection of actors, objects and activities, as a process through which all actors are simultaneously, “free and networked”, “constructing and being constructed by their engagement” (Lawn, 2006, p. 4).

PISA — FABRICATION, CIRCULATION AND USE: SEEKING A “MULTI-LEVEL PERSPECTIVE”

Current comparative studies of public policies face the challenge of capturing, through their “interdependences”, the phenomena that generates “transnational convergence” and the national processes of “appropriation of orientations and instruments disseminated transnationally” (Hassenteufel, 2004, p. 113). Also in the fields of education policy and/or comparative education it is recognized that — despite the greater penetration or greater national adjustment to agendas and discourses diffused in/by international agencies — there are conspicuous indications of *divergence, bricolage, hybridization, or intra-national diversification* (see e.g. Ball, 1998; Popkewitz, 2000; Schriewer, 2000; Steiner-Khamsi, 2004).

KNOWandPOL studies follow these signposts and adopt the argument whereby there are multiple levels of education policy regulation (supranational, national, regional/local), played out by a variety of actors, and involving different sources and modes of regulation. Moreover, multi-regulation supposes the interpenetration of such levels, agencies and forms. Thinking in terms of regulatory tools, this means that instruments (like PISA) “circulate” and that they may “acquire new meanings as they circulate” (Freeman *et al.*, 2007, p. xx). Such analytical orientation invites us to express the

multiple and multidirectional threads of ideas and interests, and to look at knowledge-policy tools as potentially changeable and multi-usable products of these intertwining of ideas and agencies.

From this point of view there is not, *a priori*, any hierarchical relation or determination of the place by the national and of these by the supranational, and so one should admit that the meaning, intensity and effects of the relations between these various bodies comprise empirical proof. Therefore, all case studies — supranational and national — expose or explore the “N-moves” of PISA: PISA traveling, PISA driving people, (but) PISA (also) shifting (while traveling across new contexts and while attracting different social worlds).

A TOOL MADE TO TRAVEL AND TO ATTRACT

OECD AS A PROVIDER OF “KNOWLEDGE FOR POLICY”

The emergence of PISA has to be inscribed in the scope of the OECD’s political work, and more specifically within the agency intervention in the educational sector⁵. In a recent review on the role of the OECD in transnational governance, Mahon and McBride (2008, pp. 7-15) put forward some central ideas: its main contribution for the “postwar liberalization of trade and investment”; its “relative” — and frequently questioned — “autonomy” with regard to member States, particularly the US; its intervention through “soft modes of governance” (with the focus on “surveillance of performances” and “assessment of policies”); its impact on national policies as a “creator, purveyor and legitimator of ideas”. Over the years, education had progressively achieved more centrality to the overall mission of the OECD and the agency has become an *eminence grise* for many States’ education policy (Henry *et al.*, 2001; Rubenson, 2008, p. 242). Since the 90s, the OECD has played the role of evaluator or monitor of educational quality with an agenda in which educational problems are equated as requirements of a knowledge-based economy (Rinne *et al.*, 2004).

PISA “enfolds” and performs the social and cognitive features of the OECD agenda and modes of governance: PISA is a “norm and standard tool”

made through a set of “soft regulation” practices, combining — following Jacobson words (2006) — “meditative” and “inquisitive” activities. PISA is a sphere for the promotion of agreements about education practices and policies that national governments are happy to be submitted to external scrutiny. At the same time the instrument also supplies the politicians with data and analysis on a regular basis which derives from the models generated by the conventions established among experts.

It is important to note that PISA operates supported by the OECD’s authority as an “expert organization” (Noaksson & Jacobson, 2003). In fact the national actors’ narratives on participation in PISA, analyzed by our six research teams (see note 2), naturalize such status: they invoke OECD’s “technical” credibility, they praise its “expertise”, and they categorize it as an organization that represents the “developed world”.⁶ Moreover, PISA results tend to obtain the status of knowledge that is required or appropriate for mention in national or local public action scenes or even to account for political measures (Carvalho *et al.*, 2009).

