



2015

## Speculation: The Future(s) of a Global Education Market

Kaine Osburn  
*Loyola University Chicago*

Follow this and additional works at: [https://ecommons.luc.edu/luc\\_diss](https://ecommons.luc.edu/luc_diss)



Part of the [International and Comparative Education Commons](#)

---

### Recommended Citation

Osburn, Kaine, "Speculation: The Future(s) of a Global Education Market" (2015). *Dissertations*. 1961.  
[https://ecommons.luc.edu/luc\\_diss/1961](https://ecommons.luc.edu/luc_diss/1961)

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact [ecommons@luc.edu](mailto:ecommons@luc.edu).



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](#).  
Copyright © 2015 Kaine Osburn

LOYOLA UNIVERSITY CHICAGO

SPECULATION:

THE FUTURE(S) OF A GLOBAL EDUCATION MARKET

A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE GRADUATE SCHOOL  
IN CANDIDACY FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

PROGRAM IN CULTURAL AND EDUCATIONAL POLICY STUDIES

BY

KAINE OSBURN

CHICAGO, IL

DECEMBER 2015

Copyright by Kaine Osburn, 2015  
All rights reserved.

## ACKNOWLEDGMENTS

I cannot possibly thank all the people who made this dissertation finally come to fruition in a way that does their patience and faith in me any justice. Therefore, I will simply list a good number of people without whom I would not be able to submit this work successfully. Nanciann Gatta, The School Board of Niles Township High Schools District 219, Dan Bridges, and my Cabinet colleagues in Naperville Community Unit School District 203. Andrew Turner McCann. Noah Sobe, David Klingenberger, and my mom, Marlene Osburn. My sons, whose time with me was sacrificed so I could finish this project. All the students I have ever served who inspired me to explore how educational policies govern our lives every day, for better and worse.

Last and without compare: Jenny Rosene.

## TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF FIGURES	v
LIST OF ABBREVIATIONS	vi
ABSTRACT	vii
CHAPTER 1: GOVERNMENT, ECONOMICS, AND EDUCATION	1
CHAPTER 2: ECONOMIC GOVERNMENT, SOCIOLOGY, EDUCATION	42
CHAPTER 3: THE WORLD BANK AND TECHNOLOGIES OF ECONOMIC GOVERNMENT	95
CHAPTER 4: <i>SABER</i> AND THE COMING GLOBAL EDUCATION MARKET	144
CHAPTER 5: SPECULATION: ONE FUTURE GLOBAL EDUCATION MARKET	188
CHAPTER 6: SPECULATION: ANOTHER FUTURE GLOBAL EDUCATION MARKET	215
REFERENCE LIST	252
VITA	269

## LIST OF FIGURES

Figure 1. Nutrition Facts, ketchup	17
Figure 2. (Partial) Output table from ADePTedu software	131
Figure 3. Output graph of “Mean Hourly Earnings” from ADePTedu	135
Figure 4. EdStats Data Visualizer	136
Figure 5. EdStats Output: Argentina pre-primary enrollment	138
Figure 6. SABER domains	154
Figure 7. SABER-Teachers: Partial rubric	159
Figure 8. SABER-Student Assessment: Assessments and Drivers	161
Figure 9. SABER-Student Assessment: Dimensions rubric	163
Figure 10. SABER-Student Assessment: Drivers and Development	166
Figure 11. SABER-Student Assessment: Enabling Context partial rubric	169
Figure 12. Layered SABER-Student Assessment frames	171
Figure 13. SABER-Student Assessment: Country Report, Mozambique	174
Figure 14. SABER Policy Goal Ratings Report	175
Figure 15. SABER home page	184
Figure 16. SABER home page: Mozambique	191
Figure 17. Bloomberg terminal: U.S. Government Bonds	193
Figure 18. Bloomberg terminal: News Stories	196
Figure 19. SABER home page: Two views, Mozambique	199
Figure 20. SABER-Student Assessment: Ratings and Data, Mozambique	200
Figure 21. World Bank Education Twitter feed	208

## LIST OF ABBREVIATIONS

AFT	American Federation of Teachers
EKMS	Education Knowledge Management System
IBRD	International Bank for Reconstruction and Development
IDA	International Development Agency
IFC	International Finance Corporation
IMF	International Monetary Fund
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
PISA	Performance for International Student Assessment
RBF	Results-based Financing
SABER	Systems Approach for Better Educational Results
SDG	Sustainable Development Goals
WB	World Bank
WEF	World Education Forum

## ABSTRACT

This dissertation establishes a structural understanding of what is necessary to imagine in material terms the future of how education will be financed and how education knowledge will be circulated on a global scale. Making explicit a governmentality perspective for examining neoliberal constructions of education policy and practice first, this dissertation applies that perspective to understanding the trajectory of World Bank policies on financing and governing education over the last twenty years. While the first three chapters draw on existing conceptual and policy work, the chapters combine aspects of them in new ways which reveal a clear understanding of an economic government of education and how it is operationalized by World Bank policy. The latest iteration of this economic government of education is the World Bank's *Systems Approach for Better Education Results*, SABER, examined in detail in Chapter 4. Speculations on futures of education finance and knowledge circulation are made plausible because of the work of earlier chapters, when put side by side with emerging online social technologies examined in the final chapter. The dissertation concludes that a social economy for finance and policy construction may emerge, the distinction between education and economic knowledge will likely continue to collapse, but that the balance between social and economic capital could be rebalanced compared to its current dynamic in this field.



CHAPTER 1  
GOVERNMENT, ECONOMICS, AND EDUCATION

**Introduction**

In May, 2015, major institutional members of the United Nations family prepared to convene the World Education Forum (WEF) in Incheon, South Korea. A successor to the Jomtien conference in 1990 and the Dakar convocation in 2000, the Incheon conference was meant to establish a global education agenda for development aligned with the Sustainable Development Goals (SDGs) to be adopted by the United Nations the following September. The draft lays out seventeen SDGs, and while education is explicitly mentioned in one of the goals, its role is substantial in many others (United Nations, 2014). The Incheon conference's draft framework for action (World Education Forum, 2015) identifies seven explicit targets and three additional sub targets for action and attainment by 2030.

The World Bank (alternately referred to as the 'Bank'), the largest financier of education in the developing world and member of the UN family, was a co-convenor of the WEF. On the eve of the conference, the Bank announced that it would invest US\$5 billion in its emerging "Results-based Financing" program (RBF), previously called "Program-for-Results" or P4R. The press release from the Bank indicated that the pledged amount is double what had been provided

over the previous 5 years for the same program. Additionally, the Bank noted that since 2000 it had provided nearly US\$40 billion in financing for education globally, explicitly toward the achievement of the Millennium Development Goals (World Bank, 2015e). The two primary international finance organizations, The World Bank and International Monetary Fund (IMF) have played essential roles in attempts to achieve the Millennium Development Goals (MDGs), especially as more than \$50BN in debt to these organizations owed by highly indebted poor countries (HIPCs) has been canceled. However, out of forty-one countries examined in 2010, UNESCO Institute for Statistics found that in twenty-six of those, less than a third of adults were literate. When gender was examined it was seen that in every country except Brazil, female literacy rates were lower than males, “and often by a wide margin” (UNESCO Institute for Statistics, 2012, p. 5). The symbolic notion of *Education for All* and the reality of the state of education in developing countries are still disparate. Many nation states alone are not providing sufficient resources to ensure all their citizens have access to comprehensive, free primary education. In such situations the World Bank and or the IMF, as established development investment institutions with access to huge financial and human capital, can and do intervene. The Bank’s actions in particular, when viewed beyond any single intervention, influence educational policy development on a global scale far beyond the mere cancellation of countries’ debts. And, although the WEF’s draft framework for action (World Education Forum, 2015a) asserts in its “Guiding Principles” that education is a “fundamental human right and enabling right” and “a public good, of which the

State is a duty bearer” (p. 3), the Bank has been criticized in the past (Torres, 2009; Klees, 2012; Robertson, 2012). Even as it released the news of its US\$5BN pledge, that its financing approaches -emphasizing neoliberal policies such as privatization and economic incentivization or decentralization- do not treat education as a right or as a public good re-emerged as criticisms (World Bank, 2015e). Many critics have railed against the neoliberal policies of the Bank, but with few exceptions have critics proposed alternatives for the ‘economic government of education.’ This last term, along with the phrase, ‘government of education,’ are derived from a Foucauldian perspective, and will be examined in considerable detail later in this chapter and in Chapter 2, but its contours are easy to imagine. Additionally, most criticism of neoliberal education policy, including that at the Bank, occludes any picture of what the future of global educational policy and practice looks like. There needs to be more visionary work in this regard. My dissertation will seek to explain how the World Bank’s current policies and practices presage one or more types of education markets that stand to impact heterogeneous actors across the globe in heretofore unimagined ways, regardless of their respective current relationship to the Bank. Even though I see a future that is market-based, I also presage a future governed by market relationships distinct from those so constructed by neoliberalism, a notion not antithetical to rationalities of socialist markets attempted in much of the world over the last century.

While criticism has targeted what is portrayed as an imposition of ideological frameworks onto the economies of recipient nations (Alexander,

2001; Girdwood, 2007; Mundy & Menashy, 2012), the sheer volume of investment in developing nations amid their vulnerable conditions and the expectations of donor nations together result in international lending bodies exerting considerable influence on the approach to education undertaken by those borrower nations. For example, from the 1980s onward more and more restrictive conditions were attached to IMF loans; governments were pressured to cut public spending and encourage private sector involvement in areas traditionally controlled by the state while the role of the market was emphasized (Mundy & Menashy, 2012, p. 115). The Bank's technologies for building marketplaces for education, for de-emphasizing state intervention in favor of private sector actors, and for structuring national educational policies informed its activities and, along with its tangible financial investments, have made it the primary narrator of the story of global education investment. For too long, criticism of the Bank has narrowly focused on the conditions of education policy tied to Bank investments in the developing world or the mere fact of conditionality itself. More critical work can be done explaining and examining the mechanics of financing education, which is appropriate to understanding the government of education, since in a neoliberal framework, the former and the latter are synonymous.

Examining the Bank's practical system of intervention in education globally, therefore, becomes pivotal to understanding the trajectory of education policy and practices globally and to speculating on what a market in education will look like in the coming decades. In this dissertation, I will focus on unpacking

concrete World Bank policies related to its financing of education in developing countries, revealing a policy progression over the last 20 years that looks more and more to market-based solutions for funding education. Neoliberal market relationships require an inherent level of speculation or risk, because the value of something in a market is not certain to its participants prior to their exchange of any particular good, no matter the technologies (price system, quality ratings, etc.) put in place to communicate such value. Even before its turn to market-oriented technologies, the World Bank, like any other bank, has been a speculative venture. Thus, as it has looked for more and more countries to embrace market solutions for financing and otherwise governing education –from privatizing school related services to privatizing learning itself– the Bank’s ontology and policy have converged with greater clarity than ever before. Such a convergence of the specific and the speculative have not resulted only in benefits for the millions of children and families in countries where the Bank’s education grants and loans have been made.

This dissertation’s title, *Speculation: The Future(s) of (a) Global Education Market(s)*, speaks to how I unpack the World Bank’s policy progression from a certain perspective so that I may speculate upon, so I may project, one or more futures for what I call the global economic government of education. Not only do I attempt *to look* into the future, global future(s) that reveal a government of schooling and learning like the current government of global finance; I foresee futures that employ discursive and today-common visual technologies to frame and represent education in a manner which makes it both more and less easily

governed by economic knowledge and forces. Ultimately, I speculate (albeit in great material detail) on distinct futures for the global government of education, one neoliberal, one social, both economic. One future for global education policy, practice, and knowledge circulation erases the distinctions between policy and practice such that global policy sharing occurs on the same platform as does global finance of education. Another future recognizes the evolution occurring in social technology and how a global social economy of education could take hold and alter the balance between financial and social capital in the government of education.

I do not engage in new empirical work or quantitative analysis. Broadly, my work is one of critical policy analysis; more specifically it can be understood to be applying discourse theory to educational policy and practice on a global scale, understanding that discourse is multifaceted and “global” implies a multi-scalar reach (Taylor, 1997; Dale and Robertson, 2009). Pointedly, I apply a hybridized sociological lens to neoliberalism in the context of educational policy and practice as a clarifying tactic for accomplishing two goals: First, my approach helps me critically analyze and illuminate World Bank policy and practice, specifically its development and deployment of discrete government technologies that contribute to the construction of education markets, a form of government of populations. Too much critique of Bank policy has reverted to reactive shorthand regarding neoliberalism, leaving much unexamined in how policy is functioning, and that reactionism has likewise obscured academics’ and policy makers’ ability to see a constructive way forward. Second, the clarifying

lens applied to World Bank policies empowers me to speculate clearly and plausibly, in concrete detail, on what futures of global government of education might look like. I do highlight specific policies and programs to illustrate how the economic government of education operates. Such illustrations are not designed to provide empirical support for my contentions of how Bank policy works on the ground, but subsequent research is clearly suggested in the examples I draw upon.

In some ways, my work can be seen as a strange companion to Alexander Sidorkin's (2009) *Labor of Learning: Market and the Next Generation of Educational Reform*. Like Sidorkin, I think we are at "the end of an educational era" (xi), which is to say we stand at the beginning of a new era. However, 'the end' of the current era will be prolonged because even as neoliberal capitalism and education policy as we know them mutate, such changes take years and, particularly in a globalized environment, do not happen in linear or otherwise progressive fashion. That is to say, the transition will be staggered and fragmented and filled with unevenness. Sidorkin wrote that what could emerge is "a market-based system of learning" to replace mandatory schooling, and that this system would be "finely tuned to demand and [does] not rely on extra-economic coercion" (xi). Sidorkin also worked hard in his early chapters to lay the ground work for later speculation. However, he and I differ in some fundamental ways. First, Sidorkin speculated schooling could disappear entirely. I do not. There are too many recognizable benefits around schooling - incorporated into how education is priced for a market- which would prevent

different actors from allowing those benefits to disappear. Additionally, turning much of human capital theory on its head and applying an essentially Marxist approach, Sidorkin constructed school learning as “a form of labor,” a provocative argument. Nonetheless, I differ with him on this point. This dissertation speculates on one global future where neoliberal constructions of education as human capital more or less continue and continue to play a role in a global education market. However, the very social technologies I explore in the last chapter have implications for transforming neoliberal constructions of ‘learning’ and knowledge vis-à-vis policy and practice. Sidorkin and I both focus on financing education as a fundamental form of government, but I apply my lens to policy formation and its implications, e.g. how policies will be constructed, assessed, transformed, and circulated, while he applied his approach to policy application at the level of individual learning, e.g. the implications of his policy for how, where, and when kids will learn and be tested. One could explore such implications for my work, but my dissertation does not undertake such labor.

Sidorkin and I both take substantial risks. A common academic impulse would be to portray the future in safely abstract terms, albeit with an appropriately optimistic or pessimistic lens following from my analysis of present circumstances. My aim is to help readers visualize some very real possibilities for educational policy, policy sharing, and practice so that other policy speculators, policy makers, and educational practitioners can place their bets, so to speak. By taking such a risk, I seek to spur policy analysts and comparativists to further draw out the implications of my work for better or for worse and in



greater depth and complexity than I offer in this introductory work. For policy makers, I seek to spark a sense of innovation, even for those who might wish to turn away from a future I portray, so that a future previously unimagined is pursued. For practitioners, like the teachers and administrators and students with whom I have long collaborated in schools, perhaps schooling and learning will be re-imagined, whether in concert or contrast to the futures I imagine here.

In order to see into the futures for global education finance and government, I do employ a certain lens, one now common to examining educational policy over the last 20 years; namely a governmentality perspective. However, my approach is more of a hybrid that includes the work of Foucault (1991) (and others) in dialogue with Bourdieu's economic sociology (1974; 2005; 2005a). Such a collaboration results in a fuller perspective of neoliberalism and a clearer picture of the future than would result if only Foucault informed my understanding of education policy. The remainder of this chapter will unpack my particular approach to governmentality and how I deploy it in this dissertation. I will conclude this chapter by previewing the remaining chapters and explaining their relation to one another.

### **Governmentality: Limits, Applications, and Complements**

The present study will approach the future of education markets from a governmentality perspective, appropriate for a number of reasons, not the least of which is because a contemporary understanding of markets as a form of government – of self and others – derives from Foucault's work, grounded in his lectures at the College of Paris in the late 1970s. 'Governmentality,' is

deceptively simple, perhaps, being Foucault's term for a 'rationality of government,' or more accurately "the right disposition of things" (Gordon, 1991, p. 93). Plainly, 'governmentality' describes the technologies and procedures employed to 'govern' the 'mentality' and conduct of individuals and populations. So governmentality is more than the political power mechanisms used to govern, but encompasses the shaping of normalizing frameworks conducive to self-conduct; even the thinking about government in terms of individuals and populations simultaneously (Foucault, 1991). A word should be added here about my insistence on choosing "government" and "govern" and its forms when talking about this "shaping of normalizing frameworks" and so forth. Rather than "governance," I choose "government" to reinforce the idea that what has traditionally been assigned to the state, "government," now exceeds the state but functions no differently than the state, so to speak. Foucault stated that power is not possessed by a single body and used to exert dominance but instead consists of power relations distributed across multiple actors, institutions, individuals and administrations (Foucault, 1988). "Governance" could be used instead of "government" to refer to the processes that regulate heterogeneous actors and their respective relations, but I rely on "government" because of Foucault's use of the term and because it reinforces the almost institutional notion of a disposition of bodies now distributed across more than just the institutions of the state, even as the state itself is duplicitous in that very distribution, e.g. the market as a government institution and the state's role in ensuring that role for the market. As we begin to think of schooling or education,

possibly even 'learning', as a government technology affecting and intersecting with multiple actors, it is important to note that for Foucault governmentality was specifically historicizable; it is only conceivable at the moments of liberalism and "advanced liberalism" and these governmentalities can only be enacted under certain assumptions (Rose, 1996; Rose, 1999), although I would assert neoliberal governmentality can be represented by both a genealogy and a spectrum. Particularly, liberal government assumes the individual's "freedom" to govern one's self, which is why liberal and advanced liberal government are trained on the individual; to train on any other unit of government as its foundation would point one beyond the bounds of "what lies within its powers" (Gordon, 1991, p. 15). Rose (1999) writes that "when it comes to governing human beings, to govern is to presuppose the freedom of the governed. To govern humans is not to crush their capacity to act, but to acknowledge it and to utilize it for one's own objectives" (Kindle, Location 107), whether it is the state or another organization so operating on the assumption. Educational policies and practices, as they deploy any number of technologies, simultaneously construct individuals – parents or teachers or students– in ways that enable and circumscribe their freedom. So despite Foucault (1977) having located mass schooling as a disciplinary technology of the police state in *Discipline and Punish*, it is no mistake that mass schooling flourishes alongside an advancing liberalism, for the former became a technology by which the latter (in theory) could better make free, self-governing individuals and by which, thereby, the latter could continue to burgeon. In many ways, then, governmentality describes

neoliberalism, although other scholars (Dean (1999), Hunt (1996)) have concluded that governmentality is a perspective applicable to other historical contexts. I concur that governmentality is a neoliberal development, but ideological laden-ness has caused many to fail to see how the same government technologies can be deployed by actors with different ideological perspectives, thus calling 'neoliberal' an ideology at all becomes problematic. Nonetheless, I see governmentality as a necessary perspective, in concert with an economic sociology, for understanding the present as well as imagining a post-liberal future.

Through the hybridized perspective deployed in this dissertation, neoliberal narratives, which have been gaining saliency among national and international education policymakers for nearly forty years, are redefined not simply as an ideology but are recognizable "in terms of certain arts, tactics and practices of governing" which implicate us "in all manner of practices that enjoin us to exercise certain forms of freedom" (Lerner & Walters, 2004, p. 4). These freedoms arise from the need to transform society beyond the state and include active participants ranging from civil society, NGOs and the poor (Rojas, 2004). Such a transformation is fraught with the possibility that the very notion of what is "public" becomes less distinct. However, less state power and more individual choice do not equate to less government per se, with the market, as just one example, exerting pressure on the individual to conform to market norms, a type of "market governance" (Larner, 2000, p. 12). Foucault (1991) explained how:

There is a double movement, then, of state centralization on the one hand and of dispersion on the other ... at the intersection of these two tendencies ... the problem comes to pose itself with peculiar intensity, of how to be ruled, how strictly, by whom, to what end, by what methods, etc. (p. 88)

In Foucault's governmentality, the relationship between state centralization and decentralization plays a role related to the state's "disposition of things," which is no small matter since this intersection has been prominent in educational policy and practice for at least the last twenty-five years. Furthermore, how the state disposes of things is a matter of "employing tactics rather than laws, and even of using laws themselves as tactics -to arrange things in such a way that, through a certain number of means, such and such ends may be achieved" (Foucault, 1991, p. 95). But the tactics and means are *not* deployed by the state exclusively. This realization is what separates a governmentality approach from analyses of political sovereignty or state power. Foucault (1991) asserted that in the eighteenth century even "the family becomes an instrument rather than a model: the privileged instrument for the government of the population" (p. 100), largely as the result of material, discursive, statutory, and regulatory practices by state, civil society, and individual actors. However, Bourdieu (2005a) still saw the family as merely a model, that "the family provided the model for all exchanges, including those we regard as 'economic' ..." but now economic logic "claims to govern all practices and exchanges, including those within the family" (Kindle Location 138). Foucault saw "the family" as a discursive (statutory, juridical, otherwise) technology for promulgating economic government, whereas Bourdieu portrayed the family as a victim of just such technology. Additionally, the

conscious or unconscious omission of an affirmative policy can have intended and unintended effects; governmentality is as much a matter of how an actor does not do something as a matter of how that actor does do something.

Whereas Foucault reserved judgment on such historical inversions due to the neoliberalism he describes, Bourdieu considered such developments oppressive (2005, Kindle Location 138, *passim*).

According to Colin Gordon (1991) governmentality is really the “conduct of conduct” (p. 2), beyond state “techniques and practices of governing populations of subjects” (p. 4). In fact, it is “at the level of consciousness of each individual who goes to make up the population...” (p.100). Dean (1999) went further, asserting governmentality is a matter of “thought as it becomes linked to and is embedded in technical means for the shaping and reshaping of conduct ... Thus to analyse mentalities of government is to analyse thought made practical and technical” (p. 18), whether by individuals, groups or institutions. Governmentality is as much, then, how an individual thinks about conduct, as it is about actually engaging in particular conduct. Not merely thinking about how the state governs but how individuals govern themselves and the relationship between the state and the individual, between individuals, between groups and the state, and between groups and groups, vis-à-vis conduct. That a power relation should be inferred here is consistent with Foucault’s earlier work, especially *Discipline and Punish* (1977). And in terms of power, governmentality does not imply unidirectionality or even bi-directionality. For example, the deployment of accountability technologies such as standardized testing affects multiple actors

simultaneously, from student to teachers to corporate entities, and each of these actors then has the potential to subsequently affect the other actors initially impacted by standardized testing. Nonetheless, Foucault did not address power in the context of governmentality as he addressed power in other earlier works or even in relational terms, e.g. power/knowledge. This is accounted a failing of Foucault's approach by the likes of Gordon (1991, p. 4, p.6). However, describing educational policy and practice in this work through a governmentality lens, I too eschew assignments of power and its consequences for a number of reasons. First, as mentioned above, there is no consistent site for power when examining phenomena from a governmentality perspective if the individual exercises a distinctively self-regulated autonomy. Second, the rationality of government is instrumental, ultimately, and actors in opposing positions of a power relationship might very well engage the same means, technology, of government at the same or different times and with varying outcomes. Even when examining World Bank policies and practices, its deployment of government technologies, the Bank itself is not a consistent site from which power is exercised. The Bank is a promulgator of technologies by which it can then likewise be affected as a result of the actions of those other actors who engage that technology. Decentralization technologies –no matter at what scale (local, global, etc.)– are an example of neoliberal government technologies deployed both by those traditionally in positions of power and those traditionally marginalized. Likewise, in another vein, the Bank itself is subject to market forces as are its recipients, since the Bank must seek capital on global financial markets. This last point is a different

reminder for why it is worthwhile to remember Robertson's point (2012) that we should not think of the Bank as only global, but instead multiscalar. My appropriation of Bourdieu (discussed below) in constructing a lens through which to view neoliberal education policy and practice and the future of such mitigates to a small degree the shortcomings of an exclusively Foucauldian approach.

Governmentality does not describe an ideology motivating state or individual behavior. Rather, a neoliberal governmentality itself is an accrued perspective, involving multiple and heterogeneous subjectivities, resulting from deploying a range of technologies over time, whether technologies of the state or technologies of groups or technologies of the self. And the degree to which technologies are deployed by the state or the market or the individual contributes to a multidimensional spectrum across which different government technologies are intersecting, a spectrum which might best describe the gradation between neoliberal governmentality and more traditionally liberal or social approaches. This spectrum is outlined in more stark and strictly economic terms in the next chapter, but a familiar example might be instructive here.

In the United States, the labeling of food for its nutritional content is a government technology that provides individuals with knowledge about the products they are purchasing so their purchases of products might be nutritionally informed. Implicit is that individuals choose food products based on nutritional content, in addition to price, i.e. people want to eat healthy food.



As a technology that governs the conduct of individuals and interlocks whole populations in order to govern conduct related to food consumption, nutrition labeling can be understood in the context of a spectrum couched in terms of knowledge and choice. A more traditional social approach to governing behavior of this type would simply have the state (as a centralized proxy for the collective population) determine the limits of food products' nutritional content prior to its becoming available to consumers, then label the food product to communicate that its content meets the nutritional standards established by the state. In this case knowledge of what is appropriate nutritional content (healthy or not) would reside with the state and the choice for food purchase would be left to the consumer to decide based solely on flavor, price, etc. That type of regulation of conduct requires technologies of surveillance and inspection deployed by the state and consistent with those described by Foucault

<b>Nutrition Facts</b>	
Serving Size 1 Tbsp. (15g)	
Servings Per Container 34	
<b>Amount Per Serving</b>	
<b>Calories</b> 25	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	<b>0%</b>
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 200mg	<b>8%</b>
<b>Total Carbohydrate</b> 6g	<b>2%</b>
Dietary Fiber 0g	<b>0%</b>
Sugars 4g	
<b>Protein</b> 0g	
Vitamin A 0%	• Vitamin C 0%
Calcium 0%	• Iron 0%
*Percent Daily values are based on a 2,000 calorie diet.	

Figure 1. Nutrition Facts, ketchup

in *Discipline and Punish* (1977). That state-centered approach then requires the state to deploy a sovereign power so that food producers alter their behavior. The behavior of individual food consumers changes little under such an approach.

However, a neoliberal approach assumes that food consumers' demand to know the nutritional content of food, but locates the responsibility for choosing foods based on nutritional content in the hands of the individual. The state's function now is to provide knowledge, but only in the service of individual choice. The use of this technology changes the behavior of the state and the individual; the individual (in theory) compares food products based on more information than was previously available. Note that the state is responsible for providing the knowledge about an individual product's nutritional content while the consumer is responsible for knowing about two or more products' respective nutritional contents. How this technology has implications for whole populations is potentially multi-fold, but specifically: As more knowledge is introduced into individuals' choice over a given food product, the more knowledge individuals possess and the more important the role of knowledge itself in any given decision. Thus, the importance of knowledge itself is elevated as a result of a technology like food labeling. Whether or not the product exists in a market, wherein the relative nutritional value of one product compared to another is embedded in the price of each product, the kind of knowledge that is deployed in nutritional labeling is discrete. For Bourdieu, choice in a market is a matter of the economic logic of "calculation" being deployed (2005a), so actors with the

resources to better calculate will be better equipped to make choices in such a context. Furthermore, then, across the whole population, the disposition toward such knowledge receives an elevated status and that disposition can become commodified in other situations. Hence, food labeling itself is not neoliberal, but as a technology the role it plays in increasing knowledge and choice as it intersects with other technologies reinforces emphatic features of neoliberalism, features explored in more depth in Chapter 2.

This illustration of food labeling points to why it is necessary but insufficient to talk about a state policy affecting citizens and citizen behaviors, for state policy itself is not the only factor. Tikly (2003) asserts, “Studying policy through the lens of governmentality theory allows for a consideration of the autonomous effects of rationalities of government” (p. 161). Tikly's point is important here for its recognition of the *autonomous* effects; such a recognition enables a view of technologies which focuses on the technologies themselves and their effects separate from intended causes, whether political, sociological, ideological, or otherwise. Rose (1999), for instance, writing about the Thatcher government's rule, asserted that it was not the enactment of a political philosophy, but “contingent lash-ups of thought and action, in which various problems of governing were resolved through drawing upon instruments and procedures that happened to be available...” (Kindle Location 436). As illustrated above, “advanced liberalism” deploys technologies which are not inherently neoliberal or progressive, but which reorient the relationship between actors and the relationship of actors to themselves. Educational policy and practice, through

the “technology of schooling ... is hybrid, heterogeneous, traversed by a variety of programmatic aspirations” (Rose, 1999, Kindle Location 830) and constitutes a “translation mechanism” which “links the general to the particular, links one place to another, shifts a way of thinking, from a political centre – a cabinet office, a government department – to a multitude of workplaces...” (Rose, 1999, Kindle Location 794). And as I examine which specific policies and practices are most clearly illuminated by conducting an investigation and speculating with a governmentality lens, it will be important to remember that: One, I am focusing on policies and practices developed and deployed from a global perspective, i.e. World Bank, but which reach across and through multiple scales, reaching into practices in the classroom and the home (think of test-taking and test-preparation as examples). The global scale of my focus in Chapters 3, 4 and 5 are specifically about financing education, even as I unpack policies on assessment in Chapter 4; two, understanding how educational policy deploys technologies of government (educational practices) shifts one’s thinking about what role policies and related technologies can have in the future, because where and how technologies are deployed, aimed at and located in individuals as they are, thereby constitute potential sites of resistance. This is no different when talking about a marketplace; resistance occurs within a given market but deploying market-based technologies or resistance can occur in the form of alternative markets being formed or resistance can be formed by external technologies being imposed on a market so as to circumscribe or mitigate its governmental

force. Chapter 6 will examine multiple potential sites and directions that represent resistance to a global market for education.

Finally, the outline of the investigations made possible by a governmentality lens will make clear that I am not merely addressing local, sub-national, or regional education policy since the outline of the investigations suggested here point to a global governmentality. Global governmentality can be described as the relations and exertion of authority between a multiplicity of actors including nation states, non-governmental institutions, private bodies and citizens above national levels (Keohane, 2004; Robertson, 2012). Traditionally, the field of international relations focused upon the nation state as the predominant actor. With neoliberal narratives problematizing the state, and resulting policies increasing decentralization at different scales of decision making, there is a greater need to examine the distribution of power across myriad sources through a global government approach which can recognize the construction of norms and policy between non-state actors. World Systems theories (Arno, 2009) point to such a need, and whether a global institution like the World Bank or a global market governing education finance, phenomena such as isomorphism and convergence are in play when considering a global governmentality. When it comes to education and global government, the World Bank, with its dominant position in educational investment globally, is pivotal for my present analysis and subsequent speculation. As I will make clear, the Bank's loan conditionalities and relationships with borrowing countries have been establishing norms and constructing 'knowledge' via discrete technologies of

government, thereby positioning itself as the “main subject of globalization of education” (Bonal, 2002, p. 4) and thus the main focus of my work. Additionally, I will explore how the Bank governs at a distance, legitimizing and normalizing its own knowledge and policy prescriptions (opening up spaces for a market) and then allowing states and citizens to adopt them as forms of acceptance and self-conduct (Cammack, 2004). Again, such a view does not locate power solely in the Bank, but makes it the promulgator of certain technologies; in adopting such, other actors must deploy technologies that then intersect with those initially deployed by the Bank. Those other actors’ engagement and subsequent technological deployments have ramifications for the Bank, its employees, its directors, and the Bank’s position *vis-à-vis* a multiplicity of actors, including contractors for the Bank, purchasers of Bank bonds, and traders in Bank bonds.

The relationship between something like state developed markets or market-like state practices makes sense when remembering that some technologies deployed by a state as education policy and practice can be noted for not having originated with that state or state enterprise at all. Many in fact, whether mentioned here or not, began in other fields –from business to psychology to medicine– and were adopted and even transformed by the state or subsequent private actors intersecting with education. This is not inconsistent with Foucault’s and others’ observations of liberal and advanced liberal governmentalities, that the neoliberal technology *par excellence* is the market (Gordon, 1991, p. 35).

Education policy developments characterized as “market-reforms” have been flourishing for decades. An instructive example from the last ten years in developed and developing countries has been “accountability,” best understood as a key technological complex deployed in educational sectors, in both developed and developing countries. Too easily accountability is viewed as a neoliberal technology unto itself, borrowed from corporate government, but I assert that it is a decidedly instrumentalist technological complex necessary for market formation. I prefer to name “accountability” a “technological complex” because it is made up of any number of inter-related technologies that together result in a relationship whereby different members of a given school community are made to be accountable to one another. Often, such technologies only intersect haphazardly, something like the “contingent lash-ups” cited above. Another way of understanding ‘accountability’ as a technological complex is as an “assemblage” (Fenwick and Edwards, 2011; Marcus and Saka, 2006). For example, Fenwick and Edwards (2011) wrote that:

Assemblages of educational “choice” ... draw together statistical measures of populations, multifarious educational agencies ... discourses of consumption and the knowledge economy, deregulation policies, textbook publishers, buildings, timetables, educational materials, and lesson plans ... which themselves become assembled within the diverse and simultaneous enactments of educational policy. (p. 716)

Their point was to make sure we recognize “important influences in policy assemblages emanating from nature, technology, objects ... which may overlap and infuse what is human” (p. 720). Sobe (2011) addressed accountability in educational research regimes, specifically the U.S. Department of Education’s

“What Works” research clearinghouse, although he alluded to multiple other contexts. Sobe’s comment that “What Works works into a collective salvation narrative that has been recast to include actuarial expertise, disclosure, and reporting as keys to social hope” (p.37) is interesting on two fronts. One, I see “accountability” as a necessary complex for the formation of an education market, as it will reinforce knowledge and choice, ultimately to help establish value that can be made relative for consumers in a market. Although, his comment was tongue-in-cheek, accountability plays into a salvation narrative as do all neoliberal narratives, as they all lead to markets as that governing force which will right any wrong. Secondly, and more succinctly for my point, Sobe recognized that “accountability” is not so much its own technology but a complex of technologies, including one constructed around “actuarial expertise” and “disclosure.” Furthermore, while Sobe was right to unpack how “accountability” has discursively been transmuted into an empirical object, governmentality cannot ignore how accountability is a complex that deploys discursive and material technologies on equal terms. Marcus and Saka (2006), in reviewing the genealogy of the concept of “assemblage” summed up this ephemeral concept succinctly when writing that:

“Assemblages” are thus the causally productive (machinic) result of the intersection of two open systems, and their properties are emergent in the sense in which that concept is deployed in logic, that is, not part of, and so not foreseeable in light of, either one or the other system considered in isolation, but instead only discernible as a result of the intersection of both such systems. (p. 103)



A line can be traced from Rose's idea of "contingent lash-ups" through Fenwick and Edwards' "diverse and simultaneous enactments" to Marcus and Saka's "intersection of two open systems" (2006, p. 103). I would emphasize that a technological complex is not binary but instead heterogeneous, and can involve intersecting actors and technologies that would be in opposition if placed in dyadic relations. Furthermore, a technological complex is not unrelated to Tikly's idea of autonomous effects. Namely, technologies' autonomous effects can give rise to the enactment of another governing technology (think of my citation of Sobe (2011) above). In this way, a neoliberal governmentality, even a market, can be everywhere in particular. Likewise, "accountability" is an important part of educational marketplace formation. Understanding it as a technological complex or assemblage is as important for understanding how the different technologies within it—discursive, material, human—work together, even as they illuminate contradictions and, potentially, sites of resistance. I revisit these complexities in subsequent chapters because criticism of World Bank policy and neoliberal education policy has focused on technologies such as "accountability" without considering their contribution to market formation or has focused on market constructions without unpacking the technologies that make education markets possible.

In the USA, the *No Child Left Behind* legislation is the primary accountability technology deployed by the state, and education agencies across the country have adopted additional policies and practices in response to NCLB's accountability requirements. From the deployment of standardized tests, to the

organization of students by test scores, to the metrics and tables used to rate schools performance, each of these entails a different set of measurements and strategies that make up the technological complex of accountability. And those do not include the very publicly deployed rhetorical strategies -through policy documents and speeches- which themselves constitute technologies for circumscribing a successful school, a successful student, and so forth (Suspitsyna, 2010).

By looking at a policy like NCLB and its subsequent practices as technologies deployed in the context of an advanced liberal governmentality, they should be understood differently than solely as instruments of neoliberal ideology meant to shrink the state or enact a version of 'managerialism.' Instead, visible is how students, teachers, parents and organizational actors (schools, districts, associations) are refigured by the very use of these technologies. Whether it is a school that is on "Academic Watch" or a student who "Meets" or "Exceeds" standards, schools and students are re-organized and re-subjectified as a consequence of this accountability complex. Teachers and pedagogy too are refigured, since what constitutes a successful student has been recast. Whether the relative status of the Math teacher compared to the Fine Arts teacher is changed or Math pedagogy itself is transformed, the original technology deployed now spawns any number of organizational and pedagogical technologies that change the relationship between the various actors, even as new sites of resistance to this initial technology are created (McCarthy, 2008).

Like the relationship between food labeling and the status of knowledge, this accountability complex is married to what Mark Peters (2005) called a “responsibilization” of these actors, which is a matter of individuals governing themselves when and where they previously did not. Specifically, now certain actors are expected to not only be accountable, but to be accountable in a specific way, invoking a whole set of skills and orientations not previously called upon, e.g. statistics. Peters (2005) saw this as part of the development of an “actuarial rationality,” which the individual employs to govern him or herself, transforming educational decisions into actuarial calculations (p. 131). In fact, statistical knowledge and its deployments comprise a component of the larger complex of accountability that transforms what counts for learning, who counts as a learner, and what the relationship should be between what is being learned, who is learning, and how the learner is learning, i.e. pedagogy. While liberal government requires the individual be free to engage in self-government, advanced liberal government requires the individual to be responsible for those choices by acquiring and possessing discrete knowledge in order to make specific choices, here educational decisions (Simons & Masschelein, 2008, p. 399). What started as a state deployed technology of accountability then requires the individual (student, teacher, or parent) to first understand then act upon discrete knowledge. This responsibilization of individuals as the result of state deployed technologies is one outcome identified by an investigation from the governmentality perspective, and it points to the “autonomous effects,” which might not otherwise be identified by more traditional positivistic analyses.

While this kind of “responsibilization” can be figured as an autonomous effect of the accountability complex, the whole complex itself exists in an intersecting relationship with other policies, practices, and discourses, which make up additional technologies of the state, groups, and the self, i.e. other complexes, other assemblages. The notion that an individual student, teacher, or parent is now responsible for learning statistics or, say, evolving computer technologies implies and is implied by additional constructions, such as “The Learning Society” and “Lifelong Learning,” as governmental technologies deployed by the state, the self, and others in the arena of educational policy and practice (see Fejes, 2008; Olssen, 2008; Popkewitz et al, 2007; Simons and Masschelein, 2008). But the most prevalent construction is that which is borrowed, consuming, and invasive simultaneously, *the market*.

This multifaceted notion of intersecting technological complexes, each made up of discrete discursive and material technologies that can be deployed from a spectrum of intentional sites – social, liberal, neoliberal – describes the governmentality approach that I take when examining World Bank policy in Chapter 3, specifically the Bank’s SABER program in Chapter 4, and future(s) for the construction of an education market in Chapter 5 and Chapter 6.

