



The World Bank and Education: Governing (through) knowledge



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ABSTRACT

The World Bank has become one of the most influential actors in global education governance. Much research on the World Bank's role in education has focused on coercive and regulative mechanisms. The paper examines the WB's epistemic influence in shaping educational knowledge. This article analyses its activities as producer, manager and transmitter of knowledge. Analyzing the evolution of the WB's research and publication record, its knowledge management and project outreach since its creation, the article will show how it has become one of the world's most important research producers in education. Through disseminating, teaching, applying and celebrating specific kinds of educational knowledge, its role as an educational knowledge clearinghouse has expanded to change the global education discourse.

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1. Introduction

The World Bank (WB), initially the International Bank for Reconstruction and Development (IBRD), had been founded in 1944 to assist in post-war reconstruction. With the founding of the International Development Association (IDA) in 1960, it extended its mission to global development.¹ Compared to other international organizations (IOs), the WB today features the highest number in staff (more than 10,000 employees), widest geographic scope (genuinely global) and broadest substantive coverage (including all human development areas).

In the decades following its founding and growth, the WB has gradually evolved from a global financial facilitator into an important global agency involved in funding, advising and planning educational policies worldwide. While its early work in education prioritized on providing resources for infrastructure and financing manpower training, its focus shifted, along with the general development discourse, to basic education and early childhood education in the 1970s and 1980s (Chabbott, 2003; Jones, 2007). Today, the WB is, by far, the largest funding institution in education in the world covering all educational sectors from early childhood care and education to tertiary education and lifelong learning.

Studies dealing with the WB's role in education are often interested in unearthing the ideological underpinnings of its education recommendations and in tracing its effects on public education systems and learning opportunities. As the major global lending institution, its loan conditionality has been shown to systematically involve reforms in education. In these studies, the WB is primarily analysed in terms of its coercive or regulative power (Jones, 1997; Klees, 2002; Klees and Edwards, 2014).

More recently, scholarly contributions have started to take into account the normative influence of the WB by focusing on such mechanisms as agenda-setting and policy-design in education.

Yet, despite this shift towards 'softer governance', little attention has been given to the cognitive or epistemic role of the WB. Thus, here the WB would primarily be understood as a producer, manager and transmitter of educational knowledge worldwide. Since 1996, when then-president James Wolfensohn announced that the World Bank is to become the 'Knowledge Bank', the organization has implemented a series of strategies to reform its internal management and operational portfolio. This 'knowledge turn' did not only involve major changes in the use and provision of its knowledge management systems. The WB has invested heavily in knowledge production, namely research, in all its units, particularly in education. The Bank (as it calls itself) has become, in the last 15 years, the most productive scientific institution and data generator for a wide array of research areas including education. Its *Development Research Group* was nominated 'best government-affiliated think tank in the world' in 2015, and the associated *World Bank Institute* comes fifth in the same report published by the *Think Tanks and Civil Societies Program* (University of Pennsylvania).

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¹ Together, IBRD and IDA are referred to as the World Bank (WB) and they are dealt with in this paper. In addition, the World Bank Group comprises the International Finance Corporation (1956), the International Centre for Settlement of Investment Disputes (1966) and the Multilateral Investment Guarantee Agency (1988).

Drawing on its own, rapidly growing, body of research, the WB now also actively seeks to disseminate its gathered knowledge. Such dissemination occurs through publications (books, journals, conferences), databases and, to an increasing extent, through offering seminars, courses and on-line learning formats, more and more resembling a conventional (yet global) higher education research institution. It also directly applies its knowledge in the field through a drastically growing number of projects with an explicit focus on education around the globe.

These and other novel practices, discussed in this paper, have the potential to fundamentally alter the kind of influence the WB exerts worldwide. As a consequence, scholarship on global education has to rethink the analytical apparatus applied to the study of global educational governance.

In the first part of the paper, available literature on global educational governance from comparative education scholarship enables the identification of mechanisms and rationales of governance found in IOs in general and for the WB in particular.

Then, I trace the 'knowledge turn' in education at the WB from its incipient stage in the mid-1990s to its most recent innovation, the *Systems Approach for Better Educational Results* (SABER) in 2014. Empirically, the analysis draws on various sources of quantitative data to provide evidence supporting the hypothesis of an emerging focus on knowledge within the Bank's (educational) work. This 'knowledge turn' is analysed in terms of the WB's research, scientific output, scientisation of output, increase in knowledge-assembling and application and its burgeoning teaching portfolio.

The final section discusses the WB's epistemic practices in educational knowledge governance as a showcase of *epistemic governance* defined as the production, processing, diffusion and use of policy-relevant knowledge.

2. International organizations in the study of global educational governance

In recent years, global or international dimensions in the guise of international organizations (IOs) have been systematically introduced into the study of educational governance and policy-making. Important macro-approaches emphasizing the role of IOs in globalizing education include, for instance, Mundy's (2007:20) concept of *educational multilateralism* depicting IOs as 'a new venue for political contests over shared norms and institutions'. In a similar vein, Parreira do Amaral (2011) sees an *international regime* rising in education with governmental and non-governmental, national and international organisations institutionalizing education globally.

Further, research from fields such as comparative and international (development) education interested in the movement of educational policies investigate the roles of individual international actors. Here, IOs are treated, at times, as 'hard' players that regulate, fund and, hereby, impose education by tricking states into new policies (Dale, 2005), at times, more softly, as 'teachers of norms' (Finnemore, 1993) or 'knowledge brokers' (Jakobi, 2006a, b). In the latter case, as the 'sociology of measurement in education policy' (Gorur, 2014) takes shape paying particular attention to international organizations (IOs) and their diverse roles in national policy making (Fenwick et al., 2014) governance mechanisms may include coordination and comparison (Martens and Niemann, 2010), agenda-setting (Jakobi, 2006a,b) and evaluation (Rivera 2006, 2009). The whole field is understood to be in a 'metrological mood' (Power, 2004) entering an 'age of measurement' (Biesta, 2009; also Heyneman and Lykins, 2008; Meyer and Benavot, 2013).


Such approaches are highly useful in providing a fresh perspective on how to rethink educational planning in a globalized world, acknowledging the critical importance IOs have acquired in the past two decades. These contributions have added up to a fine-grained analytical apparatus helping to understand how IOs influence national and other IOs' educational policy-making.

Against the backdrop of these analyses, we can considerably extend Jakobi's (2009) classification on governance instruments discussed in the context of lifelong learning from UNESCO, EU, OECD and WB (Table 1) loosely borrowing a classical sociological scheme to distinguish between different processes of institutionalization (Scott, 2001).

In a *regulative* perspective, Dale (2005), for example, proposes to look at funding, provision, ownership and regulation as key activities in EU educational governance. In his *pluri-scalar governance of education* these activities are renegotiated along subnational, national and supranational levels. Further, the notorious Structural Adjustment Programs (SAPs) and more recently Poverty Reduction Strategy Papers (PRSPs), as part of the 'Washington Consensus' (Held, 2005) imply hefty conditionality tied to loans and might serve as an example of *coercive* governance (Reimers, 1994; Jones, 1997; Heyneman, 2003; Mundy and Verger, 2015).

WTO/GATS might be another example of (controversial) regulation in education. Although actual effects on national education systems remain still limited, implications are thought to be far-reaching (Robertson et al., 2002; Scherrer, 2007). The recent Trade in Services Agreement (TiSA) negotiated between the EU, the USA and some other 20 Asian and Latin American countries has not yet been discussed in the literature in its potential

Table 1
Governance mechanisms of international organizations.