CONNECTING WORDS

The OECD’s PISA Secretariat — the structure responsible for the “management of everyday activities of PISA” — takes the agency’s scripts seriously, either playing the “catalyst role” — acting on the mobilization, enlargement and selection of other collective (sometimes individual) actors, and working on the definition of their roles, on the rules and the mechanisms for their interaction — or playing the role of the independent purveyor of data and visions (see Carvalho, 2009, pp. 73-76, 91-95, 110-113). The “monopoly of expertise” (Latour, 1996 [1986]) created around PISA rests on a social process that includes a nucleus of actors from private and public organizations, experts from different areas, and OECD members. They all participate in the coordination of PISA multiple activities — inquiry, exchange, and publication — and through these activities they bring together many other and diverse actors and agencies (bureaucrats, policy makers, journalists, researchers). Furthermore, the tool is a result of the gathering of these social worlds and the assemblage of the varieties of knowledge and interest they bring. For instance, the making of PISA

knowledge is disciplined by the “literacy theoretical framework” and by particular psychometric assumptions, concepts and methods, but it is developed depending on a greater or lesser consensus between experts, their permeability to (national) political and cultural factors or pressures, and their alignment with OECD discourse.

From the diverse “coordination forms” (see Delvaux, 2009) that the PISA Secretariat puts forward in order to set the interdependencies among experts, policy makers, bureaucrats, etc, we want to highlight one that relates to the performance of the OECD’s rules for the making of “knowledge for policy” (consensus building, collaboration, high trust in expertise, responsiveness). This form is particularly evident on the use of *documents as coordination devices* (see Freeman, 2006). The methods adopted in the fabrication of an enormous amount of documents/texts of different types and the repeated mobilisation of different bodies to work on their draft versions (the openness of the documents until the final version) involves complex normative and functional coordination: on the one hand, the participation on the ceremonial may generate perceptions of membership/belonging and (at least) of partial authorship; on the other hand, it effectively leads to the production of consensual decisions (e.g., the frameworks, the structure and the writing style of the reports) and/or the standardised procedures (e.g. the technical norms that guide the implementation of PISA inquiries) that steer the actors.

PISA is a device that *connects worlds* (see Barroso & Carvalho, 2008). Thus, the relevant convergence produced by the tool sees the policy makers and other social worlds move towards the choice of the tool, as a pertinent resource for their action or as space for their social and cognitive investment, thus allowing PISA to become an “obligatory passage point” (Callon, 1986; Star & Griesemer, 1999 [1989]). PISA’s “attractiveness” rests on the capacity to engage social actors in knowledge production practices that uphold: mutual-surveillance as an appropriate way of knowing-governing; and PISA data as appropriate “knowledge for policy” (and public action). Such ability relates to the qualities we address below: the plasticity and adaptability of the tool.

PISA has been and is expanding in a threefold form: through the enlargement of the object of study, through the expansion of the number and focus of surveys, and through the increase of PISA’s target populations. The KRT is expanding as it moves into new areas of assessment (students’ interpersonal competencies, ICT competencies), as it moves closer to teachers’ practices and to classrooms, as it moves to younger and older students. This expansion is a sign of the plasticity of the tool; and this plasticity and these changes may be interpreted at the light of several *mechanisms of translation* (Callon, 1986; Latour, 1996 [1989]) related to the making of the PISA ecology: the boundary work needed to assure a monopoly of expertise; the permanent need to persuade, to keep others within the Program and to mobilize new allies; or to guarantee public resources and confidence. Thus, vigilance practices — regarding evaluative perceptions of PISA’s impact, regarding criticisms or regarding new methodological or theoretical developments — goes together with *interestment* practices. Making the ecology is making the tool — and making the tool is making the ecology.

The plasticity of PISA may also be related to the different forms the knowledge takes within the PISA reports, as it becomes more and more close to the audiences moving from “revelation” (the core results of the survey) to “explanation” (the interpretation of the results through relationships between performances and “context variables”), and to “condensation” (findings that require policy makers’ awareness) (Carvalho, 2009, pp. 110-111; see Delvaux, 2008, chap. 4, 2009, pp. 107-112). But the tool is also multiform, if we consider the variety of publications produced under the PISA label: frameworks for the study of literacy, databases, general and thematic reports, methodological users’ guides, technical reports, etc. What is perhaps more relevant here is that this variety of publications and products also supposes a variety of target populations and opens up a variety of possible uses, whether in order to reproduce knowledge, to re-contextualize or to produce “new” knowledge from it. Thus PISA “becomes” the basis for the production of new data-information-knowledge by national researchers, by

the media, by public policy actors (either to identify and describe educational system problems, or to selectively use PISA results), by national and/or regional education administrative structures that use PISA for making (at least inspiring) their own social-technical instruments. They depend from the tool, they amplify the effects on the tool, and they remake the tool.