Foucault’s governmentality perspective, arguably an economic sociology of its own, is incomplete, although it provides the bulk of what is necessary for clarifying my view of global education policy and practices, now and in the future. Foucault’s work spawned a whole field of education policy research and analysis and some of its weaknesses have been remedied through application in field

work, case studies, vertical case studies and more. However, specifically in Chapter 2 and Chapter 5 in this work, it will be necessary to draw on additional theoretical perspectives to clearly see the implications of current World Bank policy and the futures for global education policy, practice, and knowledge circulation

In *The Social Structures of the Economy* (2005a), Bourdieu presents a useful complement to Foucault, one that for the near and medium terms of work in education policy analysis suggests a comprehensive approach. This section of Chapter 1 will outline those aspects of Bourdieu's work which support a fuller perspective and clearer picture of neoliberalism than does Foucault alone. For instance, Bourdieu wrote:

It is not 'decisions' of the rational will and consciousness or mechanical determinations resulting from external powers that *underlie the economy of economic practices* – that reason immanent in practices – but the dispositions acquired through learning processes associated with protracted dealings with regularities of the field. (Kindle Location, 182)

Here Bourdieu was explicitly critical of the rational actor constructed by neoclassical economics (and appropriated as such by neoliberalism) and implicitly critical of Foucault and “mechanical determinations resulting from external powers.” However, for me, there is not such a difference between the two, because while Bourdieu would like to focus on “dispositions acquired through learning processes associated with protracted dealings with regularities of the field,” such “learning processes” and “regularities of the field” are the very technologies of government deployed by an economic government and

conceptualized as such by Foucault. Thus, I see Bourdieu suggesting that the critical lens should be focused on the individual's agency, an admittedly weak area of Foucault's approach. Also useful to remember from this passage is Bourdieu's emphasis on "practical" reason, which I will address to some degree in different contexts in Chapters 2, 5 and 6.

Like Foucault (and his attendants), Bourdieu perceived the totalizing power of economic government, namely its power to transform previously non-economic fields of relations, (e.g. artistic, religious) so that they now conform to relations defined by economic terms, namely the "economic' logic of interest and calculation" (Kindle Location, 190). Bourdieu asserted this logic is inseparable from "the economic cosmos in which it is generated" while I suggest that these are simply technologies deployed to create market relations where knowledge and choice are the undeniable bases for decision-making. In other words, the economic sociology of Bourdieu and Foucault share more than separates them. However, Bourdieu, while implicitly criticizing Foucault's shortcomings, is useful for highlighting where neoliberalism (and a governmental perspective of it) fails to reach. Specifically, Bourdieu's view of neoliberalism distinguished itself from Foucault's when Bourdieu saw various actors in an economic field possessing not only different dispositions but possessing access to different types and quantities of capital:

...to subordinate this 'interactionist' description of strategies to a structural analysis of the conditions that delimit the space of possible strategies – while, at the same time, not forgetting that competition among a small number of agents in strategic interaction for access (for some of them) to exchange with a particular

category of clients is also, and above all, an encounter between producers occupying different positions within the structure of the specific capital (in its different species) and clients occupying positions in social space homologous to the positions those producers occupy in the field. (Kindle Location 3881)

Thus, while admitting the structuralism inherent in Foucault's governmentality, Bourdieu relocates the saliency of power in his uses of the term "capital." Ultimately, and useful mostly for the speculative aspects of my dissertation, Bourdieu's emphasis on the non-rational aspect of actors decision-making and the location of a power differences in the concepts of capital are what make his perspective a meaningful complement to one solely reliant on Foucauldian governmentality. Together, this hybridized lens makes possible a fuller picture of the economic government of education over the last decade and in the coming decade.

### **Outline for the Chapters of This Dissertation**

With the description of my theoretical approach to understanding education policy in place, the remainder of this chapter will outline the basic ideas of each subsequent chapter in this dissertation.

The formation of an education market, as I will argue in the next chapter, emerges from two intersecting technological complexes constructed to enact knowledge and choice in heterogeneous actors. Accountability is a recognizable technology that contributes to the construction of knowledge and choice. These actors –states, schools, students, parents, private for-profit and non-profit agencies- in deploying or otherwise being engaged with knowledge and choice

technologies then interact to form a market, a decentralized form of government that is the axiomatic rationality of government for advanced liberalism.

My portrayal of neoliberalism focuses on its epistemology and the two basic technological complexes mentioned above – one for enacting that epistemology and one for enacting choice. Of course, and as will be unpacked in Chapter 2, the two complexes are made up of myriad adherent (and even contradictory) technologies and the two complexes themselves interact in ways that do not appear ideologically or conceptually consistent. Certainly a criticism of my approach in Chapter 2 will be its reductionism, but such is in the service of demonstrating how the current state of the government of education is being transformed into a global education marketplace. What can be mis-characterized as an oversimplification is a matter of disentangling what has become the nebulousness of the critique of neoliberalism over the last twenty years. In fact, it has been difficult to discover a rigorous conceptual unpacking of neoliberalism, particularly in the context of education, which is not itself ideologically over-laden. For me to speculate as clearly and in as much detail as possible about the future of education finance policy, policy sharing, and practice, it is important that I first strip to its bones what I mean by neoliberal governmentality in this context. Such is the focus of Chapter 2 and what emerges is what I mean by the term “economic government of education,” a term I prefer to “neoliberal.”

Jamie Peck’s work in *Constructions of Neoliberalism* (2010) is a decidedly different approach to neoliberal governmentality than what I proffer or what I rely upon in Chapter 2, even though Peck and I share certain aims. Peck writes that



it can be challenging to consider certain “policy paradigms like neoliberalism” because they have become so ubiquitous and embedded (2010, Kindle Location 54), with neoliberalism itself “a shorthand term for the ideological atmosphere” (2010, Kindle Location 66). Thus, while Peck’s approach is to highlight how neoliberalism’s progress “is no bloodless, semi-automatic process, but the work of situated social actors” (Kindle Location 66) by fully historicizing neoliberalism in a rather traditional approach, I attempt to very slowly and deliberately show how the epistemology of neoliberalism and the subsequent construction of choice are the rationale for particular technological complexes resulting in the economic government of education. Peck’s version “elaborate[s] an explanation complementary to more structural accounts, one that keep agents and agency in sight” (2010, Kindle Location 74). However, my examination begins by identifying structural pieces emerging from the thinking of Hayek and his descendants, keys to later understanding World Bank educational policy and which, with that understanding, form a launching pad for speculating on the future education market and policy sharing. Additionally, while Chapter 2 uncovers the foundations of knowledge and choice in market formation, the second half of the chapter provides current examples of this market formation at work in American education and the blind spots in these markets that are revealed when Bourdieu’s sociological critique is applied. Ultimately, an economic sociology will play a role not only in speculating how a global education market might work, but also how it might be transformed into new types of educational government.

My third chapter is a more straightforward analysis of World Bank education policy for the last twenty years, but emphasized through the lens of knowledge and choice technologies unpacked in Chapter 2. Specifically, I highlight how knowledge, choice, and markets have been increasingly prominent in formal Bank policy documents and associated publications from 1999 through 2011. What is novel in this chapter is my examination of how Bank policy and loan technologies through the Bank's "public" arm (IBRD/IDA) have interlocked with the work of the Bank's "private" arm, the International Finance Corporation (IFC). In this relationship, the policy conditionality of the former empowers the private investment and privatization driven by the latter. Chapter 3 also looks at how the Bank constricts as it constructs "knowledge" and knowledge production both discursively and materially. While I review the existing criticisms of the narrow confines of World Bank research and its exclusionary tactics (Klees, 2012; Steiner-Khamsi, 2012; Heyneman, 2012), new from me in this chapter will be how knowledge is constricted and constructed through a reliance on statistical and visual technologies (such as *AdEPTEdu* and *EdStats*), so that the resulting educational policy "choices" available can only be operationalized in certain ways. These pathways are not merely conceptually narrow but materially constricted by the technologies used – the spreadsheet (and its calculations), the graph, the table, the scattergram, etc. Such technologies are reminiscent of Nikola Rose's (1999) comment that "a map, a chart, a table, a diagram is a little machine for producing conviction in others... Inscription devices are 'intellectual techniques': material techniques of thought that make possible the extension of

authority over that which they seem to depict” (Kindle Location 577). Alas, the Bank’s constricted knowledge, represented repeatedly as it is these visual technologies, is best operationalized in a market or proto-market context, despite what should be an inherent tension between certain kinds or restricted knowledge and the operation of a decentralized knowledge in the service of a free market espoused by neoliberal economic thinkers like Hayek. Finally, also described in Chapter 3 is the latest loan technology being deployed by the Bank, its “Performance-for-Results” (P4R) program, now named ““Results-based Financing,” (RBF), a form of loan conditionality that results in stricter alignment between country policy implementations and Bank policy recommendations, specially policy prescriptions outlined in SABER. Chapter 3 more than any other chapter incorporates the most recent critiques of World Bank Education policy, as the ESS 2020 policy statement has drawn more scholarly attention than any Bank policy statement in almost twenty years. However, this new criticism does not cover any new ground and could have as easily been leveled at the Bank a decade ago. Ultimately, the current body of criticism is limited by its failure to offer any creative policy alternatives or to recognize in any sober way the potential material manifestations of Bank policy in the coming decade, recognitions that exceed fatalistic pronouncements of “more of the same.”

The Bank’s latest technological complex for governing education globally is its *System Approach for Better Educational Results* or SABER. Chapter 4, drawing on what has been established in the previous chapters, will use the policy concepts analyzed in Chapter 3 and provide detailed analysis of their

operationalization in SABER, achieving two objectives. First, the chapter will describe SABER generally, as it is made up of thirteen distinct domains of analysis, each however structured along nearly identical analytic pathways, suggesting a template-like approach to distinct areas of knowledge, from Early Childhood Education to School Finance to Workforce Development. More importantly, the chapter will in great detail unpack one of these domains – Student Assessment- in terms of how SABER constructs knowledge and, subsequently, choice, specifically through discursive, statistical, and material technologies. The latter deployment is a definitive progression from the Bank’s development of its *AdEPT* software and its *EdStats* online research and visualization software. Likewise, the SABER online platform visually projects a global educational polity that employs the same measure for educational value akin to a price system in a market. These visualization technologies serve to relentlessly focus any viewer’s attention in such a way that these technologies serve as magnifying lenses which make more specific and clear the knowledge represented. The visual projection, the screen, brings the distant into present, so to speak, and makes it “socially interactionable” in a way that is both new but consistent with existing market interactions, such as those in currency markets described by Karin Knorr-Cetina and Urs Bruegger (2002). Not unlike a Bloomberg terminal that connect (securities, bonds, commodities, futures) market participants across the globe, SABER’s construction and representation of the global is both totalizing and individualizing. My emphasis on visual technology and the economic government of education is a meaningful development of the

thinking on bio-politics by Foucault. Whereas his work in *Discipline and Punish* (1977) revealed the role of surveillance technologies (in the prison and the classroom among other sites) in the state's government of individuals and construction of sub-populations (the prisoner, the student), I draw on ideas developed by Knorr-Cetina and Bruegger (2002), Knorr-Cetina (2003), and Sobe and Ortegon (2009) to show how visual technologies individualize and totalize simultaneously. I see the computer terminal (or the mobile device display even) as that which circumscribes and amplifies at the same time: knowledge and choice, individual and population, material and discursive, groups, institutions, nation states, private business, and global institutions. Any distinction between these actors or ideas collapses inside the frame so that they can fit inside the frame of that terminal or mobile device. Making these equivocal and ubiquitous is also what makes them global and accessible in a market, although it is the same argument to say that a market (at least an electronic one) makes them equivocal, ubiquitous, and accessible. In less esoteric terms, my speculation is that these technologies, as that which delivers World Bank policy and practices via the SABER framework, sets the stage for a market to finance education globally.

Chapter 5 begins with a confirmation that the previous chapters adequately establish World Bank's SABER as a single global platform for representing educational value operated by a financial institution which itself is an actor in global financial markets. Confirming the validity of this premise, the resulting speculation in Chapter 5 is neither fantastic nor unreasonable.

Specifically, continuing to draw on Knorr-Cetina's work done in the sociology of currency markets, I describe how SABER can serve as the virtual and material marketplace for engagement in a variety of economic transactions that could govern educational practices globally. From matching buyers and sellers of educational provisioning, to matching investors and borrowers of capital funding for educational initiatives, to setting interest rates on educationally-oriented loans, SABER's site can well serve as such a market once the actors accept the assignation of value to myriad educational practices represented on SABER itself and established by the World Bank. Additionally, this chapter looks at how the Bank's increasing use of Twitter could contribute to a social liquidity that can play a role in the economic liquidity of an education market.

However, the very material and financial technologies that are powering the potential for SABER to become a global education market are among those that could point to a different future for educational government, one that is far more speculative and makes up the bulk of Chapter 6. Understanding "crowdsourcing" and as a model illustrating what the future might look like, I draw out material speculative examples to reveal digital technologies that empower "sharing" and "crowds" and other new types of social relations that span the globe. These technologies are exemplified in Kickstarter, and hold the promise of establishing a different type of market for financing education practices. Thus, I portray two possible futures for markets in education. One looks like an extension of what is developing on SABER now and is best exemplified by the type of economic activity that takes place through technologies such as

Bloomberg terminals, i.e. financial markets for education that are consistent with neoliberal economic and educational policy progressions of the last twenty-plus years. The other future is less easily recognizable, a global social market for education that has its roots in 'Third Sector' concepts but also harkens to other social economic models attempted in the twentieth century, such as employee-managed collectives. Chapter 6 concludes by noting that my speculation on such global education markets has implications for educational policy sharing too. Chapter 6 speculates that little stands in the way of a full conflation of educational policy, analysis, and commentary on the one hand, and a monetary exchange value assigned to education practices on the other, whether that is in the form of specific resources, services, or interest rates for a loan. Knorr-Cetina and Bruegger's (2002) depiction of the screens used by currency traders - including as they do everything from running scrolls of economic information and current events to Federal Reserve policy statements - suggests a future where scholars can post their own insights and see them traded or circulated in the context of the investments being made on the same platform by private investors, ministers of finance, and World Bank directors themselves. Steiner-Khamsi's original article (2006) on policy borrowing and lending in the context of post-Soviet Central Asian republics links loan technology from international development banks to educational policy, but she does not explore the implications of her own trope. Important to remember in all the work on educational policy sharing is that in the neoliberal market place, where knowledge plays such prominent role in the decision-making of market actors, it

is no leap to imagine that knowledge and economic value in terms of educational policy becomes the same thing; such is already the premise of a “knowledge economy” and all that human capital theory implies. All that is required for policy to become part of an economic government of education is a particular convergence of technologies.<sup>1</sup>

### **Conclusion**

A global market for education, some might argue, already is the best way to describe how education knowledge circulates across the planet. However, scholars such as Steine-Khamsi (2006, 2011, 2012) and Sobe and Ortegon (2009) have used terms borrowed from economics to create tropes for the current circulation of education knowledge globally. My work, its theoretical approach and chapters outlined here, does not create a trope or a model for the future circulation of education knowledge and practice. This dissertation sets out to paint a specific material picture of the social, economic, and material parameters and dynamics for the government of education finance, practice, and knowledge across the globe.

In fact, too many global education comparativists have for too long failed to focus on education finance in explicit material terms for a variety of reasons. In light of neoliberalism’s ascendancy, this failure has left a hole in the dialogue about the present and the future of global education policy and its development because in neoliberal terms, the finance of education is the government of

---

<sup>1</sup> With how the publication and payment currently works for scholarly works owned by companies such as Taylor and Francis, there is an argument to be made that we are more than half-way to just such an economic government of educational policy, i.e. it’s no longer just sharing.



education. My work does not set out to exhaust the conceptual opportunities suggested by the topics addressed. Nor do I engage in original empirical data collection to support my thesis. Rather, this dissertation approaches terrain now raised due to the collision of capital, policy, practice and technology; terrain unrecognized or neglected by others. I describe this very real landscape in ways that imagine where it leads so a provocative dialogue may emerge which ignites some urgency among scholars and policy makers regarding the future constructions of education policy.

CHAPTER 2  
ECONOMIC GOVERNMENT, SOCIOLOGY, EDUCATION

**Introduction**

Chapter 1 introduced the frames of reference for exploration in this dissertation, namely that: World Bank financing of education in the developing world— its method and magnitude- will continue to have a profound influence on policy, policy sharing, and educational practice globally; a sociological lens compounded from the work of Bourdieu and Foucault will be applied to better understand the promulgation of Bank policy today and its implications in terms of future markets for education.

To properly speculate on the future of global education marketplaces and policy, it is necessary in this Chapter to unpack some of the intellectual heritage of educational economics and then provide clear explanation and examples of the economic government of education. Towards these ends this chapter will review aspects of 20<sup>th</sup> century economic thought that underpin today's notions of educational markets. By exploring specifically Hayek's epistemology and the functioning of markets, the connection between the two and subsequent economic theorizing around human capital and choice, a nascent understanding will emerge of what undergirds discrete neoliberal policies in education. Such policies, from decentralization of decision-making to privatization to charter

schools, to vouchers, have dominated public education policy making in the last quarter century. In fact, most policies grounded in the economic government of education have little in common with learning in terms teachers commonly employ, but the policies themselves appear indistinguishable from the very economic theorizing that have made such government possible. This conflation of economic government of education as education policy is consistent with Gordon's (1996) observation that an economic model "... must be invented for the conduct of individuals, groups and institutions within those areas of life hitherto seen as being either outside of or even antagonistic to the economic" (p. 27) and Bourdieu's (2005) observations that an "economic logic" represses other types of "common sense" and establishes itself across fields as a "universal model", despite its rootedness in a distinct ethnocentrism and historicity (2005, Kindle Locations 190, 205, 218). However, looking at these policies first through the filter of mid-century economic theorizing will reveal that, among other cogent issues, a belief in markets as a form of government is not necessarily neoliberal. Rather, when markets are approached from epistemologically distinct perspectives, the result is two different types of markets, each the result of a different intersection of government technologies. Rather than the socialist approach to markets, characterized by thinkers such as Lange (1936), it is the resulting neoliberal market lineage that I will follow into the economics of education.

The second focus of this chapter will be to provide a plain explanation of how certain technologies for constructing knowledge and choice constitute the

establishment of educational market places, particularly but not exclusively in the U.S. I will demonstrate how real programs are being constructed in a manner consistent with a neoliberal epistemology and are reinforcing the relationship between knowledge and choice in the making of a market mechanism governing education-oriented behaviors. This is not a matter so much of the economics of education as it is the institution of an economic government of schooling. For the sake of clarity and focus, I emphasize certain technologies familiar to many readers. Such emphasis does not constitute an empirical support for my assertions. Rather, as in Chapter 1 and throughout the dissertation, I use discrete exemplars of economic government to ultimately limn out a full picture of education policy and practice today so that I can offer a robust and plausible speculation in my final chapters. And specifically, some of the highlighted technologies intersect with technologies related to a market for educational policy, policy sharing, which will be the heart of my speculative venture. After illustrating with such examples how neoliberal education policy and practice deploy particular technological complexes to construct markets, I will rely on Bourdieu's economic sociology to expose blindspots in the economic government of education. That exposure is necessary for exploring the future(s) of education markets, financial or otherwise. This chapter is purposefully reductionist, structuralist really in a sense that is consistent with the limits of a governmentality perspective, while employing Bourdieu's insights to shore up that former perspective's shortcomings. The structural approach is necessary because so much of the critique of neoliberalism has simply leapfrogged over these

fundamentals and focused on the ideologically hardened positions resulting from the historical evolution of the deployments of discrete technologies, e.g. accountability, privatization. My approach in this chapter is useful for making clear how knowledge and choice are constructed to make a market for educational services and schooling itself; such a reduction makes possible a necessary and straightforward frame for later chapters' work approach to World Bank policies and practices and on the future of global educational markets and policy making. It also makes clear that, ultimately, new policies and practices will have to be constructed, so a structural understanding of how that occurs is indispensable.

### **One Story of 20<sup>th</sup> Century Economics: Knowledge, Choice and Markets**

Governmentality perspectives of the market aside, a marketplace in economic terms can be explained as a means for matching the demand of individuals for certain goods or services to the supply of those goods and services, such that the matching of the two maximizes the satisfaction of actors acquiring and supplying goods or services (Smith, 2013, Kindle Location 393). For my purposes, the delineation of markets in economic terms will not delve much deeper than just that definition, but will look at some specific turns as a result of 20<sup>th</sup> Century economic and sociological thought. In the terms of governmentality, market exchanges are ultimately matters of ethics, the government of one's self and others and whole populations (Gordon, 1991, p. 2). The knowledge one possesses contributes to one's behavior in a market, even as a market exchange, a discrete behavior, increases an individual's knowledge.

Of course, Foucault's focus, and one I will attempt to illustrate increasingly throughout this work, was that there are interactions (or even intersections) involving neoliberal technologies which are not strictly market exchanges but are facilitators of market exchanges and the knowledge necessary to conduct them. For example, the technological complex that makes up "student assessment" is not strictly market-oriented, but facilitates market exchanges, even while parts of that complex itself, e.g. buying testing supplies, can include market exchanges.

A market, then, is the physical or virtual place where such exchanges occur. The market might be a consumer goods market (think Target vs. Wal-Mart), commodities markets (think corn or gold or oil at the Chicago Mercantile Exchange), financial investments (think stock markets, bond markets, currency markets), the labor market (job seekers and employers), or for insurance instruments (think "derivatives" or futures markets). Economic approaches developed over the last century on how markets should most efficiently operate, i.e. so that the mutual self-interest of every actor is maximized, in structural terms can be organized along a single spectrum. Points can be located and described in terms of the relative role of individual actors (individuals, households, or firms) in a market compared to the role of state actors (federal, state, national, sub-national, local) in regulating the rules for market exchanges, determining how markets operate, how buyers and sellers are matched. But common public and political discourses, even common academic discourses, approach this spectrum as if it were not a spectrum at all but a matter of pure opposition, the state being on one end of the spectrum, opposed to a market on the other, i.e. socialism vs.

free-market capitalism. Hayek, whose own epistemology is my basis for examining neoliberal education technologies, did as much as anyone to reinforce this sense of opposition, beginning with *The Road to Serfdom* (1945), which he acknowledged undermined his reputation as an economist (Peck, 2010, Kindle Location 2493), because it was not an economic treatise but a political one. However, that book did not establish the epistemology for economic government; rather it makes the utopian political (and anti-democratic) argument for that type of government, largely by framing facism as a problem of economic government. Ultimately, Hayek collapses economics and politics because a utopia requires that conflation. Peck's work (2010), despite its title, is really a history of the construction workers of neoliberalism, noting that neoliberalism is "no bloodless, semi-automatic process, but the work of situated social actors" (Kindle Location 74) and that his work is not "a vision of the neoliberal world from 30,000 feet" (Kindle Location 80). Peck attests to being "close to the ground" but he rarely unpacks the seminal documents produced by these "situated social actors" in any manner that illustrates how their vision became the dominant driver of government policy for the last forty years. Somewhere between the starting point of Hayek's economic work and "30,000 feet" important points can be made that suggest where neoliberal policy (its neoclassical roots) and social economics share conceptual space. That understanding, where these ideas come together and where they separate, will contribute to a cogent understanding of current and future educational policy and practice. Despite that some of the pre-eminent thinkers on this spectrum engaged in campaigns to reinforce differences,

dichotomy does not offer rewarding insights into the perspectives on markets which might not be dramatically different.

As Johanna Bockman's (2011) introduction to her history *Markets in the Name of Socialism* makes clear, socialism and neoclassical economics (the seedbed for neoliberalism) were much in dialogue from the late 19<sup>th</sup> century through the mid-20<sup>th</sup> century (Kindle Location 323). What the two ends on the spectrum I describe share is the premise that a relationship exists between supply and demand, between producers and consumers (no matter the good or service), a market, which can be described mathematically (Bockman, 2011, Kindle Location 323). What differentiates perspectives is how the exchange of "goods" is governed and how individual or supra-individual actors gain access to the information necessary to make an exchange that could be mutually beneficial. Thinkers like Oskar Lange (1936) asserted that a central authority, aggregating all the necessary information for the purposes of deploying a mathematical formula, could manage the market by accurately predicting the necessary supply and demand for any given item, then direct the economy to produce said items in the appropriate quantities ((pp. 68-71); (Bockman, 2011, Kindle Chapter 1, Paragraphs 3-5); (Hayek, 1945, p. 519)). Friedrich van Hayek, in contrast to Lange and others, asserted that centrally aggregating all the necessary information to successfully deploy the aforementioned mathematics was not feasible (cite Hayek and Bockman; Hayek, p.519, *passim*). Hayek did not initially dismiss the mathematical approach to managing markets, but he asserted the "knowledge" (Hayek's term) necessary for an accurate



mathematical calculation was not available to any single actor at one time for a market to operate in such a fashion (pp. 519-20) (Beckert, 2009, p. 246).

Because a mathematical calculation could only successfully be made from a central position empowered by perfect information, the mathematical model and the centralized planner of a socialist economy became synonymous. Thus, as Bockmann goes on to point out, neoclassical and neoliberal economists relied on the same foundational model against which to measure the efficiency of an economy as did the centralized planner. The perfectly efficient economy described mathematically represented the same utopia of supply and demand for the socialist and the neoliberal.

Hayek (1945) was not against planning an economy or market, but his understanding “planning” was fundamentally different than his contemporaries who asserted that a centrally organized economy was more efficient. “Planning in the specific sense in which the term is used in contemporary controversy necessarily means central planning – direction of the whole economic system according to one unified plan. Competition, on the other hand, means decentralized planning by many separate persons” (Hayek, 1945, p. 521). However, the significant difference between a centrally planned market economy and a decentralized one was not “competition” per se. Rather, for Hayek the difference between the two hinged on different epistemological premises. Namely, for Hayek a socialist market-based economy was about the nature of knowledge, which more accurately would be defined as “information” as he used the term, and its impossibility because the kind of knowledge asserted by Lange

was impossible; no one actor could possess or deploy all the information necessary to accurately predict the marginal rate of substitution (which ultimately determines the price) for every item in a given market.<sup>1</sup>

That impossibility caused Hayek to emphasize two points, and the first- about knowledge and its different types- must be thoroughly unpacked here before moving on to his second point about how one accessed that knowledge through a price system. For Hayek, a decentralized system was the only possible system by which all the available information could be used (or at least maximized) to “plan,” or organize, a market. This was not just pragmatic, but epistemological, because the mathematics underpinning central planning relied on one type of knowledge, what Hayek termed “scientific knowledge” (1945, p. 521) but ignored “unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules: the knowledge of the particular circumstances of time and place” (p. 521) and this failure caused central planning to be economically unreliable and politically suspect, although Hayek was not strictly a democrat. For Hayek, only an individual actor, or a firm, was going to possess all the information that made up a contextual knowledge necessary to make the most efficient economic decisions for that individual. Hayek’s focus was on the economic information at-hand and only addressed what was explicit, made so by the price system, which will be examined shortly.

---

<sup>1</sup> Consider Adam Smith’s (2013) comment that a sovereign cannot and should not direct the labor market because “he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be sufficient” (Kindle Location 1764393) in light of the debate about epistemology and the centralized planning of a market economy.

However, his distinction between scientific (or theoretical) knowledge and a “knowledge of the particular circumstances of time and place” does not preclude a tacit knowledge. In fact, this notion renders Hayek’s notion not entirely alien to Bourdieu’s later constructions of *habitus*, despite Bourdieu’s assertions that habitus represents the opposite of what occurs in the mind of the calculating economic actor (Kindle Locations, 3961 – 3991). Although, Bourdieu (2005A) acknowledged, outside his discussion of habitus and its relation to economic decision-making, a role for tacit knowledge:

... agents are guided by intuitions and anticipations arising out of a practical sense which very often leaves the essential factors implicit and which, on the basis of experience acquired in practice, engages in strategies that are ‘practical’ in the dual sense of implicit – i.e. non-theoretical- and expedient – i.e. adapted to the exigencies and urgent pressures of action. (Kindle Location 186).

Hayek’s point was that there is no mathematical model to access the individual actor’s knowledge in a given situation, and that was Bourdieu’s point too. For example, Bourdieu, harkening back to Weber, wrote about “agents taking account of the actions and reactions of the competitors ... [being] equipped with information about their competitors” (Kindle Location 3866) while for Hayek, such information was absolutely incalculable in a price system directed by a central planner, even though it could be reflected in a price system operating in a decentralized market. What separates Hayek and Bourdieu here is really a notion of priority, namely that for the former, social interactions might inform economic decisions (while neoliberalism will eventually make all of the former into the latter) and for Bourdieu, economic decisions remain embedded in social relations and networks (Kindle Location 3678). Thus, an actor’s knowledge of

the field in which he or she interacts represents a tacit knowledge to Bourdieu, while for Hayek that which is tacit is made explicit through the price system. Dunne and Pendlebury (2003) noted that the modern epistemology that empowered scientific knowledge (of the central planner, for instance) suppressed “the context-dependence of first person experience in favor of a third-person perspective which yields generalized findings in accordance with clearly formulated publicly agreed procedures” (p. 195).

This practical reason appears to be at odds with Hayek’s individual (or firm) accessing the price system although it could be that the tension really exists between that individual’s habitus and a reliance on the calculation of the price system, which is Bourdieu’s point. Nonetheless, the price system is simply a means to display the collective practical knowledge and action of the individuals that make up a given market. That practical knowledge, for Hayek, is context driven however. A tacit knowledge grows out of experience making decisions in a given context (or field for Bourdieu). This is distinct from a broader wisdom (see Dunne and Pendlebury, 2003) which includes a moral dimension and is even distinct from the habitus of Bourdieu which, for all its nebulousness, is informed by experiences beyond those in a given field. Hayek’s perspective does not preclude a “nomological” knowledge playing a role in a market government. Rather, such knowledge was practically constructed by the participants in the market. Much of this nuance has been lost in subsequent policy developments or critical characterizations of neoliberalism. A focus on mathematics or a technical rationality, one could argue, perverted Hayek’s

earliest economic ideas, sacrificed as they were for the sake of achieving neoliberal ends –creating markets- while ignoring the epistemology rationalizing a market in the first place. My argument does not romanticize or idealize Hayek’s notions, but admits that his considerations of where knowledge was constructed was not inherently hostile or alien to subsequently more socially oriented epistemologies. Instead, this argument suggests how neoliberal technologies have more to do with a technical rationality that bypass what Dunne and Pendlebury (2003) characterize as “judgement,” where the individual’s experience informs an understanding between the particular and the general, between norms and procedures, between means and ends (p. 198). These authors ascribe judgement as the opposite of technical rationality or scientific knowledge, and include in the latter “positivist philosophy, aspirations to social control and pursuit of economic interests” (p. 196). However, Hayek’s own epistemology invited tension because it relied on the immediate first-person experience of the individual but constricted that knowledge to an economic field dependent on particular means for constructing knowledge in that field. A tension existed and exists, then, due to the relationship between the means and the ends for Hayek, between the type of knowledge he asserted as prizeworthy and the means for acquiring it, a tension that Dunne and Pendlebury characterize as a strange inversion where “a combination of efficiency and economy becomes, in itself, the single overarching end” (p. 197). For me, this has more to do with how neoliberalism becomes an ideology through its reliance on

government technologies steeped in technical rationality at odds with its epistemological roots.

Specifically, for Hayek, a central planner was never going to be able to possess all of the necessary knowledge “of the particular circumstances of time and place” which could then be deployed in a mathematics for the purpose of setting prices appropriately or directing producers appropriately. Because of this conclusion, his second emphasis was that “the true function of the price mechanism” in a decentralized market is that it most efficiently communicates, by proxy, the information producers’ need to determine how much of a given item to produce, and it is the technical means of the price system that suggests an unexamined tension in Hayek. Hayek (1945) wrote that the price system is:

...a kind of machinery for registering change, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers, as an engineer might watch the hands of a few dials, in order to adjust their activities to changes which they may never know more than is reflected in the price movement. (p.527)

Here, a “price mechanism” is, quite literally, a government technology, something indicating to actors how to behave and guiding that subsequent behavior. It is worthwhile here to remember why I rely on “government” instead of “governance” (see Chapter 1, pp. 10-11). While “governance” rightly can be used to describe the processes –including people, processes, policies, and laws- that govern people’s conduct, “government” invokes how a technology deployed by the state or other actor retains its institutional power, a power in neoliberal thinking, in which the state still has a role potentially. Even the “government of self” implicates the state, among other actors besides the individual. Also useful to

consider are all the different material technologies promulgated to communicate prices of a given item in a market today. A governmentality approach examines the myriad ways each and all of these technologies (from SKU bar code technologies, to price advertisements, to “discount” campaigns, the ways price is both revealed and hidden) work separately and together to change behavior. Knorr-Cetina and Bruegger (2002) and Knorr-Cetina (2003) do much the same when looking at the “terminals” used by currency traders and how that technology intersects with microsocial interactions to change traders’ behaviors. Rather than a centrally deployed mathematical model for determining the proper levels of supply, demand, and price, Hayek asserted that the market system – a system of multiple producers and consumers with the attendant “telecommunications” of the price system - was the most efficient way actors governed themselves (instead of a centrally planned system governing the actors). Prices were not the result of the market system; the price system was a technology that made the modern market possible. Thus, as the price system is just one aspect of it, the market is a complex of technologies that govern behavior. Even more so than the passage just cited, Hayek then produced a description that I suggest poses the “price system” as the answer to the question of neoliberal government itself, namely, how to construct choice in a way that individualizes and totalizes government.

The problem is precisely how to extend the span of our utilization of resources beyond the span of the control of any one mind; and, therefore, how to dispense with the need of conscious control and how to provide inducements which will make the individuals do the

desirable things without anyone having to tell them what to do. (p. 527)

This movement –from the need for conscious control to providing inducement– could describe the movement from the police state of earlier centuries described by Foucault to the governmentalized state and attendant technologies of the second half of the twentieth century which Foucault described in his lectures of the late 1970's and early 1980s ((Foucault, 2008); (Gordon, 1991, pp. 26, 36); (Rose, 1999, Kindle Location 726)). Pointedly, the market mechanism and its attendant technologies related to knowledge and choice “extend[s] the span of our utilization of resources.” The attendant technologies, to be explored more in the context of the economic government of education, govern what can be known, by whom, and how, and are inseparable from the functioning of markets themselves. The price system represents the crudest technology for imparting knowledge necessary for the functioning of a market. Subsequently, more complex and nuanced ideas, particularly that of “utility” and “marginal utility,” “value” and “relative value” make more challenging the idea of knowledge and its relationship to markets, and not the least so when considering education markets (Foucault, 1991; Gordon, 1991, p. 26, p. 36; Rose, 1996, Kindle Location 794). For Bourdieu, the price system is tyrannical and misconstrued, and that “It is not prices the determine everything, but everything that determines prices” (Kindle Location 3660). It is not clear that Hayek would disagree since he would acknowledge that an actor's circumstantial information plays a role in an understanding of price, the decision-making about conducting an exchange and, therefore, in the subsequent price of an item in a market. As I will attempt to



unpack later in this chapter and in subsequent chapters, disentangling the issues of price, knowledge, and choice -or failing to do so- is essential to understanding the construction of such markets in education.

It is not wrong to note here the intersection between Hayek's epistemology and the meaning of liberalism itself, the intersection that is at the heart of Hayek's description of how a market functions most effectively. As Rose (1996) noted, neoliberal government exhibits four distinct features. The first two are important here: One, there is a new relation between government and knowledge, namely that greater knowledge is required for self-government, and that knowledge then makes government possible and better. Two, and a necessary corollary to the first, is that individuals are invested with a certain degree of self-government (Rose, 1996, pp. 44-7). Only the premise that knowledge makes government more effectual underpins the socialist market approached espoused by the likes of Oskar Lange. But Hayek's emphasis on a decentralized and dispersed -but ultimately collective- knowledge, organized in the form of the market itself, requires both of Rose's features I've emphasized. Nevertheless, Hayek's description of how markets operate most efficiently, really a neoclassical rehash, became dominant from the 1950s to today in the West, although I agree with Peck (2010) that there was no "foundational eureka moment" (Kindle Location 104). Rather, there is a "historical geography" that can be traced that is more about the individual actors attempting to find opportunities to deploy technologies in the troubled space between "state/economy" relations (Peck, 2010). That the "state" and "socialism" became proxies for the mathematical

central planning of a market, and that the former became politically demonized due to Cold War politics and the growth or proliferation of privately funded “think-tanks” such as The American Enterprise Institute, The Heritage Foundation and The Cato Institute reinforces the truth that Bockman points out in her book or that Hayek even notes himself in a 1945 essay when he writes that “The remaining dissent seems clearly to be due to purely intellectual, and more particularly methodological, differences” (1945, p.529). In other words, the framing of the difference in common political discourse today between socialism and free-market capitalism is exactly that, a result of politics and political ideology and not very much due to initial differences in the understanding of markets or their importance for governing behavior. Of course, that Hayek’s closest acolytes contributed to the widening of that schism is what so troubles those who, as Peck (2010) notes, too often blindly invoke neoliberalism and treat its history as a progression and its narrative as monovocal. This demonization is no better nor useful for speculating upon and possibly shaping the future than is a romanticization of Friedrich van Hayek and his intellectual relatives.

Hayek’s emphasis on the decentralized nature of knowledge in the efficient operating of a market is important to understanding two other aspects of markets and 20<sup>th</sup> Century economics relevant to this chapter. Foremost, Hayek’s groundwork in establishing decentralized and dispersed knowledge as essential to efficiently operating markets represented an enormous redirection of economic thinking toward microeconomics and directly influenced the work of intellectual relatives, such as Theodore Schultz, Gary Becker, and Milton Friedman.

Because the mathematics required of a centrally planned market was marginalized as a theoretical path in the West, the mathematics of individual choice came to the fore. Literally, an entire mathematics and statistics of choice were developed to describe individual behavior in markets. Becker and Friedman were not solely focused on microeconomics, but they did, respectively, focus on two reinforcing aspects that emerged from Hayek's work, knowledge and choice. Namely, knowledge did a consumer (individual, firm, etc.) no good whatsoever, if there were not an adequate number of choices, which should be made possible by a competitive decentralized market. Additionally, the role of knowledge itself, which could no longer be centralized, was elevated since every actor made a choice based on the knowledge he or she possessed; each choice represented that knowledge itself. Likewise, knowing the price of things (goods or labor) –and their relative value- was important because those signaled what behavior an actor should undertake. Hayek (1945) wrote that the price system fulfilled its function of communication “less perfectly as prices grow more rigid” (p. 526). Prices would grow more rigid as there were fewer choices, fewer producers of those choices. Conversely, the more brands of a good that were available meant more information a consumer could potentially possess upon which he or she could base a decision. More choice meant more knowledge a consumer could acquire, which meant it was more likely that the price system would be operating properly as it could communicate more to a consumer about the relative scarcity (and therefore value) of a good. Hayek, by emphasizing the imperfect quality of his own epistemology, brought to the fore the knowledge an

individual must possess and the importance of individual choice.<sup>2</sup> These implications are consistent with a neoliberal circularity that can be gleaned from the features of neoliberalism identified by Rose, mentioned above. Namely, (from a neoliberal perspective) well-functioning markets, as technological complexes of government, presuppose both the knowledge of the individual and the freedom of the individual to make choices. However, that knowledge can only exist in the context of having choices to make, i.e. that knowledge is operationalized when it is “knowing” the difference between two things, e.g. goods to consume, investments to make, etc. As mentioned before, the “knowledge” in question for Hayek was the individual’s knowledge informed best by his or her own experience (and all that makes up) as that is activated by the price of a good and whatever else he or she knows regarding that potential exchange. Even when examining the decision-making of a firm, or an institution, which might have a collective specialized knowledge (think of a Bank engaging in a complex financial transaction), “knowledge” is not only “theoretical” or “technical,” per se. Rather, the tacit and practical knowledge of a given actor, however defined, is always in play, so to speak, and is itself relative and contextual.

As inheritors of Hayek’s and a specific neoliberal heritage, Theodore Schultz, Gary Becker, and Milton Friedman were three economists whose work played important roles in shaping the understanding of markets, knowledge, and

---

<sup>2</sup> For an in-depth and more strictly philosophical tracing of Hayek’s thinking, see Andrew Gamble’s (2006) “Hayek on knowledge, economics, and society” in *The Cambridge Companion to Hayek*.

choice in the latter half of the twentieth century and, subsequently, thinking about education markets over the last twenty-five years. “Human capital” in its simplest terms, asserts that a person’s learning which can be used to improve labor productivity and the economic returns from such increased productivity represent a form of investment as does physical capital, like a piece of equipment.