Mechanism	coercive/regulative	normative	cognitive/epistemic
Practices	provision ownership funding conditionality treaties/sanctions	standard-setting coordination surveillance persuasion	knowledge production & dissemination theorization mimesis
Basis of legitimacy	legally sanctioned & enforced	morally governed	cultural
Examples	GATS & TiSA WB & IMF Structural Adjustment and Poverty Reduction Strategies	EU Open Method of Coordination OECD Peer Reviewing & Benchmarks UNESCO Recommendations	common development models & organizational principles & action frameworks knowledge diffusion among IOs
Type of governance			

(Source: authors' own depiction)

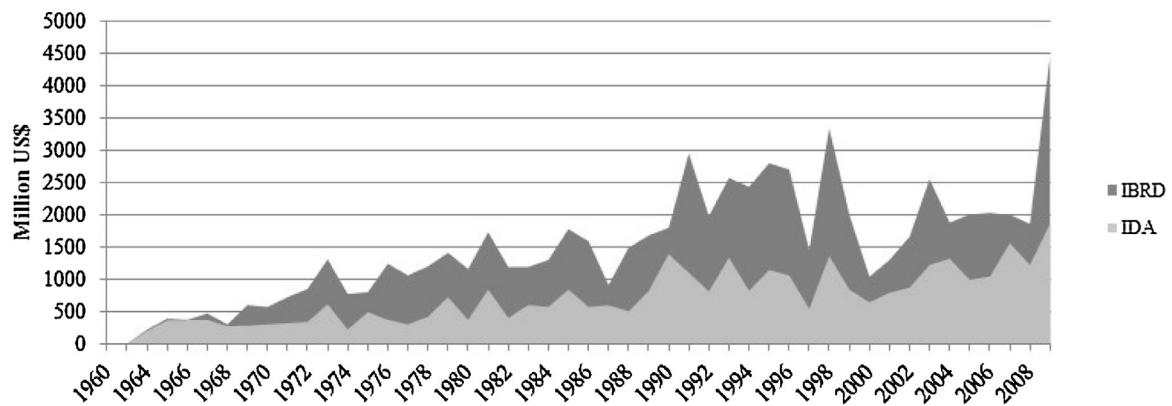


Fig. 1. Amount of World Bank Education Lending, 1962–2010.

(Source: EdStats; own calculation)

consequences for national educational systems (but see Robertson and Komljenovic, 2015).

More recently, researchers have directed their attention towards more *normative* mechanisms. Again in the context of the EU, Martens (2007) and Jakobi (2006a), for instance, analyse the Open Method of Coordination as a soft mechanism serving to surveil member states' compliance with European definitions of best practice (see also Dale, 2005). Similarly, Kallo (2006: 282) analyses OECD soft governance in terms of 'strategic consulting, peer pressure, public studies and direct and indirect agenda-setting'. In a seminal article from constructivist international relations (IR) scholarship, Finnemore (1993) analysed the spread of science bureaucracies worldwide by UNESCO, even where there seems to be no need (also Barnett and Finnemore, 2004).

While these mechanisms continue to have much impact and deserve further ongoing examination, much less attention has been given to *cognitive* or *epistemic* mechanisms. A notable exception is Chabbot's (2003) and Zapp's and Dahmen's (forthcoming) work on the global organizational field of educational development arguing that knowledge production helps to explain the diffusion of education and development models among IOs by structuring the field into core and periphery. While the knowledge producers (IOs with professional staff, professional schools, journals and so on) sit at the core, the knowledge users that depend on this knowledge (smaller organizations) occupy more peripheral positions leading to isomorphic processes in positions and practices among highly diverse actors in the field. In becoming more similar, *mimetic* processes and the role of professionals in spreading common development models, common organisational principles and common action frameworks among organizations.

The argument of isomorphism is all the more important if considered that, in this perspective, world development in education works in a top-down direction, from IOs to national policy-making. Here, IOs serve as 'theorists' providing rationalized accounts of social organization. Rationalization, scientization and educationalization have become major cultural transformations of the world polity in the 20th century and are embodied by IOs (Meyer et al., 1997; Bromley 2010; Ramirez et al., 2016). In this cognitive or epistemic view, the shared understandings, establishing of orthodoxies and their mimetic diffusion supported by a cultural ideology of functionalism become main theoretical tenets.

3. The world bank and education

Education has become one of the key *Global Practices* (WB operational units) in the WB portfolio (Psacharopoulos 2006). Since the Education for All initiative (1990), WB education lending has seen significant and steady increase up until today in the two major organizational members (IBRD and IDA; Fig. 1). A similar increase can be reported for educational lending as a share of the total WB lending portfolio (Fig. 2).

Most research done on the WB's work in education has focused on two aspects. First, the WB's particular understanding of or approach to education has been widely discussed. We, here, find a number of contributions stressing the WB's neoliberal take on education where education is only 'handmaiden of the market' (Rivera, 2009: 289). Such a line of thinking has been applied to WB education work in general (Klees, 2012; Verger and Bonal, 2012) and particular educational sector work as, for example, for lifelong learning, adult education and technical and vocational education (Klees, 2002; Schemmann, 2007; Rutkowski, 2007).

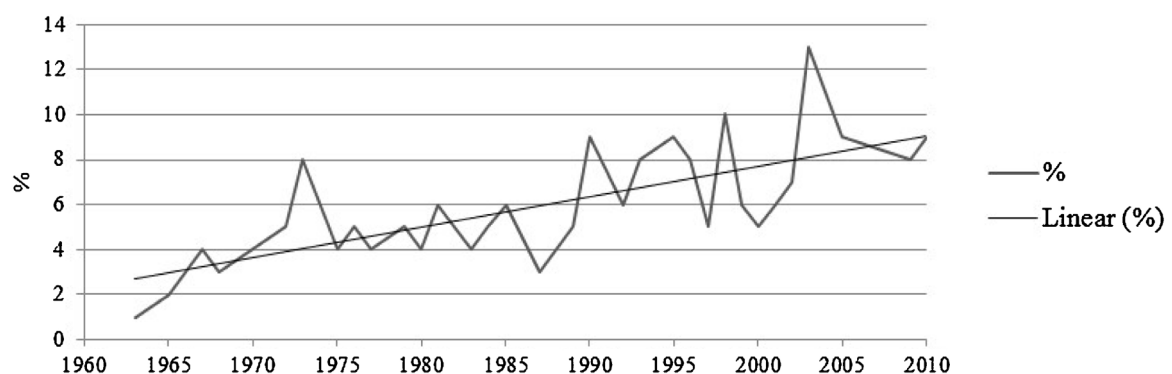


Fig. 2. Education as Percentage of Total World Bank Lending, 1962–2010.

(Source: EdStats; own calculation)

These studies derive much of their importance in claiming that the underlying economic paradigm heavily affects WB's educational lending practices and the policy prescriptions coupled to them as in structural adjustment or, since 1999, poverty reduction mentioned above (Heyneman, 2003; Caillods and Hallak, 2004; Jones, 2007).

Secondly, and more recently, scholarship with a fresh research perspective on governance has begun to look at the emerging knowledge work done at the WB in general and in its work on education in particular (St. Clair, 2006). Using the continuum introduced above, these important studies are situated at the soft, i.e. cognitive, end of the array of governance mechanisms (see Table 1). Among the specific instruments under scrutiny in these contributions are the neoliberal implications of decentralized WB knowledge management (Plehwe, 2007), the biased generation and deployment of research-based knowledge (Lauglo, 1996; Broad, 2007; Dethier, 2007; Rao and Woolcock, 2007), the far-reaching classification of educational systems around the world through educational indicators (Steiner-Khamsi, 2009) and the use of quantitative methods as a technology of governance in general (Klees and Edwards, 2014).

This work is valuable as it pays attention to the new approach to education taken by the WB in the last 20 years pointing to the potential consequences of such a shift. What remains somewhat underrepresented in these studies is, however, the scope and wider implications of these important shifts towards a more knowledge-based international actor in the internal organization of the WB knowledge management (*vis-à-vis* its own staff) and its external communication and operation (*vis-à-vis* clients and stakeholders around the world).

More importantly, this new philosophy of creating, managing and sharing knowledge affects the WB's way to approach work in its 19 *Global Practices*, especially in education. In its latest education sector strategy, the WB (2011: 1) announced that it would not only be needed to have a 'global knowledge base powerful enough to guide', but that it should also have the 'aspirations to be both a generator of new knowledge and a synthesizer of existing knowledge'. This has far-reaching implications for the strategies pursued by the WB in education and, as I will show in my empirical part, for the global landscape of educational research as a whole. In the following part, I trace the main WB reforms and initiatives to build its knowledge base and the strategies to put it to use.

4. The world bank's 'knowledge turn'

In October 1996, at the Annual Meetings Address, then-president James Wolfensohn announced the WB's new mandate: 'We have been in the business of researching and disseminating the lessons of development for a long time. [. . .] we need to invest in the necessary systems, in Washington and worldwide, that will enhance our ability to gather development information and experience, and share it with our clients. We need to become, in effect, the Knowledge Bank.' (Wolfensohn, 1996).