PISA CIRCULATION AND N-WAYS OF USING IT: THE CASE STUDIES

When we bring together the studies on supranational fabrication of PISA and the six national case studies, we 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 *et al.*, 2009, n. p.). The conclusion sends us back to the initial reasons that lead our studies on PISA: the *conspicuous — albeit not similar — presence of PISA in public action*. The texts presented in this *Dossier* give a deeper understanding of such phenomena. They all contribute to clarify the diverse moves of the tool: it *spreads*, it is *displaced*, and it *shifts*, it helps to *modify* or to *preserve* power relations and meanings. These articles bring with them different comprehensive accounts about such moves and — along with, and this must be underlined — a rich diversity of theoretical and methodological resources that each team puts up in order to cope with the fabrication, circulation and use of a KRT in multiple public action scenes. Thus, in this Dossier the reader will follow six illustrations and six ways of seeing PISA’s circulation and use in six European spaces: Belgium (francophone community), France, Hungary, Portugal, Romania, and Scotland.

THE “EVALUATED-EVALUATOR”

The paper by Eric Mangez and Branka Cattonar deals with the reception and use of PISA in the French Community of Belgium (FCB). The authors question the nature of the OECD program and they interrogate the regulatory function of the tool when it is put together with the political and

cultural specificities of the FCB. They refute common and official discourses that portray PISA as a “decision support tool” — an instrument that increases rational policy making or the development of ‘evidence-based policies’; and they put forward an alternative understanding: PISA operates mainly as “surveillance” tool, as it puts pressure on the education sector’s institutional regulators. Thus, in FCB context the monitoring tool operates (and is operated) in ways that cause the regulators to become regulated. The “Evaluative State” is — as the authors wrote — also an “Evaluated State”. Within this scenario, they see the OECD (and its expert knowledge) emerging, between civil society and the State, as a “third-party evaluator”.

COMPETING “ARGUMENTAIRES”: TRANSLATING EXPERT KNOWLEDGE INTO COMMON KNOWLEDGE

The contribution of Nathalie Mons and Xavier Pons investigates the multiform reception — acceptance, refusal, negotiation — of PISA in the French policy debate between 2001 and 2008. Backed up by a synoptic view of 10 years of national debates on PISA, the authors develop an analytical perspective that puts the reader face-to-face with “a more or less stable and coherent set of arguments (scientific, technical or political) that help explain to the public the main results achieved by French students in the PISA tests” — what they call the *argumentaires*. Two sets of arguments are characterized: the *Bias Argumentaire* and the *Ideal Governance Argumentaire*, respectively produced by two sets of relevant policy actors: the staff of the education ministry and OECD members. Furthermore, the authors show that the *argumentaires* evolve as they compete, as they face new circumstances, as new actors and interests are involved, etc. What is more significant, Mons and Pons show that these cognitive politics always reformulate the knowledge delivered by PISA, transforming it into a “common and politically legitimate knowledge on the functioning of French education”.

CUSTOMIZING PISA AND INCLUDING-EXCLUDING VOICES

The article by Eszter Berényi and Eszter Neumann — with Iván Bajomi and Júlia Vida — focuses on the ways “domestic” actors cope with the diagnosis of

the Hungarian education system provided by PISA surveys. The text shows how Hungary's "shocking results" on quality and equity issues were "framed" in the domestic discourse, and they identify numerous policy solutions with reference to PISA. The social-cognitive operations of translating knowledge are, as in the previous article, a central element of the analysis. However, here the reader is steered to a different configuration, one where a domestic alignment is visible with PISA vocabulary and data as well as with the rationale for "evidence-based reforms". As the authors wrote: "the PISA discourse has lately become a master narrative for domestic education policy that embraces and neutralizes various other voices and results in a univocal policy discourse. (...) in order to be heard and taken into account, everyone is requested to first master the vocabulary of the all-encompassing PISA narrative". Thus, the re-contextualization of the KRT — the labour of customizing PISA — does not only act upon interpretations and modes of action in education; it extends to a boundary work that generates inclusions-exclusions among those who intend to speak publicly about education.