Friedman, Mincer, Becker and Schultz all had been including notions of human capital in their work throughout the 50s, but Schultz and Becker are the two most associated with developing the notion that “skills and knowledge are a form of capital” (Schultz, 1961, p. 1). Less known, while no less important is Becker’s work on consumer behavior, which is related to both human capital and the pivot Hayek represents from centralized “scientific” knowledge expressed mathematically to decentralized, individual, and “contingent” knowledge, or information. First, if one accepts Hayek’s proposition that no centralized knowledge, expressed mathematically or not, can know everything necessary to efficiently direct a market, then the individual -dispersed and decentralized- becomes the unit of analysis for describing economic decisions; these individual decisions collectively form a market. What happens then, in Becker’s theory of consumer behavior, is that the mathematics practiced by the centralized planners of Socialism a generation earlier is now practiced in attempting to describe individual (or household) behavior in a market (Becker & Michael, 1973; Becker, 1973). Specifically, Becker attempted to express a household’s consumption of a good, its demand for that good, like a firm “for any factor of production” (1973, p. 381). But the demand for a good by a household is the expression of many

different factors, which contribute to the concept of utility, which Becker expressed mathematically:

The production model not only emphasizes that the household is the appropriate basic unit of analysis in consumption theory, it also brings out the interdependence of several household decisions: decisions about family labor supply and time and goods expenditures in a single time-period analysis, and decisions about marriage, family size, labor force attachment and expenditures on goods and human capital investments... (1973, p. 388)

Without reproducing them here, Becker proffered involved statistical functions to describe this household behavior. Becker did not engage in the exact mathematical approach to individual economic decision-making that Hayek decried in centralized economic decision making; socialists did so in *planning* market activity based upon such mathematics. Rather, Becker asserted that the economist could describe the behavior of the individual like one could describe the behavior of a firm, in mathematical terms.<sup>3</sup> Even as he transformed a model for describing production into a model for describing consumption, he blurred the distinctions between the two while emphasizing the mathematical calculation at work, supposedly in the mind of the given economic actor. Here, then, a household had a constellation of factors it must consider when deciding to purchase a good, including decisions about other goods purchased or investments made. Thus, as the passage cited immediately above makes clear, investing in human capital is just one such decision.

---

<sup>3</sup> Here it could be useful to note that the long standing criticism by the political left that corporations should not be given the same legal status as individual people is related to the parallel work by behavior economists like Becker that treat people like business firms.

Becker's and Schultz's works on human capital are closely associated, and Schultz (1961) wrote that "much of what we call consumption constitutes investment in human capital. Direct expenditures on education, health ... are clear examples" (p.1). What had been considered a choice about consumption, then, really was a choice about investment. Again, just as Becker had treated household consumption like a firm's production, now the individual consuming the "good" of education was more akin to a firm investing in capital. Fifty years after Schultz' address to the American Economic Association, Becker had reified again and again the ideas that "Education, training, and health are the most important investments in human capital" (Becker, 2008). Additionally, Becker (1994), extended to the concept of human capital work that had been done in economics on physical capital. He focused on the "rate" that an investment in human capital, e.g. education, would return the person making the investment, just as a firm would determine such a rate if it had invested in say, a piece of equipment. As Julia Resnick points out (2006), in the intervening years, beginning in the early 60's, human capital theory and the relation between education and economic development, had become nothing less than a "black box" accepted by various stakeholders as *doxa*, including the United Nations family of development institutions. My point here is not to question what exactly is inside the "black box" or, like Resnick, to trace its development as such.<sup>4</sup>

---

<sup>4</sup> Resnick spends most of her time simply historicizing the adoption of the economics-education (including Human Capital Theory) nexus by international development organizations, including UNESCO and OECD. Because she focuses on the 50s and 60s, she does not address the World Bank's adoption of this approach even though the Bank did at the time use a manpower approach aligned with this thinking.

However, it should be noted that Mincer (1958) and Becker (1994) deployed mathematics for the economist to determine what that rate of return on human capital investment might be, but the individual engaged in no such precise calculation. Becker's approach imposes upon the individual a kind of knowledge it is not clear individuals possess, which is ironic because it seems to commit the error that Hayek complained socialists were making on a macroeconomic scale; namely, that an individual can now commit to a sophisticated knowledge, here in the form of complex statistics. Bourdieu's criticism of Becker, in this regard, echoes Gordon's passage about "market models of action" (cited above), when Bourdieu (2005) writes that:

*Homo economicus*, as conceived (tacitly or explicitly) by economic orthodoxy is a kind of anthropological monster: this theoretically minded man of practice is the most extreme personification of the scholastic fallacy ... by which the scholar puts into the heads of the agents he is studying ... the theoretical considerations and constructions he has had to develop in order to account for their practice. (Kindle Location 3495)

While Becker's epistemological assertion is problematic, it nonetheless plays a key role in the economic government of education. Specifically, not only the knowledge a person gains through their investment, education, but the kind of circumstantial knowledge a person deploys (such as Hayek emphasized) to make a choice about what human capital investment to make or not, plays a role in the market of educational services, for that investment is also a form of consumption in a market providing such investments, e.g. vocational training,



college, on-the-job training, etc.<sup>5</sup> And while Becker (1994) did develop human capital theory explicitly in terms of education, years earlier Milton Friedman asserted the relationship existed between economics, education, and choice in terms of human capital.

Friedman's most visible public legacy will be due to his political advocacy for free markets, especially related to school choice, embodied first in his 1955 work "The Role of Government in Education." This advocacy was not merely a matter of policy, but was consistent with Hayek and then Becker and others for its emphasis on the individual actor's knowledge (not described mathematically here) and the application of that knowledge in the form of choice, here as a consumer of education, which even Friedman identified as a form of human capital with a rate of return (1955, p.22). While Friedman (1955) invoked "competitive private enterprise" as the more efficient means of meeting consumer demands (p. 24) in education, this is exactly how Hayek described the decentralized system of individual actors making choices on the basis of their own circumstantial knowledge. Friedman's criticism of the government's role in schooling does not employ the same language as did Hayek's criticism of a centralized knowledge and planning of an economy, but Friedman's point is the same: The state, as central planner, cannot allocate educational resources as efficiently as could a market government. And Friedman's most substantial

---

<sup>5</sup> For an imaginative and frustrating rebuke of the current economics of education, see Alexander Sidorkin's (2009) *Labor of Learning: Market and the Next Generation of Educational Reform*. Regarding Human Capital Theory and education, see particularly Chapter 12 in Sidorkin's book, where he casts education as a form of unpaid and captive labor rather than a capital investment.

contribution was another technology, or mechanism, by which choice in an educational market might be more available, the voucher.

I have at this point made clear how Hayek rejected the possibility of a centrally planned approach to facilitating market exchanges in favor of a competitive decentralized market perspective. Peck and others trace the genealogy of neoliberal policy construction and the hardening ideology that resulted; my emphasis has been to focus on the neoclassical economic underpinnings of neoliberalism so that subsequent policies to be explored can be understood as technologies activating a discrete epistemology. I am not ignoring the specific historical terrain traversed by neoliberal thinkers because I do not consider that important or because I think this epistemology developed without historical context. Hayek was a neoclassical economist whose experience witnessing German interwar politics and the rise of the Nazis had a profound impact on his thinking. That experience caused him to emphasize just what I have highlighted here. That it did so to a degree that –it could be argued– distorted his application of his own epistemology when promoting policy prescriptions is something better addressed by others or in future works. I seek to place these premises regarding knowledge and choice in the context of the World Bank's education policy in order to historicize their significance. Nonetheless, the construction of individual actors' (whether people or firms or institutions) knowledge, and choice, is directly traceable to Hayek's thinking in the 20<sup>th</sup> Century and the myriad technologies developed to activate them.

For the earlier economic thinkers in neoliberalism, the individual would need to access knowledge in order to make the most satisfactory decisions based on their own needs. This knowledge was necessary in a healthy market characterized by adequate choice which in turn allowed the price system to function properly, displaying the value for goods relative to their scarcity or abundance. In this sense education as a tool towards greater knowledge accumulation began to be seen not as a consumer commodity but instead as a human capital investment. I will now seek to briefly review the idea of markets as intersecting constructions of knowledge and choice in light of an economic sociology exclusive of Foucault's governmentality, exploring blindspots in neoliberalism broadly and in neoliberal education policy generally.

### **Economic Sociology: Markets and choice**

Foucault's approach delineates some conceptual structures and the technologies governing the interactions of heterogeneous actors. Slater and Tonkiss (2001) write that Foucault's governmentality "refer[s] in an extended way to the range of practices that seek to regulate individual and collective conduct" (Kindle Location, 2807). While I consider Foucault's work on governmentality economic sociology, most of all because Foucault admits that "the economy" is the focus of his work, not many other readers frame him in this manner. Admittedly, a more explicit economic sociology considers the specifics of what makes up this "range of practices" that Foucault refers to as making up economic government (a term he borrows) and what particular actors bring to those interactions that ultimately regulate conduct. Over the past three decades there

has been a significant increase in the sociological treatment of the marketplace and the economy as a social process and phenomenon (Montanari, p. 1), although the development of economic sociology and the sociology of markets over the last century has been uneven (Smelser and Swedburg, 2005, Kindle Location 319). While the starting point of neoliberal economics in particular has been the individual, “the analytic starting points of economic sociology are typically groups, institutions, and society” (Smelser and Swedburg, 2005, Kindle Location 220). Of particular interest when speculating on the future of education markets will be how an economic sociology addresses blind-spots in the economic government of education, specifically how the latter constructs knowledge and choice. For instance, Smelser and Swedburg (2005) point out that in traditional economic discourse “The active influence of other persons and groups, as well as the influence of institutional structures, is set to one side” (Kindle Location 263), and it is exactly these active influences which must be reconsidered.

As noted regarding market socialism and Becker’s human capital economics, much modern economic discourse focused upon the “mathematical proof of efficiency postulates”, and economic sociologists would assert that as a consequence, instead of providing a theory of the market, economic discourse provided a hypothetical “theory of exchange” (Beckert, 2009, p. 246). Even within the social sciences, more focus has been given to institutional preconditions necessary for the development of the marketplace and later to areas of production and labor exploitation as Marxist approaches became more influential

(Beckert, 2009, p.246). Since the 1970's and 1980's however, a sociology of markets has become a sphere of influential study in itself. Beckert defines the marketplace as a locus of *social* interaction. Markets are not simply brought about by the act of exchanging goods but instead are:

Characterized by competition, which means that the existence of a market presupposes at least three actors: one on one side of the market confronting at least two other actors on the other side whose offers can be compared. A market may be said to exist wherever there is competition, even if only unilateral, for opportunities of exchange among a plurality of potential parties. (p. 248)

Whereas competition is necessary but not emphasized in any sociologically recognizable terms by neoliberal economists, Beckert asserts that competition is what characterizes the social nature of market interactions. With neoliberal approaches increasingly constructing markets and proto-markets for education and schooling and concomitant the withdrawal of the state as the locus for the government of individuals and populations, understanding all actors within Beckert's "plurality of potential parties" in the exchange process is important, including how each constructs an understanding of the exchange. A theory of economic government does not take into account an understanding of all such actors except to treat them as individuals subjected to the identical calculations that govern a market exchange. Neoliberalism's failure to address issues of power is also a failure of Foucault's critique of neoliberalism, although it could be argued that Foucault's approach highlights how power is individualized and totalized simultaneously. In this dissertation I am proposing that an economic sociology will aid a re-examination of an economic government of education on a local and global scale and re-constitute (at least) social relations in such a

government so that their proper understanding is an integral part of my speculation on the future of global education markets and policy sharing.

Fligstein and Dauter (2007) differentiate a sociology of markets from economic sociology in general by stating that the former deals narrowly with the process of market exchange and its structural nature rather than the broader conditions of production and reproduction of social life (p. 106). Additionally, there is a substantial body of work specifically on the generation of value and pricing, a type of construction of knowledge that often involves “incommensurable forms” of input beyond purely market factors (McKenzie, 2011, p. 1782). Of particular note for this examination are the social constructions of knowledge about value. Viviana Zelizer (1979) in the influential *Morals and Markets: The Development of Life Insurance in the United States* argued that to understand the growth in the buying of life insurance that “non-economic aspects of economic behaviors” would have to be employed, namely exploring value systems in relation to death and the aversion to treating life as a financial concept (p. 3). Ewalt (1991), Mackenzie (2011), and Zelizer (1979) each approached knowledge construction in the context of risk very differently, but in distinct ways their observations were consistent with Bourdieu's seminal theories on knowledge construction. Bourdieu argued that the exchange process involved more than the individuals but their society and their social practices as well; therefore it was necessary to study their social context (2005). Bourdieu's highly influential works on education and perceived and real advantage have helped to reinterpret the relationship between knowledge and society. For

example, he indicated that the success of students should not be ascribed solely to individual capacity but stated that consideration should be given to significant contributors such as the role of cultural resources (familiarity to the dominant culture), similar value systems in schools and regions, and the role of culturally-dependent examinations. When attempting to understand the individual, no major difference inherent in the individual is evident that “cannot be related to a range of systematically linked social differences and hierarchies” (1974, p. 344). In economic terms, for Bourdieu (2005), this understands actors in an economic exchange as having access to different “species of capital” and each species to which an actor has access being of a different size and scope; those differences a result of that actor’s specific experience and life-context. By this approach what should be possible is a better understanding of educational decisions taken by individuals, families and communities that cannot be comprehensively understood through an economic approach alone, i.e. understanding their perceptions of what constitutes greater economic valuation only. Hayek’s initial epistemology did not preclude such considerations, but neoliberalism’s resulting policies and practices over the subsequent seventy years did not demonstrably take into account such considerations while ardent neoliberals would assert that market mechanisms such as the price system have such information embedded in their operations. For Bourdieu this is an inversion that de-prioritizes the factors that contribute to the social construction of systems that make up prices and demand while tyrannizing price and the calculation necessary to engage the price system in decision making. This will be important when approaching the

financing of education on a global scale and the actors involved are World Bank directors, national ministers of education, leaders of international NGOs and the like. Determining how an education policy and practice is valued is directly related to what perspective informs that valuation.

While the utility and vibrancy of the field is evident, some caution that the sociology of markets has produced lineages of thought and perspectives that remain separate from each other at the theoretical level. Fligstein and Dauter (2007) admit sociologists have at times “focused on a particular social aspect of markets and acted as if it was a more general understanding” and this has led to the production of less than comprehensive theoretical foundations (p. 122). Nevertheless, by accepting markets as a social phenomenon it can be argued that therefore the systematic study of the structure and process of markets as a sociological process is a prerequisite to the understanding of the nature of neoliberal policy interventions in education. However, I think a better approach will be to explore how each technology that contributes to choice and knowledge in the market mechanism includes social components, e.g. socially constructed non-economic knowledge, which intersect with economic knowledge to inform actors’ decisions. The social components are really a matter of the technologies that enable actors to co-construct non-economic and economic knowledge. In Chapter 4 and Chapter 5, I will examine how the World Bank deploys technologies to construct knowledge and choice in discrete ways that form a nascent market for financing education globally. Here, including in my additional



speculations on the future of education markets, the role for an economic sociology will become apparent and important.

I have briefly looked at some sociological perspectives on economic relations, specifically around knowledge and choice and markets, as a way to ameliorate the shortcomings of Foucault's governmentality, likewise exploring blindspots of neoliberalism vis-à-vis knowledge and choice. Whether a matter of relation –the social embedded in the economic or the economic embedded in the social- or a matter of subordination of one to another, my purpose has been to lay the groundwork for exploring neoliberal education policy, its future, and the implications of the ongoing construction of education markets.

### **Neoliberal Education: Knowledge, Choice, and Markets**

Friedman (1997), in his seminal work "Public Schools: Make them Private," wrote that privatizing a large section of the education system would unleash the energy and imagination of the free market, improving education not just in the private sphere but engendering a parallel improvement in public education as well. He declared that this process cannot be held back indefinitely by vested interests. This was a culmination of a push that developed momentum in the 1970's which called for a transfer of school governance from the public to the private sphere and for the market to enter the field (Levin and Belfield, 2003 pp. 183-184). Such "radical" alternatives for educational choice have been embodied by two endeavors in particular in the U.S. and elsewhere, charter schools and vouchers (Levin, 1999, p. 128). This establishment of alternative opportunities in education has necessitated an understanding of how knowledge

and choice are constructed, accessed, and implemented on individual and collective bases. These policy developments will serve as two examples through which I can plainly illustrate neoliberal technologies of choice and knowledge, technologies which intersect to form markets for education, schooling specifically. Likewise, I will apply the sociological perspective developed so far in order to see where these technologies fail in economic terms and social terms. Finally, these examples are illustrative of knowledge and choice technologies deployed by World Bank policies.

No set of choices is infinite, in a market or otherwise, and choices about which school to attend are constrained to varying degrees for a number of reasons. And while exclusive public provision of education has been demonized by political conservatives, such a criticism is epistemologically consistent, as the neoliberal perspective asserts that the knowledge necessary to most effectively deploy educational resources can be neither possessed by a single centralized knowledge nor deployed by a single agent. Such action is more efficiently coordinated through the action of dispersed and decentralized actors. With the current relatively exclusive public provision of education in the U.S., limited choices mean the role knowledge plays is likewise constricted in economic terms. However, the knowledge a family has about the value of an education is limited for other reasons. Neoliberal governmentality is largely a matter of developing and deploying technologies that build the capacity for knowledge and choice into a market. Certainly, technologies such as privatization of services or decentralization of decision-making are examples recognizable at a structural

level, but developing the knowledge necessary for families to make choices akin to those they make in a traditional economic market has been more challenging. The foremost reason for such a difficulty is that, unlike a physical product about which the knowledge of its value is immediate and tangible, knowledge about the value of a specific educational experience is not immediately accessible and not tangible. More importantly, while a conceptual understanding of the value of an education can be clearly perceived, then recognizing the value of a specific educational experience compared to other such available experiences is more problematic. But there are many educational markets, so to speak, and some of them have flourished because of the uncomplicated character of the means by which knowledge about the value of goods is communicated.

A perfect example of a “robust” educational market is that for school support services –custodial, food, transportation- which has been growing for more than a decade in the United States and United Kingdom, and in 2012 was an industry totaling tens of billions of dollars. Large corporations such as Sodexo and Aramark compete for contracts to feed students or clean hallways and classrooms. Sodexo, a global conglomerate for “Quality of Life Services” had 38% of its business in the United States and earned more than \$30BN in revenue in 2013 globally (Sodexo, 2014). Despite the fact that these services revolve around student health and safety, the knowledge communicated through the price system *alone* is sufficient for this market to function. Other non-price indicators communicate *enough* to the schools contracting these services, such

that price becomes the only indicator upon which a decision is made.<sup>6</sup>

Furthermore, in the United States, most public school districts that award such contracts, are required to accept the lowest bidder. Thus, the State has enacted law to conform to an explicitly economic form of government (see Foucault, 1991, p. 95). This same law affects a number of other education markets, which also function robustly, those being areas such as school construction, transportation and, in many cases, engineering services.

Another active education market, one that is increasingly global, is higher education, and a neoliberal approach would ascribe this to knowledge and choice, although predominantly through choice at first. As early as 1974, Leslie and Johnson recognized that by funding students directly (through grants and loans), the state was supporting what was an increasingly explicit market model for higher education in the United States (p.2). However, the price system's role is less clear in terms of the knowledge it provides in the higher education market, because while price indicates (or is a proxy for) value to the consumer or investor, the relative value (e.g. the value of a Harvard degree compared to the value of a University of Illinois degree) is not clear, largely due to there being too many variables for precise inclusion by an economic approach, e.g. subject major, family background, current economic status, etc. or a lack of consistency about how variables are assigned value. Tertiary schools do attempt to establish the relative value of their respective degrees. Hoxby ((1997) cited in Dill (2003))

---

<sup>6</sup> This does not mean schools will fail to terminate a contract due to non-economic factors, but price is by far the dominant factor when school districts are in the market for a new services contract.

noted the rise of publishing admissions test scores of entrants as one means by which universities communicate the value offered; namely, the average admissions test score serves as proxy for the academic quality of the student body and educational experience offered. Of course, this is not communicating the value of the education itself since these scores are not the product of the university education; they pre-date students' university experiences. Published ratings and rankings based on criteria and methodologies established by publishers is the most recognizable formal method for communicating the value of a tertiary education in the United States and, increasingly, abroad. For example, the publication *U.S. News and World Report* annually ranks colleges and universities both in the U.S. and internationally. In 2014, the rankings included numerous factors, with the test scores of admitted students accounting for 65% of a school's rank (Flanigan & Morse, 2014). Likewise, British and Indian publications, along with public entities, publish "league tables" for the same purpose. Here, rank serves as a proxy for the relative value of the education experience offered; *U.S. News and World Report* does publish a separate ranking strictly on its own value criteria, indexing academic performance-related outputs and inputs with the financial cost of attending a given institution (Morse, 2014). Yet, while this publication's ratings and rankings garner considerable public attention in the U.S., and there exists economic research on the return-on-investment (ROI) at a macro-level, e.g. the ROI of tertiary education compared to less than tertiary education, little or no rigorous academic research exists identifying the comparable ROI of attendance at

different four-year universities. Additionally, no research exists identifying what percentage of prospective tertiary students access such information and establish any knowledge based upon it for the purpose of applying to colleges or universities. Nevertheless, for each actor –standardized testing company, university, publisher– intersecting technologies deployed for discrete purposes result in a complex that governs families' decisions about higher education. Each intersecting technology on its own likewise results in the government of decisions by the aforementioned actors about a host of things, e.g. admissions, instruction, purchasing, each with its own governing apparatus. Any accounting by these technologies for social interactions or relationships surrounding or intersecting with them is strictly a matter of an autonomous effect or at least policy making outside any economic rationalization. While a governmentality approach accounts for the intersubjectivities constructed as a result of interacting with the complex made up by the assembled technologies, Bourdieu's approach reminds that dispositions toward education decisions are influenced by factors prior to an actor entering this respective field. Therefore, the technologies deployed to communicate value are necessarily inclusive of or exclusive to the potential audience and their effectiveness, for Bourdieu, is due to the social and cultural capital accrued by the actors in said audience. This is perhaps a long way of getting to a reminder that not everyone intersects said technologies of knowledge and choice with the same tacit knowledge or species of capital available.

The most common technologies deployed to communicate knowledge about the absolute and relative value (so to speak) of elementary and secondary schools' offerings are standardized assessment and accountability technologies, remembering that these are not just about test scores or reporting. Rankings like those of universities by publications such as *U.S. News and World Report* also exist for secondary schools in the U.S as do "league tables" in many countries. In the U.S., around and in addition to the actual test scores are discursive frameworks that communicate whether or not students are "Exceeding" standards or "Failing" to meet standards, whether or not schools are doing the same. Likewise, whole reporting systems, both internal and, most importantly, external, communicate statuses around test scores in terms that appear statistically oriented (percentages) and in comparison to other schools or the average of all schools in a given state, and so forth. The assessment and accountability technologies intersect when the test scores are used to determine funding and or resource levels provided for schools. Interestingly, in the United States at least, the accountability systems include the reporting of non-performance data such as demographics, with student performance on assessments disaggregated by demographic markers. Ostensibly, this reporting is meant to address performance equity, a benchmark by which schools, school districts, and states in the U.S. are measured for the purposes of determining funding and support under the federal education law, *No Child Left Behind*. Yet, as I note shortly, this reporting could be communicating information that results in

decision-making by families with morally or ethically perverse effects when school choice is available.

In economic terms, however, these communication systems produce proxies for value, premised on the underlying human capital notion that more schooling leads to better returns for the individual student, e.g. lifetime earnings (Eide & Showalter, 2010, p. 28). Despite the publication of rankings, no rigorous research exists that examines financial returns at the school level, i.e. greater returns for a student if he or she attended a particular elementary or secondary school. All of the research is at the state or national level (Gunderson & Oreopoulos, 2010; Patrinos & Psacharopoulos, 2010; Poteliene & Tamasauskiene, 2013). Test scores, then, and the differences between them across schools, communicate value by proxy, adhering to the assumption that if a secondary school produces a greater return than, say, elementary school, the “better” secondary school must produce a “better” return than a “lesser” secondary school. This assumption underpins the entire technological deployment (testing, rank, publication, etc.) despite the fact that test scores demonstrate a weak correlation to factors such as employment and lifetime earnings (Betts, 2010). Certainly there is scant empirical evidence about how or **that** families **seek** such knowledge in making a decision about which secondary institution to attend.<sup>7</sup> That a family does not seek such knowledge does not

---

<sup>7</sup> Other countries across the globe deploy standardized testing and publish those results. To the degree countries deploy choice technologies, then this form of constructed knowledge about schools plays a role in an educational market in those countries.



mean it does not seek other types of information through different means which represent the same knowledge, but those are not conveyed through government technologies consistent with knowledge about economic value. Such possibilities are addressed more in a subsequent section.

The deployment of standardized assessment and accountability technologies to communicate with students/families about the value and relative value of elementary and secondary schooling experiences nominally begins with the state, although there is a history of standardized assessment in the U.S. which includes non-state actors. The inclusion of private actors in the development and deployment of technologies such as standardized assessment, and publishing of rankings of schools, has blurred public-private distinctions in a way consistent with the underlying epistemology of dispersal and decentralization. But recently the question has started to arise regarding whether or not the locus for these technologies has simply been re-centralized, now in the hands of private corporate actors instead of the state. Nonetheless, decision-making about how the information is organized and represented and shared is not uniformly centralized or at least not vertically, thus engagement with the technologies, reporting scores, publishing scores, administering tests, the discursive approaches to students taking tests, and so forth, are engaged by multiple actors from multiple perspectives, each with a different purpose for engagement. In this way, a technology is deployed which begins with the individual but governs entire populations (Foucault, 1991). Together these technologies communicate the value of a school's educational provision. But

knowledge of that value only provides the opportunity for engagement with an educational market if choice also exists.

The assessment and accountability technologies discussed above are deployed differentially at national and supra-national scales; the most prominent global intersections of these technologies are the *Organization for Economic Cooperation and Development's* (OECD) institution of the *Programme for International Student Assessment* (PISA) and concomitant publications. For example, the latest PISA results which OECD has published are for 2012, but no single publication captures PISA (OECD, 2014). Rather, OECD disseminates a series of publications that frame and reframe PISA results, always steeped in terms of human capital theory that identifies the ROI of respective educational levels. Here, unlike the publication of assessment data and related rankings of individual colleges or schools, PISA rankings implicitly rely on nationally-scaled research conclusions that economic advantages accrue to individuals with a secondary or tertiary education (OECD, 2014, p.2; OECD, 2013, *passim*). Additionally, “benchmarking,” the comparison of countries’ aggregate scores on PISA, is couched in terms of a tool for national policy makers (OECD, 2014), but the ranking serves to establish relative economic value. In fact, because the intersection of economic value and educational knowledge has already been acknowledged by OECD, PISA is little more than a “league table,” which establishes a system for establishing the ROI for a national education system, and by extension, a proxy for the relative economic value of a country’s educational system. As will be demonstrated, this will be significant when

examining the World Bank's SABER program (Systems Approach for Better Education Results) in Chapters 4 and 5. Robertson (2005) describes the OECD's approach as one that is "concerned with human capital formation" and "competitive comparison" but "rejects the market model" (p. 151) she ascribes to the Bank. Also, examining such assessment and accountability technologies engaged by OECD or the World Bank and other institutional actors requires a different nuance than does examining such technologies when applied to the scale of an individual family choosing where their child should attend school. The issues of tacit knowledge, technical rationality, and access to species of capital all look different when the actors' own respective capital (type and scope) is so different, more robust than an individual. In such cases, now, not only does a policy maker or decision maker at a major institution access a (relatively) microsocially constructed knowledge, one informed by life-experience and amounting to cultural capital, that actor also accesses vastly greater qualities of cultural capital formed vis-à-vis that institution's culture, or intellectual capital generated by that institution, and so on.

Likewise, just as related media take up the results and publish PISA, the *Teaching and Learning International Survey* (TALIS) results and other myriad data, whole intersecting technologies play a role in communicating such value across multiple scales. Whereas with higher education ratings, the value communicated is to a potential individual investor in a tertiary education, the OECD rankings and related communications technologies are aimed at a different scale, from private businesses considering where to invest to national

education policy makers. A perfect example of how the latter then used the benchmarking established by OECD reporting would be the European Union countries participating in *Open Method Coordination* (OMC) (Dale, 2004; Drachenberg, 2011). OMC and OECD's reporting are different government technologies on supra-national scales; the intersection of the two contribute to the establishment of the knowledge necessary to create a single market for education services in Europe, something still outside the scope of the European Union's mandate. A purist might argue that the relative value captured and communicated through the technologies described –benchmarking, accountability, indexing, publishing- are actually embedded in something like the price per pupil expended to educate a student in a given local or national system. However, the neoliberal economic response is still the starting point for its entire venture; that because the state allocates some or most of the education resources in question through a centralized process, it has short-circuited an exchange of resources that would allocate them more efficiently, e.g. expended inefficiently on the resources in question, and this distorts any operation of the price system. Thus, an alternative system for communicating the value of a given schooling experience, such as described above, has been constructed to accompany an entirely alternative system to establish choice, e.g. loans in higher education (already extant), vouchers, and charter schools, etc.

And the construction of the type of knowledge outlined above, represented as quantitative data and benchmarked, is only active in the government of individuals and populations when choice exists too; the technological complexes

for choice and knowledge intersect and are really interdependent, although an accountability system could exist without choice. Returning to a local scale example, choice technologies in terms of the economic government of schooling are largely reduced to variations on privatization, vouchers, and “charter” schools, the last two demand and supply technologies, respectively. Upon expanding our perspective to look at World Bank technologies for supply, demand, knowledge, and more in Chapters 3 and 4, it is the very intersection of knowledge and choice that is crucial, but on a global scale.

Similar to the subsidization of demand that funds (through grants and loans) student attendance in higher education in the U.S. and many countries, vouchers enable funding to follow the pupil. Recalling that a neoliberal epistemology supported a dispersed knowledge held by as many actors as possible as a better way to allocate resources through exchange, voucher technology operates under the same epistemological premise, namely that as many users as possible are going to collectively more efficiently allocate educational resources – learning – than will an approach to the market underpinned by an epistemology that centralizes knowledge about how to best allocate resources. Providing the funding to the individual, subsidizing (a somewhat inaccurate term) the demand, activates the individual’s ability to use that knowledge. And in previous sections, I have briefly explained how that knowledge can be constructed by other intersecting technological complexes – standardized assessment and accountability for instance. As it is for those aforementioned mechanisms, an array of legislative actions is required to put

vouchers in place. Across developed or developing countries, legal frameworks abound that regulate student eligibility or school eligibility, selection procedures, enrolment quotas, performance criteria, and more (Gauri & Vawda, 2003), making the state complicit in market solutions. Likewise, choice technology intersects public, private, individual, and corporate actors, in developed and developing countries, so, ultimately, even as the state is required to enact the market mechanism, it is at the same time making itself another actor in the market, i.e. now families can choose a public school or a private school.

Vouchers or voucher-like programs have been developed on a smaller scale in a number of U.S. cities, and in larger (Chile) and smaller (New Zealand) contexts in countries across the globe, although some of these are closer to devolution approaches (Gauri & Vawda, 2003). The purpose of this review is not to assess the efficacy of these programs compared to their stated purposes, i.e. whether the programs resulted in improved educational quality and allocation. Rather, the purpose here is to highlight how the programs are constructed to be consistent with a neoliberal epistemology, namely that vouchers reinforce the relationship between knowledge and choice in the making of a market mechanism that governs educational-oriented behavior.

A choice technology similar to vouchers which has been increasingly visible in the United States and internationally is privately established and operated schools sanctioned by the state and funded by the state according to enrolment (Brewer & Hentschke, 2008). These “charter school” approaches nominally subsidize supply as a way of increasing choice; vouchers directly

subsidize demand, seeking to fill existing excess capacity first before the subsidized demand results in additional supply being created. Charter schools require more extensive tactical legislative action, as the establishment and regulation of schools is far more involved than enacting regulations for existing schools to accept voucher students. Furthermore, the profusion of micro-technologies, or at least the development of a sector of inter-related activities associated with charter schools, is more expansive than is the case with vouchers, as the former includes all implied by the latter and more. In the United States, an entire field dedicated to the establishment and development of charter schools has arisen - from associations, consultants, human resources services and such- parallel to those already established for public schools and private schools, respectively.

Consistent with a neoliberal approach, then, are these intersections of knowledge and choice. Information is conveyed through price, assessment systems, and accountability systems, among others, and choice technologies are deployed so that a market for education can be established. The more choices available, the more information is potentially available to investors in education – students/families attending schools –and more information should lead to better choices, i.e. choices that result in better educational outcomes. The preferences of families are defined by the knowledge and choice available. Recalling Hayek's earlier cited quotes about the price mechanism and the price system, knowledge technologies like standardized assessment and accountability attempt to signal to investors in education the relative value of a given school experience. What is

not accounted for here is what is included or not included in the construction of such knowledge; those blindspots revealed by a sociological approach to neoliberalism. This is particularly so regarding the dispositions of actors, differentiated access to different species of capital; particularly acute is that neoliberal policy does not only fail to take into account what some actors lack when confronted with economic decision-making. More so, neoliberal educational policy around markets and a governmentality approach fail to address the effect of that which actors do take into account which is non-economic. This second failure is largely due to neoliberal insistence on the price system to embed such information within prices themselves. Here, academic information about schools and subsequent ratings serving as a proxy for price or value.

Specifically, much more research needs to be done regarding the engagement of these technologies by potential actors in the market, although some work does suggest there is a discrepancy between what is reported regarding criteria for choosing schools and what actually drives school choice (Chakrabarti & Roy, 2010). In fact, Chakrabarti and Roy (2010) cite others' research conclusions that, in U.S. schools, anyway: No matter the scenario (public, private, voucher) the percentage of school's population that is black better predicts white attendance patterns than academics (Hastings, Kane, & Staiger, 2006); white parents will not on average choose the highest-performing (by test score) school available before they will choose based on a school's demographics being similar to their own demographic make-up (Elacqua & de



Gobierno, 2006); socio-economically affluent families are more likely than less affluent families to exercise choice through vouchers when such a choice technology is available. Conclusions like these call into question whether the knowledge and choice technologies most prevalently deployed, those highlighted above, are discernibly governing families' educational decision-making. Thus, the economic government of schooling itself is undermined by social factors not accounted for by such a government.

In one sense, conclusions like these beg the question of what is contributing to school selection when choice exists; however, these particular conclusions also suggest that typical accountability mechanisms used in the U.S., namely school report cards, could be contributing to decisions with unintended and perverse results.<sup>8</sup> Specifically, laws like *No Child Left Behind* in the U.S. require schools to report their demographics, including students' achievement on standardized assessments disaggregated by demographic groups, consistent with the legal system aiding in the construction of accountability technologies' deployment. Thus, the very accountability mechanism meant to make schools responsible for the achievement of every child no matter his or her racial or ethnic background could be contributing to school attendance decisions that exacerbate segregation. A failure appears to exist regarding the deployment of knowledge technologies, revealing blind spots in the underlying educational economics. For example, if race or ethnicity or

---

<sup>8</sup> I only focus on the U.S. in this example. The British Department of Education publishes similar information, but league table publications do not uniformly do so.

socioeconomic status plays a role in school selection, then there does not appear to be a knowledge technology that currently counters such bias in this context.<sup>9</sup>

Additionally, as suggested, some knowledge technologies and choice technologies could possibly exacerbate such bias. Still, some voucher programs are constructed to disproportionately put in the hands of the poor or ethnic minorities the opportunity to exercise choice; while this appears equitable, it does not necessarily lead to desegregated or heterogeneous schools. In short, information about race or ethnicity or socioeconomic status does not constitute information that can be conveyed in a system like a price system; such information, for better or worse, is conveyed through other means, some social, some technological, some hybridized, and an economic government of education has yet to account for such information, except accidentally, as in the example mentioned above when accountability and choice intersect to spawn an ‘autonomous effect’ such as re-segregation.<sup>10</sup> Such a “market failure” then, is not really a failure of the market, per se, but a failure of the technologies deployed by economic government to construct a market. Specifically, the technologies of knowledge and choice deployed are themselves constructed on the basis of a technical rationality, and, therefore, as means they overwhelm their own ends, namely the actual choices families make. That statement does not support education markets as complexes that should be kept in place but improved technologically. Instead, it recognizes that neoliberal technologies –and

---

<sup>9</sup> There certainly pathways to fighting bias, particularly in schools, but not currently identified in the context of school choice.

<sup>10</sup> See Sikkink & Emerson (2008); Ben-Porath (2012); Hubbard & Kulcarni (2009).

Foucault's critique of them generally- do not consider something like Bourdieu's (2005) depiction of different species of capital and different actor's relation to one another in a field. Said species and relations are a result of their different access to different capital of different magnitudes (Bourdieu, 2005, Kindle Location, *passim*). All of the "differences" cannot be accounted for by the current suite of neoliberal technologies deployed.

As repetitive as it appears, the above examples and conclusions reiterate the unbalanced consideration neoliberal education policies give to social relations concomitantly not accounted for in market-like relations. The emphasis is necessary because the relation between the economic and social is relevant to my work in Chapter 5 and in Chapter 6, as I speculate on the future of financing and governing education globally. Particularly, when considering the last decade of World Bank policies in Chapter 3, issues of bias, universalizing motives, and species of capital are neglected by the Bank, even as policies skew toward decision-making that requires actors to access the very types of capital unavailable to them, even actors at the institutional level. The balance Bourdieu sought through the establishment of an economic anthropology will not be achieved by the means he suggested be employed. The pace at which neoliberal education policies and practices proliferate cannot find redress in an anthropological critique or project, or any critique. Rather, social relations must be built anew in the midst of an evolving economic government of education, re-embedded explicitly by deploying some of the very technologies increasingly used to finance education and circulate education knowledge. After delving

deeper into World Bank policies and practices in the next two chapters, Chapter 6 will examine how such a balance might be struck in at least one future for education.

### **Conclusion**

In this chapter I attempted to accomplish three main objectives. First, I attempted to revisit neoliberalism in stripped down, even reductionist, terms so that the twin concepts of knowledge and choice could be laid bare in neoliberal terms, disentangling neoliberalism from what Peck calls “a shorthand term for the ideological atmosphere” (2010, Kindle Location 54). Important for understanding these terms was the notion that Hayek’s epistemology relied on a decentralized construction of knowledge and that knowledge only counted as such in the context of making a choice in a market. The signal example of a government technology in a market, then, is the price system, which conveys information to decision makers and is affected by the choices of those decision makers. Worth noting for reference in Chapter 6 is that socialist economists did not disavow markets but simply contended that knowledge and choice could be centrally located because the relationship between supply and demand, between knowledge and choice, could be described mathematically. Hayek’s epistemology did not countenance the possibility of a mathematical model that could fully contain all the knowledge contained in a market, while his descendants increasingly overlaid mathematical proscriptions on the relationship between knowledge and choice, doing so in terms of education markets

(Friedman and vouchers) and in the context of human capital theory, even as they denied the possibility of a centrally planned market.

Second, this chapter briefly laid out some of neoliberalism's blindspots as revealed by a sociological approach to markets, both generally and in terms of Bourdieu's concepts of habitus, species of capital, and the relation between agents in an economic field. Noteworthy in this section was what markets cannot or do not take into account, the price system being a prime example. While Hayek excludes no types of knowledge (social, political, etc.) from informing price, it is in price that all other types of information are embedded, while for Bourdieu that relationship is inverted, meaning that all the other factors related to an economic decision (social ties, political ramifications, religious implications) themselves take price into consideration.

Last, this chapter attempted to provide specific examples of how education markets or proto-markets operate today, specifically how knowledge and choice operate in education decision-making such that markets are constructed from the relationship between knowledge and choice in an education context. Pointedly, the focus was on the government technologies deployed to promulgate knowledge and choice among education actors. Broad examples from higher education globally and schooling in the U.S. and other Western countries were provided. Consistent across these examples were how supply (e.g. charter schools) or demand (e.g. student loans or vouchers) were subsidized. Additionally, government technologies for establishing knowledge about the relative value of schools were explored by unpacking examples of

rating schools via benchmarking. Thus, technologies of knowledge and choice together provide opportunities for actors (here students and their families) to engage in decision-making similar to that made in a market environment. Noted in terms of an economic sociology was how issues like race, ethnicity, and economic status often affected the education decisions made available by the very government technologies rationalized by neoliberal economics but not taken into account by those technologies. Thus, in specific terms did sociological considerations reveal blindspots in the use of neoliberal government technologies.

Achieving the objectives of this chapter were necessary to properly understand the trajectory of World Bank policy over the last twenty years and how the most recent developments in Bank policy are consistent with that trajectory, the primary topics of Chapter 4. Issues of knowledge construction and choice play a prominent role in Chapter 4's examination of policy and policy development, while an economic sociology will play a role in speculating on the future of global markets in education examined in Chapter 5 and Chapter 6.

