KNOWLEDGE MOBILIZATION AT THE WORLD BANK:
A BIBLIOMETRIC ANALYSIS OF WORLD BANK PUBLICATIONS ON
PUBLIC-PRIVATE PARTNERSHIPS IN EDUCATION

by

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Graduate Department of Theory and Policy Studies in Education,
Ontario Institute for Studies in Education of the
University of Toronto

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Abstract

This study examines the ways that knowledge on public-private partnerships in education (PPPE) spreads due to the knowledge mobilization (efforts to incorporate research into policy and practice in education) work of World Bank Education Sector. Specifically, this study looks at the role of the World Bank in research mediation between research producing contexts and research using contexts. Using bibliometric analysis this study a) traces the citations in five World Bank publications on PPPE in order to clarify the origins of the evidence used; and b) maps the spread of this research through its online take-up by other organizations. This study provides baseline data about the knowledge mobilization efforts of the World Bank around PPPE, and illuminates the broader discussion in the literature on who is included (and excluded) from this research enterprise.
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Dedication

For Leor, because you have loved me, you gave me faith in myself; and because I have seen the good in you, you gave me faith in humanity.

For Jessica, who told me this would happen.
"The World Bank Group aims to fight poverty with passion and professionalism for lasting results - to help people help themselves and their environments by producing resources, sharing knowledge, building capacity, and forging partnerships in the public and private sector."

~World Bank Mission Statement (World Bank, 2010a)
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CHAPTER 1: PURPOSE AND DESIGN OF STUDY

Introduction

In the field of International Development, it is a commonly held belief that education is one of the most powerful instruments for reducing poverty and inequality and helps to lay the foundation for sustainable economic growth. It is for this reason that since 1963, the World Bank has placed education at the centre of its poverty reduction strategy. In the last ten years alone, the World Bank committed approximately $24 billion to its work in education with active education operations in 81 countries around the world (World Bank, 2009a). Since 1996, the World Bank has taken its role as a global education provider to a new level, serving as a “Knowledge Bank” for data, research findings, and best practices in policy design and implementation. The World Bank is currently the largest external funder of education (Mundy, 1998; World Bank, 2009a) and widely recognized as a leading source of knowledge on development (Carayannis & Laporte, 2002; Bolton, 2007; Gilbert & Vines, 2000; Gwin, 2003).

The Bank has always complimented its lending in education with extensive empirical work on international education policy, country-level analyses, and impact evaluations in order to develop a strong evidence base about what works in education (Mundy, 2002; World Bank, 2009a; Woodhall, 2003). With this strong analytical background, it is not surprising that the Education Sector of the Bank (which falls under the thematic network of Human Development along with Health and Social Protection) was among the first to get on board with the creation and implementation of the Knowledge Bank (Carayannis & Laporte, 2002).
One area in the Bank’s educational lending strategy that has been justified through the use of evidence is the issue of public-private partnerships in education (PPPE), which falls under the Economics of Education Thematic Group. This group has been held up as an exemplar of the Knowledge Bank, and has been recognized for its use of empirical work (Carayannis & Laporte, 2002; Woodhall, 2003). This emphasis on evidence is illustrated in the wide variety of evidence-based publications freely available on the PPPE section of the Bank’s Education Website; publications which consequently provide a rich source of data for empirical research.

The Research Problem

Despite the significance of the World Bank’s influence in international development education, there has been little empirical work done on the Education sector’s efforts to incorporate research into policy and practice in education. Regardless of the lack of evidence, there have been many claims made about the quality and reliability of Bank data and research (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006; Klees, 2008; Torres, 2001; Broad, 2006; Wilks, 2004). Furthermore, there are conflicting claims on the nature of the World Bank as the Knowledge Bank with some claiming the Knowledge Bank represents a shift in the Bank’s development paradigm (Gilbert, Powell, & Vines, 1999; Laporte, 2004); while others claim the Knowledge Bank is just a new way for the Bank to maintain the current neoliberal world order (Broad, 2006; Torres, 2001). However, despite the significant implications of this controversy, there is a lack of empirical evidence to support or refute these claims. Additionally, considering the size and scope of the World Bank’s work in both knowledge production and dissemination on development education, there has been little empirical work to determine the impact Bank
knowledge is having on the wider field of International Development Education – especially beyond the World Bank itself and the realm of academia.

**Research Questions**

Looking through the analytical lens of knowledge mobilization, the central question of this study is:

*What is the nature, extent and impact of World Bank research on PPPE from the context of research production to its ultimate uptake by others?*

**Sub-questions**

1. What was the context of knowledge production?
   
   a. What type of research is produced?
   
   b. Who produced the research?
   
   c. What are the researchers’ organizational and geographical affiliations?
   
   d. What are the organizational affiliation and geographical focus of the studies?
   
   e. Where did the studies take place?
   
   f. Who published the studies?
   
   g. How was the research evidence packaged for dissemination (journal articles, reports, books, etc)?

2. How do World Bank publications package and disseminate this evidence?

3. To what extent has this evidence spread both geographically and organizationally; especially beyond academia?
Definitions

Knowledge Mobilization refers to the movement of research from production to dissemination to its ultimate impact on policy and practice.

Research includes, “Any systematic process of critical investigation and evaluation, theory building, data collection, analysis and codification” (Nutley & Davies, 2010, p. 4).

Impact includes any external reference to, citation of, or alternative version of World Bank publications on the topic of public private partnership in education. Although this is a narrow view of research impact, for the purpose of this thesis the term impact refers to the spread of World Bank knowledge on PPPE, rather than how that knowledge is actually being used by policymakers and practitioners.

Significance of the Study

Although KM is not a new concept, KM as a field of inquiry is still in its infancy. The literature tends to address ways in which research can be better disseminated rather than how it is actually being used (Cooper, Levin, & Campbell, 2009). The literature provides us with limited evidence based strategies to inform our understanding of what works in what contexts; especially in contexts that are of similar scale and scope of the World Bank’s KM work on PPPE. It has been recognized that there is a need for greater application of formal and rigorous research designs to assess and evaluate the success of KM in specific contexts (Mitton, Adair, McKenzie, Patten, & Waye Perry, 2007). My exploration of KM at the World Bank is intended to help fill that void by focusing specifically on the context of research production and dissemination on the issue of PPPE at the World Bank, as well as through the examination of publically accessible documents available online.
The methods used in this study are also a significant contribution to our understanding of KM. By adapting traditional bibliometric methods, the methods used in this study provide a new way for researchers to map the influence of research beyond the walls of academia. Through the use of publically available resources online as a source of data, this study has a high level of replicability as my results can be checked, interpretations examined, and extensions on my study can be explored from anywhere in the world.

A deeper understanding of research and its use in policy and practice is useful to researchers trying to disseminate their work to the appropriate target audience, as well as for policymakers and practitioners who want to increase their understanding of an issue in order to make informed policy and program decisions. The data that comes from mapping the nature, extent and impact of evidence can be put to a wide variety of uses by research producers, policymakers and practitioners. Depending on the stakeholder, it could help improve accountability; value for money in research funding; setting priorities for stakeholder groups; and ultimately help to improve outcomes (Davies & Nutley, September 2008, p. 4). A better understanding of KM is useful in the fields of education, development and beyond; as it can help us to create better systems that support the exchange of knowledge across regions and sectors.

Although the controversies surrounding PPPE are not the focus of this study, the results of this study will add insight into how the World Bank is using evidence to support its position on public-private partnerships and to influence other policymakers and practitioners in the field of education. Additionally, the type of analysis used in this study is relevant to any field where there is a lack of agreement on policy issues - such as PPPE.
CHAPTER 2: REVIEW OF THE LITERATURE

The following literature review is divided into three main sections. The first section will provide an overview of the rising role of knowledge within the World Bank, situated within the context of the historic role of the Bank within a changing global economy. It discusses structural changes at the Bank that have enabled the World Bank to mobilize knowledge on a large scale. Lastly, this section discusses the implications of the World Bank’s role in managing global development knowledge in terms of the conflicting perceptions of the Bank’s promotion of knowledge as a global public good, versus, the Bank’s promotion of knowledge as a tool of paradigm maintenance.

The second section provides an overview of the field of knowledge mobilization in order to provide the theoretical foundation for this study. This section also identifies three major areas across which research use occurs; and elaborates on the relevant issues arising from each area in relation to how these issues contribute to my conceptual framework.

The third section discusses the education sector and how this sector and its network in the World Bank has been affected by the rising role of knowledge at the Bank. Although the focus of this study is on the role of the World Bank in research mediation between research producing contexts and research using contexts, I use the evidentiary base published by the Bank on the topic of public-private partnerships in education (PPPE) as the gateway to examine this broader phenomena. Therefore, although in this section I do discuss the topic of PPPE both in terms of its relation to the Knowledge Bank and the ideological debate, the focus of my study in on the on the origins and spread of the evidentiary base rather than the policy debate itself.
The Role of Knowledge in a Changing Global Economy

In the twenty-first century, we have seen a paradigm shift from a global economy based on material resources and other forms of physical capital, to a global economy based on knowledge as the new source of wealth (Stiglitz, 1999). The ability to produce and use knowledge is now seen as critical to a nation’s comparative advantage (Government of Canada, 2001), and has become a central focus in international development (World Bank, 2009b). One of the major theorists who advocated for knowledge based international development was Joseph Stiglitz, former Chief Economist of the International Bank of Reconstruction and Development (IBRD), more commonly known as the World Bank. Stiglitz claimed that,

…development requires closing the gap not only in ‘objects’, in human and physical capital, but also in knowledge. Knowledge and capital are in fact compliments: improved knowledge enhances the return to capital, while additional capital provides the opportunity to make use of recently acquired knowledge” (Stiglitz & Chang, 2001, pp. 79-80).

This notion of knowledge as capital was reinforced in Knowledge for Development, the 1998/1999 World Development Report (World Bank, 1999). This report highlights the increasingly important role of knowledge by arguing that developing states must find ways to participate effectively in the new global economy where knowledge drives financial markets. Knowledge for Development places the World Bank as the central organization that can help countries, “…understand and cope with the challenges of reducing poverty and promoting sustainable development while also helping to shape their futures in the knowledge economy,” (Leautier, 2005, pp. 98-99). Today, it is a commonly held belief that the capacity of developing countries to generate, acquire, assimilate and utilize knowledge is a crucial part of their ability to reduce poverty (Hovland, 2003).

Driven by a more educated population and a growing awareness of the need to understand more fully the complex problems confronting us (Levin, 2004), the shift towards the
knowledge-based economy has resulted in an increased interest in strengthening the impact and value of research among governments, funders and development practitioners. Furthermore, rising demands on limited resources have resulted in a general culture of accountability (Mitton, Adair, McKenzie, Patten, & Waye Perry, 2007, p. 730), thus escalating the need for decision makers to utilize research evidence to support their policy decisions. As a result, there have been increasing efforts to bridge the knowledge gap by incorporating evidence derived from research into policy and practice (Cooper, Levin, & Campbell, 2009). In the field of international development many organizations and institutions have attempted to address this gap (Court & Young, 2003), but none have been able to devote the time and resources necessary to create a knowledge management system comparable to the scope of that created by the World Bank.

A Brief History of the World Bank

Since the end of World War II, the elite Western countries (including Canada) have worked together, under the leadership of the United States, to push forward an international system of trade based on the principles of free market capitalism. This system allowed their firms and industries to grow and flourish under the non-competitive conditions provided by the early stages of globalization (Waks, 2003). In order to maintain their economic advantage, the elite have assigned the International Financial Institutions a privileged position (Sachs, 2005) in order to create a system of,

Global governance without global government, one in which a few institutions…and a few players – the finance, commerce, and trade ministries closely linked to certain financial and commercial interests – dominate the scene (Stiglitz, 2003, p. 22).

Since its creation at the Bretton Woods conference in 1944, the World Bank has been one of the most influential financial institutions on the global scene. The Bank’s original purpose was to
help rebuild Europe after World War II, and it has since maintained its relevance by focusing its efforts on lending and development in the Global South in order to promote economic growth.

The World Bank is a public institution, financed in part by contributions from taxpayers around the world. Country members of the Bank provide both direct finance to the bank and the promise of “callable” capital. The Bank uses this to float bonds, which provide the capital out of which the Bank provides loans and grants to developing country governments. Unlike most other intergovernmental development organizations, the Bank reports to ministers of finance and the central Banks of its member governments, and the citizens these institutions represent. Decision making power at the World Bank is formalized through a complicated voting arrangement, with votes being distributed to states based on the funds each country has committed to the Bank. Thus far the USA has been the only country able to afford veto power (Stiglitz, 2003), although due to the events of recent years (including the United State’s economic crisis and the rise of middle income countries) the USA seems to be losing its grip on power at the World Bank.

Despite the fact that I refer to the World Bank as if it were a single homogenous institution throughout this study, it is important to recognize that the Bank’s structure is multifaceted and complex. The Bank is composed of several branches - each with its own unique function - including the International Bank of Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Centre for the Settlement of Investment Disputes (ICSID). It also has tens of thousands of staff members, consultants, partners and clients; each playing a, “...different but collaborative role in advancing the [World Bank’s] vision of inclusive and sustainable globalization” (World Bank, 2010b).
Additionally, it is necessary to acknowledge the millions of people who are affected by the decisions made by the World Bank based on its institutional definitions as to what counts and what doesn’t when it comes to the development of our world.

Technically, as a financial institution, the World Bank has no official political power. However it can (and does) force lesser developed countries to make certain economic policies by including them as conditionalities in loan or debt reduction agreements. Throughout the 1970’s and 1980’s, these conditionalities took the form of Structural Adjustment Programs (SAPs), which often required the Bank’s client countries to open their markets by removing trade barriers, devaluing currencies, deregulating constraints on foreign investment, downsizing government and limiting state sponsored social services such as health care and education (Sachs, 2005; Stiglitz, 2003). Unfortunately, the reforms required in SAPs resulted in increased poverty in the developing world, leaving the poor without access to the social safety nets that they had heavily relied on – including education (Mundy, 2002; Carnoy, 1999; Klees, 2008; Alexander, 2001). The power of the World Bank policies and their effects, such as increasing inequity between the developed and developing world, makes a study of the World Bank and its use of research in policy making in education important.

By the 1990’s it had become increasingly clear that SAPs were causing more harm than good, and people from all over the world – including many from the affluent world – joined together to question publically the Bank’s credibility as a development agency (Chan, 2007). In June of 1993, the United States’ House of Representatives came two votes short of cancelling American funding to the Bank (Danaher & Yanus, 1994). A year later, civil society organizations from around the world marked the Bank’s 50th anniversary by participating in the
“50 years is enough” campaign, calling for an end to the World Bank and its neoliberal\(^1\) lending regime (Danaher & Yanus, 1994; de Moura Castro, 2009). One of the main concerns was that the Bank’s lending policies were externally driven with no input from the people they were supposed to be helping. SAPs left the poor voiceless when it came to their own development, as World Bank conditionalities meant that countries had no ownership over their own development policies. As the devastating affects of SAPs became more and more clear, the Bank was increasingly critized for creating a system of, “economic intervention without representation” (Easterly, 2006, p. 381).

At the same time, many developing countries began to increase their credit ratings, allowing them to turn to private lending systems instead of having to work with the World Bank (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006). Since private loans did not come with the devastating conditionalities of SAPs, countries were able to spend these funds as they saw fit (de Moura Castro, 2009). By the mid-1990’s, it had become clear that the Bank must change if it was to remain legitimate in,

…the rapidly changing global economy - where private capital flows are five times greater than official assistance, where many different actors (from multilateral Banks to NGOs) now play a much greater role in development, and where technological change has revolutionized the way business is done (World Bank, 1997a).

In other words, in the context of the new global knowledge economy, the Bank could no longer rest its laurels solely on its lending capabilities. The Bank had to change in order to maintain its position as one of the most influential institutions in the governance of our world.

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\(^1\) My use of the term ‘neoliberal’ stems from Martinez and Garcia (no date), and refers to a set of economic policies that have become widespread during the last 25 years or so including: 1) The rule of the free market; 2) Cutting public expenditures for social services; 3) deregulation; 4) privatization 5) elimination the concept of ‘the public good’. The beneficiaries of neoliberalism are a minority of the world’s people and it is widely believed that neoliberalism has only served to increase the gap between rich and poor.
The Rise of Knowledge at the World Bank

Change came to the World Bank in the form of its 9th president, James Wolfensohn, who first took office in June 1995. Wolfensohn understood that the Bank was in drastic need of renewal, and in 1996 at the Bank’s Annual Meeting, he announced his vision of a new development paradigm to bring the Bank back on track with its central mission – to reduce poverty. During this address, Wolfensohn announced his plan for change including a shift towards decentralization, major changes to the lending policies of the Bank, and a plan to utilize the Bank’s unique pool of development knowledge across sectors and countries. He announced,

We have been in the business of researching and disseminating the lessons of development for a long time. But the revolution in information technology increases the potential value of their efforts by vastly extending their reach. To capture this potential we need to invest in the necessary systems, in Washington and across the world, 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)

In March 1997, Wolfensohn’s vision became reality when the Bank’s Executive Board voted unanimously in support of the Strategic Compact (World Bank, 1997b); a complex 30 month, “...plan for fundamental reform and renewal of the World Bank to make it more effective in achieving its basic mission of reducing poverty” (World Bank, 1997a). The Compact was meant to change the way in which the Bank did business, making it more effective in terms of time and money spent, and making higher quality products more suitable to the needs of its clients. The Compact also established clear performance criteria against which development progress would be measured and staff would be held accountable (World Bank, 1997a).

Central to the Strategic Compact was the rebranding of the World Bank away from the Bank as primarily a financial institution towards the image of the ‘Knowledge Bank’ - an institution that provides state of the art expertise on development. This commitment to transform the World Bank into the global Knowledge Bank had sweeping implications of change in terms
of increasing the Bank’s ability to systematically collect, organize and share development knowledge among Bank Staff, partners and clients. While the Bank had always tied its development knowledge to its financial products, it is only since 1996 that the Bank has focused on finding ways to maximize the potential benefits of the Bank’s competitive advantage as an international development agency—its global knowledge of development (Gwin, 2003; Leautier, 2005; Gilbert & Vines, 2000).