DE-POLITICIZATION OF POLICY AND RE-POLITICIZATION OF THE INSTRUMENT (TOOL)
The article written by Natércio Afonso and Estela Costa examines the mobilisation of the survey results in processes to legitimise education policies and the construction of the "governmental rhetoric". The authors focus their analysis on the period the 17th Portuguese Constitutional Government is in power and discuss the hypothesis that it is possible to identify what they call "new configurations in the decision-making processes". The article identifies different policy measures justified in the light of the PISA results, which were invoked with an unprecedented frequency in relation to previous governments. However, the more in-depth analysis is reserved for the narratives of the Minister of Education of that government, in which the authors identify a change in the "conception of the decision-making process" and a "renewal of the foundations of policy legitimacy", which places a greater emphasis on "scientific grounds" and "the possession of evidence" as conditions to exercise its choices. This de-politicization of policy goes hand in hand, however,

with a "re-politicization of the instrument", deriving from the adjustments between the politicians' agendas and the values, visions and directions embodied in the instrument.

THE SILENT PISA

The contribution by Adél Kiss, Ildikó Fejes and Zoltan Biró starts with a description of Romania's education policy and educational research, and subsequently analyses PISA's participants, activities, products at the national level, and the rare debates about it (within an amorphous public opinion). The article draws the scenario of a "post-socialist" country that, since the end of the nineties, lives the unstable processes of (political, economic and cultural) transition as well as the controversial process of "accession" to the EU. The authors suggest that PISA as a tool that fosters comparisons with other countries is an object with the potential to amplify contradictions inherent to the transition-accession processes. The result is, the authors suggest, the co-existence of two (simultaneous) attitudes: the efforts towards "compliance", "that also stress the formal and peripheral characteristics of the adaptation"; and the "discomfort and frustration" caused by the perception of "gaps and deficits" that the results generate. These factors help one understand several conclusions of their study: there is no significant reflection on PISA in academic circles; the issues of undertaking the PISA survey are basically a matter for the Government and Ministry and there are no detectable relationships between PISA results and national reforms.

POLICY-MAKERS AND PISA:

FIREWORKS, TRUST AND STATUS

Conversely, the study of PISA in *post-devolution Scotland* (1999-2007) tells us about the journey of the tool as a "spectacle"; although a triennial ephemeral spectacle. The authors associate such a routine with the "fairly positive profile" granted to the Scottish education system by the PISA results. Based on an analysis of interviews with policy actors, the contribution of Grek, Lawn and Ozga moves PISA to a symbolic territory. It is a space of trust and status. Trust: (a) in Scottish education as PISA's (good) results introduce reassurance in a system that does not use massive testing devices; (b) in comparative

knowledge as a fundamental tool for steering the system; (c) in the external certifier (OECD & PISA) seen as the “gold standard” of international education research or as able to conduct and to deliver an expert-based impartial assessment. It is also an issue of status because participation in PISA allows Scotland to be a “visible” partner of the competitive world of nations with a separate national presence in the international arenas.

The collection of texts brought together in this Dossier comprises just one of the visible faces of the

profitable work carried out by six research teams on the production, circulation and use of a KRT — in this case a device produced on a supranational scale — in policy and public action. More work continues to be undertaken, either studying policy and public action through the instruments based on the knowledge generated in national contexts, or examining the “knowledge-policy” relations in specific scenarios (national, regional and local) of action and public policy (see Barroso *et al.*, 2007). We await the new words.

ENDNOTES

1. See www.knowandpol.eu (11-2009).

2. In the education sector a total of nine reports have been produced since then: a Literature Review Report (Carvalho, 2008); a case study of the fabrication of PISA at a supranational level (Carvalho, 2009); six case studies regarding circulation and use of PISA in European spaces were undertaken (Afonso & Costa, 2009; Bajomi, Berényi, Neumann & Vida, 2009; Cattonar, Mangez, Delvaux, Mangez & Maroy, 2009; Grek, Lawn & Ozga, 2009; Mons & Pons, 2009; Rostás, Kósa, Bodó, Kiss & Fejes, 2009); and finally an “integrative report”, built on the previous research materials (Carvalho, Afonso & Costa, 2009).