## CHAPTER 3

### THE WORLD BANK AND TECHNOLOGIES OF ECONOMIC GOVERNMENT

#### **Introduction**

Chapter 1 and Chapter 2 together set the stage for the current chapter in a few ways. First, by establishing in Chapter 1 the perspective at work in this dissertation, a clear context exists in the present chapter for unpacking intersecting technologies deployed and promulgated by The World Bank. I reiterate here that focusing on the Bank is not antithetical to governmentality's usual characterizations of power as dispersed or Bourdieu's construct of the economic "field". The Bank deploys and promulgates, but so do other intersecting actors –donor nations, recipient nations, education ministries and departments, private corporations, schools, students– so that power is ultimately distributed across a multi-scalar span of individuals, institutions, and parties, albeit not equally. Such distribution was well described by Bourdieu in terms of the size and type of capital being a factor that configures relations in an economic field (Bourdieu, 2005). Additionally, as will become clear in Chapter 4 and fully in Chapter 5, the Bank is a platform for a market exchange, as much as it is a source for capital, knowledge, or other manifestations of power. In fact,

that the Bank is a source for capital and knowledge makes it a platform for market exchange.

Chapter 2's attempt to make clear how knowledge and choice are constituted to form an economic government of education, a market, with relevant examples was important in assisting the current chapter's work of explaining how policies promoted by the World Bank also develop such a government of education. Actually, the Bank has supported charter school and voucher programs and policies in numerous countries, but rather than repeat the citation of those examples here, I will broaden and deepen a view of neoliberal education policies by citing lesser known examples illustrative of intersecting technologies which promote knowledge and choice in an educational context. Unlike the broad examples of supply and demand (of knowledge and choice) technologies provided in Chapter 2, the examples here are government technologies whose focus operates on different scales, reaching from the local to national to transnational in a way that vouchers or charter schools rarely can or do. The scale is important simply in detail. The examples in Chapter 2 outline a government of local actors; that same scale is still extant when examining World Bank policies. In this chapter the implications for local actors moves to the background, e.g. the choices families make about selecting a school. Here the foreground will reveal the implications for national educational policy making and for World Bank actions themselves.

The broad purpose of this chapter therefore will be to trace the Bank's recent history in terms of its construction of knowledge and choice into proto-



markets as a prelude to the potential establishment of a *de facto*, global market for investment in education. Towards this objective, a history of the Bank's work in education prior to 2000 will be summarized to establish context, noting the emergence of policies and practices consistent with neoliberal government. Next, a more in-depth examination of Bank policies and publications will unpack the accelerating development of an economic government of education from 1999 to 2014, focusing on the construction of knowledge and choice into potential education markets, particularly at the national and transnational levels. Then, recent developments related to knowledge, choice, and investing in educational markets will be highlighted, specifically the World Bank's *ADePT* software platform and the *EdStats* web portal. These more specific examinations of World Bank policies and technologies from 1999 to the present illustrate on a global scale Foucault's argument that knowledge is not a neutral force passively representing reality but a technology itself constituting a governing reality (Foucault, 2008). This is particularly so in light of how these latest visual and electronic technologies make external users complicit in knowledge construction consistent with Bank epistemology, namely construction of knowledge that is most readily deployable in market-like decision making. And with a governing orthodoxy established, the Bank is even more free to directly influence borrower countries by deploying the law of financial markets to leverage these countries' need for financial capital and foreign currency. Those borrower countries then legally restructure education policy and practices, transforming aspects of their

education sectors into an economic government of financing, schooling, teaching, learning, and more.

All of the aforementioned work to be done in this chapter will be accompanied by various critiques of the World Bank's financing of education and its accompanying educational policy prescriptions, including a long section dedicated to recent publications highly critical of the Bank's education policies. I will conclude this chapter by discussing data systems and visual technology, which not only construct knowledge but exclude knowledge inconsistent with neoliberal approaches to education. I will aim to make clear how there is a fundamental shift occurring in what constitutes knowledge and how visual data and computational software are playing a role in transforming and legitimizing the World Bank's knowledge base while preventing oppositional knowledge that might impinge on neoclassical economic orthodoxies.

### **The World Bank and Education from 1962 to 1999**

Philip Jones' (2007) book is indispensable for its revealing of unearthed facts (speeches, memos, archived reports) but more so for its insights into the thinking of actors inside the World Bank over its first forty years of involvement with education development globally. Of course, although it appears pedantic, Jones' admonition to remember that "The World Bank – first and foremost – is a bank, and requires analysis as such" is an important one (Kindle Location 151). Materially, this fact is important because the Bank not only lends money, but it must raise capital funds, and those investing in the World Bank must be certain their investments will produce financial returns. Specifically, Jones notes that the

Bank “is obliged to protect its credibility in the marketplace, and part of that credibility stems from the wisdom of its own investments, as perceived in international financial markets” (Kindle Location 151).

Despite its being a bank, surprisingly, for more than just its first decade, the Education Department at the World Bank was made up almost wholly of architects (Jones, 2007, Kindle Location 710). This was because for almost its first twenty years, the Bank’s financing of education was couched in terms of a physical capital investment, i.e. building schools. This is still consistent with a human capital approach, although the Bank articulated its work in terms of workforce development and training (Jones, 2007, Kindle Locations 2247, 2310). In other words, the Bank was analyzing specific labor demands in the economy and investing in the education provision necessary to meet those demands (Heyneman, 2012, pp. 45-6). Not until at least the 1980s did lending in education begin to approach actual program concerns, e.g. quality of staff, governance, budgeting, etc. The 80s began the period of Structural Adjustment Loans and Sector Adjustment Loans (Jones 2007, Kindles Location 721-743; Heyneman, 2012, p. 49). The Bank’s loans required borrowing countries to undertake policies “promoting good governance and civil-service reform, and mitigating the short- term effects of adjustment reforms” (Jones, 2007, Kindle Location 702). However, beginning in the mid-1990s and early 2000s loan program requirements began “encouraging competitive market structures, fostering environments conducive to private sector investment” (Jones, 2007, Kindle Location 743). What’s significant about the shift from the project lending of the

60s and 70s to the program adjustment lending of the 1980s was the use of debt-based financing (“leverage” in financial parlance) as a government technology for catalyzing changes in national education policy. Jones (2007) literally recognizes the Bank using its loans as a technology, a lever, when he writes that:

Leverage is an important aspect of the Bank’s perceptions of its close working relationships with borrowers. Along with the IMF, it ensures a continuing and detailed assessment of the economic, fiscal, and social environments, to the extent that weaknesses in these areas might jeopardize the safety of the Bank’s investments. (Kindle Location 655)

Jones represents this use of the loan covenant as a technology meant to safeguard the Bank’s financial integrity. Conditions attached to loans act “as a substitute for the collateral which is typically employed in domestic loan contracts to discipline the behavior of the borrower” (Federico, 2001, p.3). So loans therefore become a commitment technology (committing parties through legal contract to a series of behaviors), persuading investors that policy changes are permanent and ensuring the continuation of reform programs imposed on national governments. Jones’ history does not delve into this aspect of Structural Adjustment Programs (SAPs) in great detail. Nonetheless, calling these tactics “development policy loans” in the 1990s and since, more frequently the Bank used its leverage, its loan conditionality, for the purpose of having countries adopt policies and practices more strictly consistent with a neoliberal construction of knowledge and choice vis-à-vis educational decision-making by national policy makers, school practitioners, students, families, and other intersecting actors. Such developments are clearly traceable in the Bank’s broader policy statements over the last decade or more, specifically the *Education Sector*

*Strategy paper of 1999 (ESS 1999), the Education Sector Strategy Update of 2005 (ESSU 2005), and Learning for All, Investing in People's Knowledge and Skills to Promote Development: Education Sector Strategy for 2020 (ESS 2020).*

Thus, the Bank began focusing upon human capital projects, investments in staff skills, national governance quality and other factors conducive to maximizing the Bank's investment returns. Towards such ends, loan conditionalities were imposed and acted as a technology for creating choice by way of increased private intervention in previously public spheres of education. Now I would like to explore an additional technological complex, 'partnerships,' deployed via discursive technologies (publications, statements, conferences) and loan conditionalities (statutory revisions), which advanced the Bank's construction of 'knowledge' and 'choice.'

### **Partnership and Privatization in World Bank Education Policy**

The three Bank-published strategies examined here, the ESS 1999, the ESSU 2005 and the ESS 2020 are important because of how -on micro and macro scales- they emphasized discursive, legal, and material technologies for constructing knowledge (about educational decision making) and choice (the number of potential decisions) in ways that emphasize the economic government of self and others. Additionally, these papers are the focus for much of this chapter because they are approved by the full Board of Directors of the Bank (see Heyneman, 2012, esp. p. 44 and 46). The approaches espoused in these statements, including the means for the production of knowledge, along with other technologies described later in this chapter, together form a complex for the

economic government of education in developing countries with World Bank relationships, with implications for educational policy in countries that do not have such relationships with the Bank.

The World Bank commends the role of national governments in providing access to quality primary education but states that “governments cannot do everything” and there “are many areas of education service provision (such as text books and vocational training) where actors other than the government tend to be more effective and efficient” (World Bank, 1999, p. 17). (Recall the brief passages in Chapter 2 outlining the market for educational services and global conglomerate players such as Sodexo and Aramark.) Consequently, the Bank calls for more productive “partnerships” in order to support educational development since it believes the “job is too large for any one institution or agency alone, and too important for a single perspective to hold sway” (World Bank, 1999, p. 17). According to major Bank policy statements, among the entities that should play a role in education are non-governmental organizations (NGOs), local stakeholders, bi- and multilateral development agencies, and local partners such as parents, students and teachers' groups. While discursively steeped in an acknowledgement of the scope of such work being too great to be centralized, such a diversification of resource development is consistent with the neoliberal epistemology examined in the previous chapter; namely, that no one authority can have sufficient knowledge to effectively govern the allocation of all educational resources.

The inclusion of entities like NGOs and local civic groups in education government suggests at least two perspectives. The neoliberal perspective vis-à-vis World Bank policy positioned this action as a way to decentralize knowledge and thereby reduced the state's provision for that knowledge, while a progressive perspective, such as that espoused by Klees and others, promoted such diversification as a means to promote democratic and inclusive values (Klees, 2012; Edwards and Klees, 2012; Klees, 2010; Edwards 2012). These are not necessarily conceptually opposing views, but Klees' progressive view identified the democratic process as the end itself, while the World Bank identified such decentralization in instrumental terms, i.e. it leads to a more efficient allocation of resources. And it should not be overlooked that financial resources are required for such governance and provision. The World Bank is silent about any need for more state-funded resources; but it has in the past looked to mechanisms that would require fee paying by individuals to fund education provisions. Klees (2012) directly stated that "The World Bank's long term position on resources has been simply irresponsible" (p. 54). Furthermore, for recommendations regarding a decentralized government of education to be enacted, whole technologies also must be enacted that do not actually make for less state involvement or less government, per se. For instance, in order to have NGOs provide textbooks in developing countries, policies and procedures for provision must be put in place, e.g. ordering, purchasing, accounting and the like, but now proliferated due to a myriad of potential providers. Likewise, the NGOs themselves must put in place internal government mechanisms regarding their decision-making in order to

provide such resources, i.e. NGOs must internally govern their own members' behavior in the context of such provision. Thus, "partnerships" often become the privatization of the government of educational decision-making which was previously public and often democratic; that privatization now contractualized or otherwise made statutory. Edwards and Klees (2012) accurately critiqued the neoliberal approach to decentralized education government as a form of participation which "occurs though individual consumers acting in the marketplace, or though communities acting as management and accountability mechanisms" (p. 57) which for these authors was not as effective as a progressive approach to including non-state actors like civic groups or community groups in education government, which must reflect democratic relations and result in empowerment of those groups or individuals (p.59).<sup>1</sup>

The ESSU 2005 called for more emphasis to be placed upon the Bank's role in promoting those "partnerships" than it did previous to the report's publication in 1999 stating that "The importance of such work will grow rather than diminish in the coming decade, as countries become more interlinked under the pressures of the changing world" (World Bank, 2005, p. 20-21). Towards realizing this enhanced role, the ESSU lauded the operationalization of the Comprehensive Development Framework (CDF), a set of principles to guide development and the provision of external assistance. While accepting the nation state should be in control of the agenda, the CDF advocated more and stronger "partnerships" between governments, civil society and private entities (World

---

<sup>1</sup> Bockman (2011) writes that "Democratic, decentralizing forms of socialism remain in co-opted and distorted form within neoliberalism" (Kindle, Location 4388).



Bank, 2005, p. 20). This was re-emphasized later in the ESS 2020 which stressed that improving educational outcomes required “collaboration and an alignment of interests among many actors” (World Bank, 2011, p. 70). Without making clear the details of the causality involved, the ESS 2020 stated that these “partnerships” would push global collective action and would “mobilize global and country resources for education and improve policy making within countries” (World Bank, 2011, p. 70). The CDF, then, served as a discursive/managerial technology for changing education policies inside borrower countries.

A substantial publication that laid out the myriad partnerships and accompanying technologies enacted as part of this policy was the Bank’s 2009 report *The Role and Impact of Public Private Partnerships in Education*. The report identified its rationale for Public-Private Partnerships (PPPs) vis-à-vis four demonstrable outcomes, but these are not actually a rationale. Rather, embedded in each outcome is the thread of the same rationale, namely that such partnerships more efficiently matched supply of educational goods or investment vehicle (school) to the demand for such (Patrinos et al., 2009, p. 4). Additionally, the report recognized many forms for PPPs, including those in which private non-profit or philanthropic organizations, often embodied as NGOs, “support the education sector” (Patrinos et al., 2009, p.1). Even when referring to private providers of schooling itself, “in this book the term “private” encompasses the whole range of non-government providers of education services” (p.3). However, the report takes pains to note that it specifically:

...examines PPPs in which the government guides policy and provides financing while the private sector delivers education services to students. In particular, governments contract out private providers to supply a specified service of a defined quantity and quality at an agreed price... (Patrinos, et al., 2009, p. 1)

Thus, the private sector delivery of a range of educational services, including schooling and classroom learning, is conflated by the World Bank in a manner consistent with a neoliberal epistemology which actually empowers technologies that could be used by policy makers who occupy different points on a spectrum of economic government, i.e. socialist, capitalist, etc. For example, for the World Bank no difference exists between the “partnership” formed by a school’s administration team and a local civic group providing after-school tutoring services on the one hand and a “partnership” formed by a state (or sub-state) education agency and a for-profit provider of education services where the former contracts the latter to work under detailed terms and conditions that are legally binding. Such a conflation is necessary for making non-market relationships and market relationships equal in discursive value. Equalizing, or equivocating, the value of the two different types of relationships empowers the Bank to focus on the outcomes produced by such arrangements, and likewise equalizing how knowledge about them is constructed makes it simpler for these different actors’ services to compete for the state’s provision on only an economic basis. It is this conflation of different types of knowledge and the technological deployments necessary for such conflation that together are blind to those sociological issues raised by Bourdieu (2005). Epistemological and ontological flattening aside, the Bank’s leveling of the field advantages actors

who have certain species of capital in greater quantities, e.g. financial, intellectual, social, etc. Even on a national or international scale, in plain development terms, this is a capacity issue. If actors representing national states or their institutions do not possess the necessary capital to invest in developing equal partnerships, but the structures for such partnerships are in place (as a result of Bank conditionalities), then the mobility of capital (also encouraged by the Bank's conditionalities), will invite partners with greater capital than that available to state and/or local actors. However, as we will explore in Chapter 5, while neoliberal theory and practice currently takes little account of social relations, social enterprises, or social capital, the conflation of economic and non-economic in emerging technologies and policies could open the door for greater economic influence of socially-oriented actors in financing education and governing education practices.

Examples of partnerships include those nurtured between private donors and the Bank on knowledge generation schemes (World Bank, 2011, p. 72). The Educational Sector Strategy for 2020 (ESS 2020) reasserted that part of maximizing educational effectiveness is creating linkages with private sector providers (World Bank, 2011. p.80). Corporate involvement in education has already grown in recent decades and private publishers of educational materials and privately-owned schools exercise a more prominent role in educational provision. The Bank reported that in many cases private sector entities are providing education services at different levels, while in other situations private bodies may partner with governments or advocate for system reforms. This

augmented role of the private sphere provides an opportunity for the International Finance Corporation (IFC), a World Bank arm, to complement the Bank's educational aims and directly support private involvement in education. The IFC was already involved in seven investments in 1998, and with another twelve countries singled out as being good prospects for further IFC involvement by the time the first ESS was compiled in 1999. The IFC can increase access to education and expand educational choice for low income students, the Bank contended (World Bank, 1999, p.19), by encouraging reforms that see wealthier families pay for education, while allowing governments to free up more resources to direct to poorer families in secondary and higher education (World Bank, 1999, p. 19).

Given the importance of mobilizing additional resources and building public sector capacity, efforts to engage the private sector in the provision and funding of education, particularly post-basic education, are imperative ... An important aspect of the World Bank Group's comparative advantage in this area relates to the role of the International Finance Corporation (IFC), in facilitating links with the private sector. (World Bank, 1999, p. 80)

Between 2002 and 2013, IFC invested more than \$1BN (USD) in private education companies in emerging markets in 33 countries (IFC, 2014) and IFC activity played a prominent role in ESS 2020 (World Bank, 2011; Mundy and Menashy, 2012). In multiple contexts of economic government, then, the World Bank engages and/or encourages technologies that create greater choice in educational provision, even if that provision is for investment vehicles. Namely, the Bank (specifically the IBRD) loans out or grants funds for government investment in the educational sectors of developing countries, under the

conditions that those governments themselves embrace certain technologies of government in the form of policies and laws. Regarding its encouragement of PPPs, the Bank reports that in countries new to developing PPPs "...the government may need to change its education policies and regulatory framework," specifically:

- defining the place of private providers in the national education strategy;
- setting clear, objective, and streamlined criteria that the private sector must meet in order to establish and operate schools;
- introducing school funding systems that integrate public and private schools that are neutral, responsive, and targeted;
- establishing an effective quality assurance system.

(Patrinos, et al., 2009, p. 5)

As the IBRD is leveraging the promulgation of technologies to be deployed by nation-states and sub-state governments, those very technologies are creating more investment opportunities for the IFC. More succinctly, as the IBRD's technologies of choice create the opportunity for more supply, the IFC is there to subsidize supply by making loans to private providers who might not otherwise have invested capital in developing countries' education sectors. One example is a November 2014 proposed investment of \$25M (USD) the IFC considered making in a Peruvian Company (*Proyectos Educativos Integrales del Peru* (PEIP)) which had purchased a 30 year-old technical college the company intended to expand. The "Overview" of the proposed investment, posted to IFC's website in February of 2014 indicated that the "The proceeds of the investment will be used to support PEIP's expansion plans in the sector, which include expansion plans across all market segments: technical training, university

education and K-12 schools” (IFC, 2014). Meanwhile, the IBRD/IDA has had a handful of active loan programs connected to the “General Education” sector in Peru in the last ten years, totaling hundreds of millions of dollars (USD). One example would be the “Programmatic Social Reform Loan IV” installment of a larger program, one phase approved in 2004 and closing in 2005 for a total of \$100M (USD). The loan program overview stated that it was designed to “support reforms aimed at increasing access, transparency, and efficiency in service provision” (World Bank, 2014c). Thus, as WB’s IBRD/IDA group leveraged policy changes that made possible private sector access and investment in education, the Bank’s IFC arm subsidized that very private sector investment.

Another such example in the secondary and post-secondary sectors is IFC’s nearly \$30M (USD) investment in FINEM, a privately held concern in Mexico that finances private secondary and tertiary schools and provides student loans (IFC, 2014a). In this case, the IFC was providing capital for FINEM to expand its financing of private secondary and tertiary schools, consulting to such schools’ management teams, and the financing of student loans, potentially to students attending the very schools FINEM was financing. In exchange, IFC received an equity stake of at least 13% of FINEM (IFC, 2014a). Aligned with this was the Bank’s work on its \$171M (USD) loan “The First Phase of the Tertiary Education Student Assistance Program,” approved in 2005 and closed in 2011 (World Bank, 2014d). This provided Mexico’s government a loan of \$171M if it instituted reforms to how it provided student assistance, including to its

neediest citizens, and included policy provisions for the private sector making student loans, justified as increasing access for students from disadvantaged economic backgrounds. Thus, the example of its work in Mexico is not unlike the example involving Peru, cited earlier. Namely, on the public side, the Bank advocated for policies increasing educational choice by subsidizing the provision of private schooling or private financing to attend schools, while IFC subsidized the private providers themselves with affordable loan packages. Just as the IFC advocated for and simultaneously subsidized school choice, the Bank made conditional policies enabling demand subsidy technologies (such as vouchers).

This section of the current chapter has made clear that by coordinating its public and private arms, the Bank deployed discursive and financial technologies to establish the context for choice (policy changes) while subsidizing supply (private schooling) and demand (student loans). Thus, the Bank deployed technologies consistent with neoliberal perspectives on the government of education while also promulgating the deployment of those and other technologies by other actors. Ultimately, whether the other actors are NGOs, civic organizations, or private for-profit corporations, the Bank has conflated all of them under the umbrella term “partner,” another tactic consistent with an economic government of education that seeks as many actors as possible to populate and decentralize a market. Additionally, in order to accomplish this population and decentralization, the technologies of choice and knowledge are of a certain type, more accessible by actors already possessing species of

intellectual capital epistemologically consistent with economic decision-making in a market.

### **World Bank, Knowledge Bank, Knowledge Construction**

While the previous section provided detailed examples of how choice technologies have been deployed at a national scale, the overall address of knowledge construction at the Bank thus far has still been somewhat schematic. Recalling Chapter 2's description of a neoliberal epistemology, of knowledge about investments (or consumable goods) needing to be dispersed and decentralized in order for a market to function efficiently over time, it was also emphasized that the more knowledge actors in the market possessed, the more effectively choice could be exercised and competition could flourish, resulting in the most effective distribution of resources. While one blindspot for markets has been the inclusion of non-economic (social, cultural) information in communicating value, another has been how to communicate the relative value of two seemingly comparable experiences, especially when what appears to differentiate them is related to non-economic information. Communicating that relative value of one (educational) investment compared to another (communicated largely by price in other markets) empowers an actor to make an informed decision in the market. Thus, an economic government of education necessarily develops technologies that communicate relative value; the most commonly established are discursive benchmarking technologies like "league tables" that rely on students' standardized test scores. Examples of such knowledge construction are extant on the local or, sometimes, national level.



On the macro-scale where the World Bank's work is often most involved, knowledge construction has required different approaches, which are typically aimed at a national policy level in a global context. There are two basic audiences for this knowledge development: The national finance ministries and bond markets that provide the underlying financing to World Bank itself so WB may then make loans to developing countries, and the Finance and/or Education ministries of borrowing countries. This section's examination will focus on the knowledge construction in the context of the latter audience. The examination initially will draw from the major policy documents relied upon thus far; however, the second half of this section will look at additional discursive and statistical technologies deployed by the Bank as it has recently begun to develop knowledge at the policy level in fashion more similar to the Organization for Economic Cooperation and Development (OECD) and consistent with the discussion in the last chapter about the construction of knowledge through means such as benchmarking.

In order to promote private provision of education consistent with a neoliberal perspective, knowledge must be provided and generated not only to guide nominally more effective interventions (educationally or economically) but to encourage governmental (and family) choice. Specifically, consistent with illustrations of benchmarking provided in Chapter 2, the Bank must construct educational knowledge that empowers choice akin to that in a market. That knowledge, embodied in benchmarking and other "accountability" mechanisms, makes knowledge about education, a cognitive activity, into information

representable in relative terms, like a price system. This transformation is most recognizable in the discursive focus on quantitative proxies –such as “outcomes” and their “indicators”- which serve as the bridge between cognitive learning in the classroom and economic activity outside the classroom. This is consistent with Hayek’s epistemology, i.e. what an actor knows is only knowledge as it informs that actor’s choice in a market and is likewise informed by other actors in the market, and that is communicated via the price system. Such knowledge is inextricably tied to the choices available to an actor. This holds true no matter the scale in question, but as the Bank’s papers develop over the time period from 1995 through 2011, the distinctions of type of knowledge and scale are lost, although the Bank’s audience for these papers was national and international actors. The Bank consistently translated knowledge about “best practice” in education systems into outcomes for national economies, including, admittedly, poverty reduction.

Since the 1990's the Bank has been perceived as a “centre of authoritative economic knowledge and expertise in political discourse” (Girdwood, 2007, p. 3). The Bank emphasized that knowledge is a key factor in economic development and comparative advantage for countries. The ESS papers continually emphasized the need for development not only of 'brick and mortar' projects. They emphasized the importance of recipient countries ability to construct knowledge and have access to a global knowledge base. The ESS explored several major trends evident in global education. The principal trend is the increasing democratization of states with more than “a hundred countries now

have democratically elected governments, almost twice as many as a decade ago” (World Bank, 1999, p. 1):

If all this democratization is to survive and flourish, education will have a key contribution to make in helping citizenries develop the capabilities required to be well informed, understand difficult issues, make wise choices, and hold elected officials accountable for delivering on their promises. (World Bank, 1999, p. 1)

The ESS 1999 paper linked democratization and the need for knowledge provision to citizens’ decision making, and it clearly established the Bank’s principles and approaches to private interventions in education and knowledge provision. Thus, private intervention played a role in citizen decision-making about a “good” every citizen should access. The Bank’s broad goals in ESS 1999 were to ensure that all people everywhere had the opportunity to: First, complete a primary and lower secondary education of at least adequate quality; second, acquire essential skills to survive and thrive in a globalizing economy; third, benefit from the contributions that education makes to social development and; last, enjoy the richness of human experience that education makes possible (World Bank, 1999, p. 6). However, the report also pointed out that a central challenge to achieving these aspirations was the ability to make well informed choices, highlighting five important principles that underlined the Bank’s activity towards redressing issues of access and choice and meeting its education goals. Among these were that the Bank would “Enhance knowledge sharing and promote access to knowledge resources in education” (World Bank, 1999, p. 37). Despite what appeared to be some objectives related to social development and

cohesion, the Bank's education policies and policy statements, in alignment with Millennium Development Goals of poverty alleviation through economic growth, remained focused on economic outcomes as the primary measure for fulfillment of said objectives, consistent with its work in other sectors and with statements of other regional and global agencies, such as OECD, about the relationship between education investment and economic growth.

The ESSU 2005 as an update to the ESS 1999 revealed that the Bank was seeking to broaden its perspective, increasing efforts to speed up countries' work towards meeting the United Nation's Millennium Development Goals for universal primary education. The themes of the ESSU 2005 were the integration of education into a country-wide perspective, the use of a system-wide approach and an emphasis on assessing the results of educational interventions. It also emphasized the principle highlighted above, that of enhancing knowledge sharing and promoting access to knowledge resources in education. By promoting access to knowledge and educational choice, and encouraging the growth of a higher education system to meet the needs of the global knowledge market beyond compulsory, primary education, this expanded vision recognized that "the challenges of access, equity, education quality, efficiency, financial sustainability, and governance and management are intrasectoral issues" that really constituted a challenge to establishing a broad knowledge base (World Bank, 2005, p. 48). In practical terms this meant policy development within this broadened agenda must be informed by sector-wide perspectives. Additionally,

decisions regarding what level of funding and what types of interventions should be executed by the Bank required:

resources to carry out or manage the analytical work needed to provide the knowledge base for such decisions; a strengthening of staff skills in carrying out such analysis and translating it into policy dialogue, support for sector strategy formulation, and other Bank assistance; and capacity building and collaboration with country and regional research networks to help sustain and build ownership of the analysis and its implications for policy reform. (World Bank, 2005, p.62)

This passage identified how in terms of formulating policy on its own resource allocation, the Bank did not advocate increased funding focused on capital projects or discrete educational programs at a given scale. Instead, the Bank emphasized that increasing *its own* resource allocation was necessary for the production of the knowledge that undergirds WB policies and practices. Steven Klees' earlier mentioned critique aside, my emphasis here illustrates the importance to WB of its role as a knowledge producer in the last decade or more. The ESSU 2005 re-iterated that in order to maximize the effectiveness of the aid provided to clients, there needed to be sound policies and strong institutions, and in turn these will only exist when there is a sound knowledge base to inform "...sectorwide analysis, impact evaluation, and establishment of reliable data on learning achievement and key education indicators and ... a new initiative covering student learning assessments and for policy research aimed at better identifying what drives education outcomes" (World Bank, 2005, p. 76). Not simply the educational outcomes, but the ramifications of each of the Bank's policies need to be grasped. Implicitly and explicitly, the ESSU 2005 argued there was a lack of specific results and evidence informing policymakers, and

that effective educational strategies, interventions and educational progress may be negatively impacted by this:

In many parts of the world, there is a surprising lack of data about student learning. Even though the benefit of education is really a function of the skills and competencies students acquire ... most studies of educational outcomes are limited to analysis of years of schooling completed... As such, they provide insufficient guidance to countries and donors alike as to the optimal use of resources. In an era of tight donor resources and an increasing trend toward performance-based aid, systematic efforts are needed to understand which interventions contribute most to the desired outcomes. (World Bank, 2005, p. 66)

Only here, in its 2005 paper, did the Bank begin to articulate an epistemology worth noting in two specific regards. First, the turn to “data about student learning” and “desired outcomes.” Up to this point, WB had not been focusing on this type of knowledge, namely quantitative student assessment data to describe “desired outcomes” for its investments. This began a shift which accelerated over the next decade, finding a substantial purchase through technologies such as its *AdePT* software platform, then the *EdStats* platform, and *SABER*, all of which I will examine shortly. Second, the focus on this type of knowledge is consistent with the neoliberal epistemology described in Chapter 1, which understands “knowledge” as “information” that makes choice possible, e.g. the price system.

Also worth noting in this passage is the conflation of the importance of student learning (“skills and competencies”) on the one hand and donors’ considerations regarding their investment on the other hand. Here, then, by conflating the different types of knowledge, the scales across which the knowledge reaches are also collapsed. On the local scale, knowledge about

student learning indicates whether or not a given school is a good value; on the national scale, this knowledge better informs the state's investment in human capital and its potential return on that investment ("increased earning potential, better livelihoods"); and on the global scale, this knowledge informs potential investors in a given country's economy or education sector, or in the Bank itself, which then invests in the country's education sector. Thus, this knowledge is not just necessary for choice to be made in the context of a single potential education market, e.g. a parent about a school or an Education Minister about a school region. Rather, this same knowledge is reproducible and repackaged so that it serves multiple education investment markets. How such knowledge then is constructed constitutes much of the Bank's "research" and "analytical" work referenced in the above passages; work developed especially in the last ten years or so. How the Bank shared that knowledge, the scope of that knowledge provision, and its effects, were also highlighted in the Bank's policy papers, whether major policy statements like the three referenced thus far in this chapter, lesser policy publications, like that on PPPs referenced here, or in the hundreds of research-based or policy publications issued yearly by the Bank or by Bank affiliates. In particular, the Bank's Education Knowledge Management System (EKMS) emerging from the ESS 1999, was an early attempt at developing a discrete discursive framework for providing access to this knowledge on development education, making the Bank a knowledge institution. Clients, policymakers and Bank staff were encouraged to use publications, the Internet, conferences, databases and an Education Advisory Service in order to recognize

best practice approaches in education. The EKMS was not sustained by the Bank or its users but should be seen as a precursor to something like *EdStats*, which I discuss below.

By the time of the release of the ESS 2020 report, not much had changed since ESSU 2005, but the type of knowledge being shared had been made more discrete (perhaps narrow) despite attempts to establish a “global knowledge base to guide those reforms” (World Bank, 2011, p. 1). The creation of this global knowledge base ostensibly would improve the design of education policies by the World Bank, its client countries and other partners. Such a knowledge base would provide “reliable, timely, and comparable statistics on learning outcomes; the state and performance of education systems; and analytical work, practical evidence, and know-how about the impact and cost of programs and policies” (World Bank, 2011, p. 37). “Learning outcomes,” a defining construct of knowledge in the 2005 paper, now becomes constricted by its relation to “reliable, timely, and comparable statistics.” Epistemologically this constriction makes sense vis-à-vis neoliberalism because it makes simpler the assignation of relative value to a given specific outcome that a school, state sponsored sub-national system, or state-sponsored national education system produces. And such is what counts when the Bank touts in the ESS 2020 that it has made significant advances in its knowledge base and accumulation of empirical data. Before addressing some of the discrete technologies for knowledge construction deployed by the Bank over the last five or so years that contribute to this constriction, two other aspects of its knowledge production are worth noting.



First, the systems-approach adopted by the Bank is directly related to the “results-oriented” approach that WB began to delineate in policy in 2005 and reinforced in ESS 2020. Second, the Bank’s research and publication endeavors are worth noting because of their construction of knowledge and their implications for policy sharing to be explored in Chapter 5.

Specifically, in its 2005 paper and to a greater degree in the ESS 2020 produced six years later, a system-wide approach was emphasized, with the expected contribution of a project towards strengthening the education system as a whole to be considered when designing interventions (World Bank, 2011, p. 64-65). This approach can “reveal more pressure points for change, offer a wider set of options for policy reform and investments, and identify political economy issues that a narrower, less systemic perspective might miss” (World Bank, 2011, p. 65). Such a system perspective, furthermore, purportedly employed “a conceptual framework,” (World Bank, 2011, p. 60) which:

can be summarized as “Analyze globally, act locally.” One of the foundations of the system approach is accurate and reliable information on the roles and performance of students, providers, and institutions, which allow policy makers to understand the connections between them and identify the most pressing needs and institutional capacity gaps, as well as options for filling them. (World Bank, 2011, p. 42)

The “Analyze globally” part of the catchphrase included in the report was a direct reference to the benchmarking made possible when the Bank applied the type of knowledge it had constructed across multiple countries’ education sectors. That knowledge collapsed scalar and contextual differences. Specifically, no differentiation or nuance existed due to scalar differences, i.e. that knowledge

(information) looked the same at the local, national, or global level. The “pressing needs and institutional capacity gaps, as well as options for filling them” were the result of this same collapse, i.e. needs, gaps and options are framed in terms of statistical knowledge and “analytical tools” presented through a system-wide approach. Accompanying the systems-approach and the the Bank’s focus on “results-oriented” knowledge is a new approach to actual financial provision, a program titled “P4R” or “Program-for-Results.” The Bank’s ESS 2020 asserts P4R is an “innovative” approach that links Bank financing to quantifiable results, by directing “loan disbursements based on achievement of results and performance indicators, not on the procurement of inputs” (World Bank, 2011, p. 66). In P4R, then, the Bank is looking to use the statistical data it collects via discrete technologies or analytic tools, then benchmark that data so as to produce “knowledge” about educational outcomes to which it can tie its financing. Thus, the Bank can, *de facto*, assign a monetary value (the loan and its interest rate) to the educational outcome the Bank itself describes through its own knowledge construction. The outline presented here is just a sketch of how the Bank accomplishes what is a nascent market government of education on a global scale. Its other means for constructing and producing knowledge still need to be addressed.

The most traditional approach the Bank employs for constructing knowledge is to conduct research (or contract that out), then publish that research and disseminate it to its borrower countries. On the Bank’s web-based “Open Knowledge Repository” (OKR), the search for “Education” alone provides

6,663 results (World Bank, 2015e). Some of the results are certainly for duplications produced because of publications that cover more than one sub-category, but it would be difficult to understate the proliferation of World Bank publications. Philip Jones (2007) look at some of the research and publications by the Bank's Education Department was specific in its review, dismissing potential criticism, when he wrote that:

Research needs to be driven by operational requirements and must reflect organizational values, aspirations, and objectives. What becomes an issue is when researchers working in such contexts deny the institutional parameters that shape and dictate their work, and claim their research to be objective, untrammled by institutional requirements. (Kindle Location 4123)

Jones' assent to an operational assumption behind Bank research and its resulting publications did lay bare the conceptual bias underlying the Bank's construction of knowledge and reminds us of Jones' initial admonition. The Bank's construction of knowledge is consistent with it being a bank that must raise and invest capital in a global market; likewise, adherent to a market perspective, the Bank's publications on policies around choice and provision are internally consistent.

Thus far, the chapter has made clear how the structure and implementation of World Bank policy, especially around knowledge construction works to communicate knowledge of relative value, actionable in market-based decision-making, whether on a local, national, or global scale. This is borne out in the Bank's collapse of the distinction between private and public under the umbrella term of "partnership" and the resulting intersection between IBRD and IFC policies and practices. Additionally, while the Bank discursively positioned

itself as a “global” knowledge bank, its reach has been geographic, not conceptual, because it has relied only on a constricted notion of knowledge that can be deployed in market-like decisions by a decentralized set of actors. Finally, this collapse of distinction between public and private actors and collapse of distinction between types of knowledge have worked together, especially in concert with the Bank’s emphasis on systems approaches and outcome-based policies when the outcomes are economic. Before exploring the Bank’s most emphatic tactics to transform knowledge for the purpose of economic decision-making, here is the appropriate place to include the critical voices that have recently weighed in on the Bank’s policy statements and practices over the last decade.

### **Dissenting Voices on World Bank Policy**

While the breadth of recent criticism can certainly be characterized as against the Bank’s consistently neoliberal approaches, more acute and as frequent is the attack on the Bank’s assertion that it is a “knowledge bank” and what that means. Gita Steiner-Khamsi (2012) identified a selection bias that caused her to conclude “The agenda-driven analytical work of the World Bank may lead to wrong conclusions and inappropriate policy recommendations that match the available portfolio of the World Bank” (p. 15). What Jones (2007) identified in the passage cited above as research that “must reflect organizational values, aspiration, and objectives,” was framed as a criticism by Steiner-Khamsi because it ignores facts on the ground in borrower countries, even facts that are sometimes reported by Bank researchers. Steiner-Khamsi goes on to note that

the “knowledge bank” itself, the repository of research and publications, is a self-referential system, one that “only absorbs knowledge that perpetuates its own system logic” (2012, p. 15). This theme was examined in detail by at least two other critics of ESS 2020. Joel Samoff (2012) noted that in this latest policy statement, 55% of the references are from other World Bank sources, 17% of the references are from other funding and technical agencies. Furthermore, while 26% of the references are from “published and unpublished papers and books,” several of those had World Bank contract researchers or staff members as authors (p. 148). Perhaps the most searing analysis of the “self-referentiality” of this knowledge production was by Stephen Heyneman (2012), who not only conducted a similar analysis as that done by Samoff, but compared the reference analysis of the ESS 2020 to the major policy paper produced by the Bank in 1995, noting that the use of external sources dropped by nearly 20% and the total number of references dropped by more than 100% (pp. 58-59).

Heyneman’s criticism was particularly pointed because of his long service at the Bank. A common theme among recent criticisms of Bank policy, whether in terms of self-referentiality or the Bank’s policy drafting process being “tone-deaf” to externally provided input (Steiner-Khamsi (2012); Heyneman (2012); Arnove (2012)), was that the Bank simply does not engage in authentic critical dialogue around its work, but Heyneman, in his account of starting at the Bank as a staff economist in the 70’s, acknowledged that such close-mindedness has always been part of the Bank culture and Jones (2007) diplomatically alludes to as much in his monograph on the Bank. According to Heyneman, in the 70’s

only a perspective that framed education in the context of manpower analysis was viable among the Bank's Education staff. His introduction of "rate-of-return" frameworks only took hold with the introduction of new leadership; as a result, Heyneman points out that that very "rate-of-return" framework came to dominate Education staff analyses to the exclusion of other perspectives (pp. 46-50). Thus, even though criticism has appeared to reach a fever pitch, with two large scale collections dedicated to criticizing ESS 2020, the criticism, more or less, concluded that ESS 2020 represents more of the same policy prescriptions as have been in place for the last 20 years (Mundy and Menashy, 2012). What critics failed to do was take the Bank to task for its inconsistency regarding knowledge construction on neoliberal terms. Specifically, while the Bank has looked to deploy technologies that construct knowledge that can then be used in making decisions about relative value (market decisions) and the Bank has deployed technologies so that choices exist, the Bank has done so at the cost of "recentralizing" knowledge, i.e. not empowering conceptually decentralized points of view that can inform value. In other words, the Bank's epistemology is at odds with that which informed Hayek's assertion about what would make markets successful, decentralized and contextual information that was not controlled by a centralized power. While these might not be terms on which critics like Steiner-Khamsi, Klees, or Samoff would attack the Bank, gaps like these, in addition to blindspots on social knowledge and relations, make more salient the criticism of the bank as ideologically misguided.