**Knowledge Banking in Action**

As the ‘Knowledge Bank’, the World Bank focuses on expanding its clients and partners by providing technical assistance, producing and disseminating knowledge, and aggressively promoting the use of modern information and communication technologies as a critical tool for development (Torres, 2001). Since the inception of this strategy in 1996, the Bank has produced no overarching documents outlining how the objectives of the knowledge initiative will be achieved. Instead it has published a chain of strategic documents and progress reports (World Bank, 2010c; World Bank, 2010d; World Bank, 2010e; World Bank, 2010f), which provide an informal insight into how the World Bank attempted to rebrand itself by transforming its image from the ‘Conditionality Bank’ to the ‘Knowledge Bank’ (Gilbert & Vines, 2000).

Initially, the move towards knowledge Banking manifested in structural changes aimed at improving the efficiency and effectiveness of Bank staff, such as the creation of five thematic networks that crossed sectors and regions. These five networks (including Human Development; Finance, Private Sector and Infrastructure; Environmentally and Socially Sustainable Development; Poverty Reduction and Economic Management; and Operational Core Services) are further divided into Thematic Groups (also referred to as communities of practice), which organize staff based on their area of expertise (Carayannis & Laporte, 2002). To ensure Bank
staff are able to access the information they need in a timely manner, a help desk was created for each thematic group allowing staff to connect with a knowledge management expert who could direct them to the information required within 48 hours (World Bank, 2010g). In 1998, the Bank linked all their offices to a global communications system\(^2\) to ensure that staff are able to access Bank knowledge wherever they are, and launched the Overall Performance Evaluation to ensure that all staff complied with the new knowledge sharing policies.

By the year 2000, the Bank was ready to expand its knowledge system to include Bank partners and clients. In order to provide better knowledge based services to these stakeholders, the Bank created the Global Development Learning Network, the Development Gateway, the Global Development Network – and received public recognition for these achievements (World Bank, 2010d). These organizations have since become autonomous from the World Bank, although they continue to receive some funding from the Bank (Global Development Gateway, nd; Global Development Network, 2011).

Today, the Knowledge Bank has expanded to reflect Wolfensohn’s vision for the World Bank to be the first place anyone looks for development knowledge (Carayannis & Laporte, 2002). To this end, the Bank has amassed an immense amount of publically available - via the Bank website - resources from data bases, historical documents, articles, reports compiled by researchers both internal and external to the Bank, a website full of resources geared towards youth and educators, and a thesis Bank to support university students (to name but a few).

\(^2\) Unlike most companies where ‘global’ means North America, Europe and parts of Asia; for the World Bank global literally means all corners of the world. In 1996, when the concept of the Knowledge Bank was incepted, many countries in the developing world still lacked the infrastructure to keep the electricity on all day let alone provide reliable access to the World Wide Web. Therefore, in order for the Knowledge Bank to work, the World Bank had to create a global communications network linking all Bank staff around the world. This was one of the major accomplishments of the Knowledge Bank, and had a profound effect on Bank structure and operations. For a detailed account of the process and the implications this had on the Bank see Worthen (2005).
World Bank research and development knowledge is used internally (Woodhall, 2003; Mundy, 2002), as well as externally by academics (Kramarz & Momani, 2010; Ravillion & Wagstaff, 2010), development practitioners (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006; Gwin, 2003) and regular people looking for information on the developing world. In an interview on the US Public Broadcasting Service, Bill Gates illustrated the impact of the Bank’s research. In this interview Gates claimed, “The big milestone event for me though was… a report was done, it's called ‘The World Development Report 1993’.” Gates goes on to explain how he was inspired to start the Bill and Melinda Gates Foundation after reading a newspaper article which cited evidence from this World Bank publication (Public Broadcasting Service, 2003).

The Knowledge Bank is not just a sophisticated library system; it is “mother-of-all knowledge networks” (Worthen, 2005), connecting researchers to policymakers and practitioners, and firmly entrenching knowledge as the Bank’s comparative advantage in order to become widely recognized as the world’s leading development agency (Gilbert & Vines, 2000; Bolton, 2007). A policy maker from Brazil demonstrates this fact in saying, “the Bank is the institution which we address when we need some kind of information or advice. Don’t underestimate this fact. If you really need an expert on a certain issue related to development, the World Bank is where you go” (emphasis original, Gwin, 2003, p. 62). It is this pervasive influence that makes the study of the Knowledge Bank so significant. In our modern knowledge economy, where knowledge is power, it is necessary to question the implications of having a Bank in control of the production and dissemination of development knowledge.

**The Knowledge Bank as a Global Public Good**

The World Bank claims that knowledge on development is part of the global commons that belongs to everyone; and it positions development knowledge as a global public good. A
public good has two critical attributes: 1) nonrivalrous consumption—meaning the consumption of the good by one individual does not take away from the ability of another to consume that same good; and 2) nonexcludability—meaning it is difficult if not impossible to exclude any other individual from enjoying the good (Stiglitz, 2001; Squire, 2000). A quote from Thomas Jefferson is often used to explain this concept, as he once described knowledge by saying, “...he who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me” (Squire, 2000, p. 108). Using this logic, the Bank claims that the communal ownership of development knowledge enables everyone to participate in knowledge production and mutually benefit from the consumption of the public good of development knowledge (Wolfensohn, 1996).

In the knowledge economy, there is little incentive for individual firms - or even individual states - to invest in the production of a public good like development knowledge. In economics it is well known that the two attributes that make a public good also result in an under supply of that good; as firms must bear the full cost of the production of knowledge, but only receive a small fraction of the total benefits that knowledge brings to society (Squire, 2000, Stiglitz, 1999). Since development knowledge is a global public good, the benefits of this good spill beyond the national borders of any single state. For this reason, there is little incentive for state-based governments to bear the costs of production and dissemination. Therefore, in order to maintain an adequate supply of development knowledge, the international community as a whole must take responsibility for the production and dissemination of this public good.

This argument falls in line with a compensatory liberal framing of development as outlined by McKinlay & Little (1986); where governments must intervene in the markets by redistributing wealth in order to protect the health of the market itself, as well as the social welfare of its citizens. Compensatory liberalism calls for the explicit intervention of
governments to provide for the basic needs of all members of society. At the global level this is shaped as an obligation of more developed states to help lesser developed states, which is achieved by the liberal community coming together through representative governments in order to decide which collective policies need to be pursued and then pursuing those policies (McKinlay & Little, 1986). These same principles have been applied to the knowledge economy, and within this context it is clear that the global knowledge commons must be managed in order to ensure that is efficient and equitable in terms of knowledge production and dissemination (Stiglitz, 1999; Squire, 2000). Since its creation at the Bretton Woods conference in 1944, the World Bank has been a central gathering place of the liberal community; and in turn the Knowledge Bank is the place where the liberal community collectively decides the future of our global commons of development knowledge.

The World Bank’s use of the internet as a critical dissemination tool further strengthens its position of managing development knowledge as a global public good. In fact, based on the attributes of nonrivalrous consumption and nonexcludability, any Bank publication made available through the internet can be classified as a public good; as any number of users could theoretically access the document at the same time without affecting anyone else’s use (Spar, 1999; Sy, 1999).

Gilbert, Powell and Vines (1999) support the framing of the Knowledge Bank as a global public good and argue that development knowledge is best produced and disseminated by an objective party like the World Bank (Gilbert, Powell, & Vines, 1999). Laporte goes even one step further, describing the Knowledge Bank as, “a shift in the development paradigm: empowering clients through access to knowledge, and facilitating knowledge and learning among clients” (2004). However, despite the fact that the World Bank has received much support for its work as a Knowledge Bank and its ‘objective’ management of development knowledge as a global public good, it has also received much criticism.
The Knowledge Bank as Paradigm Maintenance

As the Bretton Woods project so eloquently puts it, “...one person's terrorist is another's freedom fighter, what some see as knowledge is viewed by others as propaganda for a particular world view” (Wilks, 2004). Although the World Bank describes the Knowledge Bank as a global public good, the institutional structures of the World Bank as well as the structure of the field of development itself interfere with the nonrivalry and nonexclusivity of the Bank’s knowledge mobilization work.

Contrary to Laporte’s assertion that the Knowledge Bank represents a paradigm shift, Broad (2006) refers to the World Bank’s knowledge mobilization work as ‘paradigm maintenance’, arguing that the Bank manipulates the context of research production and dissemination in order to maintain a neoliberal paradigm of development. He supports this claim by arguing a set of six inter-related structural processes and mechanisms through which the World Bank performs its paradigm-maintenance role including: 1) hiring of researchers; 2) promotion of researchers; 3) selective enforcement of rules when it comes to the publication review process; 4) discouraging dissonant voices; 5) manipulation of data; and 6) external projection through promotion of certain authors and publications – and in these arguments Broad is not alone. Even World Bank commissioned evaluations of Bank research and knowledge sharing argue that Bank research is used to,

...proselytize on behalf of Bank policy, often without taking a balanced view of other evidence, and without expressing appropriate skepticism. Internal research that was favourable to Bank positions was given great prominence, and unfavourable research ignored (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006, p. 6).

Although the Bank may attempt to portray the Knowledge Bank as a global commons that is openly accessible to all - the standardized systems they have put in place for the production/collection, codification, evaluation and sharing of knowledge effectively limits
access. Thus, while the Bank makes claims that the knowledge and technology revolution changed the relationships between, “…expert and amateur, government and citizen, aid donor and recipient” (Carayannis & Laporte, 2002, p. 1), the Knowledge Bank may actually reinforce the traditional power dynamics of these relationships with the very systems that are supposedly intended to provide wide access. Those who don’t have access to the required technology, those that do not speak the languages of the Banks products and services, and those who envision development beyond the narrow confines of neoliberal economics are effectively and efficiently denied entry.

Perhaps the best summary of the critiques against the Knowledge Bank is Torres (2001) “Banking Model” of development knowledge (for the image of Torres conceptual framework see Torres, 2001, p. 3). In this conceptualization of knowledge-based development the Global North views itself essentially as a knowledge provider; and views the South as a knowledge consumer. Torres model depicts knowledge mobilization in development as a system in which;

The North thinks, knows, disseminates, diagnoses, plans, strategizes, does and validates research (including that done in, or referred to, the South), provides advice, models, lessons learned, and even lists of desired profiles (i.e. effective schools, effective teachers); the South does not know, learns, receives, applies, implements. The North produces, synthesizes and disseminates knowledge; the South produces data and information. The North produces global policy recommendations to be translated, by the South, into National Plans of Action. (Torres, 2001, p. 4)

The construction of such a hierarchical knowledge gap legitimizes and replicates the one dimensional transfer of knowledge from the North to the South that has consistently been pointed to as a critical flaw in the development process (Evers, Kaiser, & Muller, 2009). So while the World Bank (and other agencies) may like to refer to knowledge-based aid as a “new development paradigm” (World Bank, 1997b), Torres model conceptualizes knowledge mobilization in development as simply a rebranding of old theories and practices.
The criticism of the Knowledge Bank, as outlined above, bring into question the World Bank’s ability to act as an impartial manager of knowledge as a public good as it holds the power of the purse in determining who produces Bank research, what type of research is produced, how research will be packaged and disseminated, and which audiences it will be disseminated to. The Bank’s control over the entire knowledge model interferes with its ability to maintain the nonrivalry and nonexcludability necessary to manage the Knowledge Bank as a public good.

Thus, although the World Bank may very well see knowledge as a global commons, it is accused of exploiting that knowledge - much like it has exploited our other shared resources\(^3\) – in order to 1) advance its own centrality within the international development regime and ensure that it remains a central source of development finance from borrowing countries; and 2) continue to be seen by rich countries as an effective mechanism for delivering development finance.

When brought down to base principles, the criticisms against the Bank come down to a question of ownership. Although ownership of global public goods is not defined by property rights, it can be defined by the communities that feel they have a stake in the good (Gardiner & Le Goulven, 2002). Faust et al. (2001) as cited in (Gardiner & Le Goulven, 2002), provide three elements that must be present in order to ensure that public goods remain nonexclusive including; 1) **Publicness of consumption**, 2) **Publicness of the distribution of benefits**, and 3) **Publicness of decision-making**. This third element is perhaps the most significant when it comes to maintaining development knowledge as a global public good.

In becoming the Knowledge Bank, the World Bank claims it has attempted to get closer to its clients by taking the time to work with the people who are most affected by Bank funded

\(^3\) The Bank’s policies on other global commons have tended to be far from the open or equitable image they portray. For example, Bank policies promoting the privatization of natural resources, (as witnessed in Bolivia where the world Bank helped to push through the privatization of Bolivia’s water supply resulting in increased user costs that were well beyond the means of the average family (McNally, 2006, pp. 21-22).
projects in order to promote, “…economic growth that at the same time promotes equity, increases human and social capital, and enhances social justice” (World Bank, 1997a, p. 11). Despite the many criticism of the Knowledge Bank it is to this end that the Bank continues to strive. Most recently, Robert Zoellick, the current president of the World Bank, called for a democratization of development economics claiming that,

We need to democratize and demystify development economics, recognizing that we do not have a monopoly on the answers. We need to throw open the doors, recognizing that others can find and create their own solutions...We need to recognize that development knowledge is no longer the sole province of the researcher, the scholar, or the ivory tower (World Bank, 2010g).

However, despite the Bank’s stated intention and attempts at managing the Knowledge Bank as a global public good it is argued that dominant ideas and values, and institutional structures have interfered with its ability to achieve this goal.

While the assessment of what counts as evidence might well be interpreted as a technical question calling for careful methodological judgments, in practice the labeling of particular types of knowledge as ‘evidence’ relies not only on technical expertise but also on positional power. Hence the role of determining what evidence counts and what doesn’t falls under the control of those in power (Nutley & Davies, 2010). In our current global climate of limited resources, there are no value-free ways for those in power to define what counts as evidence. The, “...attaching of labels such as evidence or research to particular types of knowledge are political acts” (Davies & Nutley, 2008, p. 3). Based on the critiques made against the Knowledge Bank, it seems clear that in order for the Knowledge Bank to function as a global public good it must open its compensatory liberal redistribution model of development, to also include a recognition model which transforms, “…wholesale societal patterns of representation, interpretation, and communication” (Chan, 2007, p. 362). To this end, the Bank’s development knowledge must not only attempt to address the socioeconomic injustices of our world, but also address the symbolic
injustices of our world by breaking traditional patterns of representation, interpretation and communication that have historically lead to the oppression of the World’s poor (Fraser, 1998).

However, due to the conflicting opinions and the lack of empirical evidence on the nature of the Knowledge Bank, it is unclear which model – Knowledge as a Global Public Good as put forth by the Bank and its supporters, or the Banking Model of Knowledge Based Development (Torres, 2001) which reflects the critiques against the Bank – best describes the World Bank’s Knowledge Bank. Further investigation into the role of the World Bank in research mediation between research producing contexts and research using contexts is needed in order to clarify these debates. In order to fill this dearth this study aims to a) clarify the Bank’s knowledge and its sources and then b) map the spread of this knowledge in regard to citations and take-up by other relevant organizations.

The Study of the Movement of Knowledge

Despite the fact that the World Bank has used its ability to produce and disseminate development knowledge to entrench itself in the position of the world’s leading development agency, there has been little empirical work examining how knowledge produced by the World Bank travels from the context of knowledge production to use.

Studies on the links between research, policy and practice are by no means new to the academic community, and in fact can be traced back to the days of Plato and Aristotle (Levin, 2008; Estabrooks, et al., 2008). In recent years, the scope and scale of this field has increased dramatically across disciplines. Unfortunately, like so many areas of academia, there is a lack of

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4 In her work, Fraser distinguishes between two types of injustice; 1) socio-economic injustice which pertains to economic marginalization and exploitation; and 2) symbolic or cultural injustice which pertains to societal patterns of representation and communication including cultural domination, non-recognition and disrespect (see Fraser, 1998)
consistency in terminology being used to address this topic. Frequently used terms for the process of linking research to policy and practice include knowledge mobilization in education (Cooper, Levin, & Campbell, 2009; Davies, Nutley, & Walter, 2005, Levin, 2004); knowledge sharing and knowledge management in development (DFID, 2009; Court & Young, 2003; Hovland, 2003); knowledge transfer and knowledge management in business (Argote & Ingram, 2000; Inkpen & Dinur, 1998); as well as knowledge transfer, knowledge translation and knowledge exchange in health (Mitton, et al., 2007; Lavis et al., 2003). The Research Supporting Practice in Education (RSPE) Team at the University of Toronto – Ontario Institute for Studies in Education has created a synthesized list of the various terms and definitions currently being used (RSPE, 2010). This list demonstrates the considerable overlap in the definitions of various terms being used; however, the subtle differences between various terminologies do affect our understanding of the topic. For example, the term Knowledge Transfer, implies that knowledge is like an object that can be transferred in a linear fashion by simply handing from one person to another. Alternatively, terms such as Knowledge Exchange or Knowledge Mobilization imply that knowledge moves in a non-linear fashion and can be altered or shaped into different forms as it passes from person to person.

For the purpose of this thesis I utilize the term Knowledge Mobilization which was coined by the Social Sciences and Humanities Research Council (SSHRC) and defined as, “...moving knowledge into active service for the broadest possible common good” (RSPE, 2010). This definition conveniently reflects Wolfensohn’s hope that the Knowledge Bank, “…will help increase understanding of the complex relationship between knowledge and development [a]nd that this understanding in turn will help us better apply the power of knowledge to the great
challenge of eradicating poverty and improving people’s lives” (Carayannis & Laporte, 2002, p. 1).

Just as various fields have applied different terms to describe the process of KM, the term ‘knowledge’ is contested across sectors. In SSHRC’s definition, “…knowledge is understood to mean any or all of (1) findings from specific social sciences and humanities research, (2) the accumulated knowledge and experience of social sciences and humanities researchers, and (3) the accumulated knowledge and experience of stakeholders concerned with social, cultural, economic and related issues” (RSPE, 2010). This reflects the greater trend across the literature which addresses two types of knowledge; explicit and tacit. Tacit knowledge is thought to be gained through personal experience, and is therefore difficult to codify and transfer; where explicit knowledge is often instrumental and therefore can be more easily transported through various mediums (Bennet and Bennet, 2007; Nutley & Davies, 2007; Jones, Datta, Jones, 2009; Cordingly 2009; Milton, 2006). Generally speaking, a broad definition of knowledge is considered to be most appropriate for the field of international development where it is seen as crucial to draw on multiple sources of knowledge to inform policy, as traditional research is often ill equipped to deal with the complex challenges that characterize this sector (Jones, Datta, & Jones, 2009). Although less formal ways of knowing, such as experience, are undeniably important when considering the realities of practice and policy contexts (Levin, in press; Jones, Datta, & Jones, 2009), there is no doubt that better use of research in development policy and practice can help reduce poverty and improve quality of life (Court & Young, 2003). As Stiglitz reminds us,

...knowledge for development goes beyond the collection of best practices and the accumulation of successful anecdotes and into analysis—why do certain policies and practices work in some circumstances and not others? Thus research is a central element of knowledge for development. (Stiglitz, 1999, p. 319)
For the purpose of this literature review and the following study, Knowledge Mobilization will be defined as the movement of research from production to dissemination to its ultimate impact on policy and practice; where research will be understood as evidence gained through “...any systematic process of critical investigation and evaluation, theory building, data collection, analysis and codification” (Nutley & Davies, 2010, p. 4). In order for us to use that knowledge on a global scale, we must understand why a certain initiative works and in what context – and for that we need research.