One year later, at the first *Global Knowledge Conference* in Toronto, the WB brought together participants from 144 countries paving the way for the *Global Knowledge Partnership* by linking all local offices to global communications. As an internal reform strategy, the *Strategic Compact* was launched the same year aiming at investing in additional resources over a three-year period 'to respond more effectively – through a fundamentally transformed institution – in reducing poverty' (WB, 2001). Also in 1997, the WB launched the *African Virtual University* (AVU). Since 2003, the AVU is an independent intergovernmental organizations supported by

Table 2

Key steps in the World Bank's 'knowledge turn'.

1996	WB president James Wolfensohn announces 'Knowledge Bank'
1997	First WB-sponsored Global Knowledge Conference in Toronto
1997	Launch of the Strategic Compact
1997	Launch of the African Virtual University
1998	World Development Report is themed <i>Knowledge for Development</i>
1998	Finalizing the Educational Knowledge Management System (EKMS)
1998	Launch of the Indigenous Knowledge for Development Program
2000	Launch of the Global Distance Learning Network
2004	Shanghai Global Learning Program
2010	Launch of the Open Knowledge and Open Data (Open Development Strategy)
2010	Launch of Skills Towards Employment and Productivity (STEP)
2012	Launch of the Open Knowledge Repository
2013	Launch of the Open Learning Campus
2014	Launch of Systems Approach for Better Educational Results (SABER)

(Source: authors' own depiction)

18 African countries, now comprising 53 institutions in 27 countries (AVU, 2016).

Remarkably, education was soon to become the pilot sector within the WB to be transformed into a knowledge management system. The same year Wolfensohn announced the advent of the 'Knowledge Bank', Maris O'Rourke, the then-director of the education department (or thematic groups as they came to be called after 1996), took on the task to set up an *Educational Knowledge Management System* (EKMS) as 'a way of organizing to create, capture, distill and disseminate relevant development knowledge on education' (Carayannis and Laporte, 2002: 6). The core of the EKMS was the *Education Advisory Service*, as a first point of contact for WB staff (250 at that time²) and 'clients'. Here, ideas for electronic, archival, and documentary usability were first developed and tested, before they were later implemented in other sectors of the WB. By 1998, the first user interface for internal and external educational knowledge transfer was established, becoming the basis of the now far more complex general knowledge management system.

Other education-related programs followed suit, such as the *Indigenous Knowledge for Development Program*, the *Global Distance Learning Program* and the *Development Gateway* (King, 2002).

A significant step was the launch of the *Open Development Strategy* in 2010 consisting of open knowledge and open data approaches including free visualization and mapping tools and access to global data sets on all WB sectors. The *Open Knowledge Repository* and the *Open Learning Campus* that followed few years later are part of the same strategy and marked a significant turn in the role of the WB from a data-gathering and data-compiling institution to, in addition, a data-disseminator. They will be discussed below. The year 2010 also saw the WB's first self-designed large-scale assessment program with a strong educational component, *Skills Toward Employment and Productivity* (STEP), piloted in 9 countries (see below).

The most recent innovation is the *Systems Approach for Better Educational Results* (SABER), which has the potential to become the world's most comprehensive and integrating country-level account on educational data and policy information given its thorough collection of data and exhaustive number of indicators. SABER will also be part of a more detailed discussion below (Table 2).

The series of measures described here have transformed both the WB's internal management (e.g. gathering data and exchanging data between units), display (e.g. wider availability and usability)

² This number applies to the Education Advisory Service. The actual number of WB staff working on education is not available, but can be estimated to be considerably higher.

Table 3

Mechanisms and practices in global epistemic governance of educational knowledge (own account).

Mechanisms	Practices	Function	Examples
Knowledge production	funding research	supporting the generation of research knowledge	Robert S. McNamara Fellowships Program
	conducting research	generating research knowledge	'Increasing Access to Education in Mozambique: Analysis of Barriers and Effects of Recent Reforms'
Knowledge management	publishing research	cognitive development of scientific discourse	books, articles, Policy Research Working Papers & Discussion Papers
	assembling knowledge	assembling the state of the art creating centralized databases and publications	Open Knowledge Repository, Education Knowledge Management System; WB Reviews
Knowledge transmission	standardizing knowledge	creating, comparing and evaluating theoretically-equal social units	indicators, benchmarks, best practices (Skills Toward Employment and Productivity; System Approach for Better Educational Results)
	disseminating knowledge	making available knowledge to scientific, policy and lay audiences	publications, conferences, forums, workshops, (social/new) media
	teaching and certifying knowledge	initiating professionals and policy-makers in WB knowledge	trainings, workshops, seminars, e-courses
	applying knowledge	projects as incubative socio-scientific laboratories	Third Elementary Education Project in India (\$1 Billion; 2014–2014)
	celebrating knowledge	ceremonial legitimization of knowledge	Romania Secondary Education Project (\$ 200 Million; 2015–2022) Skoll Award, Big Data Challenge Award, museums, exhibitions, art

and transfer of educational knowledge (e.g. universal implementability). The WB has actively sought to increase its potential to become the global one-stop-shop for educational knowledge. Analysing this new mandate and the capacities that have been built to comply with it requires a new approach that captures this knowledge turn and the novel activities at the WB. Thus, I propose a typology of mechanisms of what I term *epistemic governance* defined as the production, processing, diffusion and use of policy-relevant knowledge. I prefer the term *epistemic* over *cognitive* as the latter carries much psychological connotation with it, while *epistemic* refers to the cultural and collective structures of knowledge (Ruggie, 1975 for a similar use).³ I also prefer *epistemic* over *knowledge* as the latter is used by the bank itself to designate its strategic changes in internal management.

In the following sections, this typology will serve to guide my analysis of WB work on educational knowledge (Table 3).

5. Mechanisms and practices of epistemic governance

5.1. Knowledge production

'Only Harvard University comes close'

5.1.1. Funding research

First, the WB has long been collaborating with traditional educational institutions through fellowships and other supporting programs. Since the 1980s, it offers The Joint Japan/World Bank Graduate Scholarship Program, the Robert S. McNamara Fellowships Program or the Japan Indonesia Presidential Scholarship Program. Usually, these funding schemes target developing countries nationals with excellent proposals and finance travelling, studying abroad, data collection and so on. The number of beneficiaries is well above 5000 students, which, as alumni, become part of a network supported by the WB (WB, 2016a). In addition, the WB is among the main sponsors of the African Virtual University (AVU; see above). The AVU has trained more than 43,000 students since its start in 1997 (AVU, 2016)

³ It shall also be noted that the term *epistemic governance* has been used by Alasutari and Qadir (2014) in a Foucauldian perspective to describe practices policy-makers deploy to alter actors' perceptions of the world. The main tenets of their work differ, however, considerably from the approach chosen here.

5.1.2. Conducting research

More important than these indirect funding mechanisms is, however, research conducted by the WB itself. Obtaining reliable data on the WB's volume and outcome of internal research on education is difficult as the organization has specific criteria in defining what research and education refer to and what is made publicly available.

WB research is organized within eight research programs under the general direction of the senior vice-president and chief economist by the *Development Economics Vice-Presidency* (DEC; staff: 122 researchers on short-term and tenured contracts). The DEC is divided into three main groups, among which the *Research Group* and the *Data Group* are mainly tasked with primary knowledge generation.

By the WB definition, activities classified as research at the WB do not include the quantitatively much more important so-called *Economic and Sector Work* and *Policy Analysis* carried out by Bank staff to support pre-investment operations in countries all over the world. Nor are the World Development Reports or the World Bank Institute outputs (responsible for staff and client learning; see below) included. With all these being excluded, the epistemic influence if judged by the limited numbers provided by the WB itself may actually be understated.

For the most recent period (2009–2011), for which data is available, over 360 research projects covering a wide array of topics were being implemented each year. Although very strong in absolute terms (US\$ 244 million in 2009–2012), the DEC's research budget as a share of the total net administrative budget is still low (2.9%) compared to other organizations (e.g. the IMF with 6.8%) (WB, 2012). Between 2001 and 2010, it spent \$49 million on educational research producing 280 pieces of research and other analytical work (WB, 2011).⁴

Although education is touched upon in numerous projects within all of the eight programs, the programs with the strongest education component is the *Human Development and Public Services* program. In order to obtain a longitudinal depiction of the evolution of the number of WB-financed research projects, I collected and analysed annual research compendia in the period for which data is available (1973–2009). Overall, the number of official research projects increased considerably from 54 projects

⁴ If we calculate the average for these 280 pieces of work, each piece of work costs \$175,000 (sic).