In addition to criticism of the Bank's approach to knowledge construction, another area of criticism worth noting is that related to the deleterious effects of a market government in education that result from the Bank's deployment of particular technologies. Specifically, as the Bank's technologies look to form a market by creating more actors in more decentralized relations in order to proliferate choice, critics have taken exception to the implications of this approach in the context of the social knowledge underlying choice, education as a human right, and the democratic assumption of public education. Sangeeta Kamat (2012) took exception to this in two regards. First, ESS 2020 reframed "education for all" as "learning for all," specifically that "Learning needs to be encouraged early and continuously, both within and outside the formal schooling system" (World Bank, 2011). Kamat portrayed this as a forfeiture of education as a human right because it "allows investors to reap profits from the desperation of poor and middle class families" (p.39). Finally, she acknowledged that this aspect of Bank policy "is intended to multiply markets in education and greatly expand the private sector in education" but for Kamat this "undermines the importance of public education as the basis for equitable education and a democratic polity" (p.41). Kamat's criticisms were passionate but conceptual, with little offered to support that certain phenomena were actually a result of Bank policy or that certain policies were necessarily resulting from a different emphasis on the meaning of public education or its importance. This was where her critique was ideologically based but neither offered an attack based on the empirical results of Bank policy nor unpacked the tensions exposed by framing

Bank policy as ideologically driven. Kamat's resistance to choice was different than that of Verger and Bonal (2012), who point to other empirical research (Nieuwenhuys, 1999; Harma, 2009, Fennel, 2012) on impoverished families and school choice, namely that "families usually choose a school accordingly [sic] to criteria such as proximity, cost, social relations, pre-conceptions of the different types of schools, religious preferences or discipline in class" (p. 134). Their conclusion echoed my earlier citations of analysis of the economic government of education, namely that social factors contributing to educational choice (whether on the school level or the national policy level) are not addressed directly by a market based system for education and can result in actors making decisions not aligned with their own economic interests, rendering the economic government of education ineffective. Such a conclusion is consistent with other existing research I have cited.

Susan Robertson, Steve Klees, and Karen Mundy each provided perspectives on where the latest Bank policies are failing. Robertson (2012) highlighted contradictions in the Bank's privatization approach, including "the Bank's ventriloquism between policy and evidence, versus its insistence on robust evidence and knowledge-driven policy; the IFC's privatization projects, which it insists are pro-poor, yet the very poor have limited financial resources to spend on education as a commodity" (p.204). Thus, Robertson touched upon the issue of knowledge construction and private provision by way of noting that the policy statements and Bank practices are not clearly aligned. Mundy and Menashy (2012) made the same point when analyzing policy statements in ESS



2020 about private provision and IFC involvement compared to IFC commitments to education and IBRD/IDA commitments that include a private component. Like Robertson, Steve Klees (2012) also touched upon more than just one aspect of ESS 2020 and the history of Bank Education policy. Regarding the idea of the Bank serving as a “Knowledge Bank,” the heart of Klees’ argument was that “knowledge is contested” and that the Bank does not create any space for such contestation (p. 55). In terms of privatization, Klees did not refer to its institution in terms of a market, but portrayed it as a necessary result of years of insufficient funding for the public sector. He attacked such an institution as an insufficient substitute for public provision. Additionally, he (like other critics repeatedly) cited a lack of evidence that inclusion of private educational provision improved educational outcomes, whether learning or equity (p. 58). In each case cited here, critics took issue with the Bank’s construction of knowledge and its resulting policy prescriptions. However, although Klees (2012) did offer some alternatives, such as a new international development financing mechanism, most critics failed to cite exactly how the Bank was failing on its own terms or how to reform Bank policies and practices in a way plausibly aligned with the Bank’s historical mission. Klees simply advocated for the Bank no longer participating in education at all. However, more than the policies or knowledge-generating publications, it is the statistical and visual and financial technologies, unevenly deployed by the Bank but whose latest iteration is SABER, which ultimately will be more likely to frame and promulgate a single global education marketplace. These are only beginning to be considered by critics of the Bank.

## Emerging Knowledge Technologies at the World Bank

Beyond research articles and myriad publications and conferences and the like, knowledge production at the Bank in the last 10 years has focused on quantitative data. This section of the chapter will examine the technologies that the Bank has deployed to collect and, more importantly, represent data ostensibly related to education, but within the systems-approach espoused by the Bank in its ESSU 2005 and ESS 2020 papers. Material technology, computers and statistical software packages, intersect with discursive technologies in SABER. The visual representation (on pages and computer screens) of what is produced at this intersection is more than a just representation, and it plays as great a role as any other technology in shaping a future global education marketplace.

According to the Bank, the lack of reliable data in developing countries has presented significant challenges towards understanding the levels and the trends of poverty and consequently adapting policies and interventions towards poverty reduction is problematic, and no less so in the context of education. To redress these apparent gaps in knowledge, the Bank intensified its research efforts, augmented the volume of research papers and data available, and developed computational tools and software designed to promote ease of analysis and documenting of information on economic development. These analytical tools include *ADePT*, *iSimulate*, *PovCaINet* and *PovMap*, all performing differing functions within the sphere of knowledge provision. For example, *iSimulate* allows for the simulation of macroeconomic trends while

*PovCalNet* permits calculations to be conducted around poverty and inequality measures and to standardize and replicate measurements in World Bank publications. The most relevant to education is *ADePT*:

The purpose of this new tool is to pull common educational indicators out of microlevel survey data and present it in a print-ready form, facilitating further analysis by researchers. Using *ADePT*, a researcher can access over 15 predefined tables that present information on over 30 educational indicators. ... *ADePT Education* also provides 30 graphs on educational attainment and enrollment. (World Bank, 2014, online)

*ADePT Edu* provides over 30 indicators, including data on attendance, cohort survival rates, per pupil expenditures and more. And each indicator can be cross-referenced against other indicators and against demographic categories; ultimately, *ADePT Education* is an extensive spreadsheet. Below is a “snapshot” of one of the tables provided among the 107 pages of output produced by *ADePT Education*’s standard output file.

**Table A1: School attendance ratios and out-of-school by level, according to background characteristics**

	Primary			Secondary			Post-secondary
	Gross Attendance	Net Attendance	Proportion of out-of-school	Gross Attendance	Net Attendance	Proportion of out-of-school	Gross Attendance
Total	59.8	80.3	3.6	72.2	64.2	1.4	54.8
<b>Gender</b>							
Boys	64.9	84.7	2.4	70.6	64.0	0.4	52.9
Girls	54.2	75.1	5.1	73.7	64.3	2.3	57.0
<b>Area of residence</b>							
Urban	78.0	78.1	4.4	72.4	62.8	0.8	61.0
Rural	89.0	85.3	1.7	71.7	67.9	2.9	41.3
<b>Residence and gender</b>							
Urban - Boys	86.2	85.4	2.1	69.7	63.5	0.6	57.6
Urban - Girls	68.8	69.8	7.1	74.9	62.2	1.0	64.6
Rural - Boys	83.6	83.1	3.1	72.8	65.3	0.0	44.4
Rural - Girls	96.1	88.2	0.0	70.4	71.0	6.5	37.4

Figure 2. (Partial) Output table from *ADePT Edu* software

I will examine this aspect of SABER in more depth in Chapter 4, but it is important to approach *ADePT* as a technology that employs a discrete means for

constructing knowledge. Essentially the Bank is placing quantitative non-economic data side-by-side with economic data, conflating the two, bringing (nominal) education knowledge and economic knowledge into discursive alignment, if not simply making them indistinguishable from one another. Such conflation makes it simpler to assign economic value to educational knowledge. However, again, a tension exists between an underlying neoliberal epistemology (a broad knowledge widely drawn upon and accessible so as to be decentralized) empowering choice in a market and the technical rationality underlying the operation of the technology used to enact that epistemology. Relying on a technical rationality to legitimize and deploy knowledge it deems essential to good decision-making, market decision-making, the Bank excludes tacit knowledge or actors interacting with its “data,” i.e. it admits nothing of the experience of those who produced the data, those who make up the pre-reflexive phenomena (Knorr-Cetina and Bruegger, 2002), or the experience of those reading the spreadsheet whose lived experience might provide a different judgment, one not framed and contained by a given set of cells, and lines and tables. In many ways, then, again, by constructing knowledge this way, the Bank sins against the epistemological bases that make market decisions effective, which in neoliberal terms is synonymous with efficiency. Recalling from Chapter 2 that Hayek assumed a decentralized collective of actors could distribute goods and resources far better than a single centralized actor, the Bank’s epistemology is arguably antithetical to Hayek’s because the Bank’s reliance on a particular technical rationality excludes actors with no access to that rationality. Bourdieu

couches this in terms of differentiated habitus and capital. This exclusion is even plausible when talking about actors who are professionals in state-based agencies such as national education ministries or finance ministries, let alone local education experts or classroom teachers.

This promulgation of data is particularly evident in more recent Bank visual technologies, which are something qualitatively new. These technologies do not merely represent “more of the same,” but enact what Johanna Drucker (2014) called a “visual epistemology” to *extend* the trajectory of the Bank’s policy and practice as described over the last decade. I will not fully engage Drucker here, but it is worth noting that “Some visualization formats, such as tables, are so generalizable and so re-purposable that their structure almost disappears from view” (p. 87), which is exactly why I am bringing them to the surface here and in Chapter 5. Simultaneously, “The act of reading across and down, through a coordinate grid, to find information, is a generative act” (p. 88), and that fact is essential to understanding how this technology is new for the Bank and those actors who intersect with it. As I explore how the Bank’s deployment of visual technologies extends its policy trajectory, its epistemology, I will suggest aspects of a “visual epistemology” consistent with Drucker’s observations and I will draw inferences wholly my own. However, what’s important to remember is that the Bank’s reliance on these visual technologies will result in more than just an extension of its trajectory.

The device most prevalent across the technologies I explore is *the frame*. The visual frame - in the table or the chart or the graph— organizes information,

implying that there is purpose behind it. That implication of purpose is what conveys its legitimacy and is delineated in not just the categories provided but in the limits imposed by the frame, not unlike Rose's earlier (1996) cited quote, specifically that inscription technologies "make[s] possible the extension of authority over that which they seem to depict" (Kindle Location 577). This notion is also consistent with what Bourdieu (2005) called "instruments of knowledge endowed with universal validity" (Kindle Location 257). Outside of the frame there continues to be an endless stream of data (quantitative, qualitative, discursive), but inside the frame is an organized, focused, discrete knowledge. One of the very criticisms of the Bank's knowledge production is its inclusion of certain kinds of knowledge and its exclusion of other types of research knowledge (Klees, 2012, pp. 60-61). The visual framing technology of ADePT is an additional means by which World Bank creates knowledge that actually governs behavior, namely by including and excluding what information becomes knowledge about a given education system. *That* knowledge is inseparable from the choices that neoliberal policies attempt to construct for national education systems, schools, and families.

The "Graph for Mean Hourly Earnings" produced by ADePT illustrates the same phenomena discussed above.

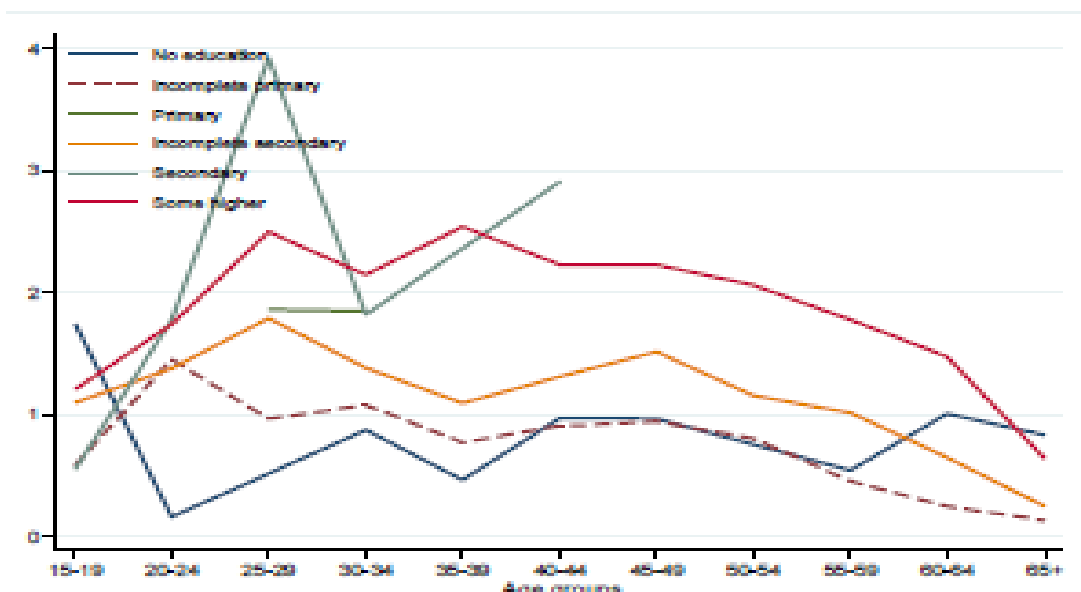


Figure 3. Output graph of “Mean Hourly Earnings” from ADePTedu

Ultimately, any knowledge inside this frame is laden with assumptions established by the World Bank itself, in addition to the underlying visual epistemology (Drucker, 2014) that accompanies this particular technology. Whether it is a question of dimension or generativity, this technology constructs knowledge in a particular way, simultaneously circumscribing it and magnifying it. Those assumptions are consistent with the knowledge production highlighted so far that is necessary to make decisions about the government of education – schooling and learning– approaching an economic government. Another technology deployed by the Bank in this regard is its Education Statistics web-portal database.

*Education Statistics (EdStats)*, the World Bank's database on education-related statistics and general information, is continually expanded. *EdStats* permits access to a range of national and global data around both government and non-government run schools. Among the sources for its data are the

UNESCO Institute for Statistics (UIS), the World Bank, the International Monetary Fund (IMF) and the Organization for Economic Co-operation and Development (OECD). The information is composed of quantitative data collected from 1970 to the present but with data projections to 2050, and with education trends and comparison available from 1985 to 2007. In terms of the practical aspects of access the information, the *EdStats* data can be provided visually in chart form, maps and tables and downloaded to Excel or ASCII format. The World Bank website for *EdStats* highlights seven discrete categories of informational topics in which queries can be made. The categories include, among others:

- Core dataset of over 1000 internationally comparable education indicators for all education levels;
- Data from five international learning assessments (PISA, TIMSS, PIRLS, PIAAC, and EGRA) and three regional assessments (SACMEQ, PASEC, LLECE);
- Data on internationally comparable indicators on education spending globally.

(World Bank, 2015e)

Additional applications, labeled as “Tools and Resources” as part of *EdStats* are the “Data Visualizer” and the “Dashboards.” A snapshot of the “Data Visualizer” for drop-out rates and net enrollment rates globally is another illustration of the Bank’s use of visual technology as a knowledge construction technology.

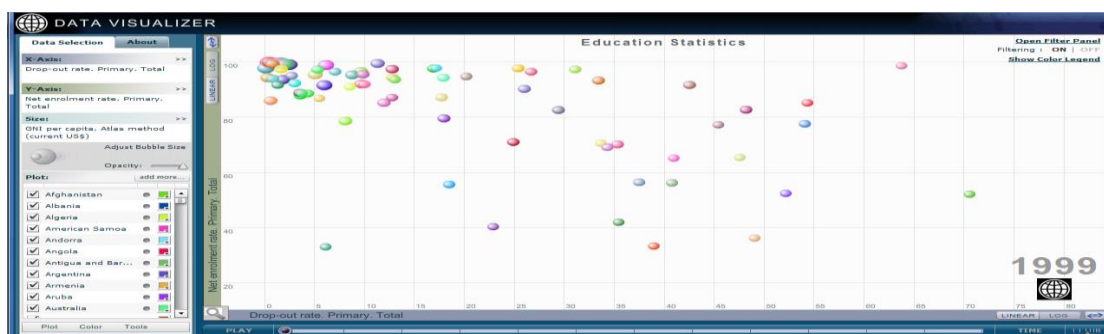


Figure 4. EdStats Data Visualizer



In Figure 4 (World Bank, 2015) each colored dot represents a country, while the X axis represents total primary drop-out rates and the Y axis is for total primary net-enrollment rates. I offer up this snapshot because one of the most significant transformations for the World Bank is not its underlying epistemology, one that relies on quantifiable data on education that can thereby be made equivalent to quantifiable economic data, an epistemology that ostensibly draws on decentralized and dispersed information. Rather, the transformation occurring at the Bank is in regards to the actual technologies being deployed to construct knowledge, like this “Data Visualizer” above. Not only do the X and Y axes construct a frame within which the information is packaged into knowledge, constricted as it were; within the frame are smaller frames demarcating limits and each country, entire nations of students, are contained within the colored circles. The *EdStats* dashboard does much the same thing, and together these technologies are best seen as technologies governing knowledge construction, that knowledge being indispensable for choice in a market. Specifically, in this case the data would serve to inform actors across scales, but certainly at the global scale about making a potential investment in a country’s economy or in a country’s education sector. Below is another display the *EdStats* Dashboard:

## Overview -- Argentina

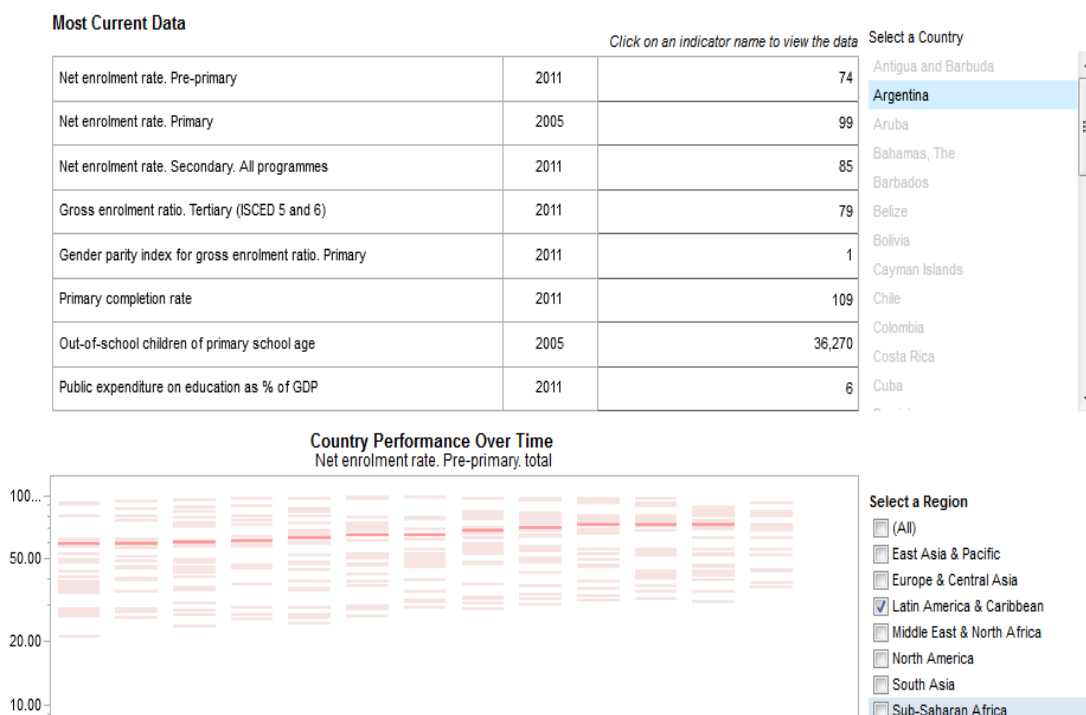


Figure 5. EdStats Output: Argentina pre-primary enrollment

For Figure 5 (World Bank, 2015) the user can request a view of Argentina's total net enrollment rate over time at the pre-primary level, represented by the darker red lines in the chart at the lower half of the screen shot. The user can then choose a filter that displays other Latin American and Caribbean countries' data for the same measure. Thus, the frame presented here not only limits and includes and excludes; this particular "tool" benchmarks Argentina's pre-primary enrollment against its regional neighbors. Such benchmarking is a hallmark of the SABER system, the method a necessary precursor in the Bank's construction of the relative value of an educational system, in this case Argentina's. This is no different than the benchmarking and publishing practices observed to rank

schools or school systems currently in the U.S. or trans-nationally by the OECD. Highlighting the emergence of a new material technology –the data system and visual technology– in the Bank’s “knowledge bank” emphasizes the Banks’ mission to not only construct knowledge but how it does so by excluding other types of knowledge that might be harder to exclude when producing a peer-reviewed research article or the like. This is something not addressed by critics of the Bank’s stranglehold on knowledge; the focus has been strictly on the Bank’s discursive strategies. Such a visual technology is part of the larger technological complex governing educational decision-making. An additional feature that distinguishes the *ADePT Edu* and *EdStats* platforms is the degree to which it makes the users complicit in the construction of the knowledge in question. In Drucker’s terms (2014), these technologies are “generative” and “combinatronic,” even as those elements being combined by a user cannot themselves be changed (p. 88, p. 116). By establishing a platform that has distinct parameters that frame or proscribe the type of knowledge available for decision-making but that also institutes filters to be manipulated by an external actor, knowledge is constituted in a distinctly neoliberal manner. Technology like this makes the user, the individual actor, in some sense responsible for the knowledge produced. Figures 2, 3, and 4 are each a result of decisions a user made about what discrete information to put in relation to other discrete information. Likewise then, each action a user takes to shape the picture forming on a screen potentially makes that user complicit, and thereby responsible, in that picture and in some sense obligates the user to validate what is inside the

frame. Furthermore, this complicity resubjectifies the user as a “co-producer” or even “partner” in knowledge production with the World Bank. That partnership, one actor at a time, then, makes a network, or market of actors complicit in creating a global picture of education that is framed within and by technologies deployed by the World Bank in a way that no publication of the Bank’s can accomplish.

Software technologies are being used to provide access to knowledge around various issues. The Bank hopes promoting the accumulation and ease of access to more knowledge will mean more efficient and productive work on the ground. However, by deploying technologies that increasingly frame and construct knowledge in an exclusively economic context, the Bank takes a pivotal position in influencing those who may benefit from increased access to such a type of information. This influence becomes particularly acute with the prominent deployment of its visual data technologies for two reasons. First, while data sources may create the appearance of empirical breadth and depth, and may appear scientifically “objective,” deploying raw data outputs loaded with scientific legitimacy while providing no diversity of interpretations of that data actually makes narrower the conception of knowledge at work. This ignores even neoliberal premises about the necessity of contextual non-scientific knowledge in assessing supply and demand and the relation between the two. Second, while a user of this visual data technology appears to access a broader and deeper knowledge generated from its quantitative vastness, the actor in question actually becomes complicit in constructing this particular type of knowledge, likewise

becoming complicit in excluding other types of knowledge and potentially even excluding his or her own tacit knowledge.

### **Conclusion**

Throughout this chapter I have attempted to demonstrate that despite appearances to suggest its focus is solely on broad development, the World Bank seeks returns for its investments, unsurprising considering it is a bank. In its early decades, investment by the Bank normally found its way to physical, 'brick and mortar' projects. However, to ensure continued rates of return, more prominence was given to concerns such as staff quality and school and national governance. This shift led to more development loans and programs, like SAPs, being used with conditionalities attached which exerted influence over all actors; its loans acted as a technology for creating increased choices and decentralized knowledge around education finance decisions.

Additionally, I showed how the Bank sought to create and foster demand and a nascent marketplace. Towards this end, the Bank activated multiple technologies of different scales (global finance to national policy making to a tertiary regional trade school) to manufacture choice necessary for a market to exist and flourish. Conceptually and materially, a decentralized network of relationships between state and non-state, private and public bodies was established and legalized. This is consistent with a neoliberal approach that promotes decentralization of knowledge and proliferation of choice with the goal of fostering a market, or economic government of education. I attempted to reveal how the fostering of these partnerships in practice became privatization of

the previously solely public decision-making process. “Partnerships” then become another technological complex changing the nature of education investment.

The Bank's creation of a supposed neutral 'knowledge bank' is countered by critics' assertions of it being a self-referential system, one that produces informational norms to be digested by external actors and which bolster its existing practices. Whereas knowledge can be considered inherently contestable (Klees 2012), the Bank's means for constructing knowledge does not include authentic space for opposition or heterogeneity. Such resulting homogeneity is necessary to establish how relative value is assigned in order for economic exchange to occur. However, this result highlights tensions between the technical-rational means underlying the technologies deployed for such an establishment on the one hand, and underlying neoliberal epistemology admitting non-scientific and tacit knowledge of dispersed individual actors on the other hand. Like Klees or Robertson or Steiner-Khamsi each in their own way, Verger and Bonal (2012) concluded that the ESS 2020 “does not introduce significant policy innovations compared to previous World Bank education strategies” (p. 138). Technologies are increasingly contributing to this normative role the Bank plays in knowledge construction in what Verger and Bonal called the Bank's “attachment to a disciplinary knowledge and to empirical methods that attempt to explain how variables behave” (p. 138). While Klees (2012) offered some embryonic alternatives for financing education development globally and Robertson (2005) looked to the OECD and European Union as potential

alternative models she paints as neoinstitutional, no current critics have examined in detail what the Bank is doing in education financing, what the future implications are for the Bank's trajectory, and none offer detailed plausible alternatives. Tikly (2014) ascribed these failures in recent criticism largely to academics' "fatalistic pessimism" (p.347) and nebulous constructions of "learning" from which a "counterhegemonic effort" might be launched (p.350) if they were better developed. He was correct to ascribe much what passes for the work in recent volumes to disciplinary battles between economists at the World Bank and academics approaching global education development from sociological bases (p.349). That much I have covered in this dissertation in different contexts, and my final chapter suggests how the emerging global market in education must be informed by an economic sociology if it is to exceed the limits of what Bank practices have proscribed thus far.

Finally, unlike the conclusions of the recent critics, I suggest the Bank's trajectory is extending in a noteworthy way. Software technologies are being deployed to not simply create and provide access to the Bank's discretely constructed knowledge, but to create legitimacy for such policies which that knowledge undergirds. Such proscribed knowledge contributes to discerning relative value between two or more education systems so a marketplace may be established. By including or excluding select information and sources on education systems details, the Bank can align (qualitative or quantitative) discursive knowledge to match its own epistemology, thereby potentially governing the behavior of a multiplicity of actors. From this vantage point, how

important the use of visual and data technologies are to manufacturing and accumulating knowledge for the Bank becomes more visible. The Bank purports that the amount of quantitative data it is making available is signal of the data's breadth and heterogeneity, even its global character, but this very characterization is contestable because of how the data is collected and presented, how it is circumscribed and magnified. The data displayed in visual technologies may be a more constricted knowledge than peer-reviewed research or other methods might produce. Furthermore, at the sites where such knowledge is co-constructed with actors across scales, the effects of using these technologies may be all the more seminal. I will explore the trajectory of the World Bank's policy and practices and its implications more specifically when I examine the Bank's *Systems Approach for Better Education Results (SABER)* in the proceeding chapter and its role in the movement towards a global education marketplace.



## CHAPTER 4

### SABER AND THE COMING GLOBAL EDUCATION MARKET

#### **Introduction**

The previous chapters established that neoliberal educational policy, the economic government of education, rests on two discretely constructed and interdependent principles, knowledge and choice, each enacted then through the deployment of various technological complexes. The unparalleled technological complex for an economic government, even an economic government of education, is the market. Chapter 3 reviewed World Bank policy development and practice over the last twenty years in the context of the Bank's reliance on the principles of economic government and those principles made manifest in the deployment of discrete technologies, such as privatization, standardized assessment, decentralization, benchmarking, etc. Highlighted in Chapter 3 was how the Bank's emphasis on a statistical knowledge conflated economic and non-economic information and was accessed and expressed through visual technologies. That conflation and the deployment of that technology magnify certain types of knowledge which contribute to the establishment of the relative economic value of educational practices between countries. Examples of this were the *EdStats* program, the abandoned *EdInvest* program, and the emerging *Performance-for-Results* (P4R) program.

In this chapter, I will examine in depth another World Bank program emerging at the same time as the release of its ES2020 policy statement, SABER, which stands for *Systems Approach for Better Educational Results*. The current chapter will first offer the broad overview of SABER and its 13 “domains.” However, I will quickly delve more deeply into one of those domains, SABER – Student Assessment (SABER-SA) in order to illustrate how SABER, as a government technological complex, continues the trajectory of World Bank policy outlined in Chapter 3. Specifically, Chapter 4 will illuminate that SABER’s design lays the material and discursive (linguistic, quantitative, qualitative) groundwork for discerning the relative economic value of different national educational subsystems. Such discernment, along with SABER’s visual technology capabilities and the Bank’s financial capital, sets the stage for my speculation in Chapter 5 and Chapter 6 regarding future global education markets, particularly for financing education.

What I reveal about SABER in this chapter via my examination of SABER-SA relies heavily on tables and rubrics and on the SABER website; none of this is facile. Grasping the visual presentation of SABER is necessary for understanding what the initiative is doing and where it could be going in the next decade. Examining the visual presentation of aspects of SABER is also powerful because such an examination augments an understanding of SABER as an assemblage, a technological complex, governing the relationship between The World Bank and its “clients” and the relationship clients have with themselves in terms of “conduct” or that clients have with each other. This assemblage can be

understood in terms of the neoliberal epistemology engaged by the World Bank intersecting with what Johanna Drucker calls the “visual epistemology” at work in the very types of visual technologies used by SABER. My work in this chapter will continue to intersect with aspects of Drucker’s work. At the intersection that is the technological complex known as SABER, in addition to individual investors in education (families) are national ministries, NGOs, and private financial investors, although this chapter will focus on the scalar relationship between national and global actors and sites (Dale and Robertson, 2009). Visual exhibits and screenshots from the SABER website make clear the power of inscription technologies to “make possible the extension of authority over that which they seem to depict” (Rose, 1999, Kindle Location 577). Furthermore, because “Inscriptions thus produce objectivity in a way that is different in its nature and its uses from speech and the bearing of witness” (Rose, 1999, Kindle Location 577), the inclusion of the inscription technology as part of SABER shows it as a true complex where the material and the discursive assemble most of what is necessary for a market. Little has been written only about SABER, but what I produce in this chapter is different from previous examinations because of my focus on SABER as a government technology, how SABER’s design causes it to govern heterogeneous actors in discrete ways, and its context as a complex whose teleology is consistent with creating a market for education (policies, practices, provisions, schooling, and more).

Following that unpacking of the SABER complex, I will explain what kind of technological complex I think SABER is, meaning exactly how and what

SABER is governing. And SABER is a complex because each of its domains is a technological complex itself, so SABER is a complex of complexes and each of those are made up of myriad technologies. Each may represent different “kinds” of power, and it’s worth recalling Dale’s (2004) suggestion that a governmentality perspective does not preclude other notions of power being at work in any given context (p. 180). Particularly, however, I will lay out why I think SABER is a scopic technology for the global economic government of education. To do so, I rely on the work of Sobe and Ortegón (2009), Karin Knorr-Cetina and Urs Bruegger (2002) and Knorr-Cetina (2003) but I extend their work in multiple ways, materializing it in SABER but using that materialization to help understand how we can **see** their “scopic” notion in terms of a governmentality approach, a complex that changes behavior and is likewise changed by those very changed behaviors. Ultimately, SABER –because it is literally a bank technology- exhibits characteristics suggesting its potential to be the neoliberal government technology *par excellence*, a market. But that very scopic notion and its interactivity suggest multiple futures for such a market, futures made visible by a sociological perspective married to an exploration of other alternative market technologies increasingly deployed today. Such futures are the subject of the final chapter of this dissertation but require exploration of SABER in order for those futures to be comprehensible and plausible.

SABER, like neoliberalism and World Bank policy, is rife with blindspots and contradictions (see Robertson (2012) for just a few examples). However, examining those tensions and their consequences are part of a larger work that

will be useful but not accomplished here. Nonetheless, noting *some* such contradictions contributes to extending the exploration of SABER and potentially rendering it more useful than a caricature of neoliberal epistemology and ontology. In a way, a thoughtful consideration of its inconsistencies, here and generally, will render it more understandable as a work of human agency, even if my work itself does not focus on the human decision-making that resulted in SABER. Additionally, these contradictions potentially open paths for developing a new way of approaching global education policy or at least finding a balanced approach, instead of what in the last decade appears to be reactionary ideological battle among policy makers, politicians, and academics or what Tikly (2014) characterized as interdisciplinary conflict.

I avoid such fruitless warfare. I do not critique the implicit or explicit goals of SABER, per se, such as offered in some of the essays in the collection edited by Klees, Samoff, and Stromquist (2012) or that edited by Collins and Wiseman (2012). The writers in the former edition were scathing in their critique of the implicit goals of World Bank policy. However, my current chapter eschews what feels like ideological reflex in the Klees et al. edition and instead offers what I think is a more rewarding approach: One, I clearly delineate the means by which SABER enacts some of that which both the aforementioned volumes critique, meaning I do not problematize SABER as much as straightforwardly unpack it; two, my approach lays the groundwork for imagining in detailed material terms a future that enacts a global economic government of education and its very plausible implications; three, the speculation resulting from the groundwork in this

chapter opens the door for additional work to be done both in theorizing a future for the movement of educational knowledge and practice and affecting that future in a way that most actors in the field of comparative education have heretofore not attempted. I do not believe any of the current academic critiques of the Bank or SABER accomplish so much in terms of constructing pragmatic visions of the future of global education policy and practice. Tikly (2014) suggested what is necessary to establish a counterhegemonic vision, and my work contributes ideas upon which others can build such a vision, but in concrete, not conceptual terms.

### **What is SABER?**

*Structure, domains, objectives.* The World Bank's *Systems Approach for Better Education Results* (SABER) stated purpose:

is to give all parties with a stake in educational results a detailed, objective, up-to-date, easy-to-understand snapshot of how well their country's education system is oriented toward delivering learning, based on measures that can be easily compared across education systems around the world. (Rogers & Demas, 2013, p.5)

In practice this means that countries and education systems conduct a detailed examination of their own institutions and policies through a standard methodology established by SABER, allowing for comparisons around global “best practice” in education, a construct established in Bank publications and, therefore, open to some contestation, as discussed in Chapter 3. Data collection consists of a questionnaire, collection and analyses of policy data and a review of the evidence for the most effective policies to promote learning. This whole process is set forth in the 'What Matters' framework paper which covers

individual policy domains. This process of information accumulation and development culminates in an online tool which provides all stake-holders access to the comprehensive data, secondary documents, country reports and diagnostic tools and questionnaires (World Bank, 2014b). Consistent with the trajectory of knowledge construction examined in Chapter 3, SABER therefore acts as a tool to construct and access an information repository, enabling stakeholders to evaluate and analyze their own and other countries' policies and, ostensibly, subsequent performance in one or more of 13 domains. Performance could be on educational outcomes, for instance, or enrollment, in order to produce:

... comparative data and knowledge on education policies and institutions, with the aim of helping countries systematically strengthen their education systems. SABER evaluates the quality of education policies against evidence-based global standards, using new diagnostic tools and detailed policy data collected for the initiative. The SABER country reports give all parties with a stake in educational results—from administrators, teachers, and parents to policymakers and business people—an accessible, objective snapshot ... (World Bank, *About Saber*, n.d.)

The above passage captured the emphasis on knowledge construction, narrowly constricted, its comparative relationship (necessary for establishing value), and the intersection of that knowledge (and its construction) with various stakeholders. The SABER overview document, *The What, Why, and How of The Systems Approach for Better Educational Results* (Rogers & Demas, 2013) positioned SABER as working in service of the World Bank's *Education 2020 Strategy: Learning for All*, identifying the Bank as a promulgator of global education policy. While the history of SABER is brief because its nominal

existence has been brief, only having been unveiled by The World Bank's Human Development Network in 2011, the provenance of the instrument can be traced to World Bank policies at least a decade old, as outlined in the previous chapter.

In line with ESS 2020, SABER adopted a systems approach to education analysis and reform. It emphasized the importance of institutions, governance and system policies in pushing for improved educational achievement and quality. A systems approach, according to the Bank, was based on the recognition that improving education:

... requires strengthening all factors that improve learning for all children and youth. This means making sure that the education system's policies and institutions for governance, accountability, information, financing rules, and school management are all aligned with learning for all. SABER is helping define and analyze education systems ... (World Bank, 2014)

Little could better emphasize SABER's role in constructing knowledge, as opposed to simply collecting and disseminating it, than the above passage's assertion that SABER was "helping define" education systems. The remit of SABER is large since the ESS 2020 portrayed an education system as encompassing a "large number of structures and participants at all levels of education" (World Bank, 2011, p. 30). Such a whole system approach involved recognizing and understanding the entire system of processes surrounding and impacting education (as identified by the Bank), then incorporating this knowledge of those influencing elements into the development and implementation of specific education policies. Additionally, the Bank asserted that "better" information from this systems approach would inform policymakers about



supply shortages and financing deficits, provide information to help market expansion plans, lessons that might better inform reforms at different levels of education. While Klees (2012) attempted to dismiss the systems approach of ESS 2020 and SABER as outmoded, outdated, and proven to be a failure, other critiques indirectly suggest that a systems approach is necessary, such as Stromquist's (2012) insistence that any approach should consider gender equity. Tikly (2014) warned against ignoring how education intersects with myriad other government sectors, or parts of life that are governed by intersecting technologies (my term), such as health (p. 351). In fact, implicit in many critiques of The Bank's policies has been that those policies do not acknowledge the inter-relatedness of the domains, particularly as such pertain to vertical scalar relationships, and Robertson (2012) warned against seeing The Bank as *only* a global institution. While raising such critical perspectives here might seem to be confusing different problems, it is appropriate because it brings up the notion that the Bank's systems approach is not contextual in its consideration of the very policies it suggests are important. This is a matter taken up extensively by Steiner-Khamsi in discussing policy borrowing and lending (2006, 2010).

After reviewing the SABER methodology below, I will unpack the notions of knowledge constructed by that very methodology by looking at one of SABER's domains in greater depth. Likewise, unpacking the SABER methodology will reveal how the construction of knowledge (its inscription, circumscription, and presentation) creates specific implications regarding choice for potential users of SABER. These constructions of knowledge and choice,

and their relationship, then, assemble what is necessary for a future educational market to be explored in Chapter 5 and Chapter 6.

*SABER methodology.* To view a national education system in its purported entirety, the SABER overview document (Rogers & Demas, 2013) organized the domains, or areas of educational policy-making, in the following way:

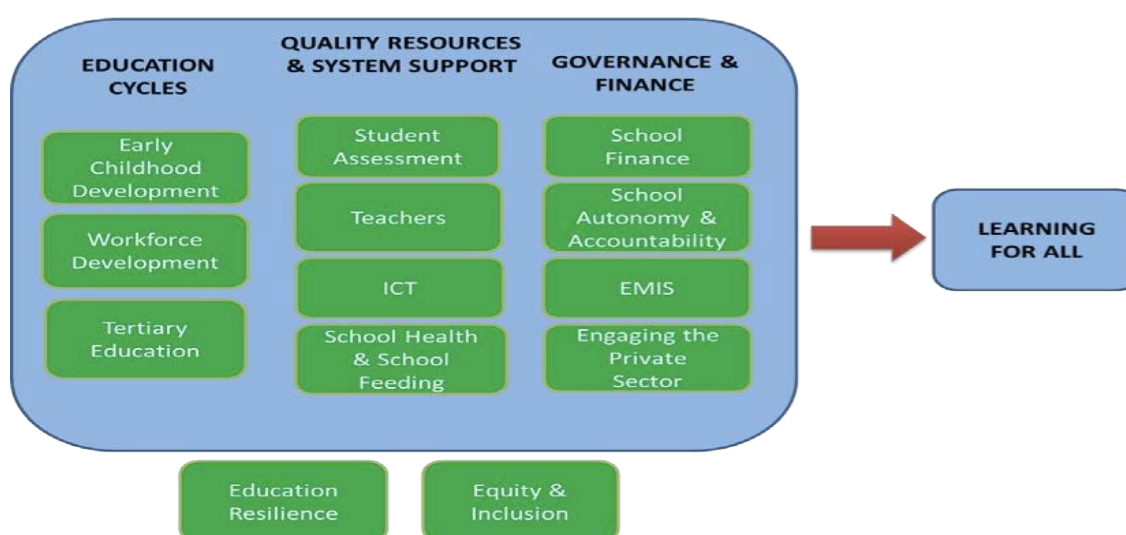


Figure 6. SABER domains

Figure 6 (World Bank, 2011) depicts the first three domains, Early Childhood Development, Workforce Development, and Tertiary Education as constituting the education cycle. The following domains in the second column show the aspects of support in the provision of education, including student assessment and school health and feeding, although how “student assessment” qualifies as a “support” for school systems is not made clear in any documents nor how it is similar to the other three domains organized under “Quality Resources and System Support.” The last column's domains comprise schools and school

system governance and financial aspects; again, little is explained by the Bank document regarding the rationale for how some of these domains are organized together under their respective subjects. It should not be lost on readers that “Equity & Inclusion,” while presented by the authors as one of two “cross-cutting” domains, is denied inclusion with the other domains.