To define the boundaries of this study further, it is also necessary to provide an account of the many conceptual frameworks that have been developed and applied to understanding research use. Many of these models have been reviewed by others, (e.g.; Nutley et al., 2007; Davies and Nutley, 2008; Levin, 2008), and illustrate the links between research production and research use in policy and practice (see RSPE, 2010 for an extensive list of frameworks). Although each framework is unique in the way it portrays the various links between research producer and research user, Levin (2008) points out that all of the frameworks have three main elements; the input in terms of evidence, the outcomes in terms of practices or decisions, and the various ways in which the previous two factors are linked (Levin, 2008, p. 11). Levin’s framework (Figure 1) addresses these three factors specifically, and represents the factors and linkages related to research impact in terms of (1) The context of research production, (2) The context of research use, and (3) The connections and interactions between the other two contexts; including all kinds of formal and informal vehicles for research production and dissemination.

Although the actual diagrams are different, the World Bank depicts the movement of knowledge in much the same manner as Levin. In the World Bank’s depiction (World Bank,
2010h) labels the three contexts as (1) creating knowledge, (2) applying knowledge and (3) the sharing of knowledge with partners and clients. Like Levin, the Bank utilizes multi-directional arrows to link all three contexts. These three contexts identified by both Levin and the World Bank synthesizes the three major areas across which research use occurs; consequently, I will elaborate on the relevant issues arising from each area in relation to how these issues contribute to my conceptual framework.

![Research Knowledge Mobilization Framework (Levin, 2011)](image)

*Figure 1. Research Knowledge Mobilization Framework (Levin, 2011).*

**The Context of Research Production**

This section examines the criticisms made against the Knowledge Bank within the context of research production. While it may seem obvious that poorly designed studies and their results should not be used as evidence, there is considerable debate about what constitutes
good, or even adequate, evidence (Nutley & Davies, 2010). When it comes to KM the quality of research does matter. Consistent bodies of evidence are more powerful and effective over time than single studies, and the accumulative weight of a strong body of evidence built over time tends to have the greatest impact (Levin, 2008, p. 5). Unfortunately, there is no simple way to evaluate a body of research in order to determine its quality and reliability. Therefore, I look to the criticisms of World Bank knowledge production in order to identify the elements of World Bank research production most contested.

**What research is produced?**

It is only natural that the work of researchers is shaped considerably by the ways in which it is funded; as the research undertaken will be done on the issues that most interest the funder. In the case of the World Bank, the preferred method of understanding and fixing development problems is through economics (Kramarz & Momani, 2010). The Bank’s knowledge agenda is often seen to be too narrowly focused on economics, where “…the plural nature of knowledge is denied and the Bank’s own problematic role in knowledge generation is not reflected upon” (Mehta, 2001).

Other criticisms of the Knowledge Bank have to do with the quality and reliability of the research itself (see Broad, 2006; Wilks, 2004; Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006). The 2006 Bank commissioned evaluation of World Bank research from 1998 – 2005 found Bank research to be, “often weak on execution and technique...and undistinguished, in the sense that it had neither great relevance to policy nor claim to academic distinction” (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006, p. 7). In the same light, the Bank is also criticized for a lack of monitoring and evaluation of research in order to ensure quality control (Banerjee, Deaton,
Lustig, Rogoff, & Hsu, 2006). Despite this criticism there remains a perception that, “in terms of quality, the reports are always 100 percent—well founded, detailed, focused, always concerned with consistency, always the best quality;” and that “the technical soundness of World Bank information is unquestionable” (Gwin, 2003, p. 62).

**Who produces Bank research?**

Bank knowledge is produced both by staff inside of the organization as well as external consultants hired by the Bank in order to capitalize on their specific expertise (which may be lacking in the Bank’s research team). It is often claimed that the Bank tends to hire researchers with doctorates in economics from a narrow range of US and UK universities (Wilks, 2004; Broad, 2006). In response to these claims the Bank acknowledges that in the past it valued certified expertise above all other forms of knowledge, but has since recognized the error of its ways. Today the Bank claims that it does in fact value local and experiential knowledge and works to integrate indigenous knowledge into the design of Bank operations (Cohen & Laporte, 2004).

The criticism against the World Bank within the context of research production paint a picture of the Bank’s KM work which looks more like Torres’s (2001) Banking Model than a model of knowledge as a global public good. However, the conflicting perceptions as to the quality and reliability of World Bank development knowledge, as well as the unsubstantiated criticism as to who is producing Bank research and where the evidence is coming from, illustrates the need for further study of the evidence base the World Bank is using to inform its knowledge on development. There seems to be a contradiction between the critiques of the World Bank on one hand privileging its own knowledge and research and on the other hand being produced by outside sources. Hence, my study will use empirical data to examine the
origin of the research, exploring 1) who produces Bank research in terms of the author’s geographical and organizational affiliations; 2) where the evidence comes from in terms of the geographical affiliation of the study. The important issue of research quality, outlined earlier, relates to what type of research and products are deemed important (Double blind peer reviews are considered ‘expert’ whereas local, non-academic literature is often devalued). Therefore, exploring the different types of evidence cited by the Bank will be important to understanding what knowledge is or is not privileged by the World Bank.

*The Knowledge Bank as a Mediator of Research*

There is a substantial body of empirical work that illustrates the multiple routes and vehicles (both formal and informal) which help to link research to policy and practice. The RSPE team at the Ontario Institute for Studies in Education have categorized these links in terms of knowledge-based products (such as publications); events (such as conferences which promote the sharing of knowledge); and networks (which include all ongoing interactions among groups of people) (RSPE, 2010). These three broad categories have also been identified by the Bank as vehicles for its knowledge mobilization work. However, research has shown that explicit knowledge that has been codified and embedded into products tends to be more easily transmitted than less explicit forms of knowledge (Cummings, 2003), a trend that has been noticed by the Bank.

This section discusses the World Bank as a mediator of research and identifies two important trends in how the World Bank disseminates its development knowledge; 1) The amount and variety of products published by the Bank for various audiences, and 2) the significance of the internet as a dissemination tool.
Knowledge brokering at the Knowledge Bank.

Intermediaries often play a major role in the interpretation, packaging and distribution of research evidence to policymakers and practitioners (Tseng, Granger, Seidman, Maynard, Weisner, & Wilcox, 2007). Jackson (2003) uses the term knowledge broker to define this role saying,

In the information world, a broker is someone who knows how to access or acquire information and who provides a gateway to information resources; in education, a broker is a proactive facilitator who connects people, networks, organizations and resources and establishes the conditions to create something new or add value to something that already exists. (Jackson, 2003, p. 4)

Based on this definition it is clear that the World Bank must be considered as a knowledge broker – a term that the Bank has long used to label itself. There has been increasing recognition of the value to the Bank of acting as a broker of development knowledge as opposed to being simply a storage facility of World Bank branded or approved knowledge (Prusak, 1999). In this regard the Bank has determined that it is most effective when it operates as a broker connecting clients who have experience in a particular area with clients undertaking related projects or programs (Cohen & Laporte, 2004). The Bank claims that it is,

...an impartial knowledge broker and a focal point...for learning and knowledge exchange. The [Bank’s] cross-sectoral and cross-regional reach, its expertise in learning design, and its long and collegial experience with partners and donors, are unique qualifications for delivering programs that help countries create, share, and apply knowledge effectively (emphasis added, World Bank, 2008, p. 2).

The Bank reaffirmed its role as a global knowledge broker delivering, “...global public knowledge goods,” (World Bank, 2010i), in both the 2009 and 2010 World Bank annual reports. However, as outlined previously, the Bank’s position as a global knowledge broker is not
without controversy, especially around the notion of the Bank as being an ‘impartial’ knowledge broker and the concept of the Bank promoting knowledge as a ‘global public good’.

**The use of publications to disseminate research.**

Although the Bank does use both events and networks as tools for KM, the production of high quality knowledge products has consistently been identified as priority of the Knowledge Bank (World Bank, 1997a; Carayannis & Laporte, 2002). A study of World Bank research found that Bank staff and consultants had published nearly 4,000 papers, books and reports from 1998-2005 (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006). A more recent study of the Bank’s publication record suggests that during its lifetime, the Bank has produced more than 20,000 publications including at least 2,000 books and over 9,000 academic journal articles (Ravillion & Wagstaff, 2010). On its website, the World Bank’s Research and Data Website breaks down its publications into several different categories including featured articles; research briefs; policy research working papers; policy research reports; world development reports; research data sets, abstracts of current studies; World Bank journals; research highlight reports; knowledge in development notes; and research books. No matter where you look on the World Bank website it is nearly impossible not to be overwhelmed by the amount of development knowledge available in Bank Publications.

However, the amount of work published is not an indicator of true nature of the Knowledge Bank in terms of being a global public good or a tool of paradigm maintenance. In fact there are many criticisms against the Bank in terms of research production, research mediation and research use (see Table 1 for a typology of these criticisms). For example, the Bank is accused of publishing documents that contain limited evidence drawn from a small sample of developing countries and/or evidence derived from studies based in the USA or
Europe which do not reflect the experience of the developing world (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006; Bretton Woods Project, 2010; Klees, 2008). The Bank is also criticized for citing too much of its own work (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006). This study aims to interrogate the criticisms outlined in Table 1.

The important role of technology and the internet in research dissemination.

The World Bank is certainly not alone in using the internet as a tool to share knowledge. In fact the original purpose of the internet was to enable an elite group of researchers from the USA Department of Defence and its Advanced Research Projects Agency to share critical information with each other (Spar, 1999). Thanks to the communications and technology revolution, the world has made great strides in our ability to share knowledge across countries and has, “…enhanced the ability of less developed countries to tap into the global knowledge pool (Stiglitz, 1999). The internet has proven to be crucial to the spread of knowledge; and in our modern world it not only provides the infrastructure for the information economy as a whole, but it is also the main way knowledge travels (Sy, 1999).

The use of the internet and other communications technologies has always been central to the Knowledge Bank. The Bank’s intention to use modern information and communication technologies as a critical tool for disseminating Knowledge is evident right from the Knowledge Bank’s inception. As Wolfensohn explained in his famous 1996 address, "the revolution in information technology increases the potential value of [the Bank’s development] efforts by vastly extending their reach.” (Wolfensohn, 1996).

There is an inherent challenge between the World Bank’s goal to maintain development knowledge as a global public good, and their extensive use of publications and the internet as a dissemination tool of that knowledge; as these tools effectively exclude those who are illiterate (or are not literate in the languages the Bank publishes in), and those who lack access to the
Table 1.

*Typology of ways World Bank publications may use research for paradigm maintenance*

<table>
<thead>
<tr>
<th>Type and definition</th>
<th>Supporting Literature</th>
<th>Corresponding element of Conceptual Framework</th>
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<tbody>
<tr>
<td><strong>Poor quality research</strong></td>
<td>The Bank is accused of citing research that is of low quality, and therefore contains unreliable/invalid findings.</td>
<td>Broad, 2006; Wilks, 2004; Banerjee, Deaton, Lustig, Rogoff, &amp; Hsu, 2006</td>
</tr>
<tr>
<td><strong>Organizational Affiliation of the Researchers</strong></td>
<td>The Bank is criticized for hiring researchers with doctorates in economics from only a narrow range of US and UK universities</td>
<td>Wilks, 2004; Broad, 2006</td>
</tr>
<tr>
<td><strong>Organizational Affiliation of the Study</strong></td>
<td>The Bank is criticized for citing too much of its own work</td>
<td>Banerjee, Deaton, Lustig, Rogoff, &amp; Hsu, 2006</td>
</tr>
<tr>
<td><strong>Geographical Affiliation of the Researcher</strong></td>
<td>This criticism is commonly referred to as the brain on the plane. The Bank is accused of relying solely on researchers from the developed world who spend a limited amount of time (sometimes only days) collecting data from the country under study and then return home to complete their research. Knowledge produced in lesser developed countries is discounted.</td>
<td>Torres, 2001; de Moura Castro, 2009; Cohen &amp; Laporte, 2004</td>
</tr>
<tr>
<td><strong>Geographical Affiliation of the Study</strong></td>
<td>The Bank is accused of publishing documents that contain limited evidence drawn from a small sample of developing countries (specifically Colombia and Chile) and/or evidence derived from studies based in the USA or Europe which do not reflect the experience of the developing world.</td>
<td>Banerjee, Deaton, Lustig, Rogoff, &amp; Hsu, 2006; Bretton Woods Project, 2010; Klees, 2008</td>
</tr>
<tr>
<td><strong>What Knowledge is Mobilized</strong></td>
<td>The Bank is accused of publishing research that best supports its policy positions, rather than accurately representing the evidence-base on an issue</td>
<td>Mundy, 2002; Banerjee, Deaton, Lustig, Rogoff, &amp; Hsu, 2006</td>
</tr>
<tr>
<td><strong>Direction of Knowledge Mobilization</strong></td>
<td>The criticism here is that the transfer of knowledge is essentially North to South, represented in this study by Torres’ (2001) model of Knowledge Based Aid.</td>
<td>Torres, 2001</td>
</tr>
</tbody>
</table>
internet. Hence, my study will use empirical data to examine accessibility of World Bank publications in terms of the types of publications produced, and the languages used for publication. My study will also assess the quality of Bank publications, including the question of Bank self citations and the geographical affiliations of research.

**The Context of Research Use**

In his framework, Levin includes those organizations and actors that have interest in the application of research within the context of research use. In the case of the Knowledge Bank everyone including World Bank staff, policymakers around the world, academics, and even the general public are seen as an audience for World Bank research (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006). Therefore the Bank utilizes a variety of dissemination vehicles in order to reach each target audience. However, despite the scope and scale of World Bank research and knowledge mobilization efforts, there has been little empirical work done to understand the impact of Bank knowledge. Although the concept of research impact is very significant in the field of KM, in general, there is little empirical work on the impact of educational research on policy and practice (Levin, 2008, p. 2).

Nutley et al (2007) suggest that research use be placed on a continuum from conceptual forms of use like awareness raising, to more influential forms of use by being adapted into policy and practice (as noted by Cooper, Levin, & Campbell, 2009). Amara, Ouimet & Landry discuss research use in terms of instrumental use, where research results are applied in specific and direct ways; conceptual use where research results are used for general enlightenment; and symbolic use where research is used to support predetermined positions or beliefs (Amara, Ouimet, & Landry, 2004, p. 77). In their cross sector empirical review Walter, Nutley & Davies considered
six forms of research impact including changes in access to research; changes in the extent to
which research is considered, referred to or read; citation in documents; changes in knowledge or
understanding; changes in attitude or beliefs; and changes in behaviour. (Walter, Nutley, &
Davies, 2003, p. 11). Knott and Wildavsky (1980) similarly outline citations as a type of
research use.

Studies that have been undertaken to address the question of the impact of World Bank
publications, tend to define impact based on changes in the Bank’s own thinking/behaviour
based on policy changes that can be connected to specific research projects or publications
(Woodhall, 2003; Mundy, 2002); while impact external to the Bank tends to be defined in terms
of citations in documents and sales record of various World Bank publications (Mundy, 2002;
Kramarz & Momani, 2010; Ravillion & Wagstaff, 2010; Woodhall, 2003), or tends to be focused
on the Bank’s impact on academia (Kramarz & Momani, 2010; Ravillion & Wagstaff, 2010).

This section of my study looks to trace the spread of World Bank publications, looking
specifically for indication of research use external to the Bank itself and to the realm of
academia. As previously mentioned, this study does not examine impact in terms of the adoption
of policy recommendations by borrowing governments. Instead, looking to the internet as the
key dissemination tool of the Bank, I examine the impact of Bank publications in terms of
citations of Bank publications and versions of Bank publications posted by organizations other
than World Bank.

Public-Private Partnerships in Education

Although the focus of this study is on the production, dissemination and utilization of
World Bank education research in international development, due to the size and scope of the
World Bank’s research in this area, it is necessary to choose one topic to focus on. Just as a doctor injects dye into a patient in order to examine and map a system of the body, I use the topic of public-private partnerships in education (PPPE) in order to examine and map the KM work of the World Bank in Education. The following sections examine the development of PPPE in context of the Knowledge Bank, and briefly touch upon the issue of PPPE itself.

The Knowledge Bank and Public-Private Partnerships in Education

In 1996, Mary O’Rourke was appointed the new head of the World Bank’s Education department. Although she was hired directly from the Government of New Zealand where she had managed the restructuring and substantial privatization of the education system, O’Rourke saw herself not as an expert in education but rather as a “professional ‘change manager,’ with extensive experience in introducing innovations in large bureaucracies” (Carayannis & Laporte, 2002, p. 5) This title of ‘change manager’ well suited her new role at the World Bank.

O’Rourke recognized the significant gaps between research, policy and practice at the World Bank and immediately started to work with her team to develop the knowledge management systems necessary to bridge this gap. The department reorganized itself along strategic themes of knowledge that the Education Sector felt were vital to the mission of the World Bank; they developed an Education Advisory Service or help desk to help individuals find the information needed in a timely manner, as well as technical experts to help organize all of the education sectors work online so that it was more easily accessible.

Today the Education anchor of the Human Development Network (EdHDNET) is the central anchor for education research, policy, and knowledge mobilization at the World Bank. EdHDNET is divided into five thematic groups (including Education For All; Education for the
Knowledge Economy; Economics of Education; School Health, Nutrition & HIV/AIDS; and Science, Technology and Innovation); each linking to subtopics (18 in total) with web spaces of their own containing knowledge-based products, networks and events on that particular sub-topic (see Figure 2).

![Figure 2. The World Bank Education Sector.](image)

An analysis of the nature, extent and impact of the spread of knowledge on all of these topics would not be possible within the scope of a master’s thesis. This study focuses on PPPE because this issue is relevant to both the education and development sectors. The significance of PPPE is reflected in the World Bank’s mission statement which explicitly states the Bank’s goal
to fight poverty by, “…producing resources, sharing knowledge, building capacity, and forging partnerships in the public and private sector.” (World Bank, 2010c).