3. Uses of PISA ranges from using PISA data in the undertaking of new research to raising reservations and criticisms, from reflecting on education systems based on the PISA results to analysing the impact of PISA results on educational policies (see Carvalho, 2008). Throughout its lifespan PISA has been involved in controversies, some of which brought its very credibility into question. The criticism can be split into the following groups: its comparatist project; its methodologies (from the claim of comparability to the procedures of construction, collection, processing and analysis); the reception and use of the results by politicians and the media; the pertinence of the financial investment *vis-à-vis* the results achieved and the effects PISA bring about (see Carvalho, 2009, pp. 34-37; Mons, 2007).

4. Accordingly with its formal structure, PISA brings together States, public and private organizations, OECD professionals, politicians, bureaucrats or their representatives and technicians from multiple countries. But there are more actors and agencies enrolled by PISA multiple activities and products: from policy makers to journalists in different public action scenes, from public servants that use PISA for the making of their own tools, to researchers, from various fields (economics, education, sociology, etc), who use PISA data.

5. PISA also needs to be understood in the light of the trajectory of these kinds of surveys. For reasons of the economy of this paper we cannot deal with this issue. From a broader historical perspective, PISA comes from a line of international studies on comparative assessment of the student achievement,

which has been embodied by the International Association for the Evaluation of Educational Achievement (IEA) since the nineteen sixties (see Bottani, 2006; Morgan, 2007). In addition, PISA has to be understood as a Program that encodes a pragmatic comparative education project (see Nóvoa, 1998).

6. Narratives on national participation at supranational level were provided for national case studies (see note 2).

BIBLIOGRAPHICAL REFERENCES

- AA.VV. (2006). *The Role of Knowledge in the Construction and Regulation of Health and Education Policy in Europe: Convergences and specificities among nations and sectors — KNOWandPOL*. Unpub. document.
- AFONSO, N. (coord.) & COSTA, E. (2009). *Use and Circulation of OECD's "Programme for International Student Assessment" (PISA) in Portugal*. Report on Orientation 3 — WP 12, Project KNOWandPOL. Retrieved November 2009 from <http://www.knowandpol.eu/>
- BAJOMI, I.; BERÉNYI, E.; NEUMANN, E. & VIDA, J. (2009). *The Reception of PISA in Hungary*. Report on Orientation 3 — WP 12, Project KNOWandPOL, March. Retrieved November 2009 from <http://www.knowandpol.eu/>
- BALL, S. J. (1998). Big policies/small world: an introduction to international perspectives in education policy. *Comparative Education*, 34, 2, pp. 119-30.
- BARROSO, J. & CARVALHO, L. M. (2008). PISA: un instrument de régulation pour relier des mondes. *Revue Française de Pédagogie*, 164, pp. 77-80.
- BARROSO, J.; CARVALHO, L. M.; FONTOURA, M. & AFONSO, N. (2007). Educational Policies as an object of study and training in Educational Administration. *Sísifo. Educational Sciences Journal*, 4, pp. 5-20. Retrieved November 2009 from <http://sisifo.fpce.ul.pt>
- BOTTANI, N. (2006). La más bella del reino: el mundo de la educación en alerta con la llegada de un príncipe encantador. *Revista de Educación*, extraordinario, pp. 75-90.
- CALLON, M. (1986). Some elements of a sociology of translation. In J. LAW (ed.), *Power, Action, and*