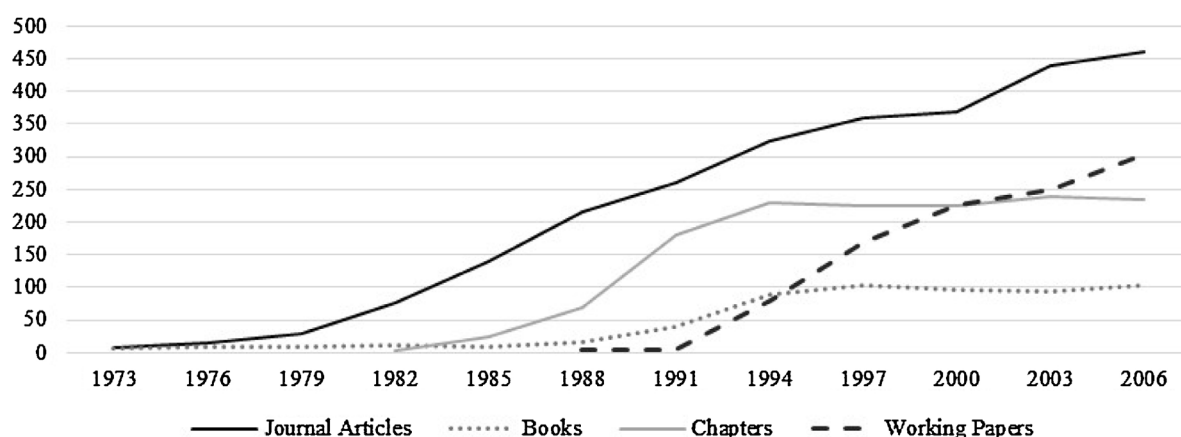


Fig. 3. WB publication portfolio evolution, 1978–2006 (Ravallion and Wagstaff, 2012).

in 1973 to 247 in 2009. Among these, the total number of education projects more than doubled (from 4 in 1973 to 10 in 2009), while the share of projects with a clear education component⁵ remains fairly stable at an average 5% (or 7.5 absolute N).

5.1.3. Publishing research

Just like at universities, most WB research is not conducted as part of particular programs or projects, but by individual scientists and then published in various formats. The WB has produced over 19,000 publications since 1973. Nearly 2000 books and 9000 journal articles have been published by WB staff, and close to 4000 working papers have been produced, most of them in the *Policy Research Working Papers* series. A database of publications compiled from several major bibliographical indices also includes nearly 5000 book chapters authored by Bank staff and 500 edited volumes published by the Bank (WB, 2012). According to an internal survey, education sector staff in the WB is with a share of 69% also the second-most research-affinitive staff in the entire organization (WB, 2012).⁶

In the period 2009–2011 alone, Bank staff and consultants produced over 3000 publications, including over 200 books, 1300 scholarly articles in peer-reviewed journals, and 1000 Policy Research Working Papers.

For education, the WB (2012) mentions 500 journal articles, 500 books, book chapters and working papers. The WB is far ahead of all of the top universities and all of the development agencies or international organizations in the volume of its papers on development topics, ranking first in growth, poverty, and, most importantly, education. It produces three times as much on education as the 13 most productive universities in the world do on average.

In order to get a more longitudinal trend on publications, Ravallion and Wagstaff (2012) analysed the increase in published articles, books, chapters, and working papers in general for the period 1978–2006 (Fig. 3). Two results are striking. Not only has the overall portfolio expanded, now including books and working papers. More importantly, all types of publications display a remarkable upward trend, particularly from the late 1980s and early 1990s on.

I complement this data with an analysis of publications containing relevant education-related terms⁷ in their title or keywords in the period 1977–2013 drawing on the bibliographic database Scopus (Elsevier) (Fig. 4). We can see two considerable boosts starting in the mid-1990s and, even more striking, in the early 2000s.⁸ Growth rates of scientific output multiply by factor five to six in less than two decades. In the period 1992–2005 alone, education-related publications skyrocketed from 4 to 81 publications, now reaching 106 publications (2013). In these publications, general socio-scientific approaches make for almost 55%, while econometric and economic approaches (including management) account for 54%.

Not only have the absolute numbers of publications risen considerably, the documentary portfolio as a whole, too. WB publications now fall into 10 collections or categories, which are further divided into 484 sub-collections. Among the ten categories, we find various types of books and WB-edited journals. The *World Bank Economic Review*, for example, is the most widely read scholarly economic journal worldwide with a 5-year impact factor of 2.48. The *Review* is freely distributed to more than 9500 subscribers in non-OECD countries. Other journals include the *WB Research Observer*, *Development Outreach* or *Handshake*, which all add up to the fact that WB journals enjoy the largest worldwide circulation in that category. Other types of publication include annual reports, evaluations, serial publications, technical papers, country strategy documents, economic and sector work studies, working papers and knowledge notes.

Regarding the impact of WB output, aggregated publications from the WB rank among IMF, Berkeley, Chicago, Harvard and MIT. Its working papers series reaches a download count of 1.4 million. Based on Google Scholar data, Ravallion and Wagstaff (2012) compare the aggregated impact of WB research staff with a set of high-performing universities and international organizations in the period 1995–2010. The WB comes first with regard to the percentage of articles cited, third with regard to average citations (behind Harvard and Chicago universities) and sixth with regard to its aggregate *h*-index and ahead of all other IOs. Educational articles are the sixth most cited articles within the WB portfolio behind more economic issues and governance (total citations *N* = 7824). Compared to university departments, the WB ranks first in education if based on article count and second if based on the *h*-index.

⁵ Projects are defined as education-related if their title contains an explicit reference to education, schooling, learning, training, teaching, skills and competences (competencies).

⁶ The original question in the survey was, 'How familiar would you say you are with World Bank research products/services on a scale from 1 to 10 where 1 means not familiar at all and 10 means extremely familiar?'. The share indicated above refers to the proportion highly familiar with research (% of responses above 5 on scale).

⁷ Publications are defined as education-related if their title or keywords contain an explicit reference to education, schooling, learning, training, teaching, skills and competences/competencies.

⁸ More recent numbers are lower as it usually takes some time for SCOPUS to update its databases.

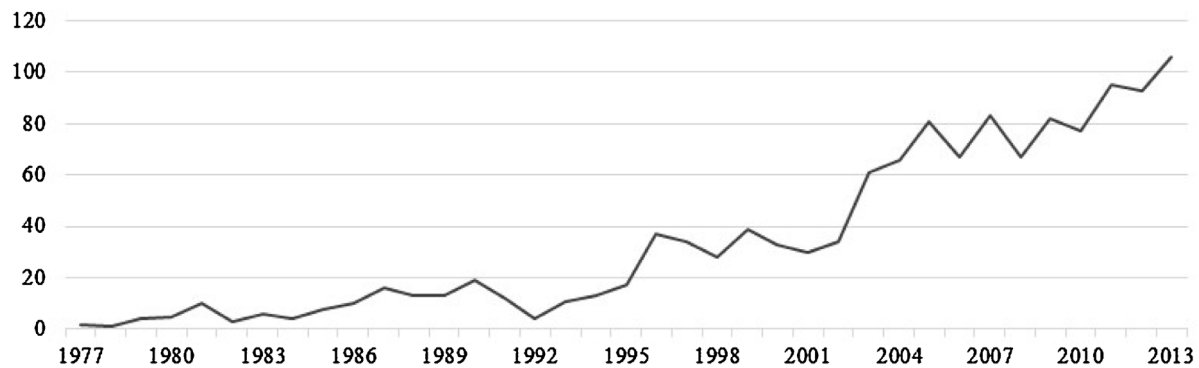


Fig. 4. WB publications in education, 1977–2013 (Scopus 2016).

5.2. Knowledge management

'The World Bank is the largest single source of development knowledge.' WB (2016b)

5.2.1. Assembling knowledge

As part of its *Open Development Agenda*, the WB launched the *Open Knowledge Repository* (OKR) in 2012. It currently contains more than 6900 freely available scientific publications dealing with education from 1980 up to today including externally-published, peer-reviewed journal articles written by WB researchers. The OKR site statistics count almost 9 million downloads since its launch in 2012 equalling a daily download rate of more than 6164 publications (January 2016).