The topic of Public-Private Partnerships in Education falls under the thematic group of Economics of Education; one of the earliest thematic groups developed in the Education Sector of the World Bank. This Thematic Group was (and continues to be) led by Harry Patrinos, an economist with extensive experience in the education sector. Patrinos directed his team to focus on the quality of knowledge produced rather than the quantity; and in turn they worked to develop tools, training material, best practices in the economic analysis of education, as well as develop a website where every resource would have maximum relevance (for a more in-depth discussion of Knowledge Banking in the Economics of Education in the Thematic Group see Carayannis & Laporte, 2002).

The PPPE website provides an overview of the topic, a summary of key issues, thirteen publications specifically addressing PPPE, conference papers from two conferences held on the topic, a list of events (including courses, workshops and conferences related to the topic from 1999 to present), a video interview, and a web forum on investing in education. The Economics of Education thematic group has been recognized for their exceptional KM work.

A World Bank Operations Evaluation review (Woodhall, 2003), claims that the Economics of Education thematic group’s website stands out from the rest of the education sector. In this review Woodhall (a prominent UK economist of education), says that the Economics of Education site, “…contains an extremely rich array of analytical material, from inside and outside of the Bank, and it is very user friendly”, whereas other Bank websites, such as Education for All were categorized as a platform for advocacy rather than being a base of empirical analysis (Woodhall, 2003, p. 7).
What are public-private partnerships?

As noted earlier in this thesis, it is widely believed that education is one of the most powerful instruments for reducing poverty and inequality, and helps to lay the foundation for sustainable economic growth. It is for these reasons (among others), that governments around the world take on the responsibility of providing public education for their citizens – especially at the primary level (Patrinos, Barrera-Osorio, & Guáqueta, 2009, p. 1). However, providing a high quality universal education is a complex and costly task; therefore, governments around the world (including here in Canada) have been exploring alternative systems that include partnerships with private organizations (including for profit, not-for profit and charitable organizations) to support the provision of high quality education. In developing countries, the task of providing high quality education for all can often seem like an insurmountable obstacle interfering with economic growth. In these countries PPPE offer an opportunity to provide access to education to the underprivileged and disenfranchised in a timely manner (Malik, 2008). Much like many governments, the World Bank also, “...recognizes the existence of alternative options for providing education services besides public finance and public delivery” (Patrinos, Barrera-Osorio, & Guáqueta, 2009, p. 1). This is not to say that the Bank would like to exclude the public sector altogether. However, the Bank does believe that the private sector can help increase, access, choice and quality in education; while improving efficiency and innovation in service delivery (Patrinos, Barrera-Osorio, & Guáqueta, 2009).

While there are many different types of PPPE, the World Bank’s economics of education group tends to define PPPE in the narrow sense of a contractual relation between government and private providers. There are many ways a government can manage educational provision (see Table 2), some of which include opportunities for PPPE with both for-profit and not-for profit (or charitable) organizations. These options for managing the provision of education are
particularly relevant in developing countries where governments have extremely limited resources to support social services such as education. Thus, it is now believed that providing educational services for the poor might be best accomplished by contracting services at the local level; where “contracting refers to the process whereby a government procures education or education-related services, of a defined volume and quality, at a specific price, from a specific provider for a specific period of time where the provisions between the financier and the services provider are recorded in a contract” (Patrinos & Sosale, 2007, p. 2). Contracts vary depending on the services purchased from the private sector and can include anything from school building and maintenance; to food services; to curriculum development and text books (see Table 2 for a full typology of contract types). However, although many elements of school provision can be contracted to the private sector, there is much debate over whether or not public education is the appropriate place for private sector involvement. Although contracts make up a large proportion of the discussion on PPPE in World Bank publications that are central to this study, PPPE also include other mechanisms such as vouchers; scholarships; user fees; subsidies; charter schools; and completely private schools run by corporations, religious organizations, or NGOs which receive no government funding.

**The Controversial Nature of Public-Private Partnerships in Education**

Although the World Bank is a champion of PPPE, it does acknowledge that there are many reasons to support, or not support this strategy in the provision of education. The following list stemming from three World Bank publications on the PPPE issue used in this study (Patrinos & Sosale, 2007; Patrinos, Barrera-Osorio, & Guáqueta, 2009; Patrinos & LaRocque, 2007) provides some of the perspectives on this debate:
Table 2

Types of Public Private Partnerships in Education (PPPE), adapted from Patrinos, Barrera-Osorio, & Guáqueta (2009, p. 9); Patrinos & Sosale (2007, p. 3)

<table>
<thead>
<tr>
<th>What governments contracts for</th>
<th>Definition</th>
<th>What governments buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, professional services (input)</td>
<td>Government buys school management services or auxiliary and professional services.</td>
<td>• School management (financial and human resource management) • Support services (meals and transportation) • Professional Services (teacher training, curriculum design, textbook delivery, quality assurance, and supplemental services)</td>
</tr>
<tr>
<td>Operation services (process)</td>
<td>Government buys school operation services.</td>
<td>• The education of students, financial and human resources management, professional services and building maintenance</td>
</tr>
<tr>
<td>Education services (output)</td>
<td>Government buys student places in private schools (contracts with school to enroll specific students).</td>
<td>• Student places in private schools (by contracting with schools to enroll specific students)</td>
</tr>
<tr>
<td>Facility availability (input)</td>
<td>Government buys facility availability.</td>
<td>• Infrastructure and building maintenance</td>
</tr>
<tr>
<td>Facility availability and education services (input and output bundle)</td>
<td>Government buys facility availability combined with services.</td>
<td>• Infrastructure combined with services(operational or output)</td>
</tr>
</tbody>
</table>

Table 3

Choice and Contracting Mechanisms in the Education Sector, adapted from Patrinos & LaRocque (2007, p. 2)

<table>
<thead>
<tr>
<th>Delivery Arrangement</th>
<th>Who chooses service</th>
<th>Who Manages Service</th>
<th>Who Provides Infrastructure</th>
<th>Who Employs Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Services Delivery Model</td>
<td>Government</td>
<td>Private Sector</td>
<td>Private Sector</td>
<td>Private Sector</td>
</tr>
<tr>
<td>Non-Core Services Delivery Model</td>
<td>Government</td>
<td>Private Sector</td>
<td>Private Sector</td>
<td>Private Sector</td>
</tr>
<tr>
<td>Voucher Model</td>
<td>Consumer</td>
<td>Private or Public Sector</td>
<td>Private or Public Sector</td>
<td>Private or Public Sector</td>
</tr>
<tr>
<td>Private Sector Provision</td>
<td>Consumer</td>
<td>Private Sector</td>
<td>Private Sector</td>
<td>Private Sector</td>
</tr>
</tbody>
</table>
Arguments in support of PPPE:

- PPPE increases competition in the education system which in turn provides the incentive for both public and private providers to increase quality and cost effectiveness.
- Contracting gives governments the flexibility to be more responsive to issues of supply and demand in the education sector since private contractors are subject to less regulation and inflexible protocols.
- Governments are able to choose contracts based on an open bidding system which allows them to only sign contracts with those who promise the best quality and/or lowest costs. This process also makes the government more transparent.
- Governments are able to hold private providers accountable based on the clauses included in the contract.
- Contracting allows governments to share the financial risks of educational provision with the private sector. This in turn encourages more private providers to invest in education because the risk does not fall solely on them. Risk sharing can also help to increase efficiency and cost effectiveness within a partnership.
- PPPE provide governments with a mechanism to provide access to education for poor and marginalized communities, which they could not do on their own.

Arguments against PPPE:

- PPPE can lead to privatization of education.
- PPPE reduces government control of education.
- PPPE is a threat to teacher job security.
- PPPE is a way for governments to diminish the influence of teachers’ unions and their ability to negotiate teachers’ contracts and wages.
• PPPE provide greater opportunities for corruption

However neither the Bank itself, nor the body of evidence on the issue of PPPE support the view that public-private partnerships alone will produce significant improvements in student outcomes\(^5\) (Gorard, 2002; Witte, 2004; Fuller, Elmore, & Orfield, 1996; Klees, 2008).

Thus, although this study does not directly address the issue of PPPE, this study will add to the debate;

...a debate that should occur not just behind closed doors of government and the international organizations, or even in the more open atmosphere of universities. Those whose lives will be affected by the decisions about how globalization is managed have a right to participate in the debate, and they have a right to know how that decision has been made in the past (Stiglitz, 2003).

The citizens of the Global South must be given the opportunity to participate fully the development of their countries and our world. A better understanding of the knowledge mobilization work of the World Bank has the potential to do just that.

\(^{5}\) For this I am indebted to the Facts in Education Panel who allowed me the privilege to coordinate two online discussions on this topic. For more information on Facts in Education please visit: [http://www.oise.utoronto.ca/rspe/Facts_in_Education/index.html](http://www.oise.utoronto.ca/rspe/Facts_in_Education/index.html)

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**Conceptual Framework**

As the literature review above suggests, KM in international development is a complex process. As a result of this complexity, the conceptual framework used in this study is depicted in two figures. The first (Figure 4) stems from the literature review and reflects my conceptualization of the KM process in development; the larger framework that this study is situated within. The second (Figure 5) focuses specifically on the study at hand, and connects the literature to the methodology used in this study.
Conceptual Framework: Part 1

Part one of my conceptual framework (Figure 3) is an adaptation of two frameworks discussed in the literature review; Levin’s framework of Research Knowledge Mobilization Framework (Levin, 2011 depicted in blue), and Torres Knowledge Based Aid Framework (Torres, 2001), depicted in green).

![Figure 3. Conceptual Framework part 1.](image)

As discussed in the literature review, Levin (2008) noted that all KM frameworks contain the same three main elements; the input in terms of evidence, the outcomes in terms of practices or decisions, and the various ways in which the previous two factors are linked (Levin, 2008). This
assertion has proven to be true in all the frameworks I have come across, including the World Bank’s own depiction of Knowledge Sharing. It is for this reason that Levin’s framework is central to my understanding of knowledge mobilization, and is the foundation of the conceptual framework used in this study.

Levin’s Research Knowledge Mobilization framework (Figure 3, blue) is situated within the social contexts that the knowledge mobilization framework is situated. As discussed in the literature review, social context refers to dominant ideas and values, institutional structure, and how these influence the creation and spread of knowledge. Levin depicts this concept in his framework by placing the text, ‘social context’ outside of the interlocking triangles of Research Knowledge Mobilization. In my conceptualization, I have borrowed from Torres (2001) (Figure 3, green) depiction of Knowledge Based Aid to illustrate the social context that I believe the World Bank’s knowledge mobilization work is situated within. Based on the literature, and my own experience working in the field of international development education, it was my hypothesis that the results of this study will support Torres’ depiction of Knowledge Based Aid. My adaptation of Torres’ framework acknowledges the power and vested interest that is inherent in World Bank knowledge, where knowledge production is essentially a North / South, asymmetrical process (Torres, 2001). My use of Torres’ framework represents my hypothesis that the context of knowledge production at the World Bank is dominated by the Northern elite, and the context of research use is dominated by Southern policymakers and practitioners.

As discussed previously, Levin (2011) represents the KM processes using three overlapping triangles which represent (1) The context of research production, (2) The context of research use, and (3) Mediators who work between the other two contexts. This study looks specifically at the World Bank as an intermediary of research, and thus the triangles have
been labeled to reflect this focus. These triangles represent functions within the KM process, not institutions or structures. It is possible for a person or organization to fulfill more than one function within KM (Levin, 2011). For example, the World Bank is a producer of research on education in development, an intermediary of research, and also uses research to formulate and support its own policies and practices in development. This is represented in the diagram as an overlap between the context of research production, the context of research use, and the mediation of research. This overlap is the central focus of this study, and is further elaborated on in Figure 4 and the following section.

**Conceptual Framework: Part 2**

![Conceptual Framework diagram](image)

**Figure 4.** Conceptual Framework part 2.
This second part of the conceptual framework used in this study is a magnification of the central triangle of part one, situated where the three triangles (representing the context of research production, the context of research use, and research mediation) overlap. Part two (Figure 4) focuses on the World Bank as a mediator of research through its publications on the issue of PPPE. Using these publications as a starting point, it is possible to:

1. Map backwards using the evidence cited in these publications in order to clarify the context of knowledge production in response to the following subsidiary research questions:
   a. What type of research is produced?
   b. Who produced the research?
   c. What are the researcher’s organizational and geographical affiliations?
   d. What are the organizational and geographical affiliations of the study?
   e. Where did the study take place?
   f. Who published the study

2. How was the research evidence packaged for dissemination?

3. Map forward in order to determine the extent the World Bank’s evidence base on PPPE has spread both geographically and organizationally.
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

This study examines the ways that knowledge on PPPE spread due to the knowledge mobilization efforts of World Bank Education Sector. Specifically, the goal of this study is to map the nature, extent and spread of World Bank research on PPPE from the context of research production to its ultimate uptake by other others.

Due to the size and scope of the World Bank’s work on PPPE, there are many ways that data could have been collected and analysed in response to the research questions that focus this study. However, due to limited funding and lack of access to the Bank itself, I came to the conclusion that the best (and most accessible) sources of data that I could access from my own desk was the World Bank’s website on PPPE and the publications included therein. The source of data determined the methodology used in this study, bibliometric analysis, which is described in detail in the following section.

Bibliometric Analysis

Bibliometric analysis is defined by the OECD as the generic term for data about publications (OECD, 2002). This research methodology is made up of various methods for conducting quantitative analysis of scientific work, including publications. All bibliometric methods are based on the assumption that, “...any publication that has influenced...thinking will get referred to in other publications” (Ravillion and Wagstaff, 2010). Based on this assumption, bibliometrics use data on authors of academic publications and on articles, citations, and patents included within in order to measure the output or influence of individuals, research teams, institutions, and countries in order to identify national and international networks, and to map the development of academic fields of study (OECD, 2002). Bibliometric methods are used to
determine the amount of published output, the quality of that output, and the extent to which that output has impacted others in the same field (Davies & Nutley, 2008). This methodology is also referred to as citation analysis, citation tracking, or citation mapping. Related terms include informetrics, scientometrics, and librametrics (Borgman & Furner, 2002).

Although the actual term bibliometrics was not coined until the 1969 (Russell & Rousseau), the use of citation analysis is not new and can be traced back to the early twentieth century. One of the earliest mentions of this methodology is by Cole and Eales (1917) in their study of comparative anatomy which counted publications on the topic from 1543 – 1860, while in 1927, Gross and Gross “tabulated the references” in a prominent journal of chemistry in order to identify the most frequently cited periodicals on chemistry (1927, p. 386).

Initially, these methods were limited to collecting data on numbers of scientific articles and publications, classified by authors and/or by institutions, fields of science, country, etc., in order to construct simple “productivity” indicators for academic research. However, in the early 1960’s the Science Citation Index (SCI) was introduced and gave bibliometrics a giant methodological push forward allowing researchers a mechanism to easily search for publications by authors and topics; and even search across academic fields. Today, there are many databases used in bibliometric analysis including Elsevier’s SCOPUS, Thompson-Reuters Social Science Citation Index (SSCI), Research Papers in Economics (Repack) to name a few. Perhaps the most commonly used databases for bibliometric studies are the Web of Knowledge created by Thompson ISI (Archambault & Gagné, August 2004)and Haring’s Publish or Perish (Pop) which utilizes the Google Scholar (Pavilion and Wag staff, 2010). However, these databases vary greatly in their coverage, and have many well known limitations which are summarized by SSHRC (Archambault & Gagné, August 2004, p. 9) as:
- Limited coverage
- Exclusion of certain types of documents
- Classification of Journals by discipline
- Changes in journal titles
- Names spelled the same way
- Number of authors and the distribution of work
- Excessive, selective, secondary, negative and erroneous citations, self citation and personal strategies

Ravillion and Wagstaff (2010) add to the list typos and spelling errors which can also skew results. All of the above limitation makes it necessary to do careful manual checks to ensure the quality of the data provided through these databases.

While trying to determine if one of these commonly used bibliometric instruments would be appropriate for this study, I immediately came face to face with the limitations of these programs. My first choice was the Web of Knowledge database which covers 23,000 journals, 110,000 conference proceedings, 9,000 Web sites, over 100 years of back files, over 87 million source items, 700 million cited references, and 256 scientific disciplines (Thompson Reuters, 2010). Unfortunately, the first title I tried to search using this program – *The Role and Impact of Public-Private Partnerships in Education* (Patrinos, Barrera-Osorio, & Guáqueta, 2009)- came up with no results. Although PoP covers a much wider range of publication types than the Web of Knowledge, it also proved to be insufficient for this study as not all Bank publications (such as *Private sector involvement in education: a review of World Bank activities in East Asia and Pacific, 1996-2002* (World Bank, 2004) can be found using Google Scholar. Therefore, although these databases would have been very useful to Gross and Gross and their bibliometric
study of frequently cited journals, these tools were not sufficient for the study at hand. Therefore I looked to the conceptual framework used in this study as a map on how to progress. The following sections correspond to the conceptual framework used to frame this study and outline the bibliometric methods used, starting with an explanation of the sample used in this thesis and how that sample was defined.

Sample Selection

The starting point for this study examined the World Bank as a mediator of research on PPPE in order to identify an appropriate sample for this study. Since this study is desk based, I looked to the World Bank’s website on PPPE, and the publications that can be accessed through this site. This provided me with an initial sample of 20 publications.

In order to narrow the sample I removed all documents that are classified as conference papers on the PPPE webpage. Although conference papers are a type of publication, the conference papers included on the World Bank website were written for a Bank sponsored event, and were not produced by the Bank itself. Therefore the eight publications classified by the Bank as conference papers were excluded from the study.

The twelve remaining publications were then evaluated in order to determine if they were appropriate for this study. In order to further define the study sample, I utilized the following inclusion/exclusion criteria:

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6 I had also intended to exclude any publication that did not represent the official view of the World Bank. Unfortunately, all but five documents included a disclaimer that the publication represented the views of the author/s and not the official view of the Bank. I have come to realize that most documents published by multilateral organizations contain an official disclaimer. For example, The 2010 Global Monitoring Report on the Education for All initiative explicitly states: the material in this publication do not imply the expression of any opinion whatsoever on the part of UNESCO...the opinions expressed therein...are not necessarily those of UNESCO and do not commit the Organization. (UNESCO, 2010)
Publication must cite empirical evidence to be included

Publication must include a reference section(s) that covers the entire document to be included

Publication must be final version to be included

Based on these inclusion/exclusion criteria, the following five publications were included in the sample for stage two:

1. *Emerging Evidence on Vouchers and Faith-Based Providers in Education: Case Studies from Africa, Latin America, and Asia* (Barrera-Osorio, Patrinos, & Wodon, 2009) (Eds)
   
   - For the purpose of this study this publication will be referred to as *Emerging Evidence*.
   