- Belief*. London: Routledge and Keegan Paul, pp. 196-233.
- CATTONAR, B.; MANGEZ, E.; DELVAUX, B.; MANGEZ, C. & MAROY, C. (2009). *Usage et Circulation des enquêtes PISA en Communauté française de Belgique*. Report on Orientation 3 — WP 12, Project KNOWandPOL, March. Retrieved November 2009 from <http://www.knowandpol.eu/>
- CARVALHO, L. M. — with COSTA, E. (2008). *Production of OCDE's PISA — Literature Review Report*. Intercalary report. Orientation 3 — WP 11, Project KNOWandPOL, September. Unpublished document.
- CARVALHO, L. M. — with COSTA, E. (2009). *Production of OCDE's "Programme for International Student Assessment" (PISA)*. Final report. Orientation 3 — WP 11, Project KNOWandPOL. March. Retrieved November 2009 from <http://www.knowandpol.eu/>
- CARVALHO, L. M.; AFONSO, N. & COSTA, E. (2009). *PISA — Fabrication, Circulation and Use in 6 European Countries*. Integrative Report — Orientation 3, Project KNOWandPOL, August. Retrieved November 2009 from <http://www.knowandpol.eu/>
- DELVAUX, B. (2008). On the role of knowledge in the course of public action. In B. DELVAUX & E. MANGEZ, *Towards a sociology of the knowledge-policy relation*. KNOWandPOL Literature Review — Integrative Report, September, pp. 3-97. Retrieved November 2009 from <http://www.knowandpol.eu/>
- DELVAUX, B. (2009). Transformation des données en connaissances et en arguments. In B. CATTONAR et al., *Usage et Circulation des enquêtes PISA en Communauté française de Belgique*. Report on Orientation 3 — WP 12, Project KNOWandPOL, March, pp. 100-150. Retrieved November 2009 from <http://www.knowandpol.eu/>
- DELVAUX, B. & MANGEZ, E. (2008). *Towards a sociology of the knowledge-policy relation*: KNOWandPOL literature review — integrative report. September, 2008. Retrieved November 2009 from http://www.knowandpol.eu
- DRAELANTS, H. & MAROY, C. (2007). A survey of public policy analysis. In B. DELVAUX & E. MANGEZ (coord.), *KNOWandPOL Literature Review Report (Part 1)*, June. Retrieved November 2009 from <http://www.knowandpol.eu/>
- FREEMAN, R. (2006). The work the document does: research, policy and equity in Health. *Journal of Health Politics, Policy and Law*, 31, 1, pp. 51-70.
- FREEMAN, R.; BARROSO, J.; RAMSDAL, H. & VAN ZANTEN, A. (2007). *KNOWandPOL Orientation 3: regulation: specifications*. September. Unpublished paper.
- GREK, S. (2009). Governing by numbers: the Pisa effects in Europe. *Journal of Education Policy*, 24, 1, pp. 23-37.
- GREK, S. & OZGA, J. (2007). Governing by numbers. Paper presented to the *European Sociological Association Annual Conference, Network 10, Sociology of Education*, Glasgow, September.
- GREK, S.; LAWN, M. & OZGA, J. (2009). *Study on the Use and Circulation of PISA in Scotland*. Report on Orientation 3 — WP 12, Project KNOWandPOL, March. Retrieved November 2009 from <http://www.knowandpol.eu/>
- HASSENTEUFEL, P. (2004). Comparaison. In L. BOUSSAGUET; S. JACQUOT & P. RAVINET (dirs.), *Dictionnaire des Politiques Publiques*. Paris: Presses de Sciences Po, pp. 109-116.
- HENRY, M.; LINGARD, B.; RIZVI, F. & TAYLOR, S. (2001). *The OECD, Globalisation and Education Policy*. Oxford: Pergamon Press.
- JACOBSON, B. (2006). Regulated regulators. In M.-L. DJELIC & K. SAHLIN-ANDERSON (eds.), *Transnational Governance*. Cambridge: Cambridge University Press, pp. 205-224.
- LATOUR, B. (1996 [1989]). Joliot: a história e a física misturadas. In M. SÈRRES (dir.), *Elementos para uma História das Ciências*. III Volume. Lisboa: Terramar, pp. 131-155 [ed. orig., Éléments pour une Histoire des Sciences, Paris: Bordas, 1989].
- LAWN, M. (2006). Soft governance and the learning spaces of Europe. *Comparative European Politics*, 4, pp. 272-88.
- LINDBLAD, S. & POPKEWITZ, T. S. (2004). Educational Restructuring: (Re) Thinking the Problematic of Reform. In S. LINDBLAD & T. S. POPKEWITZ (eds.), *Educational Restructuring: perspectives on Traveling Policies*, IAP, pp. vii-xxxii.
- LINDQUIST, E. A. (1990). The third community, policy inquiry, and social scientists. In S. BROOKS & A.-G. GAGNON (eds.), *Social Scientists, Policy, and the State*. New York. Praeger, pp. 21-51.