Graphic organizers, especially boxes and tables (which ultimately serve as frames and lenses) are important for understanding the Bank’s approach, which I explore more later in this chapter, particularly as they include and exclude what might constitute an illumination or a contradiction regarding what is contained within a given visual (and discursive) frame. Noting Rose’s quote earlier about how such inscription devices confer authority over that contained by the inscription, Figure 6 suggests the Bank’s assertion of authority not only over concepts such as Student Assessment, but the relationship between Student Assessment and Teachers. Likewise, because criticism of the Bank has included that discrete Bank policies and practices exacerbate inequality (Bonal, 2002, p. 8), it is somewhat confounding that the Bank’s own depiction of SABER has “Equity and Inclusion” outside the very box that confers its authority over the other domains contained therein.

Although, as cited above, SABER does offer comparability between different countries’ respective education sectors, the authors explicitly state that “Unlike some other multi-country policy assessment tools, SABER does not produce rankings of national or state education systems—even within education policy domains— since the goal is not to “name and shame” less developed

systems” (Rogers & Demas, 2013, p. 7). Such contradictions will be touched upon generally, as cited by other scholars, and when examining the “Student Assessment” domain in more detail. However, in subsequent sections I will make clear how what SABER achieves through its discrete technological means makes explicit discursive shaming unnecessary; the means in question still contradict the Bank’s assertion of its position regarding such tactics.

In terms of assessing the performance of a country’s educational sector in a given domain, SABER’s methodology includes seven steps. First is the production of the background “What Matters Most” paper for each domain, which the SABER overview document states “surveys the best evidence and experience in the domain and uses that survey to identify the elements of the policy and institutional framework that matter most for improving education outcomes” (Rogers & Demas, 2013, p. 14). Consistent with the critique of the Bank’s knowledge construction reviewed in Chapter 3, what is included here is open to the criticism that it is narrow and self-referential. Second, and useful for later discussion is the identification of indicators (related to policy and/or development and/or implementation) and development of rubrics for scoring performance on said indicators. Third is the development of a data collection instrument, usually a survey to be completed by an expert on-the-ground investigator. Fourth is the actual data collection. This involves collecting data by local experts within the country itself, with that information then being verified through discussions at state level. Fifth is the analysis, which is conducted by a “domain team,” but which implies further contradictions related to those noted

earlier. Specifically, this team “will also generate benchmarks of progress in those specific areas against other countries or provinces ... While the principal investigator in each country may carry out the initial analysis, the central SABER team for each domain is responsible for completing the analysis and ensuring cross-country comparability” (Rogers & Demas, 2013, p. 14). Step six is “Validation and Discussion” of the data and analyses, both among the domain team members from WB but also between the team members and actors from the unit being assessed, e.g. ministerial staff members. The final step is the publication of the data and analyses.

The SABER overview document purports that SABER’s methodology “illuminates policy choices” (Rogers & Demas, 2013, p. 15) through analytical, descriptive, and evaluative approaches. However, I will suggest that SABER, as exemplified in the Student Assessment domain, deploys relentlessly one rudimentary device to “illuminate” policy. And “illumination” is of worthwhile emphasis if we come to “see” SABER in “scopic” terms. Nonetheless, as the overview document nears its conclusion, without acknowledgement the authors again revisit an apparent contradiction: Namely, when providing benchmarking and ratings for a certain national educational system’s development vis-à-vis a certain policy “the policies of the country being studied are implicitly benchmarked against the policies of top-performing systems and those that have improved most rapidly” (Rogers & Demas, 2013, p. 20). Pointedly, what are illuminated are respective *differences in policy and practice*. Thus, what can be *seen* by users of SABER, whether clients of the World Bank or not, are said

differences. That its methodology illuminates these differences and that SABER quantifies (via the use of comparison and scale) a country's development in a given domain are inseparable from the program's nascent establishment of relative value for a given country's policies and practices.

### **SABER – Student Assessment**

As stated earlier, SABER is really a complex of technological complexes, many associated with a neoliberal governmentality over the last decade or more. At least four of the domains –Assessment; Engaging the Private Sector; Accountability and Autonomy; Management and Information Systems– represent technologies associated with New Public Management specifically or neoliberalism more generally, including but not limited to: Benchmarking, public reporting of assessments, privatization of services, decentralization, etc. None of these technologies are new to World Bank in its development of SABER. However, as begins to emerge from a cursory look at the SABER overview, and will become more clear upon examining one of its domains, Student Assessment, SABER consistently deploys a discursive strategy – embodied in a number of representations of its domains – that serves as a recurring technology which governs SABER's interactions with actors on multiple scales – international, national, subnational, and local.

In “Placing Teachers in Global Governance Agendas,” Susan Robertson (2012) examined OECD's Teaching-and-Learning International Study (TALIS) initiative and at SABER-Teacher as examples of new mechanisms for the global government of teachers. Robertson applies the earlier work of Basil Bernstein's

approach to pedagogic discourse (1990, 2000) to reveal how the World Bank (through SABER) and other global actors “classify” and “frame” the meaning of terms in the discourse on pedagogy (Robertson, 2012, pp. 588-89, *passim*) and, subsequently, the discourse around teachers. Specifically, she cited SABER’s use of policy goals and core teacher policy areas as examples of “strong” classification and framing, respectively (Robertson, 2012, p. 599). And Robertson noted that for each “teacher policy” area there are specific questions to be asked. The questions constitute the data collection aspect of SABER mentioned above; the answers provide the data then scored in rubrics based on indicators, also identified above, but here applied to teachers, specifically. Part of one of the rubrics is included here:

#### SABER-Teachers: Rubrics

1. Setting Clear Expectations for Teachers						
A. Are there clear expectations for teachers?						
Indicator	Latent (1)	Emerging (2)	Established (3)	Advanced (4)	Questions	Calculation
1. Are there standards for what students must know and be able to do?	No OR Missing	Yes, at the local level	Yes, at the sub-national level or national level		S1Q13	
2. Are the tasks that teachers are expected to carry out officially stipulated?	No		Yes		SSQ13	
B. Is there useful guidance on the use of teachers' working time?						
Indicator	Latent (1)	Emerging (2)	Established (3)	Advanced (4)	Questions	Calculation
1. Do teachers' official tasks include tasks related to instructional improvement?	No	1 task out of: mentor or support other teachers, collaborate on the school plan, design the curriculum, and take part in the internal evaluation activities of the school	2 or 3 tasks out of: out of: mentor or support other teachers, collaborate on the school plan, design the curriculum, and take part in the internal evaluation activities of the school	4 tasks out of: out of: mentor or support other teachers, collaborate on the school plan, design the curriculum, and take part in the internal evaluation activities of the school	SSQ14f, h, i, j	Don't Knows count as no

Figure 7. SABER-Teachers: Partial rubric

The methodology used in every SABER domain is used in the domain analyzed by Robertson and constitutes “strong” classification and framing technologies deployed by SABER, and it should not be overlooked that most of the rubric’s

developmental scores (Latent, Emerging, etc.) are based on binaries, meaning that a series of questions with only “yes/no” responses result in a scoring system that is scaled. Robertson’s explanatory use of Bernstein was effective but ultimately Bernstein’s “classification,” “framing” and “field of symbolic control” served the same purpose for Robertson as do my allusion to Rose’s (1999) invocation of “inscription devices” or Bourdieu’s (2005) “instruments of knowledge.” All of these intersect with what Drucker (2014) identified as the “rhetorical” effect of *graphesis*. To her, graphical tools like tables have persuasive power (p. 19, p.54, 66). Each author ultimately speaks to how these means deployed by the Bank legitimize a certain type of knowledge and implicate multiple actors in the construction of that knowledge.

I now want to explore more how these rubrics (and their underlying questions together) function as technologies, but will do so in the context of the following in-depth examination of SABER-Student Assessment (SA). It will be most effective here to simply summarize two aspects of the SA overview document, then cite a series of graphic organizers used in this domain’s overview document as a way to illustrate again, quite materially, how SABER frames and repeatedly re-frames the discourse around education policy and practice.

Specifically, SABER’s “Framework for Student Assessment Systems” is expressed in two “dimensions”. The first dimension of this domain is “Assessment Types/Purposes” and the second dimension is what the authors call “Quality Drivers”. Dimension One is then expressed in three different classifications – “Classroom Assessments,” “Examinations,” and “Large-scale,



system-level assessments” (Clarke, 2012, pp. 15-16). Dimension One is certainly recognizable in terms of a pluri-scalar quality like that proposed by Dale and Robertson (2009) for understanding the scope of global educational policy and practice. Dimension Two is likewise divided into three types – “Enabling Context,” “System Alignment,” and “Assessment Quality” (Clarke, 2012, pp. 15-16), but there is no scalar characteristic to the divisions of type. Upon presenting the characteristics of each of these domains and their respective subdivisions, the overview document first presents a blank table, followed by one completed with “indicators,” as can be seen here:

<b>Assessment types/purposes</b>			
	<b>Classroom assessment</b>	<b>Examinations</b>	<b>Large-scale, system-level assessment</b>
<b>Enabling context</b>		Policies Leadership and public engagement Funding Institutional arrangements Human resources	
<b>System alignment</b>		Learning/quality goals Curriculum Pre- and in-service teacher training opportunities	
<b>Assessment quality</b>		Ensuring quality (design, administration, analysis) Ensuring effective uses	

Figure 8. SABER-Student Assessment: Assessments and Drivers

Figure 8 (Clarke, 2012, p. 15) does more than simply “organize” these complex conceptual topics of “Quality Drivers” (Enabling Context, System Alignment, and Assessment Quality each themselves complex and multifaceted) or “Assessment Types/Purposes.” In a simple way that becomes increasingly complicated and will be depicted shortly, the above speaks to “the performative capabilities of tables” (Drucker, 2014, p 88). Specifically, she writes that:

Groupings, separated by lines, and impressed with respect to alignment and proximity, are all strategies whereby spatial and graphical properties are engaged in a systematic set of relations that help produce meaning. (p. 86)

Thus, even in the simplest of formats, while not new like the graphic interface technologies already discussed, meaning is co-produced in some sense that is usually taken for granted by actors and critics alike. Furthermore, little of the content inside these frames is necessarily 'neoliberal' in quality. Certainly, some topics, such as "Human Resources" suggest a managerialist character. But few policy scholars or policy makers would contest the importance of "Curriculum" or "Learning/Quality Goals" or the importance of "Ensuring Quality" for "Classroom Assessments." Yet, the indicators provided pertain to where a given quality driver and assessment type intersect in practice. And the indicators are illuminated through the questionnaires that the Bank uses in a given country investigation; these questionnaires themselves already linguistically and rhetorically proscribe what is included or excluded, respectively, by the respondent and Bank investigator. Furthermore, the use of a visual frame begins a relentless repetition that materially includes and excludes not only the content of these concepts. The visual frame, and the use of an x and y axis establishes a relationship in visual space between given concepts. However, this framing of the content and its intra-relatedness do not end here. Rather, it is reframed again, but this time by a benchmarking technology with the patina of developmentalism:

Dimension	Development Level				
	LATENT (Absence of, or deviation from, attribute)	EMERGING (On way to meeting minimum standard)	ESTABLISHED (Acceptable minimum standard)	ADVANCED (Best practice)	Justification
<b>EC—ENABLING CONTEXT</b>					
EC1—Policies					
EC2—Leadership, public engagement					
EC3—Funding					
EC4—Institutional arrangements					
EC5—Human resources					
<b>SA—SYSTEM ALIGNMENT</b>					
SA1—Learning/quality goals					
SA2—Curriculum					
SA3—Pre-, in-service teacher training					
<b>AQ—ASSESSMENT QUALITY</b>					
AQ1—Ensuring quality (design, administration, analysis)					
AQ2—Ensuring effective uses					

Figure 9. SABER-Student Assessment: Dimensions rubric

Figure 9 (Clarke, 2012, p. 18) now flips the x and y axes depicted in Figure 8 but not the underlying intersection of just these assessment types with just these quality drivers at these conceptual locations. Figure 9 breaks down again and “scales” accordingly, the scale being benchmarked to successful “systems” from across the globe which are synonymous with best practice as defined by the Bank’s same rubric used here. However, by including the scaling as it does, in terms of “growth” from “Latent” to “Advanced” the new inscription does not merely reinforce inclusion and exclusion, nor does it simply reinforce spatial relationships, locations where concepts come together. The scaling now contributes to a fundamental shaping of time and space. Thus, SABER technology does no less than establish the ontology and epistemology of student assessment globally. And because of how government technologies like student assessment are deployed, that ontology is not merely one conferred upon the assessment types or quality drivers in question. Rather, a discrete ontology emerges as a result of these assessment technologies intersecting, and that ontology re-subjectifies every actor engaged with the said technologies that make up the complex of “Student Assessment” –from the student taking a given test to the teacher administering that test to the minister monitoring the deployment of that test to the private for-profit company scoring the test. In each technological complex, “dimensions” and “domains” and “scales” constitute the discursive framing which are made literal in the visual frames on the page or screen (yet more frames, lenses), and do so with such force through repetition, which speaks to SABER’s potential effects on every actor involved with this over-

arching technology. The point is that SABER's framing, its inscription, as an instrument of knowledge, is assertive enough that it will result in various actors being governed and governing themselves differently as a result of interacting with SABER. This is what marks SABER as a technology whose effect is the "conduct of conduct" (Gordon, 1991). Such is the case without every aspect of SABER necessarily being "neoliberal." Rather, that every aspect is re-inscribed by the SABER methodology as a complex of economic government is consistent with Robertson's assertion that education and its social interactions have been transformed as an outcome of neoliberal incursions into the social lives (going to school, getting a job, reading, writing, etc.) of individuals via technologies that are multi-scalar (2012b, p.36).

### **SABER as Refraction Technology**

Figure 10 (Clarke, 2012, p. 20) provides the text that in general terms describes the indicators of 'progress' for any given assessment on a particular quality driver. For example, a country's progress on classroom assessment would be considered "Established" vis-à-vis "System Alignment" if: 1) "Assessments aligned with learning/quality goals, standards, curriculum" and; 2) "Assessments aligned with pre- and in-service teacher training opportunities." I include this figure to emphasize the following: First, as tedious as it might seem to display yet another table, which expands on those already depicted, doing so is important because it illustrates how repetition constitutes much of SABER's

	Emerging	Established	Advanced
<b>Enabling context</b>	<ul style="list-style-type: none"> <li>No or limited policy framework or guidelines</li> <li>Weak leadership/public engagement</li> <li>Few trained staff; high turnover</li> <li>Unreliable/irregular funding</li> <li>Unclear or unstable institutional arrangements</li> </ul>	<ul style="list-style-type: none"> <li>Presence of clear policy framework or guidelines</li> <li>Strong leadership/public engagement</li> <li>Training programs/trained staff with low turnover</li> <li>Stable/regular funding</li> <li>Clear and stable institutional arrangements</li> </ul>	<p>The same as for Established</p> <p>+ strong focus on:</p> <ul style="list-style-type: none"> <li>Assessment for learning</li> <li>School-based and classroom assessment</li> </ul>
<b>System alignment</b>	<ul style="list-style-type: none"> <li>Assessments not fully aligned with learning/quality goals, standards, curriculum</li> <li>Assessments not aligned with pre- and in-service teacher training opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Assessments aligned with learning/quality goals, standards, curriculum</li> <li>Assessments aligned with pre- and in-service teacher training opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Role of teachers</li> <li>Innovation and research-based practices</li> </ul>
<b>Assessment quality</b>	<ul style="list-style-type: none"> <li>Limited awareness or application of technical or professional standards for ensuring assessment quality and effective uses</li> </ul>	<ul style="list-style-type: none"> <li>Awareness and application of technical or professional standards for ensuring assessment quality effective uses</li> </ul>	

Figure 10. SABER-Student Assessment: Drivers and Development

power. Specifically, by repeating its framing, SABER repeatedly confronts its viewer with a choice to accept or reject that framing, to engage in that co-production suggested by Drucker. In other words, the very ontology that SABER establishes through repetition is also forced upon its consumer (or potential investor) through repetition. While each of the tables depicted thus far in this chapter might appear slightly different, they are really the same, each magnifying the same particular ontology for student assessment. Such repetition speaks to both the “framing” Bernstein depicts and Robertson deploys in examining SABER-Teachers and to the power of inscription devices described by Rose

(1999), but I believe that the repetition makes consumers of the text complicit in its underlying ontology. Second, every indicator descriptor provided in Figure 10 not only alludes to a set of questions that already pre-proscribe the subsequent visual proscription enacted by the table itself, each indicator descriptor really refers to a whole set of government technologies that must be undertaken in order for a country to capture that description for itself. In terms of Student Assessment in SABER, in order for an assessment type to be "... aligned with learning/quality goals" etc. requires sets of rules, procedures, actors, and related sub-technologies all to be enacted across multiple-scales depending on the assessment type in question. Student Assessment certainly suggests myriad vertical examples, from physical procedures and material technologies deployed to ensure that national or international tests given in a classroom are administered in a standardized manner to the material technology purchased and used to score assessments to the algorithms employed to calculate scores in a normative or criteria based manner and so forth. Such a cascading of technologies is vertical but each is deployed across a horizontal scale too. This holds true across every one of the thirteen domains in SABER and each domain's subsequent (and identical) methodology, already generally described. Third, although a general rubric that can be applied to three different assessment types (Classroom, Examination, Large-Scale) might not appear sufficient to capture the contextual differences between the different types, the function of such inscription as that deployed by SABER-SA in this instance is not to highlight such differences. Instead, here SABER collapses those differences so that

differences along the X axis may be highlighted. Thus, “Emerging,” “Established,” and “Advanced” student assessment systems, no matter the type of assessment being evaluated, are what get compared. Such a highlighting of differences is necessary for subsequent visual benchmarking to occur. Fourth, and following from my third point, is that although the scales deployed might be suggestive of “growth” or “development,” that scale is constructed on the premise of “best practices” which are derived from practices in other countries’ assessment systems which are deemed successful, i.e. “Advanced.” These last two facts are essential for our subsequent examination of SABER as a necessary device for the establishment of a global education market.

Because SABER’s means are so predominantly visual, as was the case with the Bank’s use of tables and graphs in the *EdStats* technology depicted in Chapter 3, I would like to expand on what I have just unpacked in order to explain how SABER is a particular type of government technology, one that is “scopic” in nature, as defined by Knorr-Cetina and Bruegger (2002), Knorr-Cetina (2003), and re-contextualized by Sobe and Ortegón (2009). Essentially, a “scopic” system, is not wholly visual but depends on visual technology to project the representation of a phenomena to other actors. The projection, a single picture of the whole, is a distortion due to the very technology projecting it, while also being part of a system in which the actors can respond to the picture they view, and their response (communicated visually, auditorily, linguistically) changes the picture. Thus, a scopic technology visualizes phenomena but distorts the phenomena in a particular way, bringing it closer or making it appear



farther way, having an ontology of its own, separate from the phenomena depicted (Knorr-Cetina, 2003, p. 8; Sobe and Ortegon, 2009, p. 58) and a scopic system relies on this technology. SABER’s scopic technology refracts, bends, discrete information into synthetic relations, changing the meaning and ontology of particular educational phenomena, policies, and practices. This visual framing is enacted in a pluri-scalar sense, but more rigidly than any notion of scale developed by Dale and Robertson (2009). For example, in the “Advanced” column in the table depicted in Figure 10, a reference is made to “School-based and Classroom Assessment,” and the SABER-Student Assessment document then provides in Appendix 2 another framing device, a rubric, for “Classroom Assessment”:

LATENT Absence of, or deviation from, the attribute	EMERGING On way to meeting minimum standard	ESTABLISHED Acceptable minimum standard	ADVANCED Best practice
<b>Enabling Context &amp; System Alignment (EC &amp; SA)</b> Overall policy and resource framework within which classroom assessment activity takes place in an education system, and the degree to which classroom assessment activity is coherent with other components of the education system.			
<b>EC&amp;SA1—Setting clear guidelines for classroom assessment</b>			
(Q1) There is no system-level document that provides guidelines for classroom assessment.	(Q1) There is an informal system-level document that provides guidelines for classroom assessment.	(Q1) There is a formal system-level document that provides guidelines for classroom assessment.	This option does not apply to this dimension.
This option does not apply to this dimension.	This option does not apply to this dimension.	(Q3, Q4) The availability of the document is restricted.	(Q3, Q4) The document is widely available.
<b>EC&amp;SA2—Aligning classroom assessment with system learning goals</b>			
(Q5) There are no system-wide resources for teachers for classroom assessment.	(Q5) There are scarce system-wide resources for teachers for classroom assessment.	(Q5) There are some system-wide resources for teachers for classroom assessment.	(Q5) There are a variety of system-wide resources available for teachers for classroom assessment.
(Q6) There is no official curriculum or standards document.	(Q6) There is an official curriculum or standards document, but it is not clear what students are expected to learn or to what level of performance.	(Q6) There is an official curriculum or standards document that specifies what students are expected to learn, but the level of performance required is not clear.	(Q6) There is an official curriculum or standards document that specifies what students are expected to learn and to what level of performance.
<b>EC&amp;SA3—Having effective human resources to carry out classroom assessment activities</b>			

Figure 11. SABER-Student Assessment: Enabling Context partial rubric

In Figure 11 (Clarke, 2012, p. 27), only aspects of “Classroom Assessment”, a dimension which is part of the domain of Student Assessment, are being described. Note that visually the rubric has become even more detailed. Additionally, it now has references to other sub-dimensions and to specific

questions on the standardized questionnaire used for data collection. This rubric represents just *one of twelve like it* that are produced as a result of the methodology deployed in the “Student Assessment” domain. As noted before, many of the initial discursive phenomena (and even identified indicators such as Classroom Assessment) refracted through the scopic system of SABER are not esteemed only by advocates of neoliberal educational policy. Thus, SABER’s methodology, how it is a technological complex resulting from the intersection of any number of government technologies, and its resulting ontological and epistemological transformations, are more suggestive of neoliberalism than are any of its constitutive parts.

In Figure 12 below, I have taken a number of rubrics already referenced and re-produced them in a particular way to illustrate my point. The text inside the cells inside the tables is not important except to know that each references yet another technology used to gather the information included there, i.e. a survey or questionnaire or assessment was deployed. But representing the rubrics as I do below illustrates what I mean when I suggest that SABER is telescopic vis-à-vis a deployment of nesting technologies:

	Classroom assessment	Examinations	Large-scale, system-level assessment
Enabling context	Policies Leadership and public engagement Funding Institutional arrangements Human resources		
System alignment	Learning/quality goals		
Assessment quality	Emerging	Established	Advanced
	<ul style="list-style-type: none"> <li>No or limited policy framework or guidelines</li> <li>Weak leadership/public engagement</li> <li>Few trained staff; high turnover</li> <li>Unavailable/irregular funding</li> <li>Unclear or unstable institutional arrangements</li> </ul>	<ul style="list-style-type: none"> <li>Presence of clear policy framework or guidelines</li> <li>Strong leadership/public engagement</li> <li>Training programs/trained staff with low turnover</li> <li>Stable/regular funding</li> <li>Clear and stable institutional arrangements</li> </ul>	The same as for Established  + strong focus on:  + Assessment for learning  + School-based and classroom assessment  + Role of teachers  + Innovation and research-based practices
Assessment quality	<ul style="list-style-type: none"> <li>Assessments not fully aligned with learning/quality goals, standards, curriculum</li> <li>Assessments not aligned with pre- and in-service teacher training opportunities</li> <li>Limited awareness of</li> </ul>	<ul style="list-style-type: none"> <li>Assessments aligned with learning/quality goals, standards, curriculum</li> <li>Assessments aligned with pre- and in-service teacher training opportunities</li> <li>Awareness and application of</li> </ul>	

Assessment quality	LATENT Absence of, or deviation from, the attribute	EMERGING On way to meeting minimum standard	ESTABLISHED Acceptable minimum standard	ADVANCED Best practice	Justification
	Enabling Context & System Alignment (EC & SA) Overall policy and resource framework within which classroom assessment activity takes place in an education system, and the degree to which classroom assessment activity is coherent with other components of the education system.				
	EC&SA1—Setting clear guidelines for classroom assessment				
	(Q1) There is no system-level document that provides guidelines for classroom assessment.	(Q1) There is an informal system-level document that provides guidelines for classroom assessment.	(Q1) There is a formal system-level document that provides guidelines for classroom assessment.	This option does not apply to this dimension.	
	This option does not apply to this dimension.	This option does not apply to this dimension.	(Q3, Q4) The availability of the document is restricted.	(Q3, Q4) The document is widely available.	
	EC&SA2—Aligning classroom assessment with system learning goals				
	(Q5) There are no system-wide resources for teachers for classroom assessment.	(Q5) There are scarce system-wide resources for teachers for classroom assessment.	(Q5) There are some system-wide resources for teachers for classroom assessment.	(Q5) There are a variety of system-wide resources for teachers for classroom assessment.	
	(Q6) There is no official curriculum or standards document.	(Q6) There is an official curriculum or standards document, but it is not clear what students are expected to learn or to what level of performance.	(Q6) There is an official curriculum or standards document that specifies what students are expected to learn, but the level of performance required is not clear.	(Q6) There is an official curriculum or standards document that specifies what students are expected to learn and to what level of performance.	
	EC&SA3—Having effective human resources to carry out classroom assessment activities				
	(Q7, Q8) There are no system-level mechanisms to ensure that teachers develop skills and expertise in classroom assessment.	This option does not apply to this dimension.	(Q7, Q8) There are some system-level mechanisms to ensure that teachers develop skills and expertise in classroom assessment.	(Q7, Q8) There are a variety of system-level mechanisms to ensure that teachers develop skills and expertise in classroom assessment.	

Figure 12. Layered SABER-Student Assessment frames

At each new layer, a new technology or set of technologies is referenced, and in terms of visual epistemology, this is important. This framing and re-framing does more than shape the ontology and epistemology of the education systems of those countries being assessed by SABER. By ‘fitting into’ these frames, by providing information to be captured by an inscription technology, actors from the classroom level to the school to the district level and beyond must change behaviors in order to be able to describe themselves in terms of SABER’s levels, types, areas, dimensions, and domains. At each subsequent iteration, time and space are increasingly distorted, even as they are circumscribed, just as a given object, for it to be captured as an image by a lens must be bent and shaped to be so captured. So each of these domains, of the thirteen mentioned, each as a technological complex, in fact relies on the same basic framing and nesting of frames in order to “conduct the conduct” of the actors engaged with SABER. Considered another way, SABER functions like a conceptual *matryoshka*, a Russian nested doll, requiring each iteration to fit inside its subsequent iteration or to capture its previous iteration, with all the implications for inclusion, exclusion, and distortion necessary for that to happen.

But at the same time that what is inside each subsequent frame is intensified as it is reframed, as a strategy to inscribe not just the authority of SABER but the authority of what is inside the frame, the original data which at some point was rooted in a human behavior and/or social interaction -what Karin Knorr Cetina would call the pre-reflexive reality (2003, p. 7-8, *passim*)– is increasingly refracted. For Knorr-Cetina’s study of currency traders, the traders’

computer screens (and the functions particular to Bloomberg or Thomson-Reuters terminals) linked across the globe change this initial data, “projecting” them for the purpose of microsocial interactions between traders (2003, p.8). Sobe and Ortegón (2009) build upon Knorr-Cetina’s description of the traders’ interactions, adapting it in order to explore the global movement of educational knowledge. Sobe and Ortegón, using Knorr-Cetina’s descriptions of what she calls a Global Reflexive System (2003, p. 8), portray the movement of educational knowledge in “scopic” terms in that it is knowledge *projected* in any number of ways, through material, discursive, performative social interactions at international physical and virtual forums. For Sobe and Ortegón, a collective (global) and ever-changing fractal-based picture emerges of educational knowledge. Robertson (2012b, p.41) rightly observes that any single fragment might result in exclusion, but I believe she incorrectly concludes that the collective picture assembled by a scopic system necessarily lacks diversity. However, my point in citing Knorr-Cetina and Sobe and Ortegón is that SABER is scopic both literally and figuratively, in both Knorr-Cetina’s context of financial information framed and circumscribed by a screen and in Sobe and Ortegón’s context of educational knowledge; both posit their respective systems as reflexive. In one way, SABER has collapsed the two, making the metaphorical material in a proprietary scopic system that necessarily lacks diversity while collapsing economic and educational knowledge.

Thus far, I have examined in depth how SABER reliance on visual technologies, framing and refracting information relentlessly, results in a scopic

technology for the government of educational knowledge and, by establishing relative value, the potential for choice. My borrowing from Knorr-Cetina and Bruegger and Sobe and Ortegón has not yet accounted fully for SABER in scopic terms, particularly in terms of its social interactional context or its global reach. In the final section of this chapter, I will explore how SABER's reach suggests the possibility of a global reflexive system that could become the platform for a worldwide education market.

### SABER as a Global Scopic System

The next frame Student Assessment, depicted in Figure 13, incorporates

Mozambique		SABER Country Report 2009	
STUDENT ASSESSMENT			
<b>Key Policy Areas for Student Assessment</b>			
<p><b>1. Classroom Assessment</b> The national curriculum provides some guidance for classroom assessment activities, although curricular expectations appear to be too high considering students' typical knowledge and skills. At the same time, limited pedagogical resources are available to support teachers in carrying out classroom assessment activities. While country-level mechanisms (inspection and supervision) that could help teachers develop classroom assessment competencies are in place, these do not currently focus on classroom assessment as a key area of consideration.</p>	<p><b>Status</b> Emerging ● ● ● ●</p>		
<p><b>2. Examinations</b> Examination results are used to make promotion decisions for students in grades 5, 7, 10, and 12. CNECE, which is part of the Ministry of Education, is responsible for overseeing the examinations. While examination results are credible overall, there is some concern about corruption and malpractice. There also is awareness of the need to further standardize the examinations. Examination results are mainly used by schools and teachers, and are not used to inform education policies.</p>	<p><b>Status</b> Emerging ● ● ● ●</p>		
<p><b>3. National Large-Scale Assessment (NLSA)</b> The assessment office in the Ministry of Education (INDE) has been in charge of three NLSA exercises, in 2000, 2006, and 2009. Funding for these exercises was provided mainly by international donors. The NLSAs have been aligned with the national curriculum, but the expectations of this curriculum are too high given students' typical knowledge and skills. The assessment office has provided supervision to ensure standardization of NLSA activities, although lack of resources and low capacity has threatened effective implementation. The intention to disseminate NLSA results has not translated into an effective communication plan, and results have been poorly disseminated, if at all.</p>	<p><b>Status</b> Emerging ● ● ● ●</p>		
<p><b>4. International Large-Scale Assessment (ILSA)</b> Mozambique has participated in two ILSA exercises: SACMEQ II and SACMEQ III. The SACMEQ exercises have been overseen by the assessment office in the Ministry of Education (INDE) and have benefited from stable funding that covers all core activities. While a national coordinator was appointed for each SACMEQ exercise, there is no full-time staff devoted to SACMEQ activities. INDE staff has benefited from the training provided by SACMEQ to build its assessment capacity. Despite the intent to disseminate and use SACMEQ results, there is concern about their poor dissemination and lack of impact on the school system.</p>	<p><b>Status</b> Emerging ● ● ● ●</p>		

Figure 13. SABER-Student Assessment: Country Report, Mozambique

all the other previous frames, likewise incorporating the previous series of technologies in this single "snapshot" of student assessment in a single country, Mozambique. Thus, each single frame, each cell in the previous tables depicted thus far, has had what was inside it refracted, collapsed, condensed, bent, so

that it could fit inside what is depicted in Figure 13. What might appear simple summarization actually requires extensive framing and reframing, inclusions and exclusions, distortions, in order for a “rating” and descriptor to be provided. And in Figure 13 the “rating” depicted is entitled its “Status,” which could carry a connotation that is criteria based, although a more common connotation is normative. Such a distinction is important to keep in mind when considering yet another subsequent framing, another inscription, of student assessment.







	Policy Goal - Ratings		Reports/Documents			
						
	<a href="#">Angola Country Report (2009)</a>	<a href="#">Armenia Country Report (2011)</a>	<a href="#">Kazakhstan Country Report (2012)</a>	<a href="#">Kyrgyz Republic Country Report (2009)</a>	<a href="#">FYR Macedonia Country Report (2012)</a>	<a href="#">Mozambique Country Report (2009)</a>
>> Scroll right to see more						
<b>CLASSROOM ASSESSMENT</b>	●●●●● EMERGING	●●●●● ADVANCED	●●●●● ESTABLISHED	●●●●● LATENT	●●●●● EMERGING	●●●●● EMERGING
<b>EXAMINATIONS</b>	●●●●● EMERGING	●●●●● ESTABLISHED	●●●●● EMERGING	●●●●● EMERGING	●●●●● EMERGING	●●●●● EMERGING
<b>NATIONAL LARGE-SCALE ASSESSMENT (NLSA)</b>	●●●●● LATENT	●●●●● EMERGING	●●●●● EMERGING	●●●●● EMERGING	●●●●● LATENT	●●●●● EMERGING

Figure 14. SABER Policy Goal Ratings Report

By navigating to the “Data Quick Access” pull down menu on the SABER home page, then selecting given countries and which “Student Assessment” “Policy Goals” to view, a user can view a screen such as that depicted in Figure 14, above. This frame, while it cannot be called ranking, makes visible what Susan Robertson called “competitive comparison” (2012) and reinforces that common connotation of “Status” depicted in Figure 13. Note how that previous frame,

depicted in Figure 13, a screen dedicated to Mozambique's performance on Student Assessment, is inside a frame, inside a screen, now shared by countries from across the globe, each defined by the same frame which in turn is the result of any number of previous framings, each one having made more focused and intense the representation of the original phenomena, data, that gave rise to that representation. Thus, again, what was contained in each previous frame is subsequently magnified even as it is reframed and contained.

Also distinct for its neoliberal character is the ongoing complicity of SABER users in the technology's knowledge construction and the decision-making thereby engendered. At this juncture, SABER is "combinatronic" (Drucker, 2014), meaning the user can choose which countries and which domains or assessment types to compare. The elements available cannot be manipulated by the user but the combination of countries and types of assessments (or the like) to be put in relation to one another is decided by the user, making the user a co-producer of whatever is then displayed. The technology is designed to assume the user wants to make a choice, assumes the user's freedom to make such a choice, but does not presume all the details of that choice, i.e. the technology does not choose for the user. Thus, upon choosing to place the ratings of Mozambique next to those of Angola, Armenia, Kazakhstan, the Kyrgyz Republic, and Macedonia, the user is now responsible for what is produced and complicit in the assumption that such a comparison has value, *specifically that the relative value represented has value*. Neoliberal to its core, SABER as a technology does not just construct knowledge as difference



because that will elicit choice, but SABER relies on actors' freedom to choose to construct the knowledge as difference in the first place.

SABER has taken an initial phenomenon –that lived experience (whether as students taking a test in a classroom or teachers examining test results in a Professional Learning Community or officials analyzing results in a ministry office)- and has framed it in such a way as to change it ontologically and epistemologically. And, while much academic criticism has been aimed at the epistemology the World Bank adopts, one that is instrumentalist, positivist, and reliant on quantitative data, it is at this stage particularly, in this frame specifically, that the twin principles of economic government come to the fore. Because it is not until the knowledge is contextualized by choice that the knowledge is actionable in economic terms. Only knowledge that contributes to the choice an individual actor makes in a market context is actionable in neoliberal terms. Instead of simply stating that such framing and epistemology is about “accountability” or “managerialism” I suggest that the relentless framing results in what is visible in the figures provided thus far. Specifically, the series of technologies that reach from the classroom tests to national to international assessments together work toward a frame that renders the epistemology of assessment consistent with the epistemology for a market, i.e. knowledge of the relative value of a product so that a choice may be made. Because Knorr-Cetina is describing a market that communicates relative value via a price system, the price system is the largest (but not sole) determiner of what choice any given actor makes regarding an exchange. Sobe and Ortegón, in adopting both the

scopic and reflexive characters of Knorr-Cetina's description of a global system, do not identify the motivation for one educational idea circulating globally compared to one that does not. There is a somewhat passive system that reflects every representation. SABER, since it is proprietary, only frames, reframes, and refracts its own educational knowledge constructed by its own methodology. But that fact of proprietorship, knowledge, and methodology makes it no different from an institution such as The New York Stock Exchange or the Comparative and International Education Society.

Additionally, while I have suggested how SABER is multiscalar, the "investors" in SABER, those making educational decisions based on SABER's representations, are not individuals such as parents. Rather, on the largest scale depicted by SABER, in the context of the bank being a global bank, such an epistemological framing, such an establishment of knowledge and choice, provides knowledge that only a few actors can potentially engage directly. The Bank has indicated some who are so engaged –policy makers, researchers, and private sector actors including investors and NGOs. Not mentioned are the investors in the Bank itself, in its debt products, its bonds. Investors in the Bank and private investors in education sectors, knowing the relative value of a country's student assessment system could help such investors determine the best country in which to invest. Although it might appear that the knowledge accessed and acted upon by investors implies a complex or expert knowledge, it is actually a "practical" knowledge or reason that the technology is designed to reconstruct by collapsing different types of knowledge, e.g. educational, social,

economic. That the knowledge is meant to be accessible by diverse actors –see those mentioned above –is one indication of how it must activate the judgment of different actors, each with different backgrounds, each with different sets of experience that inform respective judgments. The accessibility is made possible by the very technology heretofore described, the visual technology and scaling contained and refracted by the tables, graphs, and screens. Such inscription confers authority on the producer, the receptor, and the knowledge itself. Conferred with such authority, the technology does not stand-in for practical reason. Instead, the technology functions like a price system. It is useful to recall a passage from Hayek's (1945) essay cited in Chapter 2, when he writes the price system is:

...a kind of machinery for registering change, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers, as an engineer might watch the hands of a few dials, in order to adjust their activities to changes which they may never know more than is reflected in the price movement. (p.527)

Here, for the investor (heterogeneously defined because the Bank as a site for intersection with 'investors' is multiplicitous, e.g. investors in the Bank, state actors in whom the Bank invests, private investors investing with a state's education sector, etc.) SABER is a "machinery for registering change" about which the investor may never know more than what is reflected in the ratings system itself. At this juncture, SABER cannot function fully like a price system is purported to function by Hayek, wherein it incorporates all the experiences of the various actors on either side of an exchange. I will explore just such a possibility below. But what is practical is defined by the actor's experience in the field,

making more accurate a judgment enacted, whether by an Education Minister or global education conglomerate.

By stock-market valuation, Pearson Education is the largest education company in the world, worth £1.16BN (London Stock Exchange 2015), and has operations in more than 70 countries that include the provision of textbooks, online resources, and extensive standardized assessments. Pearson claims to have more than 1.5 million teachers and 35 million students using its products every year (Pearson, 2015; Pearson 2015a). Scantron Corporation is another global assessment company, providing software, data collection outsourcing, consulting and training services in 56 countries (Scantron, 2014). In the third quarter of 2013, Scantron reported revenue of US\$32M (Bloomberg, 2015c). Such investments do take the form of government contracts for assessment services and the provision of such are supported by Student-Assessment's intersection with another SABER domain, "Engaging the Private Sector." Thus, for example, Bank disbursements to the government of Mozambique as part of the Bank's "Education Sector Support Program (P125127)" might include monies for "devising feasible ways of assessing students' learning problems and learning achievement" (World Bank, 2015, p.2) that can then be used by the government to contract with a company like Pearson. In seeing that Mozambique's Student Assessment system is "Emerging," a company like Pearson can begin to assess whether or not contracting with the government of Mozambique will lead to long-term returns. More importantly, however, when Mozambique's ratings are placed next to those of other developing countries, companies such as Pearson or

Scantron can ascertain the relative value of investing in Mozambique compared to other countries. Furthermore, potential purchasers of Pearson stock can quickly access Pearson's own financial statements to identify in what countries Pearson is operating, then access SABER ratings to determine if Pearson is operating in those countries that rate well in terms of "Student Assessment" and "Engaging with the Private Sector." Such scenarios are what make SABER as a price system possible because they form a reflexive system, one where actors' knowledge about value informs action and that action further informs the ratings that were the basis for knowledge in the first place. Such potential intersections are plausible when recalling the relationship between the Bank's IDA/IBRD arms and its IFC arm outlined in Chapter 3. In addition to the scenario suggested above that could result from SABER's technological complex, if such is not already the case, the Bank's IFC arm seeks to subsidize private investment in education in World Bank client countries. Thus, if companies such as Pearson are not on their own seeking opportunities to contract with governments to provide student assessment technologies, the IFC could very well be using SABER to assess such opportunities and communicating the same information through its existing investment networks. Nonetheless, none of the above suggested scenarios are possible without SABER at their core, using "competitive comparison" to establish an ontology and epistemology for education systems constructed in such a way as to catalyze market-based decisions.