   - This 212 page book is made up of 11 case studies which provide insight into the “characteristics of students and the performance of various types of schools that benefit from public-private partnerships” (World Bank, 2011a). The 11 case studies are divided into chapters, each with its own reference section at the end which were compiled into a single list of 191 citations for this thesis.

2. *The Role and Impact of Public-Private Partnerships in Education* (Patrinos, Barrera-Osorio, & Guáqueta, 2009)

   - For the purpose of this study this publication will be referred to as *Role and Impact*.

   - This 116 page book presents a detailed review of studies on PPPE and demonstrates how PPPs can facilitate service delivery and lead to additional financing for the education sector as well as expanding equitable access and improving learning outcomes. This book also provides guidelines on how to
create successful PPPE. It has a complete reference section with 158 citations at the end of the book.

3. *Enhancing Accountability in Schools: What Can Choice and Contracting Contribute*  
   (Patrinos & LaRocque, 2007)
   - For the purpose of this study this publication will be referred to as Enhancing Accountability.
   - This four page document is part of the World Bank’s Education notes series which summarize lessons learned and key policy findings from the World Bank’s work in education related to Education for All (World Bank, 2011). This edition summarizes the Bank’s lessons learned on choice and contracting in education describing and providing success stories on the various ways governments can incorporate PPP into their education system. There is a list of 16 references included at the end of the document.

   - For the purpose of this study this publication will be referred to as Private Sector Involvement.
   - This 55 page study reviews the lending activities of the East Asia and Pacific Human Development Sector Unit from 1996 to 2002, to: “...a) Document how the private sector developed; b) Assess whether the way it has evolved led to policy options in the case of non-lending services; and, in the case of lending operations whether interventions if any, have worked; c) Assess potential future opportunities where educational outcomes could be further enhanced by an
explicit engagement with the private sector...and...d) Discuss the appropriate roles of the public and private sectors, distinguishing between finance and provision.”

(World Bank, 2011a) There is a reference section at the end of the review which includes 74 citations.


- For the purpose of this study this publication will be referred to as *Trends in PSD*.
- This 62 page paper maps the trends in private sector development in World Bank education projects by studying 11 out of 70 of the World Bank education projects that took place between 1995 to 1997. The 11 countries used in this study illustrates that the Bank’s interest in PPPE revolves around capacity building in order to address excess demand for education. The reference section is at the end of this document and includes 74 citations.

These five publications and the combined 512 citations included therein were the sample and main source of data used in order to map the nature, extent and spread of World Bank research on PPPE from the context of research production to its ultimate use.

The reference sections from each of the five publications had to be formatted in order to make them usable for this study. Formatting was done by copying and pasting the reference section from each publication into a Microsoft Word document, with the exception of *Enhancing Accountability* (Patrinos & LaRocque, 2007) as this document is an image as opposed to a PDF and therefore the citations included in this publication had to be typed manually into Microsoft Word. Each citation was checked to ensure it was not altered when copied or manually entered into Word, and the appropriate corrections were made. Each reference section was then inserted
into an Excel spreadsheet which was then used to collect data based on the indicators as outlined below.

The study took place in three phases, each phase corresponding to an element of the conceptual framework. The following sections below provide a detailed account of how data was collected and analysed for each phase of the study.

**Data Collection, Analysis**

I looked to the literature in order to identify the bibliometric indicators used in this study. The specific indicators used stem from the claims made against the World Bank as outlined previously in Table 1, and in turn correspond with the conceptual framework: part two. The following three main sections of this chapter detail the three phases of this study which are consistent with the three elements of the conceptual framework. Below is a detailed explanation of the indicators used in this bibliometric analysis, the data collection process for each indicator, and the analysis used for each indicator.

**Phase One Data Collection: The Context of Research Production.**

Starting from the position of the World Bank as a mediator of research to identify the sample used in this study, I then attempted to trace backwards in order to clarify the context of research production. In this stage of the study I aimed to address the claims made against the World Bank (as outlined previously in Table 1) that deal with the quality of research cited by the Bank; the organizational and geographical affiliation of researchers cited by the Bank; and the organizational and geographical affiliation of the publications cited by the Bank. For a detailed account of how data was collected and disaggregated for Phase One see Appendix A
Type of document.

As an indicator of quality of research cited, I examined each of the 512 citations in order to track the type of publication cited. I categorized each citation using the following typology that was determined inductively:

- Journal article (including any publication that is published by an academic journal)
- Report (including any publication that was identified as a report)
- Self published (this included any publication identified as working papers, background papers, discussion papers, as well as other self published documents such as policy briefs, self published articles etc.)
- Conference Papers (including any paper identified as a conference paper or as part of a conference proceedings)
- Book or Book Chapter (including any document published as a book or as part of a book)
- Other / Unclear (including any publications that could not be readily identified, or did not fit into the previous categories including guidebooks, toolkits, statistical databases etc)

Each of the above categories were listed as columns at the top of the excel spreadsheet, and every publication was categorized by putting a number one in the corresponding column. In order to categorize a citation I first look to the citation itself to see if the type of publication was identified there. If not, I used the Google and Google Scholar search engines in order to find an online version of the publication itself in order to identify its type. If I was still unable to determine the type of document it was classified as unclear and a number one was put in the
unclear column on the excel spread sheet. This same process of categorization was used for all of the indicators detailed below, unless otherwise stated.

**Geographical and organizational affiliation of the author.**

In response to claims about the geographical and organizational affiliations of the researchers cited by the World Bank, I tracked the geographical and organizational affiliation of the first author listed in each citation included in all five Bank publications used in this study. In order to do this I search online using Google and Google Scholar search engines in order to find the webpage, curriculum vitae (CV), or a note about the author on the publication itself which identified the author’s geographical or organizational affiliation. This search was done by first searching the author’s name and publication title as listed in the citation. This generally yielded the publication which sometimes contained a note about the author indicating a geographical/organizational affiliation. If this note provided enough information then it was used to categorize the author. If not, generally the publication at least included the author’s full name which was then searched. In cases where searching the author’s full name did not provide an appropriate website or document link, then additional search terms were used including the author’s full name, education, World Bank, author, CV, biography. Generally one of or a combination of these search terms would lead to a link or document which ultimately led me to the author’s website, CV or a biographical note about the author.

One of the most useful sources of data that often came up using these search terms was the IDEAS database which uses data from RePEc. In order to be included in the IDEAS database, authors have to register with RePEc and provide their personal information including organizational affiliation and if the author so chooses, their personal website. Although many
authors did not provide a link to their personal website, the information provided through the IDEAS data bank was counted in my study as this information was provided by the authors themselves. In most cases, I used the organizational affiliation of the author to determine the geographical affiliation of the author based on the geographical location of the organization itself.

The limitation of this type of search is true to all bibliometric studies; the possibility of more than one author with the same name. In order to ensure the quality of data collected in every case possible the author’s CV or publication list on their website was check to ensure it included the publication cited by the World Bank. In cases where this was not possible, I check to ensure that the author yielded from my online search was at least working in the field of education (or in cases where the Bank cited a publication on PPP outside of education that the author yielded by my online search was from the appropriate field). In all cases, I recorded the website, or document link used to classify the geographical and organizational affiliation of the author in a separate column in my excel spread sheet.

Geographical affiliation was divided into the following categories:

- Canada
- USA (with an additional column to note those authors that were specifically affiliated with Washington DC)
- Europe
- Australia and New Zealand
- Latin America and the Caribbean
- Africa
- The Middle East
• Asia (including both South and East Asia)

• Unclear (the geographical affiliation of the author was categorized as unclear if I was unable to find any indication online of a geographical affiliation)

Like the geographical affiliation, the organizational affiliation of the author was determined by the author’s website, CV or from a note about the author in a publication.

Initially this indicator was intended to address the criticism that the Bank only hires researchers with doctorates in economics from only a narrow range of US and UK universities. Unfortunately, this proved to be too challenging to determine due to the fact that in most cases an author’s C.V. was not accessible through my online search. Instead I took this opportunity to see what organization the authors cited are currently (or were most recently) affiliated with.

Organizational affiliation of the author was divided into the following categories:

• World Bank

• International Monetary Fund (IMF)

• Other International Development Bank

• The Organization of Economic Cooperation and Development (OECD)

• Any Non-Governmental Organization (NGO) such as OXFAM, Save the Children, CARE International, etc.

• University or Research Institution (this would include any national or international think tank regardless of its political ties)

• Other (including any organizational affiliation not listed above. This was tracked by adding a comment in the excel spread sheet)

• Unclear (the organizational affiliation of the author was categorized as unclear if I was unable to find any indication online of an organizational affiliation)
During this phase I also made note of where he first author had received their PhD, if it was noted on the source used for this section.

**Geographical focus and organizational affiliation of the citation.**

In response to claims about the geographical focus and organizational affiliations of the studies cited by the World Bank, I tracked the geographical focus and organizational affiliation of each citation listed in all five Bank publications used in this thesis. Using the information provided in the titles of each of the 512 citations I categorized the geographical focus of the study according to the following regions:

- USA
- Europe
- Australia/ New Zealand
- Latin America/Caribbean (with a note if the citation was affiliated with Colombia or Chile specifically)
- Africa
- Middle East
- Asia (including both South and East Asia)
- Unclear/ Not Applicable (NA)

Any title cited that did not identify the geographic location of the study, or was in fact not a study (such as a guide book, tool kit, media article, etc.) was marked as Unclear/NA. Any study that was cited as a cross county comparison was also marked as unclear except in those cases where the title explicitly listed all of the countries affiliated with the study. In those cases
a number one was placed in each of the geographical regions listed in the title, however there were only two such instances so this did not skew the data enough to affect the analysis.

Determining the organizational affiliation of each study was difficult. The most accurate indicator of this would be to determine how each study was funded and come up with some type of typology based on the funders. Unfortunately, even if I read each of the 512 publications cited by the Bank in hopes of finding some mention of who funded the research, I would still have to find a way to determine the funding sources for those research projects that did not disclose in the corresponding publications. Since this would not be possible within the scope of this thesis, I used the publisher listed in each citation as an indicator of the organizational affiliation of each citation listed, as opposed to finding the organizational affiliation for each study cited. Publishers cited were divided into the following categories:

- World Bank
- IMF
- Other International Development Bank
- OECD
- NGO
- United Nations (including any organization of the United Nations; i.e. Unicef, UNESCO, etc.)
- University/ Other research institution (this includes all academic journals, books printed by a University Press, or papers published by a university or research institution including think-tanks)
- Other (this includes any organizational affiliation not listed above and are tracked by including a comment with the organizations name in this column of the excel
spreadsheet. Generally these were documents published by private corporations or government.

- Unclear (this includes any citation that does not clearly list a publisher)

In any case where there was more than one publisher included in the citation, than only the first publisher listed was counted. This decision was based on the assumption that like authors, the first publisher listed made the most significant contribution to the publication.

**Phase One: Analysis**

As mentioned all of the above categories were tracked by placing a number one in the appropriate column on an excel spreadsheet for each of the five World Bank publications used as the sample in this study. Each of the above was checked by totalling all columns and ensuring that the total number listed for each indicator described above did not exceed the total number of citations listed in that World Bank publications. In those instances where the numbers did not add up correctly, each reference was checked and the spreadsheet was corrected appropriately. Once each spreadsheet had been checked, each category was totalled again by calculating the sum of each column in the excel spreadsheet. Following this each category sum was then calculated as a percentage of each indicator being measured. The complete findings of this phase of the study are listed in Appendix B, and are outlined and discussed in the following chapter.

**Phase Two Data Collection: The Context of Research Mediation**

After examining the nature, extent and spread of the context of research production, I turned back the context of research mediation to access the ways in which the World Bank is
citing evidence across all publications. Specifically I was looking across all five publications in order to track the most frequently cited publications, the most frequently cited authors, the most frequently cited publishers, and the language of the citations.

For this phase of the study I was able to use the data collected in Phase One and did not do any additional data collection. I did however, have to reformat the data and add to the excel spreadsheet used in Phase One. In order to do this I added some additional columns. One column was added for the first author of each citation, and one for the publisher of each citation. In cases where there was more than one publisher I used the first one listed. I also included a section to track the language of the citations, which were recorded as English, Spanish and other. The follow sections outlines the analysis used in this phased.

Phase Two analysis: The context of research mediation.

Frequently cited publications.

In order to identify the most frequently cited publications in all five World Bank publications used in this study I first created an excel spreadsheet with a worksheet for each of the five World Bank publications, and populated each worksheet with the full citation list from the corresponding publication. Each worksheet was then highlighted using a unique colour (i.e. Emerging Evidence was highlighted in yellow, Enhancing Accountability in red, Private Sector Involvement in blue, Role and Impact in green, and Trends in PSD in blue). Once each publication was highlighted in its own colour, the citations from all five publications were combined in a single column in a new worksheet. This column was then sorted alphabetically. From this sheet it was easy to identify any citation that had been used in more than one publication, simply by looking down the column for any citation that was listed in more than one
colour. These citations that were listed more than once were than tabulated and tracked based on the number of times it was cited and how many publications it was cited in. This included tracking any citations with the same author(s) listed and the same title, even though the type of document or year may have been listed differently in some of the World Bank publications used in the study sample. For example, the authors Allcott, H. and Daniel E. Ortega wrote the publication, *The Performance of Decentralized School Systems: Evidence from Fe y Alegria in Venezuela: in Role and Impact* this title is cited as a conference paper published in 2007; in *Enhancing Accountability* this title is listed as a Working Paper from Harvard University published in 2006; and in *Emerging Evidence* this title is cited as a chapter in the publication itself published in 2009. Despite these differences, this publication was tracked as being cited 3 times across three of the World Bank publications used in the study sample.

*Authors and publishers cited across publications.*

In order to track authors and publishers cited across publications, the same process was used as in the previous section, except that in the names of the first authors and publishers were used in lieu of the full citations. Colour coding for each of the five World Bank publications remained consistent and list of authors and publishers were kept in their own Excel spreadsheets to avoid any confusion. Once the authors and publisher names were sorted alphabetically in their respective Excel spread sheets, the colour coding made it easy to identify those that were listed in more than one World Bank publication. For this indicator, all UN organizations were treated as unique publishers and were tracked separately (i.e. the UN, UNICEF and UNESCO were all treated as unique publishers). Those listed in more than one publication were tracked based on the number of publications they appeared in.
In order to determine the frequency in which both authors and publishers were cited in all five World Bank publications, I utilized the software on Wordle.net. Wordle is a program that creates world clouds from any text inputted into the program. This could be anything from a list of words to an entire book. Using whatever text that has been inputted, Wordle then creates a word cloud, or diagram of words, where greater prominence is given to those words that appeared most frequently in the text that was inputted.

In order to use this program effectively, I first had to copy and paste the aggregated column of all author names and publishers from the Excel spreadsheet into a corresponding Microsoft Word document. Then using the find and replace function in Word, all spaces between first and last names and between words in publishers names had to be replaced with a ~ (i.e. instead of Robyn Read, the column was changed to Robyn~Read). This ensured that whole names were read by the Wordle program as opposed to each individual word that makes up a name. Once this process was complete the entire list could be copied and pasted directly into the Wordle program. The Word Cloud created by the program was captured through a screen shot and saved. Wordle also provides a word count for each word cloud created. This count was also saved for both author names and publishers and is included in the findings below.

**Language of citations.**

This indicator was tracked based on the actual language used to list the citation in the reference sections of the five World Bank publications examined in this study. The three categories tracked included English, Spanish and other. In cases where I was unclear as to what language was used for the citations, I utilized Google Translation in order to identify the language used. Once the language of the citation was determined it was recorded by placing a
number one in the appropriate column on the excel spreadsheet. In those cases where the language was marked other, the language used was recorded as a comment.

Phase Three data collection: Measuring the extent to which these publications have spread.

The final phase of this study traces the spread of the five sample publications from the context of research mediation to the context of research use. For this phase I wanted to determine the extent (both organizationally and geographically) to which the five sample publications have spread. Once again, due to the scope of this thesis, I was limited in what data I could access in order to determine spread. Thus, I decided to measure the spread of these publications based on their online take-up by other organizations who have posted versions of these five World Bank publications on their own websites, as well as take-up by other individuals/organizations that have cited these publications in their own work.

Staying true to bibliometric methods used thus far, I determined that the most accessible way to collect data on the spread of these five World Bank publications online was to utilize the Google Scholar search engine track citations and alternative versions of the publications that appear online. In this phase of the study, the following steps were taken for each of the five sample publications.

First, the title was searched using the Google Scholar search engine. For the first search result, the number of citations and versions listed under that result were traced in a Microsoft Word document under the title of the publication. Next I clicked on the ‘cited by’ link that appeared under the aforementioned search result. This brought me to a new page which listed all of the instances that the World Bank publication at hand had been cited by others according to the Google Scholar database. All of these citations were then copied and pasted into the
Microsoft Word document (see Appendix C). I then returned to the original search results page and clicked on the ‘versions’ link, copied the results listed on this page and pasted them into the Word document (see Appendix C).

Once this had been complete for all five World Bank publications, I transferred the data collected into a Microsoft Excel spreadsheet, using a separate spreadsheet for each publication included in the study sample to avoid any confusion. The data collected from the ‘cited by’ link for each publication was sorted into the following categories:

- Google reference (the exact reference as copied and pasted directly from Google Scholar search return)
- Author(s)
- Title
- Year published
- Type of publication (based on the typology used in Phase One)
- Publisher
- Language (in this column I made a note of the language used if it was other than English)
- Geographical/organizational affiliation of author (using the Google search engine I followed the steps used in Phase One in order to determine the geographical and organizational affiliation of the author),
- Accessibility (I looked to see if the publication at hand was freely available online and recorded this as yes or no in the spreadsheet).

Once this process was complete, I opened a new worksheet and began insert the data collected under the ‘versions’ link in Google Scholar. This link provides alternative versions of
the publication being search which have been posted online on websites other than the World Bank’s PPPE website. In some cases some of the versions listed were citations which did not link to any website or document. Since these ‘citations’ are not alternative versions they were removed at this point. I considered adding them to the citations tracked previously, but these citations do not provide any indication that they cited the specific World Bank publication being searched. Therefore they were excluded from this study.