- MAHON, R. & McBRIDE, S. (2008). Introduction. In R. MAHON & S. McBRIDE (eds.), *The OECD and transnational governance*. Vancouver: UBC Press.
- MANGEZ, E. (2008). Knowledge economy, knowledge policy and knowledge regimes. In B. DELVAUX & E. MANGEZ, *Towards a sociology of the knowledge-policy relation — KNOWandPOL Literature Review — Integrative Report*. September, pp. 98-118. Retrieved November 2009 from <http://www.knowandpol.eu/>
- Mons, N. (2007). L'évaluation des politiques éducatives. Apports, limites et nécessaire renouvellement des enquêtes internationales sur les acquis des élèves. *Revue internationale de politique comparée*, 14, 3, pp. 409-423.
- MONS, N. & PONS, X. (2009). *The reception of PISA in France. Knowledge and Regulation of the Educational System*. Report on Orientation 3 — WP 12, Project KNOWandPOL, March. Retrieved November 2009 from <http://www.knowandpol.eu/>
- MORGAN, C. (2007). *The OECD Programme for International Student Assessment: Unraveling a Knowledge Network*. Doctoral Thesis. School of Public Policy and Administration. Carleton University. Ottawa, Ontario.
- NAHESSI, A. (2008). *Making knowledge observable. Short considerations about the practice of 'doing knowledge'*. Note for KNOWandPOL, non published paper.
- NOAKSSON, N. & JACOBSSON, K. (2003). *The Production of Ideas and Expert Knowledge in OECD. The OECD Jobs Strategy in contrast with the EU employment strategy*. Stockholm: SCORE (Rapportserie, 7).
- NÓVOA, A. (1998). Modèles d'analyse en éducation comparée: le cham et la carte. In A. NÓVOA, *Histoire & Comparaison (Essays sur l'Éducation)*. Lisboa: Educa, pp. 51-84.
- OECD (2007). PISA — The OECD Programme for International Student assessment [PISA Brochure]. Retrieved November 2009 from <http://www.pisa.oecd.org/dataoecd/51/27/37474503.pdf>.
- PONS, X. & VAN ZANTEN, A. (2007). Knowledge circulation, regulation and governance. In B. DELVAUX & E. MANGEZ (eds.), *KNOWandPOL Literature Review Report (Part 6)*. Retrieved November 2009 from <http://www.knowandpol.eu/>
- POPKEWITZ, T. S. (2000). Preface [and] Globalisation, Regionalisation, Knowledge, and the Educational Practices. In T. S. POPKEWITZ (ed.), *Educational Knowledge*. New York: State University of New York Press, pp. vii-x, 3-27.
- RINNE, R.; KALLO, J. & HOKKA, S. (2004). Too eager to comply? OECD education policies and the Finnish response. *European Educational Research Journal*, 3, 2, pp. 454-86.
- ROSTÁS, Z.; KÓSA, I.; BODÓ, J.; KISS, A. & FEJES, I. (2009). *Use and Circulation of PISA in a Romanian Context*. Report on Orientation 3 — WP 12, Project KNOWandPOL, March. Retrieved November 2009 from <http://www.knowandpol.eu/>
- RUBENSON, K. (2008). OECD education policy and world hegemony. In R. MAHON & S. McBRIDE (eds.), *The OECD and Transnational Governance*. Vancouver: UBC Press, pp. 242-259.
- SCHRIEWER, J. (2000). World-system and interrelationship-networks. In T. S. POPKEWITZ (ed.), *Educational Knowledge*. Albany: State University of New York, pp. 305-342.
- STAR, S.-L. & GRIESEMER, J. (1999 [1989]). Institutional ecology, 'translation' and 'boundary objects'. In M. BIAGIOLI (ed.), *The Science Studies Reader*. Routledge: New York, pp. 505-524.
- STEINER-KHAMSI, G. (2004). Blazing a trail for policy theory and practice. In *The Global Politics of Educational Borrowing and Lending*. New York: Teachers College Press, pp. 201-220.