In its education strategy paper in 1999, the WB (1999) announced its first move towards a stronger role for knowledge in its approach. An *Education Knowledge Management System* (EKMS) was called for that 'creates, captures, distils, and disseminates relevant development knowledge on education' (WB, 1999: 42). The EKMS has gradually evolved since then, now synthesized within SABER, a *Systems Approach for Better Education Results*. SABER is thought to 'help the World Bank and its development partners to collect and analyse information on policies and identify priorities for strengthening education systems' (WB, 2013: 4). By 2014, that is, within one year, SABER diagnostics had been applied more than 200 times in more than 100 countries, and more than 55 country reports and related data are available focussing on particular aspects of education systems (e.g. early childhood education, tertiary education) (WB, 2014: 2). Diagnostic tools from SABER are used for virtually any aspect of educational governance, assessment, planning and management and on all educational levels. Remarkably, SABER is not thought of as an analytic apparatus for low- and middle-income countries only. Among the participant countries (it is voluntary) are high-income countries such as Finland, France and Singapore (Fig. 5).

Moreover, the WB does not only organize and publish its own data, it increasingly assembles the general 'state of the art' in a specific subject area or sector, but also with regard to development in general. The first *World Development Report* (WDR), published in 1978, had less than 125 pages and no scientific references. A typical WDR, as published in the last ten years, might have up to 500 pages and an average of 850 scientific references. The WDR from 2013, dealing with jobs, training and skills, for example had an astonishing 1330 scientific References

A similar pattern can be found for key education documents. The first *Education Sector Working Paper* published in 1971 resembled more an organizational statement on the topic than rigorous analytical work. This has changed in the subsequent *Policy Paper Update* (1974), *Education Sector Policy Paper* (1980), *Education*

Sector Strategy (1999), *Education Sector Strategy Update* (2006) and, above all, the latest *Education Sector Strategy* from 2011.⁸ The *Primary Education Policy Paper* (1990) is omitted due to its sector-specific scope. If not for the *Update* 2006, which is usually a much less comprehensive work, the rise in the number of references is dramatic for both the references to scientific sources, other IOs and to itself.

5.2.2. Standardizing knowledge

The WB also comes into play as a 'standardizer of standards' by creating and assembling indicators in use worldwide. The *WB Education Statistics Query* contains around 3261 (sic) internationally comparable education indicators for a wide array of domains such as access, progression, completion, literacy, teachers, population, and expenditures. The indicators cover education systems in more than 242 countries (including older territories) from pre-primary to tertiary education. The query also holds equity data from household surveys (1970 to 2050 projections) organized in five indicator groups (learning outcomes, core indicators, education equality, educational attainment, and education expenditures) and learning outcome data from international assessments (PISA, TIMSS, etc.).

Here, the WB is also the IO most actively attempting to compile the first genuinely global and (and perhaps some day globally-comparable) dataset on student achievement. It brought together high-income area studies such as PISA (Programme for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) with lower-income area studies like SAQMEQ, PASEC, LLECE and SERCE.⁹

What is also less known, is that the WB has recently started its own international assessment program. On October 2010, the WB launched its *Skills Toward Employment and Productivity* (STEP) program. It measures cognitive skills (reading literacy based on PIAAC), technical skills and personality and behavioural factors from both employees and employers. A first round (2012–2014) gathered data from adult participants (15–64 years old) in 9 countries¹⁰ on personal background, education, employment and compensation, household wealth, household size and composition, personality, time and risk preferences and personal health.

Moreover, the aforementioned SABER not only assembles country data, it also benchmarks education policies and institutions. Each policy area is rated on a four-point scale, from 'Latent' to

⁹ SAQMEQ (South and Eastern African Consortium for Monitoring of Educational Quality), PASEC (Programme d'Analyse des Systèmes Educatifs de la Confemem; French-speaking countries), LLECE (the Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación) and SERCE (Segundo Estudio Regional Comparativo y Explicativo).

¹⁰ Armenia, Bolivia, Colombia, Georgia, Ghana, Lao PDR, Sri Lanka, Vietnam, and the Yunnan Province in China.

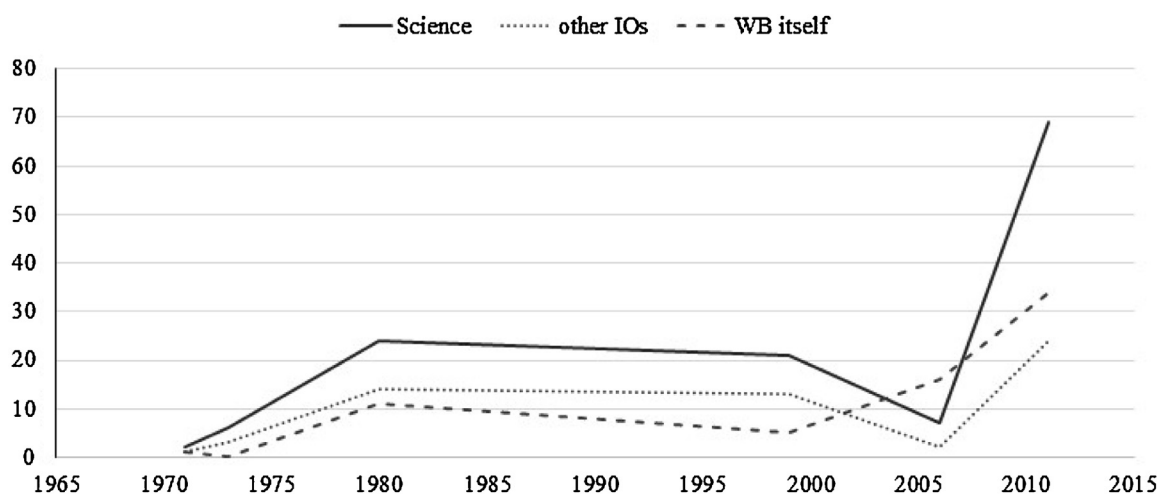


Fig. 5. Reference pattern in key WB education publications.

(Source: own calculation).

‘Emerging’ to ‘Established’ and ‘Advanced’. These ratings aim at highlighting a country’s areas of strength and weakness to promote cross-country learning. SABER also assesses policy choices by asking how well a country’s education system is performing in relation to *global* good practice. For the first time, thus, a single multivariate educational benchmarking and ranking tool is about to be applied to all countries worldwide.

Further, the WB is about to create, manage and apply global ‘big data’ in the social sciences taking care of issues like data gathering, organization, sharing, storage, transfer, analysis and presentation. In its *Big Data in Action for Development* (2014), the WB recently begun to discuss the use of vast amounts of data from such sources as satellites, mobile phones, social media, internet search queries, and financial transactions for policy advice in economic forecasting, health, labor market, migration etc. in collaboration with commercial IT consultancies. In July 2014, the WB launched a new program called *Innovations in Big Data & Analytics for Development* to identify opportunities for using big data in WB-funded operations and to promote the adoption of big data analytics in WB operations.

5.3. Knowledge transmission

‘The World Bank Group’s Open Learning Campus accelerates development solutions by transforming global knowledge into actionable learning’

5.3.1. Disseminating knowledge

Just as publications soar up and their impact grows (see above), international conferences in general and on education in particular have exploded since WWII and especially since the 1990s (Chabbott, 2003). They are obvious forums of knowledge exchange and distribution. In 2015 alone, WB-sponsored conferences and other events like talks, seminars, lectures and workshops, often organized by DEC, have been held throughout the year all over the world on 99 occasions on a wide array of topics ranging from agriculture to urban planning (WB, 2016c). It is rarely noticed that the WB has, since the early 2000s, started to organize large, international education conferences on its own behalf and no longer in the shadow of UNESCO, OECD or regional IOs. It holds regular regional conferences in Asia, Central Europe, Africa and Latin America and, less visibly, sponsors large global conferences such as the *Making Systems Work: A Global Conference on Education*

Systems (February 2016 in Sydney). A typical year has up to nine regional conferences in such places as Delhi, Cairo, Santiago de Chile, Ouagadougou, Buenos Aires, Saint Lucia, Issyk-Kul, Almaty and Samarkand all dealing with latest educational issues and accompanied by a wide array of capacity development workshops.

Other, less well-known channels of diffusion might include films (e.g. the *WB Africa Film Series* with the film *The First Grader* dealing with primary education), radio (e.g. the *WB Radio Instruction to Strengthen Education in Zanzibar*), social media (e.g. the *World Development Report App* or the *WB Education Blog*, Twitter, Flipboard etc.) and educational material on virtually any of its so called *Global Practices* including on education itself.