Data on versions posted was tracked based on the following categories:

- Google reference (the exact reference as copied and pasted directly from Google Scholar search return)
- Author(s)
- Title
- Year
- Type of publication (based on the typology used in Phase One)
- Organization affiliation of the version based on what organization had posted the alternative version of the World Bank publication online (this was categorized as World Bank, IMF, other development Bank, OECD, NGO, UN agency, government, university/research focused organization, private company, and other)
- Geographical affiliation of the organization that had re-posted this version of the World Bank publication online (including USA, Europe, Australia/ New Zealand, Latin America/ Caribbean, Africa, Asia, Unclear/Not applicable)
- Language (for this indicator I made a note of the language if it was other than English)
Once this process had been completed for all five World Bank publications used in this study, the data were then analysed in the same manner as the corresponding indicators in previous phases of the study.
CHAPTER 4: FINDINGS

This chapter outlines the findings of this study, which are presented using the three core dimensions of the conceptual framework: the context of research production, the World Bank as a mediator of research, and the context of research use. Each section is introduced with a brief description of its content followed by the specific findings for each category. The chapter ends with an overall summary of the findings.

Phase One: The Context of Research Production

This section discusses the findings from the analysis of the data collected in Phase One of this study and aims to clarify the nature and extent of the context of research production. There is a section for the results for each indicator used in this phase of the study. Additionally, all results have been included as graphs the Appendix, with graphs for Phase One disaggregated by publication in Appendix D, and graphs of all publications aggregated in Appendix E.

Type of Publication

As mentioned previously, the Type of Document indicator is intended to act as a measure of the quality of evidence cited by the World Bank in the five publications used in the sample of this study. As demonstrated in Figure 5, the World Bank actually cites a wide variety of types of publications in their work on PPPE, although some publications do a better job at this than others (for an overview of the five World Bank publications examined in this study see Chapter three, Sample Selection p. 52). Here the x axis includes the five sample publications used in the study, while the y axis reflects the number of references included in those publications. Looking at the
findings, one publication (Private Sector Involvement) immediately reveals itself as an anomaly as the majority (86%) of publications cited in this document are reports.

Figure 5. Types of publications cited.

Strangely, although both Private Sector Involvement and Trends in PSD report on the Education Sector Work of the World Bank, Trends in PSD actually cites a variety of publication types, and citations are fairly well distributed between publication types. Likewise, the other three World Bank publications cite a variety of publication types which were reasonably distributed between types (see Appendix D for full breakdown by percent of publication types cited in each of the five World Bank publications).

As Figure 6 demonstrates, although the World Bank does cite a variety of publication types in the five publications examined in this study, only 29% of all publications cited are
considered to be journal articles that have been peer reviewed\(^7\) as some measure of quality assurance. The remaining publications cited can be considered to be of varying quality that would need to be reviewed in order to determine the quality of evidence cited.

![Figure 6. Types of publications cited across all World Bank publications.](image)

**Geographical Affiliation of the Author**

As discussed previously, this measure is intended to address claims made against the World Bank regarding the geographical affiliation of the researchers cited, specifically that the Bank tends to cite researchers based in developed countries. In order to address this critique, the geographical affiliation of the first author cited was tracked for all 512 citations included in the five World Bank publications that make up the sample for this study.

As demonstrated in Figure 7, it is clear that in all five of the sample publications the majority of authors (74%) cited were affiliated with the United States, with a significant amount

\(^7\) Out of all 150 citations of journals, less than 5% (7 citations) were from journals that are not peer reviewed.
(34%) of those authors being affiliated with Washington DC (in Figure 7 the US total shown excludes Washington so that authors are not counted twice). *Emerging Evidence, Role and Impact* and *Trends in PSD* all cited at least one author affiliated with Europe, Latin America/Caribbean, Africa, Australia/New Zealand and Asia. However for all of these publications Europe was better represented (13% of all citations) than any of the other regions.

The least represented region is the Middle East, as only one citation referenced an author associated with this region. Africa was also under represented over all with only five citations out of 512 referencing an author with an affiliation to this region. Overall, only 5% or 26 citations were categorized as unclear for this indicator.

![Geography of author by publication](chart.png)

*Figure 7. Geography of author by publication.*

Looking across all five publications used in the sample of this study, the majority (83%) of first authors cited in these five World Bank publications are affiliated with regions in the
developed world. In the case of these five publications only 12% of the first authors were affiliated with a developing country, and authors affiliated geographically with developing countries were only cited to any significant degree (15% or more of total citations) in two out of five publications used in this study.

**Organizational Affiliation of Author**

This indicator tracks the most recent organizational affiliation of the first author listed for each of the 512 citations included in the study sample in order to address the claim that Bank tends to hire researchers from only a narrow range of US and UK universities. As Figure 8 clearly shows, the majority (49% across all publications) of all first authors cited by the World Bank are affiliated with a university or other research based institution such as a think-tank.

*Figure 8. Organizational affiliation of author.*
The second largest group represented (34% in total) are authors with direct affiliation with the World Bank itself.

A closer look at each publication included in Figure 8 reveals that once again, *Private Sector Involvement* stands as an anomaly, with 89% of all authors cited being affiliated with the World Bank. This is a result of the many reports included in the publication, most of which cite the World Bank itself as the author. Due to this challenge, I attempted to dig deeper by searching for each report cited in all five publications used in this study on the World Bank website. In many cases, the reports cited were not accessible on the World Bank website, especially those reports published before the year 2000 (although in some cases earlier reports were accessible). For those reports that are accessible through the Bank website, I found that the Bank often credits a large team of people in their various roles (including country teams, researchers and writers) for producing each report. This made it difficult to credit these documents to a single person, therefore in such instances the author was recorded as the World Bank.

Looking to the other four publications included in Figure 8, the Bank’s reliance on authors associated with universities and other research focused institutions becomes clear with 49% of all authors being affiliated to a university or research-based institutions. Despite their political ties, the Bank does not frequently cite authors associated with the IMF or the United Nations. Out of 512 citations, only two authors were affiliated with the IMF and three with the United Nations. Although it is not surprising that there are not frequent citations of the IMF as the IMF does not directly address education, it is surprising that the Bank does not cite the UN more frequently as UN affiliated organizations (such as UNESCO, UNICEF, UNDP, UN
Women and UNHCR) as these organizations do have substantial engagement in education and large research budgets.

During this stage I was able to identify 267 distinct authors cited. Out of the 267 authors identified, 32 were organizations as authors, while the remaining 235 were individuals. I was able to determine the institution from which 125 of the individual authors received their PhD (or highest degree). Those 125 authors represented 45 universities; 30 of which are located in the USA, three are located in Canada, eight are located in the UK, two are located in the Netherlands, and only two are located in the developing world (Venezuela and India). The top five universities attended include Harvard University (attended by 16 authors); Massachusetts Institute of Technology (13 authors); Princeton University (10 authors); The University of Chicago and Stanford University (each with 9 authors); and Columbia University (with 6 authors).

**Geographical Focus of the Citation**

This indicator is intended to respond to the claim that the World Bank publishes documents that contain limited evidence drawn from a small sample of developing countries (specifically Colombia and Chile in the case of PPPE) and/or evidence derived from studies based in the USA or Europe which do not reflect the experience of the developing world. In order to address this claim I tracked the region explicitly stated in the title of each publication. The plurality of citations (44% of all citations) in all five Bank publications did not include an explicit geographical affiliation in the title. Looking more closely at each publication in Figure 9, *Private Sector Involvement* once again reveals itself as an anomaly with the majority (85%) of
citations included therein having a geographical focus on Asia, only 5% focused on Australia and New Zealand while the remaining 5% are unclear.

![Geographical Focus of the Citation](chart.png)

**Figure 9. Geographical Focus of the Citation.**

This is to be expected as this particular publication covers World Bank projects in East Asia and the Pacific. Looking to the other publications there is a significant amount (18% of all citations) that are focused on Latin America and the Caribbean (including 9% in *Trends in PSD*, 18% in *Role and Impact*, 34% in *Emerging Evidence*, and 38% in *Enhancing Accountability*). Despite the claims made against the Bank, the number of citations that are geographically focused on the Global North is relatively low (11%) with 5% of all citations focused on the USA, 4% focused on Europe and 2% focused on Australia and New Zealand. The bulk of these Northern citations are found in two publications; *Emerging Evidence* (16% focused on the USA and 12% focused on European countries); and *Role and Impact* (13% from the USA, and 16% from Europe and 1% from Australia/New Zealand).
Additionally, 7% of all citations were geographically focused on Africa, but this region was only addressed in three out of the five publications including Emerging Evidence (9%), Role and Impact (8%), and Trends in PSD (12%). As previously mentioned, Asia was the focus of the bulk of citations in Private Sector Involvement, but was also included in all four other publications including Emerging Evidence (10%), Enhancing Accountability (24%), Role and Impact (12%), and Trends in PSD (9%). The Middle East is only affiliated with a single citation in Role and Impact.

Organizational Affiliation of the Citation

This indicator was intended to address the claim that the World Bank cites too much of its own work. The organizational affiliation of the citations was determined by the type of organization listed as the publisher for each citation. Once again Private Sector Involvement reveals itself to be an anomaly under this indicator with 99% of all citations being affiliated with the World Bank, while 54% of the citations referenced in Trends in PSD were affiliated with the World Bank. Overall, the World Bank was affiliated with 37% of the entire sample of 512 citations.

For the other three sample publications, the majority of citations referenced were affiliated with a university or research focused organization. In Emerging Evidence 69% of citations referenced were affiliated with a university or research focused organization, while the majority of citations in both Role and Impact (45%) and Enhancing Accountability (44%) were also affiliated with this group. The majority of citations overall (47%) were also categorized as having an affiliation with a university or research focused institution.
Despite the close ties between the World Bank and the International Monetary Fund (IMF), only 1% of all citations were affiliated with the IMF. Similarly, only 4% of all citations were affiliated with the United Nations (UN), although each of the five sample publications contained at least one citation affiliated with the UN.

**Phase Two: The World Bank as a Mediator of Research**

This section discusses the findings from the analysis of the data collected in Phase Two of this study and aims to clarify the nature and extent of the World Bank’s mediation of research on the issue of PPPE.

**Frequently Cited Publications**

Through the analysis of citations as outlined in the previous chapter, I was able to determine that there are 482 unique citations across all five World Bank publications used in the sample of this study. The majority (94% or 456 citations) were cited only once in one of the five World Bank publications. A small number (5%) of citations were included in two of the five World Bank publications examined in this study. Three citations (1% of all citations) were cited in three of the five World Bank publications used. No citations were cited in more than three publications. For a full list of all titles cited across more than one of the sample publications see Appendix F.

Of those citations that crossed two publications most (74% or 17 titles) were included in both *Emerging Evidence* and *Role and Impact*; while four citations were included in both *Enhancing Accountability* and *Role and Impact*, and two citations were included in both *Trends in PSD* and *Emerging Evidence*. All three of the citations that were included in three of the sample publications were cited in *Enhancing Accountability, Emerging Evidence* and *Role and*
Impact. No citations included in Private Sector Involvement were cited in any of the other publications included in the study sample. Only one World Bank authored publication, Colombia Contracting Education Services (1996), was cited in more of the publications used in the sample.

Authors Cited Across Publications

Through the analysis of authors cited as outlined in the previous chapter, I was able to identify 267 distinct authors cited in the sample of this study. As demonstrated in Figure 10, the majority of authors (83%) are cited in only one of the five sample publications.

Figure 10. Authors as cited across publications.
Of the 267 authors, 39 (15%) are cited in two of the five publications. Only 2% of all authors were cited in three of the five publications. These include Harold Alderman (3 citations in total), Hunt Allcott (3 citations in total), Joshua Angrist (9 citations in total), Mark Bray (4 citations in total), Norman Laroque (7 citations in total), and Shobhana Sosale (3 citations in total). Only one author (Harry Patrinos with a total of 12 citations) was cited in four of the five publications, and one author (the World Bank with a total of 91 citations) was cited in all five of the publications included in the study sample.

Using the frequency counts provided by Wordle, I was able to easily identify other frequently cited authors. These authors include Erik A. Hanushek (cited 10 times across two publications), the OECD (cited 9 times across two publications), Estelle James (cited 7 times across two publications), and Dante Contreras (cited 6 times across two publications). Those authors cited five times include M.N. Asadullah (all five citations in one publication), Caroline Minter Hoxby (across two publications), Francisco Gallego (one publication), George Psacharopolous (two publications) and Patrick J. McEwan (two publications). To see the Wordle diagram produced when the aggregate list of authors’ names was inputted into this program, see Appendix G.

**Publishers Cited Across Publications**

Through the analysis of publishers cited as outlined previously, I was able to identify 165 distinct publishers cited in the sample of this study. As demonstrated in Figure 11, the majority of publishers (79%) are cited in only one of the five sample publications. Of the 165 publishers, 26 (16%) are cited in two of the five publications, and only 4% of all publishers were cited in three of the five publications.
Two publishers, the Economics of Education Review (cited 13 times in total) and Harvard University (cited 10 times in total) were cited in four of the five sample publications. The frequency count provided by Wordle identified other frequently cited publishers as:

- the OECD (ten citations across two publications);
- the Journal of Human Resources (with eight citations across two publications);
- the Quarterly Journal of Economics (with seven citations in one publication);
- Massachusetts Institute of Technology (MIT, with six citations across two publications);
- the Inter American Development Bank (with five citations across two publications); and
- Princeton University (with five citations across two publications).

The World Bank and the United Nations were the only publishers cited in all five of the publications examined in this study; the World Bank being cited most frequently with 186
citations in total. To see the Wordle diagram produced when the aggregate list of publishers was inputted into this program, see Appendix H.

Language of the Citation

Out of the 512 citations examined in this study almost all (96% or 490 citations) were in English. Spanish was also represented with 17 citations or 3% of all citations. Five citations were counted as other languages, and included two citations in Korean, and three French citations.

Phase Three Findings: The Context of Research Use

The data collection process in this phase revealed that neither Enhancing Accountability nor Private Sector Involvement had been cited by others, or had alternative versions posted online in locations other than the World Bank’s PPPE website. Therefore the findings discussed below only represent three of the five publications examined.

Alternative Versions of the Sample Publications Posted Online

Out of the five World Bank publications examined in this study, only three had alternative versions posted on websites other than the World Bank’s own site on PPPE. Emerging Evidence has two alternate versions posted online, both of which are the complete document reposted on other sites. According to Google Scholar there are 14 alternate versions of Role and Impact available online. However, upon further examination it became clear that two of those versions were actually not alternative versions of the publications and were thus
categorized as incomplete versions. This also occurred with the alternative versions associated with *Trends in PSD* which had 9 alternate versions listed on Google Scholar, but only six of those were complete versions of the publication.

All 25 alternative versions listed by Google Scholar, including those that were not complete versions were tracked to determine both the geographical and organizational affiliation of the version. As illustrated in Figure 12, 40% or ten of the versions posted online were affiliated with a university or research focused institution.

![Figure 12. Versions of organizational affiliation of version - all publications.](image_url)

This number represents those versions that are posted on academic databases. An additional 20% of the versions of the five sample publications have been posted online by various NGOs. The World Bank has reposted some of the five sample publications on other areas of its vast website. These versions that have been posted by the World Bank itself represent 16% of the total, although this represents only four of the alternative versions posted.
The organization each version is affiliated with is directly related to the geographical affiliation of each version. Under this indicator I found that 29% of all versions were affiliated with the USA, 32% were tied to Europe, 19% are affiliated with organizations based in Asia, 7% were affiliated with Australia/New Zealand, 3% with Latin America/Caribbean and 10% were categorized as unclear. Africa and the Middle East were not represented.

Citations of the Sample Publications

*Emerging Evidence, Role and Impact* and *Trends in PSD* have all been cited in other publications, although some have been cited considerably more times than others. *Emerging Evidence* has been cited in one other publication, while *Role and Impact* has been cited by nine, and *Trends in PSD* has been cited by 19. The larger number of citations associated with *Trends in PSD* could be due to the fact that this document was published nine years before the other two publications; this same conclusion does not hold true to *Emerging Evidence* and *Role and Impact* which were both published in the year 2009.

Out of all 29 citations associated with these three World Bank publications on Google Scholar, 38% were books, 27% were Working Papers/Discussion Papers/Policy Papers, 21% were journal articles, while the remaining 14% were categorized as unclear.

When the 29 publications which cited the World Bank publications used as the sample for this study were examined it was found that 45% of the authors that cited these World Bank publications were affiliated with the United States (24% from Washington specifically); while 7% were affiliated with Europe, 7% were affiliated with Canada, Asia, Australia, and Latin America/Caribbean respectively; 7% were marked unclear; and the remaining 3% of authors were affiliated with Africa. The majority (55% or 16 authors) of these 29 authors were affiliated
with a university or research focused institution, while 28% (8 authors) were affiliated with the World Bank itself. Additionally, 10% (3) of these authors had affiliations with the UN. The final author not yet accounted for was affiliated with a NGO. No authors were affiliated with the IMF, another development Bank or the OECD.

The findings from the data collected for the indicator tracking the organization affiliation of each citation looked significantly different than the findings from the organizational affiliation of the author. Based on organizational affiliation, the World Bank was affiliated with 38% (or 11) of all citations, as were University/Research focused institutions. Both the other and UN categories had three authors affiliated with them respectively, while only one citation was affiliated with a NGO. No publications were associated with the IMF, another development Bank, or the OECD.
CHAPTER 5: DISCUSSION

This chapter discusses the findings of this study in light of the literature discussed previously in literature review and the contrasting view of the World Bank’s KM activities as either a global public good or as a tool of paradigm maintenance. This chapter will both highlight where the findings were consistent with the claims made about the Bank’s KM work in the literature, as well as bring to light the discrepancies between the findings of this study and the claims made in the literature. This chapter is organized to correspond with the conceptual framework for this study; first addressing the findings in terms of the three contexts of KM (Research Production, Research Mediation and Research Use); then discussing the larger social context that these activities take place within in terms of Torres’ (2001) framework of Knowledge-Based Aid.

The Context of Research Production

The Quality of Research

When it comes to KM, the quality of evidence does matter (Levin, 2008). The World Bank, however, is accused of citing research that is of low quality, and therefore contains unreliable/invalid findings (Broad, 2006; Wilks, 2004; Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006). The findings of this study show that only one third (29%) of all citations included in the five publications examined in this study were classified as journal articles. These citations have been peer reviewed and are therefore more likely to be high quality, reliable research that meet academic standards (Armstrong, 1997; Benos, et al., 2007). The remaining two thirds of those works cited could be considered to be of questionable quality and need additional investigation in order to determine their quality and reliability.
Even as undergraduate students we are taught that peer reviewed journals are the most credible and reliable sources, and that these sources should be cited most frequently in academic papers (University of Alberta Libraries, n.d.; Trent University Library, 2008). Although it is not possible to determine the quality of works cited solely based on the type of publications cited, the reference lists included in the five World Bank documents examined for this study are certainly not up to academic standards. From this perspective, the findings of this study support the claim that the World Bank cites sources that are of questionable quality and therefore cannot be considered reliable and/or valid without further investigation.