While the above possibilities describe one way that SABER functions in a larger financial technological complex, the World Bank's own loan conditionality identifies another ready-made intersection with SABER. When establishing conditions for an initial loan program, the Bank can easily deploy SABER ratings to identify a loan condition. In fact, emerging over the very months of the writing of this dissertation, what was known as its Performance-for-Results program (P4R described in Chapter 3) now has been renamed "Results-based Financing" (RBF) and the disbursement of loans under this program are explicitly being tied to outcomes described via SABER ratings (World Bank, 2015f; World Bank, 2015g; World Bank, 2015h). Hence, SABER ratings have become a metric explicitly tied to a financial value, a loan disbursement and its accompanying interest rate. Student Assessment and Engaging the Private Sector again represent the perfect intersection where such conditionality can emerge. Important here is that once SABER has intersected with other financial technologies at the Bank, a monetary value is established for the very practices underlying a given domain such as Student Assessment, whether that is made explicit or not. That in practice makes SABER function like a price system, and it makes it reflexive in a way similar to what Knorr-Cetina and Bruegger (2002) describe as occurring in global currency markets, albeit with less immediacy than they ascribe to currency trading. In terms of loans issued to countries, the value of those loans, i.e. the likelihood they will be paid back at the interest rate specified, is now based on how much confidence investors have in those policies working. However, that rating and confidence do not alone put these loans on a

market. Rather, the value of the Bank's own bonds, issued on a global bond market, are now directly tied to specific policies put in place, since the likelihood of bonds being repaid affects the interest rates at which the Bank can raise capital. A market for education policy is literally now in play as a result of the intersection of SABER and the global financial technology.

Furthermore, as actors make decisions (explicitly financial or educational) based on SABER information, those policy and financial decisions can yield educational and financial results which change not only those very same SABER ratings, but the SABER ratings of other countries. An example of just such a reflexive relationship is not difficult to imagine in the context of Student Assessment. If, for example, Mozambique accepts Bank funds to improve its assessment of primary grade students (as it actually has), and it uses those funds to contract with Pearson to then deploy a standardized assessment system, it could very well raise its SABER rating in both Student Assessment and Engaging the Private Sector. (Pearson does currently provide educational resource materials in Mozambique (Pearson, 2015b)). As its rating moves higher, other regional national governments, very possibly in loan relationships with The Bank, could actively or passively be encouraged to likewise adopt similar practices in order to raise their respective ratings or even have such a rating be part of a program like Results-based Financing (RBF). Such active or passive encouragement could not only be provided by the IBRD or IFC but by lobbyists for private companies such as Pearson or even NGOs with an interest in deploying staff, e.g. health assessments, social emotional interventions, etc.

SABER is no longer simply documenting and reporting, no longer serving as a means by which the Bank collects and shares best practices across the globe. Instead, the kind of action and reaction I am describing between and across a range of actors and scales imply the very kind of reflexive system described by Knorr-Cetina and Bruegger (2002) and Knorr-Cetina (2003), except without the explicit social technology and liquidity they describe playing a role in the functioning of global currency markets. Just such possibilities implied by existing and emerging social technologies and liquidity will be explored in Chapters 5 and 6.

Finally, SABER provides one more frame that contains all those previously examined:

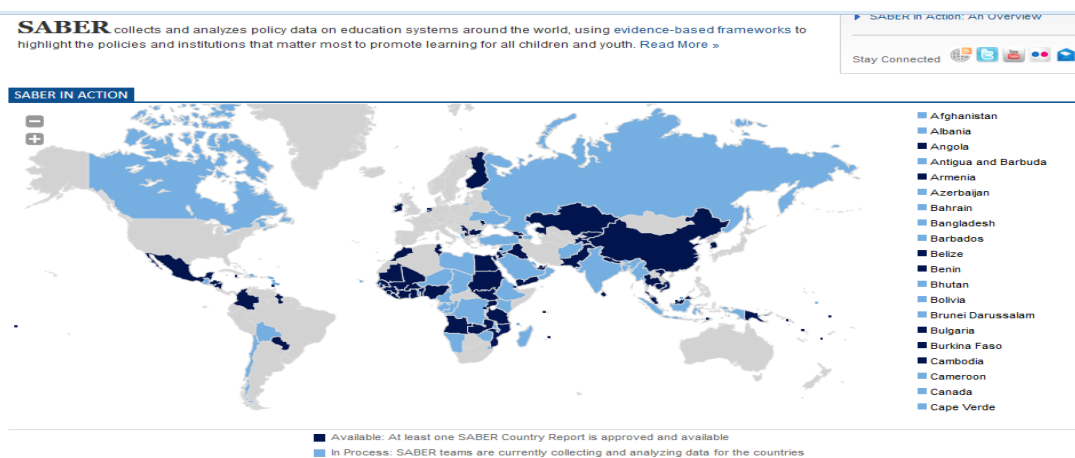


Figure 15. SABER home page

Figure 15 is a screen shot of the first page on the SABER website that greets a visitor. The page, contained within a computer screen, contains the whole world and the opportunity to understand the world in the context of SABER's ontology and epistemology. By clicking on any of the countries colored blue, one can



begin to assess the relative value of one of a country's education domains.

Globally now, SABER potentially enacts a reflexive system for the economic government of educational knowledge and practice, collapsing economic and educational knowledge, so that the latter is fungible and exchangeable because of its conflation with the former. Thus a global economic government of education is made material, discursive, and visual at the same time, even if it is in the proprietary terms of The World Bank. Such a vision calls for a meaningful exploration of the future of education on such terms, for better or worse.

### **Conclusion**

In this chapter I have attempted to provide a basic description of how The World Bank's SABER program functions, especially in terms of a government technological complex. Outlining its documented pillars, its systems approach identifying thirteen domains important to effective national education systems, I briefly used Susan Roberton's examination of SABER-Teachers to launch my in-depth examination of SABER-Student Assessment. Mirroring SABER's own repetition, I highlighted repeatedly how SABER uses discursive, material, and visual technologies to "frame" (Bernstein, 1999 and 2000) and "inscribe" (Rose, 1999) a distinct ontology and epistemology which assembles knowledge and choice in a relationship similar to a market. Unique in this chapter compared to other examinations of SABER is my emphasis on its deployment of digital visual technologies, the screen and graphical interfaces operated by a user of the program, to make users co-producers of knowledge with SABER. This aspect of SABER sets it apart and marks it as distinctly neo-liberal in character because it

relies on the choice of another actor to construct knowledge, which is subsequently used in making additional choices.

Also distinct in my approach is a more detailed explanation of how SABER can govern the behavior of multiple actors who intersect with it. I did not identify SABER as an “accountability” technology *in toto*. Instead, I proposed that such accountability, whether through what is typically called “benchmarking” or in Robertson’s term “competitive comparison,” functions to establish relative value, a necessary component for a market. Furthermore, specifically I build upon the work of Knorr-Cetina and Bruegger (2002) and Knorr-Cetina (2003) and Sobe and Ortegón (2009), suggesting SABER is organized to function like a proprietary scopic system, a visually oriented system that governs actors’ discursive, material, financial, linguistic, and visual behavior. When this scopic system intersects with the Bank’s financial technologies, it can provide what is necessary for SABER to be a platform for a market for education. This is already the case when considering that the Bank’s latest financing program, RBF, relies on SABER ratings to guide financial disbursements, thereby assigning a financial value to specific policy prescriptions. That connection means that financial facts and policy facts can affect each other in ways reminiscent of prices assigned to goods in a market. More precisely, countries’ adoption of SABER-prescribed policies can affect the financing they receive and can affect the rating of the Bank’s bonds issued on global capital markets. And it should not be overlooked that SABER now governs the Bank’s behavior as well as that of its beneficiaries.

Ultimately, the final frame imposed on the educational system by SABER is a global frame. Thus, SABER, relentlessly deploying the technologies of the age –simultaneously discursive, material, and visual– establishes a frame that suggests a global economic government of education. Such a frame and all implied in this chapter will inform my speculation in Chapter 5 and Chapter 6 on future global education markets.

## CHAPTER 5

### SPECULATION: ONE FUTURE GLOBAL EDUCATION MARKET

#### **Introduction**

In previous chapters I explored the World Bank's deployment of government technologies premised on discrete knowledge generation and choice generation. Specifically, World Bank policies over the previous ten or more years have increasingly installed an economic government of education, embodied in programs such as the *EdStats* platform, the abandoned *EdInvest* program, intersections between the Bank's public arm (IBRD/IDA) and private arm (IFC), and the recently developed Performance-for-Results (P4R) program, now renamed "Results-based Financing." Recent critiques of these programs characterized them as neoliberal by focusing on them as discrete approaches activating accountability, decentralization, privatization, etc. and associating those in general terms with neoliberalism. However, those critical approaches failed to identify how each of these complexes, when working together in the context of financing education, form market-like conditions, the real *telos* of neoliberalism, thus missing the forest for the trees. In Chapter 4 I demonstrated how The World Bank's *Systems Approach for Better Education Results* (SABER) is a complex of complexes that brings many of the previously identified practices

together on one platform. When assembled with other technological complexes reliant on digital visualization technologies, SABER forms a scopic and reflexive system that can facilitate market-based financing of education in World Bank client countries and beyond (Knorr-Cetina and Bruegger (2002); Knorr-Cetina (2003); Sobe and Ortégón (2009)). A detailed examination showed how *SABER – Student Assessment* constituted an assemblage of financial, material, digital, and discursive technologies that made possible a global market for educational policy and practices. Thus, as a market, SABER and World Bank policies exceed any critique that isolates the program or respective domains as atomistically unrelated neoliberal strategies.

In this chapter, I will speculate on one distinct future for the exchange of educational knowledge, goods, services, and investments. Specifically, I will revisit how SABER is a precursor to a global education market in material, not merely metaphorical terms. Again, I will rely on Knorr-Cetina's work to understand how this can come to pass. This future, where and when SABER operates as a financial market for education has its own permutations, including at least one where SABER becomes nothing but a rating index for global education investments traded inside existing financial markets. However, this one future picture of SABER as an education market includes the Bank's growing use of social media and how that technology increases social (and potentially economic) liquidity, i.e. the flow of non-economic information exchanged between heterogeneous actors who contribute to the financing and deployment of

educational policy and practice globally. The breakneck speed at which social technologies are evolving suggests another future global education market which will be explored in Chapter 6.

Both of the futures for a global education market I explore in this chapter and the next are congruent with what has been described in terms of governmentality thus far, i.e. they follow from my descriptions of intersecting technological complexes that construct knowledge and choice. The purpose in speculating upon either future is not to suggest that one is better than another or better than current practices for the future of education, no matter how one might define the terms “better” and “education”. The purpose of my speculation is to make very stark and material what education policy formation and exchange might look like on a global scale in order to provoke additional dialogue and research that has not been provoked so far, including the implications for the epistemic community of comparative and international education. In my concluding chapter, I will explore more extensively what my speculation may provoke and how additional research may follow from what I have laid out in these last two chapters.

### **From SABER to Global Financial Market for Education**

In the previous chapter, I emphasized repeatedly how a particular experience, such as a student in a classroom taking a test, could be framed and reframed by SABER, refracted, until it is projected outward as part of a global picture of educational policy and practice. Such is what happens when a

technological complex is enacted around something like student assessment.

That enactment is about much more than “accountability” or “benchmarking.”

That technological complex constructs much of what is necessary for a global picture of educational policy and practice so that a relative value can be

established for a given country’s educational system. Again, consider SABER’s

home page on its website:

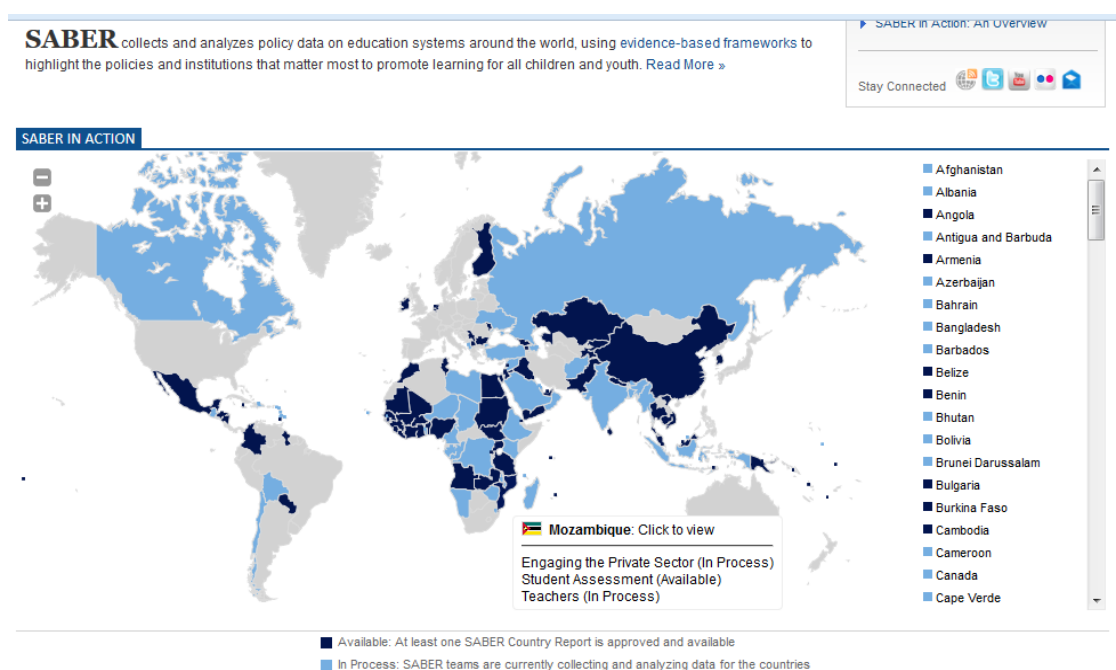


Figure 16. SABER home page: Mozambique

Now SABER is not merely governing a student’s individual experience or solely the relationship between the Bank and a given country. Instead, SABER projects outward from inside a frame what has been refracted and refracted until a global picture can be contained inside said frame, the computer screen. In the past, discrete technologies that were visually oriented were posited by Foucault as means of surveillance by the state and for cordoning off and defining for the

purposes of control, whether it be in the prison, in the classroom, the hospital, or elsewhere (1977). Here, that proposition appears inverted: visual technologies are designed to refract and bend disparate pieces of information, collecting them into a focal point for the purpose of inscribing and displaying them. Thus, the Bank literally establishes a technology that governs education policy and practice, not the least of which because the information represented intersects with the financial technologies of the Bank. As a technology it differs from something as crude as propaganda, because where it intersects with specific (individual, institutional, etc.) actors, those actors are potentially complicit in the knowledge and choice constructed. This is reminiscent of Knorr-Cetina's description of global currency markets as portrayed through the computer terminal screens accessible by traders across the planet:

... such mechanisms collect and focus activities, interests, and events on one surface from whence the result may then be projected again in different directions ... The system acts as a centering and mediating device through which things pass and from which they move forward. (2003, p.8)

The screen is not just a node in a network. And a market is not merely a network. Knorr-Cetina and Bruegger (2002) write that "Networks are sparse social structures, and it is difficult to see how they can incorporate patterns of intense and dynamic conversational interaction, the knowledge flows, and the temporal structuration of global currency markets" (p. 910). Rather, because of its ability to foster microsocial (trader-to-trader) exchanges in real time (financial or non-financial information), this market is a global reflexive system, the result



being that “market reality itself ... has no existence independent from the informational presentation of the market on the screen that is provided by news agencies, analysts, and traders themselves” (p. 915) and “the screen itself is like a mirror that reflects market participants’ activities to one another in real time, at the same time that it enables these activities to happen” (p. 925). The implications of Knorr-Cetina’s observations for SABER are profound, so it is important that I emphasize again the details of the technologies at work.

**<HELP> for explanation.**

United States | 1) Actions | 2) Tools | 3) Settings | Fixed Income Trading

07:34

4) Actives | 5) Bills | 6) Notes | 7) TIPS | 8) Strips | 9) Sprds | 10) Curves | 11) FRN | 12) Bfly | 13) WI

5) Bills				6) Bonds			
31) 05/21/15	0.010/0.005	0.005	--	49) 3 <sup>1</sup> / <sub>8</sub> 844	109-25+ / 26+	2.641	+ 04
32) 07/23/15	0.020/0.015	0.015	-0.005	50) 3 N44	107-09+ / 10+	2.641	+ 04
33) 10/22/15	0.090/0.085	0.086	--	51) 2 <sup>1</sup> / <sub>2</sub> 245 30YR	96-31 / 31+	2.647	+ 04
34) 03/31/16	0.215/0.210	0.214	+0.005	7) TIPS			
6) Notes				52) 0 <sup>1</sup> / <sub>8</sub> 420	102-10+ / 102-11 <sup>3</sup> / <sub>4</sub>	-0.348	+ 02 <sup>3</sup> / <sub>8</sub>
35) 0 <sup>1</sup> / <sub>2</sub> 217	99-30 <sup>7</sup> / <sub>8</sub> / 31 <sup>1</sup> / <sub>8</sub>	0.515	--	53) 0 <sup>1</sup> / <sub>4</sub> 125	101-26 / 101-29 <sup>3</sup> / <sub>4</sub>	0.053	+ 04
36) 0 <sup>1</sup> / <sub>2</sub> 317 2YR	99-30 / 30 <sup>3</sup> / <sub>4</sub>	0.529	--	54) 0 <sup>3</sup> / <sub>4</sub> 245	102-02 <sup>3</sup> / <sub>4</sub> / 102-11 <sup>3</sup> / <sub>4</sub>	0.662	+ 04 <sup>3</sup> / <sub>4</sub>
37) WI 2YR	0.560 / 0.555		-0.005	10) Curve Trades			
38) 1 218	100-15+ / 16	0.819	+ 00 <sup>3</sup> / <sub>4</sub>	55) 2yr vs 5yr	82.217 / -82.790		-0.839
39) 1 318	100-13+ / 13 <sup>3</sup> / <sub>4</sub>	0.849	+ 00+	56) 2yr vs 10yr	141.244 / -141.828		-1.070
40) 0 <sup>3</sup> / <sub>4</sub> 418 3YR	99-21 / 21 <sup>1</sup> / <sub>4</sub>	0.865	+ 00 <sup>3</sup> / <sub>4</sub>	57) 5yr vs 10yr	58.863 / -59.202		-0.231
41) 1 <sup>1</sup> / <sub>8</sub> 220	100-03+ / 04	1.348	+ 01+	Other Markets			
42) 1 <sup>3</sup> / <sub>8</sub> 320 5yr	100-02+ / 02 <sup>3</sup> / <sub>4</sub>	1.357	+ 01 <sup>3</sup> / <sub>4</sub>	58) US Long (CBT)	7:24 d	161-19	-0-14
43) WI 5YR	1.370 / 1.365		-0.010	59) 10yr Fut (CBT)	7:24 d	129-00+	-0-04
44) 1 <sup>3</sup> / <sub>4</sub> 322 7YR	100-09 / 09+	1.704	+ 02	60) 5Yr Fut (CBT)	7:24 d	120-12+	-0-01 <sup>3</sup> / <sub>4</sub>
45) WI 7YR	1.715 / 1.710		-0.015	61) Dow Jones Ind	4/23	18058.689	+20.420
46) 2 <sup>1</sup> / <sub>8</sub> 824	103-27 / 27+	1.920	+ 02+	62) S&P 500 Ind	4/23 d	2112.930	+4.970
47) 2 <sup>3</sup> / <sub>4</sub> N24	102-22 / 23	1.937	+ 03	63) NYM WTI Crd	7:24 d	57.510	-0.230
48) 2 225 10YR	100-14 <sup>3</sup> / <sub>4</sub> / 15 <sup>3</sup> / <sub>4</sub>	1.946	+ 03 <sup>3</sup> / <sub>4</sub>	64) Gold	7:34	1187.100	-6.920

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2015 Bloomberg Finance L.P. SN 116191 CDT GMT-5:00 6260-286-3 24-Apr-2015 07:34:36

Figure 17. Bloomberg terminal: U.S. Government Bonds

Figure 17 (Bloomberg, 2015a) is a recaptured picture of a Bloomberg terminal screen for trading U.S. government bonds. Bloomberg is itself a proprietary system, i.e. except for the information generated by users inside the system, only Bloomberg LP controls what information comes into the system. Specifically, for a given day the screen shows at what prices bonds are trading, the prices for

U.S. Treasury Bill options, the difference in prices between purchasing bonds at different maturity dates, and more. Additionally, worth noting, and which will be built upon later in this section and chapter, is that in the bottom right quadrant of this screen is listed the performance for that day of different financial markets, e.g. “10yr Fut CBT” which means the price at which 10-year Bond Futures are being traded on The Chicago Board of Trade or “Dow Jones Ind” which means the Dow Jones Industrial Average, the average stock price of 30 large capitalization companies. Not on view here is a “trading” screen where a trader would execute trades of these bonds with other parties who also have Bloomberg terminal, others with access to the same information available as viewed in Figure 17. Likewise, also not shown on any of the figures displayed in my work, are screens that open up inside of screens such as those shown here, where instant messaging takes place between traders located across the globe. These messages are depicted in Knorr-Cetina and Bruegger’s (2002) work and indicate that information related to trading and information unrelated to trading are exchanged through such messaging.

When they write about the way Knorr-Cetina’s notion of a global reflexive system applies to the circulation of global educational knowledge, Sobe and Ortegón (2009) offhandedly quip that:

We are not (yet?) at the point where policy makers and education professors in Birmingham, Brasilia and Bangalore sit in front of screens that supply them with instantaneous educational research journal table of contents alerts, real-time MCAT score reporting, the RSS feed from the UNESCO International Institute for Educational

Planning, and the online social network “status updates” or “tweets” of prominent Ministers of Education. (p. 59)

But if we look at what currently is included on the Bloomberg terminals of traders across the globe, and we consider how that compares to what SABER presents as a possible future, Sobe and Ortegon’s prescient “not (yet?)” comes into focus. Specifically, the remark -in the context of what I am presenting- suggests how what they see as a context just for the circulation of educational knowledge among researchers and policy makers actually speaks to a potential collapse of the distinction between economic and non-economic information or the collapse between economic and educational knowledge. This would be consistent with what Foucault and others have written about the totalizing character of neoliberalism, that it collapses such distinctions and casts everything in terms of “economy.” But that is also a function of the assemblage resulting from the discourse of economic government and the discursive and visual epistemologies at work in specific technologies such as Bloomberg and Twitter. Furthermore, of course, my observation is consistent with the trajectory of World Bank practices in knowledge construction and representation, most recently embodied in SABER itself which is now being used as a metric for the Bank’s “Results-based Financing” program. SABER aggregates qualitative, quantitative, and other species of knowledge, collapsing them so they can be projected by the technology at hand. A starker example of the fusion of the different types of information in financial markets, Bloomberg terminals offer viewers screens that include various news updates:



Figure 18. Bloomberg terminal: News Stories

Figure 18 (Bloomberg, 2015b) displays a screen shot of a Bloomberg terminal's "News" screen. In one of the orange fields, in the upper left quadrant of the figure, a user can type in terms of a search, or in the column to the left a user can select from preselected news topics. While other screens can provide news specific to institutions like the U.S. Federal Reserve, "News" screens simply offer news aggregation from popular news sources across the globe. Twenty-four hours per day, immediately accessible on another screen, open on another monitor, is the screen for trading action and always embedded here or in another screen is the ability to instant message anyone else with a Bloomberg terminal. Thus, at any time, non-economic information is intersecting with economic

information. Because the former can inform a trader's decision, it *de facto* becomes conflated with economic information, i.e. information that informs a trader's decision about what choice to make in a given market transaction. Whether or not a story about an exercise bike that powers the user's washing machine will affect a trader's decision is unknowable, but the placing of such information inside the context of currency trading (or bond trading or security trading, etc.) speaks to the conflation of two types of knowledge and might belie the notion of the rational actor central to neoclassical economics. Screens (or the limitation of 140 characters) literally and figuratively conflate so as to contain both types of knowledge – and that occurs from whichever perspective one acts in the co-construction of knowledge.

I raise this example of the Bloomberg "News" screen for three reasons. First, it speaks to what over recent decades World Bank technologies have accomplished in collapsing the distinctions between economic and non-economic knowledge through its emphasis on quantification, statistics, human capital theory, rate-of-return, and particularly visual technologies -from the spreadsheet to the computer screen. The way the Bank has re-oriented co-construction of knowledge vis-à-vis the fusion of quantification, statistics, visualization, and user-interface technologies form the most obvious similarity with the Bloomberg terminal. However, the Bank's deployment of economic discourse in the Education sector generally and its use of ADePTeDedu represent the same type of conflation of economic and non-economic information. Second, the above

example from the Bloomberg terminals speaks to how SABER itself has refracted non-economic information repeatedly until it can be presented in a format that establishes the relative value of different countries' respective educational policies and practices, making a market-like choice between such policies and practices possible; such a refraction and manufactured intersection between the economic and non-economic on a Bloomberg screen is not so different than what SABER does and can accomplish. A parallel would be the displaying of SABER ratings for different countries side-by-side on a screen on the one hand, compared to the ratings of different countries' bond ratings on the other hand. Third, related to my inclusion of the Sobe and Ortegón quote immediately above, just the kind of information they joke might become part of a global reflexive system for educational knowledge is exactly the kind of information that could be included in an online platform for a global education market. In addition to the news, already included on Bloomberg terminals are the minutes of Federal Reserve meetings and news reports on the Fed Chairwoman's testimony before Congress. How different is that from "online social network 'status updates' or 'tweets' of prominent Ministers of Education"? No differently than SABER might take a "pre-reflexive" phenomena such as a student taking a test and bend it through myriad technologies of government and inscription, so SABER could as easily take the quotes and passages of MoEs, or condensed speeches of prominent professors, and place those side-by-side with what it already presents and/or with its own financial information related to programs in client countries.

(Other pages and reports on the Bank’s Treasury pages and on the Bank’s Education pages outline disbursement details.) An example, *vis-à-vis* client countries can be examined, like that displayed earlier, now re-displayed here:

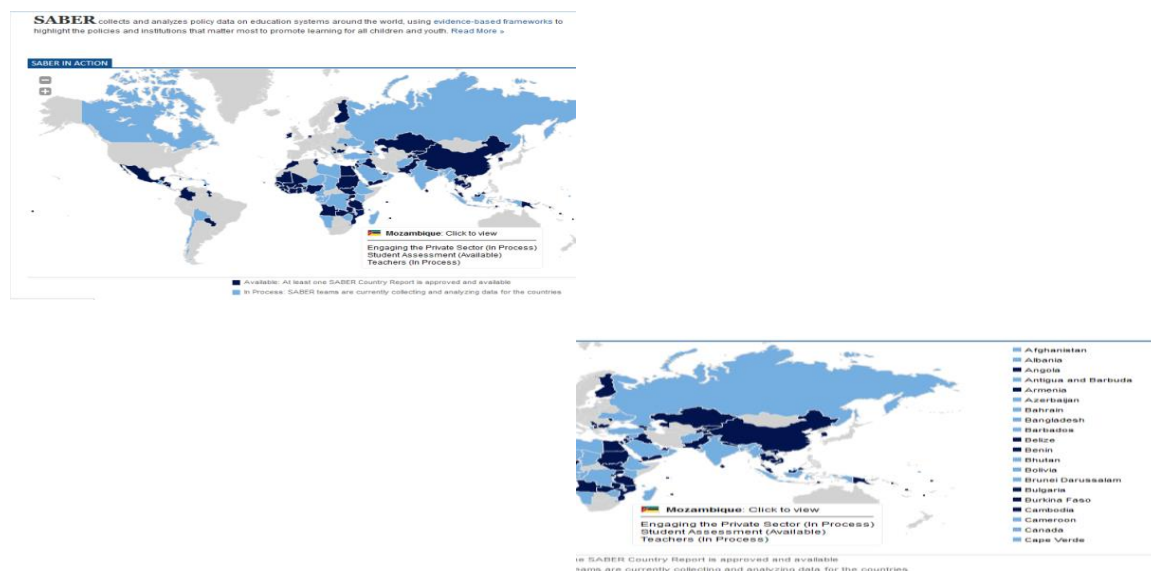


Figure 19. SABER home page: Two views, Mozambique

Figure 19 (World Bank, 2015c) above represents the same image as Figure 16, but now the screen has been reproduced at larger size to emphasize different details. The legend to the right indicates by color corresponding to countries on the map which have at least one “SABER Country Report” available, which will ultimately rate that country on a given domain. Likewise, in the screen shot that produced Figure 19, a user would need to hover the cursor over Mozambique on the map, which then highlights which specific domain reports are “Available” and which are “In Process.” Upon clicking on “Student Assessment,” a user would choose the type of assessment for which to view ratings and see something like this:

## Student Assessment Ratings and Data

A description of the **Student Assessment** scoring methodology and the meaning of categorical ratings displayed below are available in evidence-based frameworks.

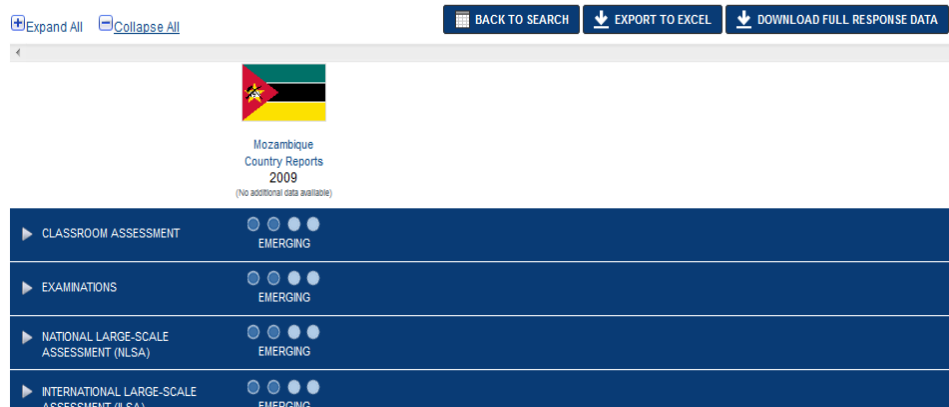


Figure 20. SABER-Student Assessment: Ratings and Data, Mozambique

Placing the rating depicted in Figure 20 (World Bank, 2015d) above on a separate screen and/or monitor or on the same screen as the image displayed in Figure 19 is not a challenge to any imagination or the technical skill of computer programmers today. Likewise, placing information related to detailed loan programs to Mozambique is also easily done with today's technology.

Furthermore, because the Bank is a bank and sells bonds that provide the capital it then loans out to client countries, the Bank could easily scroll information about its latest bond sales and/or the performance of its bonds in the secondary market, i.e. in the market where a holder of a World Bank bond might look to sell that bond. For all of this to come to pass is not mere speculation. Bloomberg terminals already provide its users with the ability to reference every outstanding bond issued by the World Bank on global capital markets, using an internationally recognized code, the CUSIP. The Bank lists these issuances on its own Treasury page (World Bank, 2015i). Such speculation speaks to a potential step



in the financing of education and the establishment of a global market for education finance. That would be consistent with the development of World Bank financing in education over the last twenty years, World Bank financing generally, and with the economic government of education.

In regards to financing, the Bank has increasingly attempted to be a “knowledge bank,” albeit one that deploys technological complexes which when assembled construct a market for educational knowledge, policies, and practices; all of this on a global scale even as the same technologies reach across multiple scales to create educational markets in local contexts, e.g. supply subsidization, demand subsidization, etc. In regards to the global economic government of education, the example above in the context of my speculation speaks to increased information provision which enables increased financing choices for investors, even as that greater quantity of information is a matter of conflating the economic and non-economic. This last point also illustrates how it will be possible for non-educators to be making educational decisions, even as a market co-opts traditional educational knowledge makers (academics and some policy makers) in a way that is not consistent with the latter’s own knowledge construction. Such a placing side by side of, say, the speech by a prominent education scholar next to the SABER ratings for a country’s assessment system, could create outcomes heretofore unimagined vis-à-vis the global construction and circulation of educational knowledge or the global finance of education.

Described in the above paragraphs is just one future for a global education marketplace. Equally plausible is a version of this future, a permutation; that most of what I have described simply becomes a screen or two inside another proprietary system, like Bloomberg LP's system. Currently, Bloomberg terminals offer screens dedicated to the Federal Reserve, the Bank of Japan, the European Central Bank, and so forth. Dedicating a page to the World Bank and including items such as I have described here are plausible for a global bank that issues between \$35BN and \$40BN in debt annually (World Bank, 2014a; 2015), particularly as global financial markets increasingly collapse epistemological distinctions and consume other epistemologies and ontologies. In some ways, such a future appears more plausible than speculations of a platform like SABER standing alone.

The last important aspect of the global reflexive system explored by Knorr-Cetina and Bruegger (2002) and Knorr-Cetina (2003), and alluded to by Sobe and Ortegón (2009), is the microsocial and its role in social liquidity, liquidity of non-economic information that stimulates economic activity. Whereas I suggested that the financial markets' messaging system, interdealer trading system, and posting of non-economic information together contribute to collapsing the distinction between economic and non-economic information, the microsocial aspect of what Knorr-Cetina and Bruegger explore has more to do with the relationship between the economic and the social on platforms such as Bloomberg. Knorr-Cetina and Bruegger (2002) write that:

Microsociology appears relevant to the understanding of transnational fields of transactions that are not aggregated into systems of governance but are structured more in terms of horizontal associations. Markets fall under this category, but so, increasingly, do organizations... (p. 910)

While the World Bank might not be easily characterized as a horizontal association, both a governmentality perspective and a multi-scalar approach suggest that the notion of hierarchy in global government is not straightforward. Robertson and Dale's multi-scalar model is not linear and Foucault's governmentality is not merely bi-directional. Technological complexes, such as SABER - Student Assessment, can cut across scales as the reach of a global institution or corporation can reach, sometimes without scalar mediation, directly into a classroom. That SABER is currently deployed in a fashion which results in more vertical than horizontal relationships is an argument that can be supported. Likewise, at first blush, even though it has yet to enact a technology that supports microsocial interactions, SABER is certainly plausible as being a "transnational field of transaction" in education.

And for Knorr-Cetina and Bruegger what distinguishes financial currency markets from networks is the microsocial, embodied in the messaging and interdealer systems embedded in Bloomberg terminals, characterized by "intense dynamic conversational interaction, [the] knowledge flows, and [the] temporal structurations" (p. 910). These particular interactions in the observed markets are not metaphorical but material. Knorr-Cetina and Bruegger display any number of such interactions in their article (2002, pp. 926, 927, 928) and assert

that “these sequences of utterances do not just convey information but perform economic actions” (p. 910). These conversations are unpacked by the authors in at least three ways which suggest more important points to consider when looking at how SABER might represent the future of a global education market. First, Knorr-Cetina and Bruegger see the interdealer conversations forming a global relationship, where a “level of microintegration, or intersubjectivity, is possible in global fields” (p. 911). Specifically, “Two persons watching the same event are brought into a ‘state of intersubjectivity’ by their experience evidently changing in similar ways, in response to what unfolds” (pp. 921-22). This point is worth remembering vis-à-vis governmentality; namely that the authors are citing the subjectivity of the individuals changing as a result of their interactions with each other and as a result of their interactions with each other using a discrete technology. And Bourdieu’s (2005) observation about agents in relation to one another in the same economic field runs along similar lines. This discrete interactive technology is not something currently deployed by SABER, but which its online platform makes possible. Second, “local settings are configured in terms of an orientation toward a distantiated interaction” (p. 911), which is to say that “the local” is achieved globally due to the technology that visually establishes a shared picture of the market in real time. For Sassen (2012), “the circuits of interaction formed through ICT-mediated exchange generate a new ‘layer’ in the social order, something akin to a microglobal community. The latter term includes not only the financiers and the activist ... but a wide and probably

growing range of other types of actors” (p. 456). Putting aside Knorr-Cetina and Bruegger’s focus on temporality, SABER’s visual presentation, intersecting with its visual attempts to represent a system for discerning relative value, attempts to create a picture of education globally, even as it depicts “local” policies and practices (both national and sub-national in some cases).

Also significant for our speculation is Knorr-Cetina and Bruegger’s recognition of how this messaging technology brings economic and social knowledge together where the exchange of the latter is not only necessary to the relationship between traders, but makes possible the exchange of the former **and** actual economic exchange (currency trading). Likewise, while “social liquidity is contingent on knowledge and information being traded” (p. 915), such liquidity is also contingent upon economic exchange. It is this contingency, due to the rapidity of the exchange and the rapid evolution of technologies, which contributes to liquidity now being “marked by flows, flexibility, and flux” (Sobe and Ortégón, 2009, p. 49). These dealer conversations –involving knowledge and economic exchange– conflate the economic and social or at least the notion that one is primary and the other secondary or the notion that one is necessarily embedded in the other. The Knorr-Cetina and Bruegger wrote that:

The phenomenon that transactions are performed through and instantiated in communication ... is important here from the perspective of economic sociology: what must be recognized is that the markets studied take the form of a large, globally distributed conversation [where] deal making, information exchange, and personal talk come together on one platform. (p. 914)

Sobe and Ortegón (2009) draw on Knorr-Cetina's 2003 article on currency trading to establish a metaphor for how educational knowledge and practices circulate globally. However, I am postulating that SABER represents a future electronic platform on which global financial markets for education can be established, where the economic and the social are not merely placed side-by-side but intersect, governed through the same technological complex. This does not necessarily mean, however, that the social is embedded in the economic or consumed by it.

State intervention in markets often occurs when there is market failure, i.e. a market fails to sufficiently distribute goods or services such that the operation of the market ceases. The failure of the global financial markets in 2007-08 and the years of subsequent intervention by the state is the most prominent recent example, e.g. Federal Reserve programs of supply subsidization vis-à-vis monetary policy. Chapter 2 identified some examples of how states intervene when educational markets fail, by providing subsidies for demand (e.g. vouchers) or subsidies for supply (e.g. charter schools); such actions address markets not fully-functioning on their own and result in quasi-markets. Insufficient economic and social liquidity are reasons for market failure, and could be cited as contributing to the financial crisis of 2007-08. Cummings et al. (2006) look at the social capital cultivated between development experts via online networks as one way individuals respond to or work to prevent market failures (p. 578). However, Potts et al. (2008), when examining social networks used by actors in the

“Creative Industries” (CI), suggest that “social network markets” are emerging which “locate[s] the valued added in the creation of market spaces ... rather than in resolutions of market failure” (p.176). Whether the use of social technology is in response to market failure or originates with the development of another set of values, in each case greater social liquidity results. These potential new markets suggest spaces for a future social economy of education, one that is transformed by the emerging technologies discussed and is a recognizable genealogical relation to liberal, neoliberal, and economic government.

The Bank is beginning to delve into such social technologies, so it is worthwhile to consider how established or emerging social media and/or social technologies could transform the global financing of education. For example, how something like Twitter (see Sobe and Ortegón cited above) might be embedded into an online market platform like SABER and thereby reconfigure the relationships between actors at different scales. Who interacts with SABER, with each other, or with The World Bank, implies meaningful consequences when we consider how such media has been used to activate political movements of resistance in recent years, whether in Arab capitals, New York City, Hong Kong, or Baltimore. While the messaging application on Bloomberg terminals is proprietary, and information currently posted on SABER is proprietary, the Bank does have an active Twitter feed with more than twenty-two thousand followers,

and responses to such a feed are challenging to constrict or censor in real time.<sup>1</sup> Such a feed could serve as a site for the production of non-proprietary or non-economic information not consistent with the Bank's existing technologies for knowledge construction. As early as 2006, Cummings et al. noted that ICT had contributed to increased networking among development professionals across the globe (p. 571), although then still dominated by actors from the North. Still predating Twitter and when Facebook was less than two-years old, Cummings et al. recognized these networks' social capital could facilitate "the creation of new intellectual capital" (p. 576). The Bank itself has worked to establish online networks for development experts, but to little avail. However, the deployment of the Bank's Twitter feed and the Bank Education Group's own Twitter feed, suggest an intersection of social capital and social technology previously unavailable.