5.3.2. Teaching knowledge

The WB has begun to be much more directly involved in teaching and training. Obviously, the WB teaches its own staff. It has also created training centres, platforms and networks, it delivers educational material and sends out experts to workshops and seminars to teach students, professionals, consultants, policy-makers, researchers and practitioners and private sector representatives from countries around the world.

The key role in this training mandate has been given to the *WB Institute* (WBI, 2016), which ‘codifies global knowledge into training programs to help its clients master tested development know-how’, the *Global Development Learning Network* and the *Justice Sector Peer-Assisted Learning*.

Most recently and remarkably, the WB launched its *e-institute* and *Open Learning Campus* offering ‘affordable, innovative, and practitioner-focused training on the ‘how to’ of policy reform and proven good practices customized to local needs’ (WBI, 2016). The institute offers more than a 100 e-learning courses and webinars and provides participants with free monthly podcasts, mobile apps, games, video success stories, multimedia toolkits and other learning materials and even hands out certificates after successful completion, of which some are academically-accredited. E-courses, webinars and e-communities hosted and taught by the WB also include education-related on-line courses such as ‘School Autonomy and Accountability’, ‘Early Childhood Development’, ‘Student Assessment’ and ‘Teacher Policies’. The WB describes its teaching style as ‘solution-focused, game-infused, interactive and participatory, peer-based and experiential’ (WB 2016 WBI), while partnering with institutions like Cambridge University, Emerson College, Coursera and EdX.

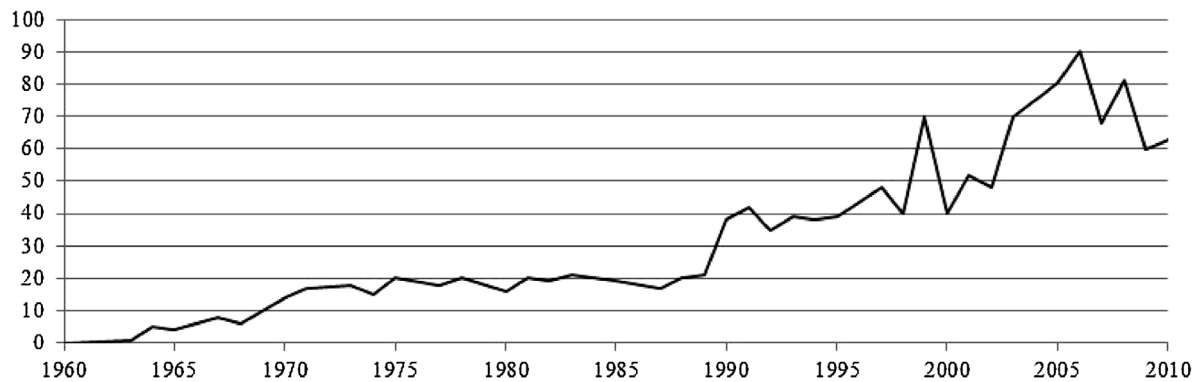


Fig. 6. Total N of Projects with an Education Component, 1962–2010.

(Source: EdStats)

5.3.3. Applying knowledge

Dissemination also takes place in the field when directly applied to countries' education systems. As development cooperation has traditionally been carried out in the project mode for more than six decades, it would be a paper in its own right to do full justice to the role of projects in educational governance. Evidence can only be selective here. The World Bank has launched more than 10,000 projects in education since 1947 estimating its project-based investments to be about \$69 billion (WB, 2011). During the period 1998–2013 alone, it has been active in the reform of education systems in 110 countries (WB, 2014b) (Fig. 6).

Similar to the trend shown above for publications on education, the WB had a considerable increase in education projects with the beginning of the EFA initiative and another momentum around the millennium before reaching an all-time high in the mid-2000s.¹¹

Among the most prominent projects are both those in developing and developed countries alike. For example, in 2014, the WB's Board approved the \$1 billion *Third Elementary Education Project* in India to be implemented over three years. This basic education project is the WB's largest education project in the world and in its own history, allegedly serving the needs of 200 million children and 4.5 million teachers (WB, 2016e). In the fiscal year 2015 alone, the WB approved operations in India amounting to \$3.785 billion. It is currently working on 152 projects in 2271 locations across the country, of which 44 have an explicit educational component.

Other large WB projects include countries like Romania, where, in 2015, the WB officially launched the implementation of the *Romania Secondary Education Project*. The project, funded with a €200 million loan, aims at supporting 80 percent of Romania's public high schools and 85 percent of faculties to address factors preventing students from successfully transitioning from upper secondary to tertiary education and completing the first year of university (WB, 2016e).

5.3.4. Celebrating knowledge

Finally, the WB praises and prizes knowledge. It grants the *Human Nutrition Award*, the *Award for Business Incubators* and the *Global Gas Flare Reduction Excellence Award*. In education, the leading Gambian educationist, Baboucarr Bouy, received the WB's *Jit Gill Memorial Award for Outstanding Public Service* in 2012. The *Skoll Award for Social Entrepreneurship* was recently handed out for providing law education for Chinese farmers. Given the sheer amount of research produced across the WB Group, the organization invited researchers in 2013 to a call for papers by the *Research*

Academy, a WB award for promoting excellence in internal research. Among the winning contributions were also education-related research projects.¹²

In the context of the recent big data initiative, the WB now offers the *Big Data Innovation Challenge*. Among the finalists were also educational ideas.¹³ Other initiatives include the *Marketplace for Ideas* and the *Development Marketplace*, both supporting early stage projects related to social and economic development.

6. Discussion

In this analysis, the WB comes into play as an epistemic actor that produces, manages and transmits knowledge in and about education. Its practices, I argue, add up to a particular form of educational governance, *epistemic educational governance*, which derives its relevance from the systematic production, processing, diffusion and use of policy relevant (scientific) educational knowledge. Given the scope, diversity and leverage of WB outreach, this global organization represents a particularly large number of mechanisms and associated practices and does so particularly visibly.

While the funding and conducting of original research by the WB in general has received some attention from scholarship on IOs (Broad, 2007; Dethier, 2007; Rao and Woolcock, 2007), its volume and impact in education has been largely ignored. As shown above, these turn out to be immense and growing, making the WB already the world's most productive and most influential educational research institute with the potential to sustainably change, for the better or the worse, the cognitive development of the scientific and (by implication) policy discourse on education worldwide, but, perhaps, particularly in countries where educational research infrastructure is weak.

Yet, the Bank not only produces knowledge through its own research or finances its production, it, above all, assembles, stocks, organizes and makes available the 'state of research' that is already out there and that has been produced by itself (sometimes presented as the same). Here, the WB appears as a massive repository or clearing house that gathers, distills and publishes scientific knowledge. In this sense, the WB is also a global (digital) library, archive and museum of socioscientific knowledge produced by generations of researchers. The growing rationalization in its own publications, as documented through a dramatic rise in

¹² The Impact of Providing School and Child Test Scores on Educational Markets by J. Das.

¹³ M. F. Crawford for Using Big Data to Predict Student Achievement in Low-Income School Settings and Sh. Nomura for Real Time Forecasting of Skills Demand and Supply: Analytics of Big Data from Babajob in India.

¹¹ Latest years are lower since ongoing projects are not included.

scientific references, is further fuelled by its own growing research record in education (with the risk of becoming self-referential in its knowledge production).

On a global level, the Bank spearheads and catalyses the trend of quantification and evaluation for the sake of country-comparability already institutionalized in regional contexts (Wiseman and Baker, 2005; Heyneman and Lykins, 2008; Gorur, 2014). In the WB context, such data-based assessments (SABER), when applied to entire educational systems, are not a mere methodological exercise, but have serious implications for policy reform recommendations and lending decisions and is, therefore, by principle a much more powerful tool in influencing educational systems than, for example, much-discussed PISA and deserve further scrutiny in future studies (Steiner-Khamsi, 2009; Klees and Edwards, 2014; Meyer and Benavot, 2013). Moreover, the WB's effort to bring together and merge numerous regional student achievement tests from across the world within one centralized database represents a significant leap towards worldwide standardized testing and comparability. Its own emerging skills measurement program (STEP) further contributes to such an educational life course-metric by including sectors less studied (e.g. technical and vocational training and education) and countries less covered by other educational assessment programs (e.g. China and Sri Lanka). With STEP, the WB enters a new phase of data acquisition and has the potential to become in low- and middle income countries what the OECD already is in high-income countries.