However, the amount of peer reviewed citations alone is not enough evidence to truly support or refute the claims made against Bank research. The notion of peer review as a quality control mechanism is not without controversy; including issues of reviewer bias, conflicts of interest and editors choosing to publish articles that have received a majority of negative reviews (Benos, et al., 2007; Henderson, 2010). While the Bank may be accused of “…a serious failure in the checks and balances within the system [which] has led to {sic} Bank to repeatedly trumpet…early empirical results without recognizing their fragile and tentative nature” (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006, p. 53), there are many examples of fraudulent research being published in academic journals as well. Without further investigation into the review process of Bank published research it is difficult to access if the traditional academic peer review system is better than the Bank’s own internal system.

Furthermore, although grey literature (such as research reports, discussion papers and policy briefs) is often thought of as low quality since it is not peer reviewed, this type of publication does have many benefits that peer reviewed articles do not. Alternative forms of research publications provide the opportunity to bring new ideas and perspectives and engaging a
wider audience (Seymour, 2010). By citing a large variety of alternative literature, the World Bank may have helped to make their evidence base on PPPE more accessible to both the average person trying to learn about this important issue, and perhaps more significantly to academics in developing countries. “…for whom refereed journals are distant, foreboding, and generally inaccessible” (Samoff & Stromquist, 2001, p. 640). The pursuit of knowledge is dependent on the effective participation of all participants, and should not rest solely on the dissemination of academic knowledge (Seymour, 2010).

Additionally, these finding demonstrate the need for further research into the content the Bank is actually citing. For example, the evidence in favour of PPPs might be all from reports, whereas the journal citations could be related to other parts of the publications. On the other hand, the core findings could be drawn almost entirely from refereed publications. Although this thesis does not address this question, it does bring to light the need for additional research in this area.

Organizational and Geographical Affiliation of the Researchers

The World Bank is criticized for hiring researchers from a range of universities from the USA and UK (Wilks, 2004; Broad, 2006). Although this study did not examine the organizational affiliation and related geographical affiliation for the researchers hired by the Bank, it did examine the organizational affiliation and related geographical affiliation of the authors cited by the Bank in terms of what type of organization they are currently affiliated with, as well as which university they received their PhD from.

The most commonly cited group were authors affiliated with a university or research focused institution. This group made up nearly half (49%) of all authors cited. The next largest
group (35%) cited were those authors associated with the World Bank itself, meaning employees of the Bank. The remaining 16% of authors were affiliated with other development Banks (2%), the OECD (2%), the UN (1%), other organizations (7%) or had an undetermined organization affiliation (4%). The limitation of this indicator is that the Bank often hires outside consultants to do research work on behalf of the Bank. These consultants are generally academics associated with a university or research-based institution. These authors would then in fact also have an affiliation with the Bank which has not be accounted for in this study, and would require further examination in order to determine if and how having multiple affiliations would affect the results of this study. Based on organizational affiliation, most authors cited in the sample of this study were geographically affiliated with the Global North, specifically the United States (74%) and Europe (13%). This finding indicates that most of the authors cited by the Bank in this study are in fact from a very narrow range of countries.

Out of the 267 individual authors identified in this study, I was able to determine the institution from which only 125 of the authors received their PhD (or highest degree). Those 125 authors represented 45 different universities; 30 of which are located in the USA, three are located in Canada, eight are located in the UK, two are located in the Netherlands, and only two are located in the developing world (Venezuela and India). Overall the findings of this study support the claim that the World Bank cites researchers from a narrow range of universities mainly from the USA and Europe and provide evidence that knowledge production (at least on the issue of PPPE) is being centralized in the Global North. However, additional research must be done to determine if the organizational and related geographical affiliations really matters in this context. Kapur (2006) provides five reasons why the criticisms made against the Bank on these matters may not be worthy of our attention;
For one, there are typically participants from developing countries in conferences focusing on propositional knowledge. It just so happens that their institutional base is in industrialized countries (typically the United States). Second, the idea that one’s analytical position is an isomorphic reflection of one’s nationality and/or geographical base is rather specious. Third, one could argue that the Bank should only be drawing on the best talent to understand difficult issues, and if it happens that the talent is based in North America, so be it. Fourth, the fears of a lack of diversity are misplaced, given the vigorous debates and differences that are integral to academic and intellectual cultures. And finally, the skewed participation may simply reflect the realities of the global production of knowledge, in which LDCs themselves have played a not insignificant role by running their own universities and knowledge production systems to the ground (Kapur, 2006, pp. 161-162).

Although my instincts tell me that Kapur is wrong, and that geography does matter, my experience in this study has shown me that this assumption requires further empirical interrogation. Although the data collection process for this stage was very black and white in terms of how I classified an author’s organizational and in turn geographical affiliation in order to address the claims made against the Bank, at that end of the process I was left wondering if this data really addressed the issue. While many researchers were affiliated with the USA or Europe, their names and photos often made me question if in fact these authors would have affiliated themselves with these regions. If an academic from the developing world had wanted to receive the best education possible and they had the opportunity to attend one of the world’s most highly recognized institutions (which all happen to be in the developing world) does that
negate their entire life experience up to that point? For example, the current Chief Economist of the World Bank, Justin Yifu Lin is from China, although he received his PhD from the University of Chicago (Zoellick, 2010). Does his time at the Chicago School override his entire life experience and education in China? Thus although the one dimensional transfer of knowledge from the North to the South has consistently been pointed to as a critical flaw in the development process (Evers, Kaiser, & Muller, 2009), the lines between North and South blur when it comes to academia. Further investigation is needed in order to determine how geographical affiliation impacts the context of knowledge production, especially for those researchers who are affiliated with a university as opposed to those who are affiliated with the Bank itself.

**Geographical Affiliation of the Study**

The World Bank is often accused of publishing documents that contain limited evidence drawn from a small number of developing countries (in the Case of PPPE specifically Columbia and Chile), and/or evidence derived from studies based in the USA or Europe which do not reflect the experience of the developing world (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006; Bretton Woods Project 2010; Klees, 2008). This study looked at the titles of all 512 citations included in the sample in order to track the geographical affiliations of the publications cited. Unfortunately, the limitations of this measurement became clear early on and will be further discussed in the following chapter. However, this study did determine that 44% of all publications cited did not include an explicit geographical affiliation in the title of the citation. Of the 285 citations that did explicitly state a geographical affiliation in the title, only 26 (9%) of them were affiliated with the US, while only 20 (7%) were affiliated with Europe. The bulk of
the citations were affiliated with Latin America/Caribbean (32%) and South East Asia (36%), however the bulk of those from South-East Asia came from a single publication which focused on this region specifically. For those affiliated with Latin America/Caribbean (94 citations), 48% (or 7% overall) were associated specifically with Chile, and 22% (or 16% overall) with Colombia.

Overall, this study does not support the claim that the World Bank documents contain limited evidence drawn from a small amount of developing countries as this study found that the Bank does in fact rely on evidence collected from all regions of the World. Although it is clear that on the issue of PPPE the Bank does draw a significant amount of evidence from Colombia and Chile, in the case of this study, the Bank cited more studies (59% overall) from regions other than USA, Europe, Australia/New Zealand, Colombia and Chile.

The World Bank as a Mediator of Research

Organizational Affiliation of the Citations

The World Bank is criticized for citing too much of its own work (Banerjee, Deaton, Lustig, Rogoff, & Hsu, 2006), however the implications of this criticism are unclear. Studies on self-citation consistently reveal that 10% – 20% of all citations are self-citations (Hyland, 2003). This study found that 37% of the 512 citations examined in this study were published by the World Bank, which is much higher than the 20% standard. However, although the Bank’s self-citation level is higher than average, how do we know what is too much? Self-citation is often portrayed as a distasteful form of academic ‘egotism’ (Hyland, 2003; Bonzi & Snyder, 1991),
however, as Bonzi and Snyder point out, "as time passes a researcher's output resembles an inverted pyramid... If you are a major contributor, it's difficult to avoid citing yourself” (p. 251).

As the world’s largest producer of research on development (Broad, 2006) (Gilbert, Powell, & Vines, 1999), the World Bank is certainly a major contributor to the field of development research. Thus, although this study did find that the World Bank did frequently cite its own work, the Bank did not frequently cite the same sources across publications. In total, 94% of the sources cited in the sample publications included in this study were only cited once, and only one World Bank authored publication was cited more than once in the sample publications. Although it is clear that the World Bank is no stranger to self-citation, how much is too much self-citation is a question that requires further investigation.

*What Knowledge is Mobilized?*

Although the scope of this study did not allow for the space to truly interrogate this claim, the Bank is often accused of publishing research that best supports its policy positions rather than accurately representing the evidence-base on an issue. Despite the Bank’s obvious position in support of PPPE, in reading the full text of the five publications used in this study I found that they did illuminate both sides of the debate on the issue of PPPE in some publications (especially in the introductions of some of these documents). For example, *The Role and Impact of Public-Private Partnerships in Education* includes a section in the introduction discussing the arguments in favor of and against PPPE (Patrinos, Barrera-Osorio, & Guáqueta, 2009, pp. 4-5). However, further investigation is needed in order to determine to what extent the Bank acknowledges the evidence on both sides of the PPPE debate.
The Context of Research Use

The Bank is criticized for facilitating a model of knowledge mobilization that moves from North to South (Torres, 2001), constructing a hierarchical knowledge gap that legitimizes and replicates the one dimensional knowledge transfer from North to South that has been consistently pointed to as a critical flaw in the development process (Evans, Kaiser, & Muller, 2009). Looking at the movement of knowledge from the context of knowledge production to the context of use, this study supports the above claim. As noted previously, those sources cited by the Bank were mainly produced by authors from the developed world, who were educated in the affluent West and written predominately (96%) written in English.

Overall, this study found that there is very little knowledge mobilization from North to South. Only 17% of those publications which cited one of the five sample publications were affiliated with the Global South. Even when I examined additional versions of the five sample publications posted online I found that the majority (68%) were posted by organizations in the North, while only 22% were posted by organizations affiliated with the underdeveloped world.

Although there are oblivious limitations and implications of these findings which will be discussed in the following chapter, this study does support the notion that development is something that is done by the North to the South, as opposed to being any form of reciprocal relationship in which all can participate and benefit mutually.
CHAPTER 6: LIMITATIONS, IMPLICATIONS AND CONCLUSION

The final chapter of this thesis restates the research problem and reviews the methodology used in this study. The subsections of this chapter summarize the results and discuss their implications.

Reviewing the Study

This study examined the ways that knowledge on PPPE spread due to the knowledge mobilization efforts of World Bank Education Sector. Specifically, the goal of this study was to respond to the research question: *What is the nature, extent and spread of World Bank research on PPPE from the context of research production to its ultimate uptake by other others?* This study utilized bibliometric methods, taking a primarily quantitative perspective in order to map the production and spread of World Bank knowledge on the issue of PPPE.

Using inclusion/exclusion criteria, five World Bank publications on PPPE were used as the sample for this research. Bibliometric indicators were developed based on the critiques made against the knowledge production and mobilization work of the World Bank as outlined in the literature review, and Table 1 in this thesis.

The research was divided into three phases corresponding to the three main elements included in the conceptual framework; the context of research production, the World Bank as a mediator of research and the context of research use. The first phase used the combined 512 references included in the five sample publications in order to clarify the context of research production. Specifically this phase aimed to provide evidence to support or refute the claims
made against the Bank’s work in research production in terms of 1) The quality of research, measured by the types of publications the Bank cited in the study sample; 2) The organizational/geographical affiliation of researchers cited, measured by the most recent organizational/geographical affiliation of the first author of each citation as listed on the authors website, CV or in the publication itself; 3) The geographical affiliation of the citation, measured by the geographical location mentioned in the title of each citation; and 4) The organizational affiliation of the citation, measured by the publisher of each citation. The second phase aimed to address claims made against the World Bank as a mediator of research by measuring the frequency titles, authors, and publishers were cited across all five publications used in the study sample; as well as the language of works cited. The final phase of the study addressed the context of research use by tracking the citations and versions of the five publications used in the study sample as posted on Google Scholar.

Detailed descriptions of the methods used for data collection, analysis as well as the results for each phase of the study can be found in the previous chapter, Methods and Findings. A summary of the findings as well as a discussion on the limitations of this study can be found below.

*The Context of Research production*

Although the World Bank likes to present the Knowledge Bank as a new development paradigm, it has been criticized for constructing a hierarchical knowledge gap that legitimizes and replicates the one dimensional transfer of knowledge from the North to the South that has consistently been pointed to as a critical flaw in the development process (Evers, Kaiser, & Muller, 2009). The evidence from this study suggests that when it comes to the context of
research production, this criticism of the Knowledge Bank proves valid. The vast majority of the citations examined in this study were found to have been produced by researchers who received their highest degree from a university located in the Global North who remain affiliated with organizations that are located in the developed world.

Claims made about the Bank self-citing also proved to be valid as slightly more than a third of all publications cited were affiliated with the World Bank either through the author or publisher. However, the findings of this study suggest that the claim “…the World Bank promotes public-private partnerships for education, based on limited evidence drawn solely from Colombia, Chile and the US” (Bretton Woods Project, 2010), is unfair. Although the Bank does often refer to evidence from Chile and Colombia, the Bank refers to evidence on PPPE from around the world and only a relatively small proportion of which focuses on the experience of the developed world. On top of this, the Bank should be recognized for the wide variety of publications it cites (including a mix of both academic as well as grey literature), as opposed to simply citing the same studies across multiple publications.

The Context of Research Use

While the Bank’s use of the internet as a dissemination tool affords everyone with internet access the opportunity to access Bank’s knowledge on PPPE and benefit from it, this study suggests that the publications examined had quite a small online impact with a total of 29 citations of the sample publications and 25 alternative versions posted elsewhere online. More significantly, most of those individuals or organizations that cited or posted an alternative version of the sample publications were located in the developed world; mainly in the United
These findings further enforce the criticism that the Knowledge Bank acts as a tool of paradigm maintenance that supports the perpetuation of a hierarchical knowledge gap.

**Limitations of the Study**

**Sample Selection**

Due to the size and scope of the World Bank’s work in the production and dissemination of international development education knowledge, it was impossible to examine the World Bank’s knowledge empire within the context of this thesis. Therefore, just as a doctor injects dye in order to examine a system of the body, this study examined five World Bank publications on PPPE, and the citations included therein, in order to examine the knowledge mobilization work of the Bank’s Education Anchor. The result of this is a focused study of one aspect of the Economic of Education Thematic Groups Knowledge Mobilization work on the Issue of PPPE, as opposed to an all-encompassing study. The results might well be different if this study were replicated for a different aspect of the Bank’s education anchor as the literature suggests that not all of the thematic groups are as evidence based as the Economics of Education Group (Woodhall, 2003).

**Data Collection**

This study relied primarily on citations as a data source. Although these citations provided ample data for the study, relying on citations as the key data source has some obviously limitations. Because citations are brief, there is often key information left out. Because of this in many cases it was difficult if not impossible to identify; 1) the type of document being cited; 2)
whether the document being cited is a study or if it includes any empirical evidence; and 3) if the
document is a study, where the study took place. Therefore, data collected from citations does
offer us insight into the nature of knowledge production; this data does not paint a complete
picture.

Furthermore, this study relied solely on data collected from online sources. Although this
method does allow for a high level of replicability, it also places important limits on the findings
of this study. Without firsthand knowledge of the World Bank knowledge production process it
is difficult to truly understand the context of knowledge production at the Bank. Likewise,
without understanding the internal workings of the Bank it is challenging to assess the World
Bank as a knowledge broker; or how Bank staff determine what knowledge is included and
excluded from Bank publications. Lastly, without access to the development process at a
country level it is difficult to determine the impact (if any) of Bank publications, like the ones
examined in this study, on policy choices made by governments.

**Findings**

The sample and data collection methods used in this study limits the generalizability of
its findings. It does, however, provide an insight to the vast and complex role of the World
Bank’s knowledge on international development education and suggests points to consider for
further research.

**Revisiting the Conceptual Framework**

Upon reflection, I feel that the conceptual framework developed at the beginning of this
study is a valid framework for studying knowledge mobilization in international development
education, however, I do believe that this framework could be developed further to better depict the movement of knowledge from North to South. The findings of this study suggest that knowledge is mainly produced in the Global North, by those associated with developed countries. This study also suggests that in terms of online take-up, Bank knowledge is mainly being shared among and used by individuals and organizations affiliated with the developed world. Based on this study, it seems that the lesser developed world is involved in the World Bank Knowledge mobilization process to a very small extent, mainly as a source of data. The conceptual framework diagram could be modified to better demonstrate the intricate realities of the knowledge mobilization process, to better reflect the flow and proportion of knowledge mobilization from North to South. This could be done by borrowing from Fraser’s notion of redistribution/recognition (as discussed in Chapter 2, p. 22) by including arrows to reflect both the redistribution of knowledge from North to South, as well as recognizing whose perspectives are included by clarifying the source of the research cited by the Bank.

Practical Implications

For Researchers

Although the World Bank is certainly not new to the scrutiny of academia, this study demonstrates the need for us to continue to question the role of this Bank in the development of our world, to determine what is working, for which stakeholders, and why. This study reminds development researchers of the continued need to include the voices of those we are trying to help, not just as sources of data, but as equal partners in the context of research production. Although this study makes clear that the World Bank’s knowledge mobilization work is far from perfect, researchers can still learn a lot from the Bank’s model of dissemination, especially in terms of opening access.
For Practitioners

The findings of this study remind practitioners of the need to continuously question the evidence that informs their decision-making; considering who produced the knowledge, what stakeholders are represented and how, and who benefits most, in order to ensure our work helps to break down the hierarchical knowledge gap that perpetuate the development failures of the past. When it comes to the World Bank’s Knowledge Bank specifically, development practitioners need to continue to push for further transparency in and accessibility to the context of knowledge production; as well as greater opportunity to access the Knowledge Bank by pushing the Bank to utilize more diverse dissemination mechanisms aimed at reaching the marginalized who are most affect by the decisions the evidence mobilized by the World Bank informs.

This study suggests a greater need for collaboration between development practitioners from lesser developed countries and researchers in order ensure that the Global South is included in the research process as more than just a data source.

The World Bank has acknowledged that it has more work to do in order to “…open data, open knowledge, and open solutions” (Zoellick, 2010). In order for this to be more than just another catchy Bank slogan, development practitioners must continue to fight to ensure that all stakeholders in the development of our world have the opportunity to participate in the knowledge production process and mutually benefit from the consumption of development knowledge.
For the World Bank

Fortunately the World Bank has recognized that the global commons of the Knowledge Bank has not succeeded in bridging the knowledge gap between North and South as it had hoped. As long as development knowledge is being imposed onto the developing world by experts from the developed world, knowledge based development does not offer us a new development paradigm. In order for a real paradigm shift to occur there must be, “... an intensive cross-cultural discussion among scholars, practitioners and politicians on the crucial issue of the relevant knowledge needed to solve local and global problems” (Evers, Kaiser, & Muller, 2009, p. 55). The Global South must be given the opportunity to participate fully in the process of knowledge production in terms of agenda setting, design and implementation. In order for this to occur, the World Bank must be prepared to commit significant attention and resources to strengthening the capacity of producers and users from the Global South.

Areas of Future Research

Based on this study, it is evident that we still have much to learn from the World Bank’s knowledge mobilization work, and more generally the role and impact of knowledge mobilization in international development. Additional work needs to be done to complete the picture of the entire process of Knowledge Mobilization at the Bank including studies to help deepen our understanding of knowledge production (especially the role of the Global South in knowledge production), as well as studies to help us better understand the ultimate impact of the Bank’s knowledge mobilization work. While this study focused solely on the knowledge mobilization of Bank publications from the Economics of Education thematic group, there
remains much to be learned by examining other thematic groups under the education anchor, as well as other types of knowledge products, networks and events initiated by the Bank.

This study also demonstrates the need for further development of bibliometric methods so that we can better understand the movement of knowledge across borders and stakeholders. It is especially important for researchers to continue to develop this methodology to better incorporate literature that has not traditionally been included in bibliometric analysis (such as reports, policy papers and discussion papers), as these sources of evidence are being used to inform decision making. It is my belief that this methodology may provide the best tool to help people to evaluate evidence to inform policy and practice.

Conclusion

There are conflicting claims on the nature of the World Bank as the Knowledge Bank with some claiming the Knowledge Bank represents a shift in the Bank’s development paradigm (Gilbert, Powell, & Vines, 1999; Laporte, 2004); while others claim the Knowledge Bank is just a new way for the Bank to maintain the current neoliberal world order (Broad, 2006; Torres, 2001). Despite the significant implications of this controversy, there is a lack of empirical evidence to either support or refute these claims. This study aimed to provide empirical evidence to address this debate, however the findings of this study show that when it comes to the nature of World Bank’s Knowledge Bank, it is not as simple as either/or.

Based on the literature, it is clear that the World Bank frames the Knowledge Bank as a global public good, where everyone has the opportunity to participate in the production of knowledge and mutually benefit from the consumption of knowledge. This study found that
when it comes to the production, mediation and use of knowledge the World Bank falls short of this goal.

In terms of knowledge production, the vast majority of the citations examined in this study were found to have been produced by researchers who received their highest degree from a university located in the Global North who remain affiliated with organizations that are located in the developed world. While many of the studies cited by the World Bank were based in developing countries, the evidence shows that the World Bank publications examined in this thesis are being predominately cited and used (at least online) by individuals and organizational affiliated with the Global North. This paints a picture of a North to North transfer of knowledge where the Global South is almost completely left out of the process of knowledge mobilization.

In recent months the Bank has come to acknowledge its failure in creating a system of knowledge mobilization that encourages the participation of alternative voices, especially those from the Global South and indigenous communities. In a speech at Georgetown University the current Bank President, Robert Zoellick announced,

We need to recognize that development knowledge is no longer the sole province of the researcher, the scholar, or the ivory tower. It’s about the health-care worker in Chiapas recording her results; it’s about the local official posting the school budget on the classroom door so that parents can complain when their children are shortchanged; it’s about the Minister, the academician, the statistician, and the entrepreneur comparing notes on the impact of incentives…. We have questions to answer. Questions that come not just from inside academia – but questions from policymakers, from societies, from inventors, from businesses, from aid workers, from NGOs, from the media. Questions that stream across borders, and
continents, and generations. We need to listen and democratize development economics (Zoellick, 2010).

However, this plan to democratize development seems very similar to Wolfensohn’s original vision of the Knowledge Bank. If, as stakeholders in the development of our world, we want to see the World Bank’s Knowledge Mobilization function as a global public good rather than a tool of paradigm maintenance, we must continue to study the development of the Bank’s Knowledge Mobilization systems in order to find out what works and what doesn’t until the Knowledge Bank truly functions as a global commons of development knowledge.
References


http://www.ikmagazine.com/xq/asp/sid.0/articleid.85040A09-0A97-4A53-8A23-9CD59063FA55/eTitle.Knowledge_sharing_at_the_World_Bank/qx/display.htm


Martinez, E., & Garcia, A. (no date). *What is Neoliberalism: A brief definition for activists.* Retrieved December 2010, from CorpWatch:
http://www.corpwatch.org/article.php?id=376


Mehta, L. (Summer 2001). The World Bank and its emerging knowledge empire. *Human Organisation,* online:
http://findarticles.com/p/articles/mi_qa3800/is_200107/ai_n8984900/?tag=content;coll1.


http://www.oise.utoronto.ca/rspe/


Appendix A
Phase One: Publication Disaggregation Control Doc

Document Codes:

1. **Emerging Evidence** *(Yellow)*
   - Emerging Evidence on Vouchers and Faith-Based Providers in Education: Case Studies from Africa, Latin America, and Asia (Barrera-Osorio, Patrinos, & Wodon, 2009)

2. **Enhancing Accountability** *(Red)*
   - Enhancing Accountability in Schools: What Can Choice and Contracting Contribute (Patrinos & LaRocque, 2007)

3. **Private Sector Involvement** *(Blue)*

4. **Role and Impact** *(Green)*
   - The Role and Impact of Public-Private Partnerships in Education (Patrinos, Barrera-Osorio, & Guáqueta, 2009)

5. **Trends in PSI** *(Purple)*
   - Trends in Private Sector Development in World Bank Education Projects (Sosale, 2000)

Disaggregation Control:

Citation
- copied from World Bank PPPE publication citation list

Author
- first author as listed in citation

Title
- as listed in citation

Publisher
- As listed in citation

Language
- language of citation
  - if unclear use Google translation

Type of document
- inductive typology
- Based on the citation and the online publication, all publications are sorted into the following categories:
  - journal article
  - report
  - working paper/background paper/discussion paper/brief/policy paper
  - conference paper
  - book/book chapter
  - other

Geography of First Author
- based on authors website or bio
  1. Scan document to see if Author’s bio is included
  2. Google document to see if able to find the author’s full name
  3. Google combo of the following until find author’s bio or website
     - author’s name
     - author’s name + publication
     - author’s name + bio
     - Author’s name + World Bank
- Classified based on which of the following the geography falls under
  - USA
    - Washington
  - Europe
  - Australia/New Zealand
  - Latin America/Caribbean
  - Africa
  - Middle East
  - Asia
  - Unclear

Geography of study
- Check to see if it is listed in publication title
- Search World Bank publication to see if location of study is written in the prose near citation
- otherwise it is categorized as unclear
- A citation that includes multiple locations but no specific locations (i.e. a cross country analysis), or is unclear if it includes any empirical evidence (i.e. a Guide Book to PPPE) is also marked as unclear/not-applicable
  - USA
    - Washington
  - Europe
  - Australia/New Zealand
  - Latin America/Caribbean
  - Africa
  - Middle East
  - Asia
Organizational affiliation of publication
- based on publisher as listed in citation
- If multiple publishers are listed then the first is counted
  - World Bank
  - IMF
  - Other Development Bank
  - OECD
  - NGO
  - University/Research Institution
  - Other
  - Unclear

Organizational Affiliation of Author
- based on website/bio
  - World Bank
  - IMF
  - Other Development Bank
  - OECD
  - NGO
  - University/Research Institution
  - Other
  - Unclear

Author’s Webpage
- Link to bio or website used for this phase
## Appendix B

### Phase One: Data and Analysis

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<td>Emerging Evidence</td>
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Appendix C

Phase Three: Google Scholar Citations and Versions of Study Sample

Emerging Evidence on Vouchers and Faith-Based Providers in Education: Case Studies from Africa, Latin America, and Asia (Barrera-Osorio, Patrinos, & Wodon, 2009)

Code: Emerging Evidence
Cited by: 1
Versions: 2

Citations:

[CITATION] Education for All: where does religion come in?
K Marshall - Comparative Education, 2010 - Routledge

Versions:

[BOOK] Emerging evidence on vouchers and faith-based providers in education: case studies from Africa, Latin America, and Asia
[HTML] from google.ca
While public-private partnerships in education in the United States have received a lot of attention, research on such partnerships elsewhere has been limited, even though such partnerships have been steadily gaining prominence, particularly in developing countries. Aiming to fill ...
124

*The Role and Impact of Public-Private Partnerships in Education* (Patrinos, Barrera-Osorio, & Guáqueta, 2009)

**Code: Role and Impact**

Cited by: 9
Versions: 14

**Citations:**

*Private education provision and public finance: the Netherlands* HA Patrinos - papers.ssrn.com

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The ... Cited by 2 - Related articles - All 10 versions [PDF] from vanderbilt.edu

*The global financial crisis and development thinking* FH Rogers - papers.ssrn.com

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The ... Related articles - All 4 versions

[PDF] *Achieving Universal Basic Education* L Steer… - 2009 - unesco.org

Page 1. [Type text] Achieving Universal Basic Education Constraints and Opportunities in Donor Financing DRAFT FOR CONSULTATION October 2009 Liesbet Steer and Cecilie Wathne * Disclaimer: The views presented in ... Related articles - View as HTML - All 2 versions [PDF] from unesco.org

[HTML] *Funding the World Bank-The sixteenth IDA replenishment: Major reform must be the price of UK support* L America, CMEN Africa, S Asia, SS Africa… - brettonwoodsproject.org

In part, this lack of effectiveness stems from serious weaknesses in the Bank’s monitoring and evaluation of its programme performance. Such weaknesses suggest the Bank has insufficient information on how its work is affecting critical development results. More fundamentally, ... Related articles - Cached [HTML] from brettonwoodsproject.org


CHAPTER 1 Public-Private Partnerships in Education: An Overview Felipe Barrera-Osorio, Harry Anthony Patrinos, and Quentin Wodon Introduction Although governments remain the primary financiers of education worldwide (at least for compulsory basic education), in many ... Related articles - All 3 versions [HTML] from google.ca

[PDF] *Output-Based Aid in Education: A Solution for Quality Education* Inga Murariu L Johannes - www-wds.worldBank.org

Output-based aid (OBA) in education is used to bridge the gap between the cost of providing quality education and the funds available. As a rule, it involves payments to schools based on predefined outputs such as enrollment and attendance of
The role and impact of public-private partnerships in education

The concept of a public-private partnership (PPP) recognises the existence of alternative options for providing education services besides public finance and public delivery. Although there are many forms of PPPs, this study examines PPPs in which the government guides policy.

Cached
Enhancing Accountability in Schools: What Can Choice and Contracting Contribute
(Patrinos & LaRocque, 2007)

Code: Enhancing Accountability
Citations: 0
Versions: 0

This document is accessible through Google Scholar, however it is the 3rd item listed and links to ERIC database which provides the link to the World Bank website


Code: Private Sector Involvement
Citations: 0
Versions: 0

This paper is not accessible through Google scholar

**Code:** Trends in PSI  
**Citations:** 23  
**Versions:** 13

**Citations:**

World Bank Financing of Education How has the financial power and influence of the World Bank helped to shape education policies around the world? Based on detailed analysis of thousands of confidential World Bank documents and extensive interviews with key World Bank Cited by 147 - Related articles - Get at CISTI - All 3 versions

Published in 1999, the World Bank’s Education Sector Strategy Paper marks the culmination of two decades of rapid change in the mandates and capacities of intergovernmental organizations in the field of education. During the 1980s and 1990s, the World Bank radically expanded Cited by 45 - Related articles - View as HTML - BL Direct - All 3 versions[PDF] from 113.212.161.150

The United Nations and Education The UN is often questioned about its ongoing relevance and overall effec- tiveness in the twenty-first century, particularly in its involvement with educational policy and co-operation around the globe. This ground- breaking book examines the work Cited by 33 - Related articles - All 2 versions

A paper copy of this publication may be obtained on request from: information@iiep.unesco.org To consult the full catalogue of IIEP Publications and documents on our Web site: http://www.unesco.org/iiep Co-operation Agency of the United Nations Institute for ... Cited by 21 - Related articles - All 4 versions[PDF] from unesco.org

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[BOOK] *The role and impact of public-private partnerships in education* HA Patrinos, FB Osorio… - 2009 - books.google.com © 2009 The International Bank for Reconstruction and Development / The World Bank 1818 H Street NW Washington DC 20433 Telephone: 202-473-1000 Internet: www.worldBank.org E-mail: feedback@worldBank.org All rights
Over the last decade, many developing countries have embarked on large education reforms aimed at rapidly expanding the supply of education, achieving equity in the provision of education, and significantly improving the...
1.1 The importance of education for poverty reduction strategies............................. 2

1.2 A conceptual framework for improving the education of the poor........................ 4

Part II: Diagnosing Education Sector Performance.................................................. 7

2.1 Key education outcomes............... Related articles - All 2 versions [PDF] from worldBank.org

The Case for Private Schools for the Poor G Kaimila-Kanjo Related articles - All 2 versions

Ethiopian Government Incentive Structure: A Comparative Analysis on Export and Education Sector W Tamrat... Related articles

Achieving Universal Primary Education by 2015: Draft Background Paper for the Millennium Project Task Force R Levine, N Birdsal, A Ibrahim... - aidharmonization.org

How can the international community reach the global goal of universal primary education by 2015? This question, by some measures a $9 billion dollar question (annually), is now loudly asked among both the providers and recipients of development assistance, and is the ... Related articles - View as HTML, [PDF] from aidharmonization.org

East Asian Private Higher Education: Reality and Policy D Levy - 2010 - siteresources.worldBank.org

The author is grateful to country experts who assisted: Yingxia Cao, Molly Lee, Makoto Nagasawa, Ben Nebres, Fengqiao Yan, and Akiyoshi Yonezawa, as well as to Norman LaRocque, Sonali Ballal, and Emanuela di Gropello. Most of all he acknowledges the ... Related articles - View as HTML [PDF] from worldBank.org


Education Development: Private and Public in Sync?” by Daniel C. Levy NORMAN LAROCQUE It doesn't matter if a cat is black or white, as long as it catches mice. —Deng Xiaoping Higher education is increasingly being seen as ... Related articles - All 2 versions [HTML] from google.ca

[PDF] Regime-Interaktionen E Hartmann - oai.bibliothek.uni-kassel.de 2 Internationale Politik als Vergesellschaftung .................................................................

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ГЛОБАЛЬНОЕ АКСИОЛОГИЧЕСКОЕ РАВНОВЕСИЕ НА РЫНКЕ ОБРАЗОВАТЕЛЬНЫХ УСЛУГ СИ Лашко - Финансы и кредит, 2007 - elibrary.ru Поиск в библиотеке, Расширенный поиск. ... Related articles

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Trends in private sector development in World Bank education projects S Sosale - World, 2000 - papers.ssrn.com _____________________________ * The views expressed in this paper are those of the author and are not to be attributed to the World Bank. The author thanks Prof. Daniel Levy (State University of New York, Albany) and Prof. Alain Mingat (Institut de Recherche sur l'Economie de l' ... Cited by 23 - Related articles


Trends in private sector development in World Bank education projects S Sosale - Policy Research Working Paper Series, 2000 - econpapers.repec.org Abstract: Emerging trends in education show the private sector to be playing an increasingly important role in financing and providing educational services in many countries. Private sector development has not arisen primarily through public policy design, but has of course ... Cached

Trends in private sector development in World Bank education projects S Sosale - Policy Research Working Paper Series, 2000 - ideas.repec.org Emerging trends in education show the private sector to be playing an increasingly important role in financing and providing educational services in many countries. Private sector development has not arisen primarily
through public policy design, but has of course been affected by ...


[CITATION] **Trends in Private Sector Development in World Bank Education Projects** S Sosale


* *The views expressed in this paper are those of the author and are not to be attributed to the World Bank. The author thanks Prof. Daniel Levy (State University of New York, Albany) and Prof. Alain Mingat (Institut de Recherche sur l'Economie de l'... View as HTML [PDF] from worldBank.org*

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Abstract: Emerging trends in education show the private sector to be playing an increasingly important role in financing and providing educational services in many countries. Private sector development has not arisen primarily through public policy design, but has of course ...

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[http://citeseerx.ist.psu.edu](http://citeseerx.ist.psu.edu)
Appendix D
Phase One Results: All Publications Aggregated

Language

Type of publication
Appendix E

Phase One Results: Disaggregated by Publication
Emerging Evidence
Organization Affiliation of Publication

Emerging Evidence
Organizational Affiliation of Author
Private Sector Involvement
Organization Affiliation of Publication

Private Sector Involvement
Organizational Affiliation of Author

- WB: 96%
- IMF: 3%
- Other Dev't Bank: 1%
- OECD: 1%
- NGO: 1%
- UN: 1%
- University/ research institution: 1%
- Other: 2%
### Appendix F

**Citations Across Publications**

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<td>Angrist, J., E. Bettinger and M. Kremer</td>
<td>Long -Term Consequences of Secondary School Vouchers: Evidence from Administration Records in Columbia</td>
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<td>When the Schools Are the Ones That Choose: Policy Analysis of the Screening in Chile</td>
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<td>Colombia Contracting Education Services.” Report 31841-CO</td>
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<td>Alderman, H., P. F. Orazem, and E. M. Paterno</td>
<td>School Quality, School Cost, and the Public/Private School Choices of Low-Income Households in Pakistan</td>
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<td>Impact of Private Provision of Public Education: Empirical Evidence from Bogota’s Concessions Schools</td>
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Appendix G

Wordle Image of all Authors included in Study Sample
Appendix H

Wordle Image of all Authors included in Study Sample excluding the World Bank
Appendix I

Wordle Image of all Publishers included in Study Sample
Appendix J

Wordle Image of all Publishers included in Study Sample excluding the World Bank