The WB also considerably expands and diversifies its global outreach beyond the scientific community. It is at the forefront of disseminating its findings and positions through old and new media, at conferences and policy forums aiming to get together the full array of 'stakeholders', from science and policy making, business and NGOs to social movements. Largely unnoticed is the WB's growing teaching mission as a novel aspect of epistemic governance. With its free-of-charge Open Learning Campus, the organization enters a new arena, proselytizing its ideas, findings and stocks of knowledge in a global virtual classroom.

A very direct form of transmission is the application of WB knowledge 'in the field' through the thousands of projects the WB has carried out in recent decades. Some important projects greatly exceed single national projects and in many cases the long presence of WB and other consultancies implementing lengthy project series and cycles is not only likely to determine the cognitive and policy direction of the national discourse, but may have lasting repercussions on the social stratification of affected areas, involved occupational groups, and other organizations (Gasper, 1999; Chabbot, 2003; Kovach and Kucerova, 2005).

Finally, perhaps in its impact the least tangible practice for the transmission of educational knowledge, the WB practices ceremonial legitimation of (a specific type of) knowledge through prizes and awards. Here, the WB becomes a curator of ideas, a jury for judging creativity, originality and excellence in science. These symbolic practices might serve as mnemotechnic aides consolidating a specific set of thoughts and views in a global collective memory (Assmann and Czaplicka, 1995). They help to popularize, routinize, trivialize and rememorize the value of certain knowledge stocks.

I argue that such practices should prompt us to complement the predominant views of IOs in comparative education. These views have largely been inherited from the study of IOs in IR where they are either seen as tools and toys of powerful states (Ikenberry 2001 in general; Rivera, 2009 on education), promoters of good (or bad) norms (Keohane & Nye 2000 in general, Klees and Edwards, 2014 on education) or meaning-generating bureaucracies (Barnett and Finnemore, 2004 in general, Jakobi, 2009 on education). These (critical) contributions are highly valuable in revealing the ideological underpinning and real world consequences of WB

work, yet they neglect the mechanisms related to knowledge, which transform ideology into social change. Instead, the analysis of IOs' nature, evolution, contemporary role and impact has to exceed these limited notions by attributing them the autonomy and authority they have acquired over the course of their existence.

Such an analysis would need to reconceptualise the WB and IOs, in general, as epistemic actors or 'theorists' embodying wider transformations of the rationalization and scientisation of human development (Strang and Meyer, 1993:493; Meyer et al., 1997; Baker 2014). To view them as mere agenda-setters would mean to considerably understate the qualities they have developed in over two decades, the product of highly professionalized and scientised socio-scientific personnel (both applied and more theoretical sciences) whose knowledge is channelled in discourses for which IOs not only provide the bureaucratic structure or organizational forum, but the original engine (Drori et al., 2003). The analytical thrust proposed by a strong focus on knowledge production in such a world-cultural perspective may provide a reply to Mundy's & Ghali's (2009) plea to better and more effectively model IO actors and their behaviour.

7. Conclusion

This paper identified the role ascribed to the World Bank in the discussion on mechanisms of global educational governance and institutionally traced and empirically supported the case for the 'knowledge turn' within the World Bank as the globe's most significant think tank.

In contrast to the predominant focus on regulative and normative mechanisms in IOs' educational governance, interest in their role as epistemic actors is growing. Here, soft mechanisms prevail. This burgeoning body of literature is, however, still limited in that it is mainly focused on standard-setting, discourse-steering and the various uses of quantitative methods in education.

As argued here, a wider scope is needed to adequately capture IOs' diverse production and diffusion of ideas in and through education. The WB's 'knowledge turn' pioneers and exemplifies this expanding scope. After a series of internal reforms and restructuring measures, the Bank is now among the world's most important producers and providers, organizers, managers, users and teachers of educational knowledge. Future studies on global educational governance could benefit from the systematic analytical framework applied here, while further refining and extending it by enlarging the empirical basis to other organizations and domains. Sociologists of knowledge and organizations (interested in different levels of analysis might benefit from the inclusion of IOs as a novel analytical opportunity, with the WB, as an ever-more influential global knowledge producer, a promising start in that direction.

References

- Alasuutari Pertti, Ali Qadir, 2014. Epistemic governance: An approach to the politics of policy-making. *European Journal of Cultural and Political Sociology* 1 (1), 67–84.
- African Virtual University, 2016. About. . (last access 15th December 2015) <http://www.avu.org/About-AVU/introduction.html>.
- Assmann, J., Czaplicka, J., 1995. Collective memory and cultural identity: cultural History/Cultural studies. *New German Critique* 65, 125–133.
- Baker, D.P., 2014. *The Schooled Society*. Stanford University Press, Stanford.
- Barnett, M., Finnemore, M., 2004. *Rules for the World: International Organizations in Global Politics*. Cornell University Press, Ithaca, NY.
- Biesta, G., 2009. Good education in an age of measurement: on the need to reconnect with the question of purpose in education. *Educ. Assess. Eval. Account.* 21 (1), 33–46.
- Broad, R., 2007. 'Knowledge Management': a case study of the World Bank's research department. *Dev. Pract.* 17 (4–5), 700–7008.
- Bromley, P., 2010. The rationalization of educational development: scientific activities among international non-Governmental organizations. *Comp. Educ. Rev.* 54 (4), 577–601.

- Caillods, F., Hallak, J., 2004. Education and PRSPs: A Review of Experiences. International Institute for Educational Planning, Paris.
- Carayannis, E.G., Laporte, B., 2002. By Decree or By Choice? A Case Study Implementing Knowledge Management and Sharing at the Education Sector of the World Bank Group. World Bank Institute.
- Chabbot, C., 2003. Constructing Education for Development: International Organizations and Education for All. Routledge Falmer, New York.
- Dale, R., 2005. Globalisation, knowledge economy and comparative education. *Comp. Educ.* 41 (2), 117–149.
- Dethier, J.-J., 2007. Producing knowledge for development: research at the world bank. *Global Gov.* 13, 469–478.
- Drori, G.S., et al., 2003. Science in the Modern World Polity: Institutionalization and Globalization. Stanford University Press, Stanford, CA.
- Fenwick, T., Mangez, E., Ozga, J., 2014. Governing knowledge. comparison, knowledge-based technologies and expertise in the regulation of education. In: Fenwick, T., Mangez, E., Ozga, J. (Eds.), *World Yearbook of Education 2014*, 8217. Routledge, London and New York, pp. 3–10.
- Finnemore, M., 1993. International organizations as teachers of norms: the united nations educational, scientific, and cultural organization and science policy. *Int. Organ.* 47 (4), 565–597.
- Gaspar, D., 1999. Problems in the Logical Framework Approach and challenges for 'Project Cycle Management'. *The Courier n° 173* January–February pp. 75–77.
- Gorur, R., 2014. Towards a sociology of measurement in education policy. *Eur. Educ. Res. J.* 13 (1), 58–72.
- Held, D., 2005. At the global crossroads: the end of the Washington Consensus? *Globalizations* 2 (1), 95–113.
- Heyneman, S.P., Lykins, C., 2008. The evolution of comparative and international education statistics. In: Ladd, H.F., Fiske, E.B. (Eds.), *Handbook of Research in Education Finance and Policy*. Routledge, New York, pp. 105–127.
- Heyneman, S.P., 2003. The history and problems in the making of education policy at the world bank, 1960–2000. *Int. J. Educ. Dev.* 23, 315–337.
- Jakobi, A., 2006a. The Worldwide Norm of Lifelong Learning. A Study of Global Policy Development. University of Bielefeld (Dissertation).
- Jakobi, A., 2006b. The internationality of lifelong learning. In: Kalló, J., Rinne, R. (Eds.), *Supranational Regimes and National Education Policies. Encountering Challenge*. Finnish Educational Research Association, pp. 115–138.
- Jakobi, A.P., 2009. *International Organizations and Lifelong Learning*, 4th edition Palgrave Macmillan, Basingstoke.
- Jones, P.W., 1997. On world bank education financing. *Comp. Educ.* 33 (1), 117–130.
- Jones, P.W., 2007. *On World Bank Financing of Education. Lending, Learning and Development*. Routledge, London.
- Kalló, J., 2006. Soft governance and hard values: a review of OECD operational processes within educational policy and relations with member states. In: Kalló, J., Rinne, R. (Eds.), *Supranational Regimes and National Education Policies ? Encountering Challenge*. Finnish Educational Research Association, Turku, pp. 261–352.
- King, K., 2002. Banking on Knowledge: the new knowledge projects of the World Bank. *Compare* 32 (3), 311–326.
- Klees, S., Edwards, D.B., 2014. Knowledge production and technologies of governance. In: Fenwick, T., Mangez, E., Ozga, J. (Eds.), *Governing Knowledge*. Routledge, London, pp. 31–43.
- Klees, S.J., 2002. World bank education policy: new rhetoric old ideology. *Int. J. Educ. Dev.* 22, 451–474.
- Klees, S., 2012. World Bank and education: ideological premises and ideological conclusions. In: Klees, S.S., Samoff, J., Stromquist, N. (Eds.), *The World Bank and Education: Critiques and Alternatives*. Sense, Boston.
- Kovach, I., Kucerova, E., 2005. The project class in central europe: the czech and hungarian cases. *Sociologia Ruralis* 46 (1), 3–21.
- Lauglo, J., 1996. Banking on education and the uses of research. a critique of world bank priorities and strategies for education. *Int. J. Educ. Dev.* 16 (3), 221–233.
- Martens, K., Niemann, D., 2010. Governance by Comparison. *Transstate Working Papers*, Bremen 139.
- Martens, K., 2007. How to become an influential actor ? the 'Comparative turn' in OECD education policy. In: Martens, K., Rusconi, A., Leuze, K. (Eds.), *New Arenas of Education Governance ? The Impact of International Organizations and Markets on Educational Policymaking*. Palgrave, Basingstoke, pp. 40–56.
- Meyer, H.D., Benavot, A., 2013. PISA, Power, and Policy: The Emergence of Global Educational Governance. Symposium Books, Oxford.
- Meyer, J.W., et al., 1997. World society and the nation-State. *Am. J. Sociol.* 103 (1), 144–181.
- Mundy, K., Ghali, M., 2009. International and transnational policy actors in education: a review of the research. In: Plank, D., Sykes, G., Schneider, B. (Eds.), *Handbook on Educational Policy Research*. The American Education Research Association & Routledge Press, pp. 717–734.
- Mundy, K., Verger, A., 2015. The World Bank and the global governance of education in a changing world order. *Int. J. Educ. Dev.* 40, 9–18.
- Mundy, K., 2007. Educational multilateralism — origins and indications for global governance. In: Martens, K., Rusconi, A., Leuze, K. (Eds.), *New Arenas of Education Governance. The Impact of International Organizations and Markets on Educational Policy Making*. Palgrave Macmillan, Basingstoke, pp. 19–40.
- Parreira do Amaral, M., 2011. *Emergenz eines internationalen Bildungsregimes?* Waxmann, Münster.
- Plehwe, D., 2007. A global knowledge bank? The world bank and bottom-up efforts to reinforce neoliberal development perspectives in the Post-Washington Consensus Era. *Globalizations* 4 (4), 514–528.
- Power, M., 2004. Counting, control and calculation: reflections on measuring and management. *Human Relations* 57, 765–783.
- Ramirez, F.O., Meyer, J.W., Lerch, J., et al., 2016. World society and the globalization of education policy. In: Mundy, K. (Ed.), *The Handbook of Global Education Policy*. Wiley-Blackwell, New Jersey, pp. 43–63.
- Rao, V., Woolcock, M., 2007. The disciplinary monopoly in development research at the world bank. *Global Gov.* 13, 479–484.
- Ravallion, M., Wagstaff, A., 2012. The world bank's publication record. *Rev. Int. Organ.* 7, 343–368.
- Reimers, F., 1994. Education and structural adjustment in Latin America and Sub-Saharan Africa. *Int. J. Educ. Dev.* 14 (2), 119–129.
- Rivera, W.M., 2006. International strategies for the development of adult education: a review and critique. *Int. J. Lifelong Educ.* 2 (2), 111–132.
- Rivera, W.M., 2009. The World Bank's view of lifelong learning: handmaiden of the market. In: Jarvis, P. (Ed.), *The Routledge International Handbook of Lifelong Learning*. Routledge, London & New York, pp. 281–291.
- Robertson, S.L., Komljenovic, J., 2015. Forum shifting and shape making in europe's negotiations on trade in (Education). Services. Presented to the Education and Trade Panel ECPR, Montreal 26–28th August, 2015.
- Robertson, S., Bonal, X., Dale, R., 2002. GATS and the Education Service Industry: the politics of scale and global reterritorialization. *Comparative Education Review* 46 (4), 472–496.
- Rutkowski, D., 2007. Converging us softly: how intergovernmental organisations promote neoliberal education policy. *Crit. Stud. Educ.* 48 (2), 303–326.
- Ruggie, J.G., 1975. International Responses to Technology. *International Organization* 29 (3), 557–584.
- Schemmann, M., 2007. Internationale Weiterbildungspolitik Und Globalisierung. Bertelsmann, Bielefeld.
- Scherrer, Ch., 2007. 'GATS — Commodifying Education via Trade Treaties.' In: Martens, K., Rusconi, A., Leuze, K. (eds.), *New Arenas of Education Governance*.
- Scott, W.R., 2001. *Institutions and Organizations*, 2nd edition Sage, Thousand Oaks.
- St. Clair, A.L., 2006. The world bank as a transnational expertised institution. *Global Gov.* 12, 77–95.
- Steiner-Khamsi, G., 2009. International knowledge banks in education. In: Junker, D., Mausbach, W., Thunert, M. (Eds.), *State and Market in a Globalized World*. Winter, Heidelberg.
- Strang, D., Meyer, J.W., 1993. Institutional conditions for diffusion. *Theory Soc.* 22, 487–511.
- Verger, A., Bonal, X., 2012. All things being equal? Policy options, shortfalls, and absences in the World Bank Education Strategy 2020. In: Klees, S.S., Samoff, J., Stromquist, N. (Eds.), *The World Bank and Education: Critiques and Alternatives*. Sense, Boston.
- World Bank, 1999. *Education Sector Strategy Paper*. World Bank, Washington, DC.
- World Bank, 2001. *Assessment of the Strategic Compact*. World Bank, Washington, DC <http://documents.worldbank.org/curated/en/2001/03/2501287/assessment-strategic-compact>. (Accessed December 1 2015).
- World Bank, 2011. *Education Sector Strategy*. World Bank, Washington, DC.
- World Bank, 2012. *Research at Work. Assessing the Influence of World Bank Research*. World Bank, Washington, DC.
- World Bank, 2013. *The What, Why, and How of the Systems Approach for Better Education Results*. World Bank, Washington, DC.
- World Bank, 2014a. *SABER in Action*. World Bank, Washington, DC.
- World Bank, 2014b. *World Bank Education Projects Database*. <http://datatopics.worldbank.org/education/wDataQuery/QProjects.aspx>. (Accessed December 22 2015).
- World Bank, 2016a. *Overview of JI/WBGS Program*. World Bank, Washington, DC http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXTWBISFP/EXTJWBGSFP/0,contentMDK:20276784?menuPK:551652?pagePK:64168427?piPK:64168435?theSitePK:551644_00.html. (Accessed December 2 2015).
- World Bank, 2016b. *Open Knowledge Repository*. <https://openknowledge.worldbank.org/about>. (Accessed: December 3 2015).
- World Bank, 2016c. *Open Learning Campus*. World Bank, Washington, DC <http://wbi.worldbank.org/wbi/node/103>. (Accessed December 3 2015).
- World Bank, 2016e. *Projects: Third Elementary Education*. World Bank, Washington, DC <http://www.worldbank.org/projects/P004602/third-elementary-education?lang=en>. (Accessed December 4 2015).
- World Bank Institute, 2016. *About WBI 2014*, pp. 2016 <http://wbi.worldbank.org/wbi/about>. (Accessed December 12 2015).
- Wolfensohn, J.D., 1996. *Annual Meetings Address*. <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/ORGANIZATION/EXTPRESIDENT/EXTPASTPRESIDENTS/PRESIDENTEXTERNAL/0,contentMDK:20025269~menuPK:232083~pagePK:159837~piPK:159808~theSitePK:227585,00.html>. (Accessed December 1 2015).
- Wiseman, A.W., Baker, D.P., 2005. *Global Trends in Education Policy*, Vol. 6. Elsevier, Amsterdam, pp. 1–21.
- Zapp M., Dahmen C., (forthcoming) *The Diffusion of Educational Ideas among International Organizations. An Event History Analysis of Lifelong Learning, 1990–2013*. *Comparative Education Review*.