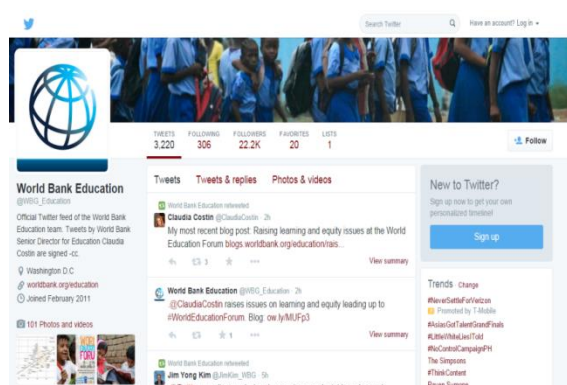


Figure 21. World Bank Education Twitter Feed

<sup>1</sup> By comparison, as of May, 2015, The Bank has 1.31M followers (<https://twitter.com/worldbank>), the International Monetary Fund has 585K followers (<https://twitter.com/IMFNews>), the United Nations has 4.04M followers (<https://twitter.com/UN>), and the musical artist Kanye West has 12.3M followers (<https://twitter.com/kanyewest>).



Figure 21 is the online “Official Twitter feed of the World Bank Education team” (World Bank, 2015a). At the time of writing this, the number of followers, the number of retweets, and the number of replies at @WBG\_Education do not suggest large-scale non-proprietary knowledge construction, i.e. intellectual capital formation. As an example, long-time critic of the Bank’s educational policy, Steven Klees, follows @WBG\_Education on his Twitter account, but he has yet to issue any tweets of his own, or reply to @WBG\_Education tweets.<sup>2</sup> Cummings et al. (2006) cite Noahapiet and Ghoshal’s (1998) organizational work on social capital, specifically that “it is because of their more dense social capital that firms ... have an advantage over markets in creating and sharing intellectual capital” (Cummings et al., 2006, p. 576). They then conclude that empirical evidence suggests “the density of social networks and institutions ... significantly affect the sustainability of development programmes” (p. 576). How might knowledge on SABER get re-constructed if Klees and like-minded critics took to regularly counter @WBG\_Education tweets with information of their own that consistently recontextualized the Bank’s education and education finance messages? Might such social media exchanges disrupt SABER’s persistent framing and refracting of educational and financial knowledge? Might such social interaction, conducted in real-time in a reflexive platform that intersects with financial technology thereby affect financial decisions? Already, such a future is suggesting itself, as recent tweets and blog post responses by critics of World

---

<sup>2</sup> I am a follower of Klees on Twitter. His profile indicates he has been on Twitter since December 2012, and I began following him in May, 2015 (<https://twitter.com/ProfKlees>).

Bank policy demonstrate that a critical dialogue on a social media platform is possible, if not robust (Costin, 2015).

If the @WBG\_Education feed existed on the same screen as SABER, and SABER's ratings of relative value were visually displayed alongside a live twitter feed of @WBG\_Education followers, and those same values were broadcast regularly through that feed, increased participation would be one important result. That increased participation on a social media platform embedded in SABER could very well result in greater "social liquidity" and thereby increased economic action on the platform. Knorr-Cetina and Bruegger (2002) write that:

information exchanges and personal talk also fill[ing] gaps between economic transactions and supply[ing] the background for deals that are made via electronic brokerage. Thus the ongoing conversation provides the market with social liquidity, which serves the market's economic liquidity. (p. 914)

Twitter, as the signal example of technology that facilitates social liquidity, is not necessarily creating new content. Rather, to Sassen's point (2012):

... digitization also brings with it an amplification of capacities that enable the liquefying of what is not liquid, thereby producing or raising the mobility of what we have customarily thought of as not mobile, or barely so. At its most extreme, this liquefying digitizes the object. (p. 460)

Twitter is more than just communication. Its particular digital qualities –allowable number of characters, format for "retweeting," its discursive idiosyncrasies- liquefy discourse around Bank policies and practices in a particular way. So would be the case if the Twitter feed and SABER ratings and loan disbursements and bond issuances were all coterminous on the same computer screen or even

a set of contiguously displayed screens before the same user. Furthermore, following the example of Twitter responses that are critical of the Bank, liquidity is not always about every actor in a given market marching in lock-step; liquidity is really about activity, even if different actors in a market or groups of actors in a market are driving a market in opposite directions; in fact, there must be some dissonance between actors over price if a market is to function; the financial crash of 2007-08 proves this point. Liquefying dissent, then, is not antithetical to what is actually necessary for a market to function.

What if a stream of tweets by Klees and his followers drove the discourse displayed on @WBG\_Education in a direction decidedly different than the Bank's own position in such a market? For instance, from the latest World Forum on Education in Incheon, South Korea, the Bank promoted on Twitter its recent commitment of \$US 5BN toward "Results-based Financing" (World Bank, 2015b, May 18). Such financing is something that represents a form of collateral for the Bank when it goes to global markets to sell its own bonds. If a robust Twitter or online discourse sprang up around this announcement, such a discourse would constitute a form of social liquidity that could literally affect investment in World Bank bonds. The same could happen if a social media discourse sprang up around SABER ratings. A social technology, very much because it would be side-by-side with the same technology where pricing or investment information is displayed, could affect a price system. Perhaps it would be more accurate to suggest that social information, non-economic information, could affect economic

exchange vis-à-vis affecting prices, in this case perhaps SABER ratings, but more directly perhaps the prices on the Bank's bonds. This is where a truly social technology like Twitter is different than a messaging technology like that described by Knorr-Cetina and Bruegger in cambist markets. The messaging system on Bloomberg is not social in the sense that entire communities see individual statements by actors in the market at any given moment; rather the interactions are *micro*-social. But social platforms like Twitter empower every actor to see an individual's comment or to witness a virtual public exchange of positions or information at a given time and, likewise, to see a wave of individual comments, responses, in rapid fire succession. Thus, the pace of information exchange and knowledge construction has the potential to quickly affect the pace of economic exchange, not unlike how rapid dissemination of current news events via a Bloomberg feed can quickly turn a market in a new direction. Hence, Twitter or a similar social technology platform, because of its temporal and public nature could provide a kind of liquidity to an education market different than that microsocial liquidity described by Knorr-Cetina and Bruegger. This type of role for a mature or emerging social technology in a future global market to govern education finance, knowledge, and practice is consistent with existing financial markets because such markets are proprietary, but the degree to which such a platform is proprietary or not is consequential to what gets exchanged, how, and by whom. That same question of proprietary versus non-proprietary is recast when exploring other emerging social technologies that play a role in

economic exchange. Specifically, in Chapter 6 I speculate that crowdfunding technologies represent another future platform for a global education market.

### **Conclusion**

This chapter advanced what was established in Chapter 4 regarding how SABER functioned as a technology for the economic government of education. With the announcement that it will use SABER domains and ratings to determine what initiatives will be the conditions for its \$US8BN Results-based Financing program (World Bank, 2015g), the Bank is now implicitly pricing SABER ratings. Such a progression is just another step in what I have further outlined in this chapter. Specifically, the displays on Bloomberg terminals illustrate how the same visualization technology at work on the SABER website is at work in global financial markets. Extending that observation, I speculated that SABER can govern a global education market if, just like on Bloomberg terminals, the financial information of Bank bonds and its education loans are displayed conterminously with SABER ratings. Additionally, as the Bank Education Group's use of Twitter increases, social liquidity related to Bank policies and practices will increase. This increased social liquidity could, much like it can in global financial markets, affect Bank policies and practices across different scales.

The speculation I have put forward in this chapter has been largely material and near-term, meaning what I am suggesting could come to happen in fewer than the next ten years. When I began my research, RBF had only been

started as a pilot program called Performance-for-Results. Now RBF, financializing specific SABER domains and ratings, will be responsible for determining how billions of education dollars are allocated across the planet. The next step -where actors in a global financial market can invest in countries' educational sectors and initiatives based on SABER ratings- is not only plausible, it is epistemologically consistent with the Bank's recent policies and practices. Such a future is consistent with the trajectory of global finance, representing as it does an innovation linked to previously unavailable technologies, confirming Sassen's (2012) conclusion that such innovations have resulted in "a massive increase in the securitizing of previously untradeable assets ... and hence a massive increase in overall volumes of global finance" (p. 463). The day when Bank loans are securitized and sold on a global market is not unimaginable, especially if SABER ratings are accepted as a meaningful indicator of a country's ability to meet loan conditionalities.

However, the same digital technologies that evolved to power Bloomberg terminals and SABER, the same technologies that power Twitter and Facebook, are still evolving and could very well point the way to a different future for the global economic government of education. That possible future, powered more and more by social technology, is the subject of Chapter 6.

## CHAPTER 6

### SPECULATION: ANOTHER FUTURE GLOBAL EDUCATION MARKET

#### **Introduction**

In the previous chapters, I have accomplished the following. Chapter 1 identified a hybrid theoretical lens relying on Foucault's governmentality and Bourdieu's economic sociology, so that Chapter 2 could establish a straightforward and operational understanding of neoliberalism in the context of education policy and practice. Without essentializing or dismissing historicizations of neoliberalism's development, I established how an economic government of education is premised on a discrete epistemology where knowledge and choice are mutually reinforcing. Furthermore, government technologies are deployed to promulgate knowledge and choice in the context of market-based decision making. The market represents the neoliberal government technology par excellence. Chapter 3 traced the recent trajectory of World Bank education policy in the context of economic government, specifically how policy statements and exemplar practices over the previous decade have revealed a policy progression where technologies (benchmarking, accountability, decentralization, privatization, etc.) proliferated educational knowledge and choice to form market-like contexts even for policy formation. The most recent

developments in policy and practice involved visualization technologies which implicated users in co-creating educational knowledge consistent with Bank and neoliberal epistemology. Chapter 4 detailed the Bank's most recent government complex, SABER, a logical progression from its policy and technology developments of the previous decade. I showed SABER, relying on relentless repetition of visual and discursive framing, especially via digital technology, as a means to establish the relative value of countries' educational policies and practices. Working like a scopic system with the potential for global reflexivity, because the Bank also deployed loan technologies, SABER laid the groundwork for assigning financial value to said policies and practices, and implied a potential market for education policy and practice on a global scale. Chapter 5 extended what was established regarding SABER in order to speculate on a future global market for education finance. Drawing parallels between the technology at work in global financial markets, namely the use of Bloomberg terminals, and the technological functioning of SABER, I outlined the components necessary to assemble a fully functioning market for education policy and practice. I also noted how the Bank in recent months, through its Results-based-Financing program, had explicitly aligned SABER ratings to the disbursement of loan monies in recipient countries, thus moving one step closer to the market I was speculating would emerge in coming years. An additional digital component extant in global financial markets facilitated social liquidity, and I outlined the Bank's recent deployment of Twitter and that technology's potential to develop social liquidity on the same platform as SABER and its loan technologies.



I believe there is yet another future global market for education that is worth speculating upon. To do so actually is prudent, since even the speculation engaged in Chapter 5 is already archaic in the current environment of technological innovation. In fact, the very visual technologies SABER increasingly relies upon, with developing online social technologies, could establish another future for the government of education across the globe. The other future is distinctly different than markets as we know them today and distinctly different than the speculation I offered in Chapter 5. The very technologies for developing social capital, such as that formed inside financial markets, as described by Knorr-Cetina and Bruegger (2002) and Knorr-Cetina (2003), and their evolution in platforms such as Facebook and Twitter are among the social digital technologies that could contribute to a different market for financing education policy and practice. Already Twitter-feeds and blogs are shaping dialogue around Bank policy, not to mention their role in visible and vigorous political action at different sites across the globe. But other growing technologies, those directly related to financing and knowledge construction, are likely to affect potential alternative or countermarkets for financing education. Such alternatives can and will have an effect on the economic and social capital circulating globally. The bulk of this chapter, then, will speculate upon the shape of this other future market for education, but it will do so in great material detail. Specifically, I will offer extended examples of how technology like crowdfunding is working differently than Twitter and how “Third Sector” (or Social Economy) actors, for example, might play a role in a future market for education

using social funding technologies such as Kickstarter or Indiegogo. The brief remainder of the chapter will reiterate what the last two chapters imply for comparative and international education and future research in the field.

### **Sharing Economy Models and the Future Education Market**

In Chapter 5, I focused on one possible future, whereby SABER functions much like current global financial markets, either on its own or embedded inside another existing marketplace. There, the role of social technologies and resulting social liquidity could function much as Knorr-Cetina and Brugger described them functioning inside global currency markets, albeit with a slightly different temporality. However, Knorr-Cetina and Bruegger's emphasis on the social aspects of certain financial markets suggested two important considerations for education, which represent possible extensions of existing markets or mutations of existing markets. The latter would be due to the rapid emergence of new social technologies. Such mutations still imply the establishment of markets – parallel, alternative, counter- for the financing of education globally and for the global circulation of educational knowledge and practice.

The “sharing economy” is a broad and emerging term referring to social and economic interactions organized by an online platform. Smolka and Hienerth (2014) identified a number of characteristics of platforms such as Kickstarter, Indiegogo, Lending Club, Zipcar, Airbnb, Couchsurfing, and countless others. They wrote that “The most significant elements of the sharing economy are access over ownership, digital disruption and information technology, peer-to-peer community and collaboration, social capital and trust

among participants” (2014, p. 1), although Belk (2014) distinguished between sharing, which is “an alternative to the private ownership that is emphasized in both marketplace exchange and gift-giving” (p.10) and “pseudo-sharing” that is “a business relationship masquerading as communal sharing” (p.11). The distinctions between the two, in addition to the distinctions between for-profit versus not-for-profit, and “open” versus “closed,” and patronage versus exchange are only emerging with these technologies’ rapid deployments and growth. Nonetheless, inseparable from any version of the sharing economy is how it is the result of technological complexes -the material, financial, digital, visual, and social technologies together- governing the behaviors of and between individuals and groups in ways those behaviors were not previously governed. Examples worth exploring in the context of a future education market particularly include crowdsourcing, crowdfunding, cyber finance, and collaborative consumption, but for the sake of brevity and directness, I will work through the examples of crowdsourcing and crowdfunding to limn out my speculation on another future for the global market in education.

Crowdsourcing is a worthwhile way to introduce crowdfunding, since the former is being increasingly deployed by organizations and governments in order to activate large scale action on the part of populations. “Crowds” are materially a location in cyberspace (and it could be that “crowds” come to replace the Foucauldian construct of “population”). Like knowledge itself, crowds are simultaneously represented, circumscribed by, and projected outward from the computer screen just like a global educational polity (on SABER) or a global

currency market.<sup>1</sup> However, crowdsourcing as a technological complex signifies the government of certain types of behavior, specifically a:

distributed problem-solving method and production model. Usually, the problems are broadcast to an unknown group of solvers and an open call is given for solutions. Users, known as the crowd, typically form into online communities, and the crowd submits solutions. The crowd participates in sorting through the solutions, finding the best ones. (Open-tube)

Crowdsourcing platforms fall on a spectrum of “open” or “closed” to describe the access to the innovation process (Smolka and Hienerth, 2010, p. 10) but access is still a consideration which did not exist prior to the emergence of social technologies as nearly all such innovation was closed. Production-based crowdsourcing is still largely in the domain of private for-profit organizations who organize communities for feedback on products or brands, making such work more akin to typical market research. But such approaches are not restricted to private sectors, and state entities are increasingly using crowdsourcing to engage (even form) communities around issues of government itself, thus reshaping state technologies of government (Arias, Garcia, and Corpeno, 2015; Vaca, 2015; Brabham, 2015). Likewise, Shirky (2011) explores the social platforms as akin to a public space and potential site of resistance.

Before looking at some implications for the financing of education and the circulation of educational knowledge, it will be helpful to delve deeper into crowdfunding, which operates similarly as crowdsourcing, but its financial element has established it as a more diverse field suggesting alternative or

---

<sup>1</sup> Lehner (2014) identifies the crowd as a new institution (p. 480), but I currently think equating “crowd” as both a site and a subjectivity might be more fruitful.

parallel markets for education finance. Specifically, in recent years two types of social financing on the internet have emerged, crowdfunding sites (such as Kickstarter or Indiegogo) and peer-to-peer financing sites (such as The Lending Club or Prosper). This chapter will only explore the former to exemplify and support my speculation.

Kickstarter was launched in 2010 and since then has resulted in 8.6 million people backing projects totaling \$1.7 billion dollars, U.S. (Kickstarter, 2015). The projects funded run the gamut from consumer electronic products to musical productions to art installations. While most projects request funding less than \$10,000 and are not directly related to education, the implications for education finance are provocative. One example of a Kickstarter project was a new web platform to connect private tutors to low-income students for free lessons (Gueye, 2015). Interestingly titled, without any nod to the Global EFA project, "Private Education for All," sought \$9,900 to fund the development of its site. Kickstarter is a "patronage" site and does not provide equity to investors in projects. Instead, project developers will offer non-monetary rewards or perks of some kind to investors. For this project, as investment levels escalated, investors were offered a public thanks on the finished website, a chance to have a company logo displayed or a chance to author a blog on the site. As an alternative market for the future financing of education, social media sites like Kickstarter are powerful in other ways illustrated by this example "Private Education for All" project. Like many other Kickstarter projects, this one deployed video technology as a way not only to provide a rationale for the project

or to provide information about the project (or product) to the prospective investor, but as a way to connect the prospective investor to the recipient of the funding. An additional connection comes by way of a means for the potential investor (the “backer”) to ask a question of the project creator. In the case of “Private Education for All,” the author used externally created video content to construct a rationale for the project around the benefits of private education and the travails of public education in the creator’s community (Gueye, 2015). Screens within screens, the videos access and project non-economic knowledge in order to elicit an economic action by the viewer. Additionally, the videos often rely on non-expert sources to provide information that is meant to contextualize an investor’s decision. Likewise, the feature that allows the potential investor to ask the creator questions about any aspect of the project, inviting the inclusion of additional non-economic and non-expert knowledge. These questions provide the opportunity for project creators to then revise what they present on their pages in order to respond to the concerns of potential investors. Such technologies for knowledge construction are different inscription technologies than those deployed by the likes of SABER or a Bloomberg terminal emphasizing tables, graphs, cells, and statistics. Additionally, social funding sites like these create dynamic interactions between users in at least two ways distinct from the interactions between users of SABER and the Bank. First, the user interfaces on sites such as Kickstarter can create the opportunity for dialogue with the original generator of the information being accessed by donor. No current Bank technology enables quite such an interaction. SABER’s graphical user interface

at best empowers what Drucker (2014) calls combinatronic interaction, where the external user can move around information provided by the Bank in order to create new knowledge via recombination. Kickstarter's dialogue leads to another aspect that distinguishes it from the knowledge construction that occurs via SABER, namely co-creation. The Kickstarter owner can revise their project as a result of interacting with a donor, thus crowdsourcing and crowdfunding can "help form the actual opportunity (co-creation) and disperse information at the same time" (Lehner, p. 494). While quantitatively oriented inscription mechanisms are still possible on these social platforms, Kickstarter includes other information that actors in a market seek in order to make an economic decision. Thus, Kickstarter promulgates social liquidity in a way that a technology like Bloomberg terminals or Twitter do not. Likewise, Kickstarter suggests that the focus of the decision for a "backer" is not an economic exchange, i.e. what is provided to the investor from the creator is not monetary and is not equal to the monetary investment provided. Clearly the platform, then, is structured to govern personal interactions between the funder and the creator, suggestive of a type of microsocial interaction not consistent with traditional forms of capital investing or lending or even with trader-to-trader interactions described in Knorr-Cetina's work. In a way, then, this social platform creates a microsocial reflexivity which occurs on a globally distributed scale. In Knorr-Cetina's work, the microsocial is a necessary part of the reflexivity but it is a global reflexive system. Kickstarter accesses a global community of users, but the reflexivity is on the microscale. Whether in terms of "inscription" (Rose, 1999) or "framing" and "classification" (see Bernstein (1990,

2010) in Roberston (2012)), or “instruments of knowledge” (Bourdieu, 2005), or Drucker’s various tools that construct a “visual epistemology,” what kind of knowledge is constructed and how it is constructed is altered by current social technology platforms such as Kickstarter compared to how such knowledge is presently constructed by SABER or a global currency market.

Crowdfunding sites do not typically operate on the bases of providing financial return to investors, thus the terms of exchange are not consistent with economic government described thus far, i.e. the parties do not have a predetermined price system by which they can communicate relative value of what is being exchanged. Also, there are not similar products presented on the platform which can compete for the same funds, although different types of products can do so, i.e. one person’s project is not represented side-by-side with another person’s project. (On SABER, the same products compete through “competitive comparison.”) In fact, other crowdfunding sites are more oriented toward supporting the development of experiences, rather than products, compared to Kickstarter. Indiegogo and DonorsChoose are sites where financial support is not for a tangible new product designed to then be deployed, e.g. a website to connect needy students to private tutors. For example, Indiegogo’s education section includes opportunities to fund: Scholarships to summer camps for American students (Dilts, 2015); the cost of an individual who leads a community orchestra to take a “Conducting Master Class” (Woodward, 2015), or; a Singaporean student’s rapid transit and food costs so less time is required for walking and cooking and the student is freed up to study (Campaign Cut Off



Point, 2015). Much like Kickstarter, no financial return is provided to the “funder,” but here nothing is suggested in the recipient’s text regarding why the funds provided are worthwhile in terms of an economic rationale. In cases like these, then, funding is provided where no market exists to do so and state funding is insufficient or non-existent. In the case of all three platforms mentioned, concepts such as altruism potentially play a role in what motivates a “backer” to fund a project. Pointedly, however, in each example visual technology supplements the linguistic and financial information communicated to the potential funder, inviting non-economic knowledge to be constructed in order to elicit an economic action. Furthermore, the absence of a price system means that the funder decides the financial amount to be contributed, thereby empowering the funder to determine the relationship between his or her investment and the non-economic information provided by the recipient of the funding. What I am describing here exceeds aspects of marketing or advertising, although certainly these fields look to exploit social technologies like crowdsourcing. Because the backer and the creator can interact, albeit mediated by the platform, and even co-create a product, the experience is qualitatively different than one in which a consumer or even an investor experiences a presentation or materials advertising a product. Peters and Reveley (2015) argue that “what is emerging is no less than a new social mode of production that is upending market-based forms of economic ordering and their attendant property rights” (p.2).

In the instance of crowdsourcing and especially crowdfunding platforms, some notions should be reiterated or noted in the context of a future global market for education, even to the point of specific material speculation on what that future looks like in light of these emerging social technologies. First, as has been noted, social technologies are creating the potential for non-economic information to be conflated with economic information in the context of market decision-making. While platforms like Kickstarter de-emphasize the financial aspect of the decision, e.g. the price of the potential investment or what the investor receives for their investment, the social opportunities for connection are increased due to the inclusion of information about the creator's motivation for the product seeking investment or the social efficacy of the product. This is an inversion of the relationship between social and economic liquidity described by Knorr-Cetina and Bruegger (2002). In the cambist markets both types were necessary but economic information was primarily what was exchanged or communicated. On the social platforms described, the economic aspects are not as prominent as the non-economic aspects. As a result of that emphasis on the non-economic, and the technologies making direct connections between actors, "social technologies can empower individuals to form communities of interest around specific issues or causes, providing societal benefits" (Chui, 2012 p. 3). And unlike the connection on a Bloomberg terminal –an exclusively micro-social peer-to-peer connection– current social technology platforms empower those types of communications *and* more public ones where commentaries can be witnessed by anyone choosing to join a discrete community, e.g. anyone

contributing to a cause or project, etc. This kind of empowerment by the social technology at hand then plays a role in emphasizing the social liquidity at work compared to the financial liquidity. This social liquidity might be better termed “bridging social capital” (Putnam, 2000, pp. 18-20), a form of social capital that Alexander (2013) suggests is more accessible to marginalized individuals as a result of platforms like Kickstarter (pp. 320-21). Second, while existing financial markets and emerging social platforms use social technologies, albeit differently, both are using visual technologies. Both rely on the screen, its framing potential, and its use of frames inside of frames, to inscribe information for the purpose of containing and concentrating it to make it more forceful when projected outwards. The containment imbues what is contained with legitimacy (Rose, 1999), while the projection is a totalizing mechanism, creating the holographic effect alluded to by Knorr-Cetina and Bruegger (2002) and Sobe and Ortigón (2009), whereby every individual interacting with the individual screen is simultaneously having an individual experience while also having a shared global experience. Thus, just like a global picture of educational policy and practice is created by SABER, a global market for currency speculation is created by the Bloomberg terminal, so a global picture of any one Kickstarter or Indiegogo project (or community) is created due to the fact that it is presented exactly the same way, frame by frame within every screen across the planet simultaneously, a global picture of Kickstarter (or the like) as a government platform being implied too. Third, the social technology of messaging is shared by the global financial markets and the nascent social platforms even as they operate differently and produce different

results. The messaging components of Bloomberg terminals in currency markets make it possible for exchange of information not directly related to an economic arrangement, creating a social liquidity for the market that empowers economic liquidity. However, these are one-on-one microsocial interactions. Social platforms too have messaging opportunities, and in the context of most of these like Kickstarter or Indiegogo such opportunities are not exclusively one-to-one between individuals on either side of an investment. Rather, on the social platforms, the comments or questions posted can be viewed by anyone in the community of current or potential funders. When considered in the context of the global picture of a market suggested above, a truly global conversation becomes possible in a way different than that described by Knorr-Cetina and Bruegger. One way is suggested by Potts et al. (2008) in proposing “social network markets” as a result of the social networks that were developing online in the creative industries. Here:

...individual choices are dominated by information feedback over social networks rather than innate preferences and price signals ... other people’s preferences have commodity status over a social network because novelty by definition carries uncertainty and other people’s choices, therefore, carry information. (p. 170)

While this observation and inference means one thing in the context of Kanye West or Kim Kardashian’s latest tweets, the dynamic at work also has implications for an online market for education policies and practices, some of which will be explored later in this chapter.

Imagine a SABER platform that operated like a Kickstarter platform, with each discrete funded project broadcast globally from the website and seeking

investors worldwide. While issues of financial scale will be addressed more below, the potential for a true dialogue to occur around any given Bank education project is appealing, because local participants in the actual project could invest and/or participate in a dialogue with potential investors, whether parents whose student fees are being subsidized, or local educational agency officials or teachers who are engaged in a public-private partnership to contract out certain school services. Due to the (admittedly imperfect) ubiquity of mobile and social technology such speculation is plausible. When added to this is the idea of participants in the project including non-economic information, perhaps via video technology, the notion of what constitutes the information necessary for economic decision-making becomes further challenged. Admittedly, at the local scale many participants are unaware that they are involved in a project with Bank origins (Steiner-Khamsi, 2010), but different actors can easily empower such participants if the Bank enables exchanges of this kind on an augmented SABER platform. Since such social messaging can promote liquidity, there are reasons to consider such inclusions. All the while, on the same platform, visual technologies can communicate the ongoing investments and trading taking place in World Bank financial products deployed to finance education. On such a platform multiple scales could explicitly and intentionally intersect, even as the social and economic become further conflated. And in light of what Kickstarter and like platforms engender, is it possible that the relationship between social and economic liquidity looks different in such a global education market than it currently does in financial markets? As communities of interest are formed

around those products or experiences which potential investors value for non-economic reasons, social benefits accrue (Alexander, 2013), but whether or not such accrual portends any impact on a future global market for financing education is dubious. Even with its US\$ 1.7BN invested in 4 years, Kickstarter's impact is difficult to measure against the nearly \$9BN the World Bank currently has invested in education worldwide and the \$5BN it has just committed solely to its "Results-based financing" program.

### **Social Economies: The Merger of Old with New**

The emerging online social technologies described thus far have empowered the development of individual social relations and the development of discrete communities of interest on global and sub-global scales. Likewise, these relations and communities have created new contours to the economic exchanges that take place as a result of the social liquidity they engender. However, in speculating upon a future global market for financing education, such relations and communities do not have enough economic liquidity to form a market of such scope, i.e. while they can provide microfinance for education projects, such platforms do not have enough financial capital or liquidity to fund large-scale local, sub-national or national education initiatives. In other words, the newly developed and socially acquired capital is not substantial enough to re-orient the field of global education finance. For a global market to be formed that could finance educational initiatives on those scales, such would have to take place under the auspices of the World Bank and SABER, as has been speculated upon already, or under the auspices of other actors with sufficient

capital to sustain the necessary liquidity, i.e. market makers. This is where the emerging idea of a social economy, one premised on the social technologies discussed so far and more historically established ideas of Social Economy come together to form my final speculation on the future global market for education.

While social technologies and their embedded economic exchange constitute the latest site for construction of a “social economy” (Chui, 2012) discourse, Monzon and Chaves (2008) identify constructions of a social economy in Europe reaching prior to World War I (p. 550), but at least since the 1970s. Particularly in Europe there has been an established institutional construction of Social Economy sanctioned by the state and in circulation, one that includes:

Private, non-capitalist categories of organization, with special status and rules: cooperatives, associations, mutual, and increasingly foundations. On the other hand, the social economy refers to the principles and values which are supposed to inspire certain modes of operation ... set up with an aim of serving members of the community rather than maximizing profit. (Defourny and Nyssens, 2014, p. 23)

Monzon and Chaves (2008, p. 554) cite the EU's *Charter of Principles of the Social Economy*, produced in 2002, which are congruent with the criteria outlined by Defourny and Nyssens and others. Specifically, examples of social economy actors might be volunteer associations, professional organizations, labor unions, financial cooperatives like credit unions, production cooperatives such as agricultural cooperatives, and even philanthropic foundations. Each of these organizations can and often do engage in economic exchange as a prominent part of their institutional activity, but such exchanges are not premised on maximizing the economic benefit they derive from that exchange, the very

premise that underpins neoclassical economics' (and neoliberalism's) assertion for how and why a market will distribute goods most efficiently and why knowledge and choice are necessary for exchange to occur. Instead, for social economy organizations, profit is "used in pursuit of sustainable development objectives, services of interest to members or the general interest" (Monzon and Chaves, 2008, p. 554). I believe these organizations that make up what has long been termed the Social Economy or "Third Sector" can play a significant role in forming a future global market for education, particularly when their participation occurs in the context of the emerging construct of social economy. In other words, if enough actors from the Social Economy sector economically engage via social technology platforms on a global scale, a heretofore unimagined global market for education finance can emerge. Imaginable in this speculation is a new, different, and expanded role for International NGOs, possibly, and it is not wrong to understand "Third Sector" thinking as an expansion of traditional liberalism's construction of civil society. However, I see Social Economy actors as actually competing with traditional financial economy actors in the moving of markets, with the investments by the former, now on social technology platforms, changing the orientation of education finance itself. But for this speculative picture to become clearer, at least three aspects must be properly drawn out: economic liquidity, social liquidity, and social values.

There is no calculation, of course, that determines or describes the precise relationship between "species of capital" (Bourdieu, 2005, Kindle Location 3612). However, because current social technologies like Kickstarter or



IndieGogo or TheLendingClub do not have enough economic liquidity –as markets they are not highly capitalized compared to traditional economic markets and that economic capital does not necessarily flow in an identifiable pattern- they cannot generate enough social liquidity. In other words, there is not currently enough financial capital in these socially-based markets to draw in highly capitalized socially-oriented organizations such as associations, unions, mutuals, or the like, as financial investors. As financial capital increases, more actors are drawn into a given market. Large scale investors and recipients will have to demonstrate a willingness for risk by entering into these new market places. On the one hand, the economic liquidity that could be provided by Social Economy organizations should be available. Hall *et. al*, (2005) estimated that as far back as 1999, that just the non-profit and voluntary sector of Canada's economy contributed \$61.8 BN (Canadian) to that country's output (p.7). . Monzon and Chaves (2008) estimated that in 2003 approximately 11 million people in the EU, or 6.7% of its wage earners, were members of a Social Economy organization (p. 569). The potential economic impact of such organizations worldwide – with their generation of fees, contributions, and revenues which can be invested – should not be underestimated. Thus, the potential economic liquidity generated by such groups investments, possibly representing billions of dollars annually, should be considered as a great source of investment in a global market for financing education.

If we consider briefly a large social organization in the educational sector, like a national teachers' union, I can better illustrate how Social Economy actors

can begin to play a role in a global education market. Specifically, the financial statements for the American Federation of Teachers (AFT) for the 2014 Fiscal year indicated that the national union held investments equal to US\$43M (AFT, 2014, p. 3, p. 10). These investments included less than US\$1M in municipal or foreign bonds, but almost US\$20M in “Corporate bonds and asset backed securities” or “U.S. Government and agency securities” (AFT, 2014, p. 12). Thus, while the traditional role of profit-making by social organizations such as unions has been to redirect those profits into activities that benefit its members - e.g. member recruitment, subsidizing additional insurance expenses for members, political activity- the funding of education initiatives globally would not be inconsistent with the AFT’s mission “that champions fairness; democracy; economic opportunity; and high-quality public education, healthcare and public services” for its students, teachers, families, and communities (AFT, 2015a). In fact, the New York State Federation of Teachers, a member organization of the AFT, along with other Social Economy organizations in its region, pledged nearly US\$10BN to purchase bonds to fund capital projects with explicitly stated social and economic benefits (AFT, 2015b). Clearly, then, the capital of such Social Economy groups is large enough to create real economic liquidity in a given investment market. However, it is not clear that groups such as the AFT have yet identified global education investment markets.

Using the speculative example above to briefly explore social capital and liquidity also suggests how Social Economy actors can affect the new social economy dynamic and a future market place. To Bourdieu, for an individual,

“Social capital is the totality of resources (financial capital and also information, etc.) activated through a more or less extended, more or less mobilizable network of relations” (2005, Kindle Location 3607). Putting aside a conflation of different capital species which he elsewhere disentangles, social liquidity then is the degree to which social capital is regularly injected into a system due to it being exchanged between actors in that system or market. As Knorr-Cetina and Bruegger (2002) point out “social liquidity is contingent on knowledge and information being traded among participants” (p. 915). The social activity stimulates the economic activity and vice versa, although the degree to which each affects each varies. However, if we imagine how an organization like the AFT not only invested a sizable amount of financial capital into a market to finance education across the globe, but also made available its social capital in such a market, then the impact of such a Social Economy actor becomes more considerable than does just the inclusion of its financial capital. The AFT has more than 1.6 million members in the United States, the majority of them teachers and education professionals (AFT, 2015a). Such members are regularly mobilized physically to conduct protests, lobby or campaign for politicians, engage in other related labor and political actions. If just a portion of that activity were directed to providing social capital on a global platform for financing education, the impact would be tangible. The online and social technologies now exist where such Social Economy players can provide the liquidity necessary to affect global financing of education. And in terms of social liquidity, this is already beginning to happen with the AFT’s President issuing a

Twitter response opposing the World Bank's funding of a private educational group in Kenya and Uganda, along with more than one-hundred other dissenting social organizations (Weingarten, 2015, May 14). If thousands of members either populated the social platforms connected to World Bank sites or platforms connected to other funding sites, the social liquidity injected into those economic platforms could move those markets in a way worthy of protracted study. Thus, as social economy platforms begin to play a role in the development of social liquidity (in terms of content flow, the volume of that flow, and the rate of that flow), various scenarios can be developed where Social Economy actors play a role in the global financing of education. Simply stated, and wrapped up inside existing financial market structures, Social Economy organizations can begin to directly finance projects in developing countries through the purchase of bonds which provide proceeds to fund projects in those countries. Right now, many developing countries cannot issue bonds to finance such projects because the global financial markets would require those countries to provide interest rates which are unsustainable. However, if the AFT invested in a manner that prioritized the alignment of its investments with its values identified above, then it would be leveraging its considerable investment power in support of educational goals consistent with its own construction of economics and education. In contrast to the union president's criticism of the World Bank's investment in a private school operator in Uganda and Kenya, the AFT instead could make public school investments in Uganda and Kenya. To do this, it could accept a lower financial return on such investments than what a market rate would pay. A lower

rate would mean lower rate of return for the AFT, but such a rate would make the repayment affordable to the recipient country while being consistent with the values of the investor. Such a scenario is not reliant on the emerging social technologies, but deploying these technologies, like Kickstarter, would represent the potential for an increased return on investment for the AFT and an increased discount for the recipient country as both would reap the benefits of the information and knowledge exchanged and the relationships and networks developed as a result of the use of the social platform. Lehner's (2014) work on social crowdfunding and crowdsourcing ventures concludes that the interplay on current platforms can lead to increased social capital and increased economic capital.

In my imagined market that merges financial, online, and social technologies, investments would be openly traded as they are now, and Social Economy players could affect social and economic liquidity. If a global financier of education like the World Bank developed its SABER platform so that it integrated online financial and social technologies, large-scale Social Economy actors could play a role in affecting the movement of such markets. This could happen because the social technologies now in place offer the opportunity for social liquidity and financial liquidity to be more proximate to one another, as suggested above via examples of uses of Twitter feeds on the World Bank site. If such a scenario developed where SABER became a global platform for financing education, then the Bank would still be the proprietor but would have to consider its proprietary control of educational knowledge and its ratings of

education systems against greater financial and social liquidity in a market for financing education. Bloomberg LP is proprietary, but the range of types of information it includes indicates how it prioritizes non-economic and economic liquidity compared to proprietary control of information that market actors access and deploy when making social and economic exchanges. Circulating in the social discourse proximate to the economic discourse on the same online platform, and visible to all actors in a given market (whether that actor is a financial decision-maker, a policy decision-maker, neither or both), suggests a social liquidity wholly plausible but seeking proper theorization.

Of course, SABER is just one potential future site for the construction of a market for global educational finance. SABER might become one market while others, alternative markets, spring up and compete with the Bank. The ease of proliferation of social technology platforms, just like a Kickstarter and Indiegogo and others can all exist simultaneously, makes it possible for Social Economy actors to potentially form their own market places that leverage and privilege social exchange and liquidity when financing education globally. However, multiple markets are unlikely in the long term because neither enough financial or social capital can accumulate to sustain liquidity. So what I am describing is not necessarily an epistemological or ontological inversion of economic government. Prices still play a role in the government of actors, but the information embedded in a price is not so much different as is the weight given to discrete information. In other words, the acquisition of social capital as the result of an exchange may serve as an explicit or implicit discount on the economic price for the borrower or

an increase in the return for the lender, and this is now more plausible because the exchange of non-economic information is transparent and communal, public. Neoclassical economics and neoliberal policy have struggled to develop government technologies that include the transparent exchange of such non-economic information when establishing price systems so that choices could be made, e.g. school choice, possibly because of the historically increasing emphasis on property rights and the role of scarcity in demand. A social platform could respond to these challenges in some measure on a policy level. Speculating in a specific way, one can easily imagine an opportunity where union members from AFT and UNATU (Uganda's teachers' union) members engage in social exchanges on the same online market place where financial investments are made in Ugandan educational projects, and status reporting on such projects is engaged by more than state agencies or private agencies, such that extra-agency reporting affects the financial value of a given investment. In such a case, even as the imagined lender, the AFT, might agree to a lower return on its investment for the sake of aligning investments and values, so the social platform makes it possible to create more social capital on a global scale. The AFT as the current example is only one, with annual investment potential in the tens of millions of dollars; billions could be available as the result of Social Economy actors together forming online market places that rely on prioritizing the social values and exchange of investors above a given rate of return. For this to transpire, financial capital equal to the Bank's is not necessary; only enough capital (invested at competitive rates) is necessary to move the market and

provide borrowers with more choices than they would otherwise have, all while providing more social liquidity than is provided when education finance is controlled by the Bank. In short, Social Economy actors using social technologies could cause World Bank capital to be invested in different ways than it is currently invested.

Certainly, in some sense, one could recognize the speculation of a global civil society in what I am proposing, but I would suggest my speculation involves something that will exceed a reframing of that liberal and neoliberal construct. First, no differently than Foucault would argue, the technologies in play will reconstruct the subjectivities of the actors involved in ways that will cause them to be unrecognizable from their previous forms. Secondly, the social technologies' ability to connect different social economy actors across the globe will cause the actors to change in unpredictable ways. Third, what I am proposing leverages notions of civil society differently than previous liberal and neoliberal constructs have attempted, e.g. "Third Way" democratic socialism. Certainly, I am suggesting that civil society's social capital can play a role in facilitating economic capital accumulation, but my model insists on Social Economy actors recognizing the role social values and social capital can and should play in their financial investment such that their investment can actually alter the shape of the market for investing in education in the developing world. Doing so has ramifications for educational policy in the developed world too.



## **Future Education Markets and Economic Sociology**

Bourdieu's reading of neoliberalism and neoclassical economic theory is critical of their failure to identify the "genesis of economic dispositions of economic agents and, especially, their tastes, needs, propensities or aptitudes..." (2005, Kindle Location 118) and for their "atomistic, mechanistic vision which hypostasizes the price effect..." (Kindle Location 3660). His desire to develop an "economic anthropology" is rooted in his other work related to habitus and how this anthropology would incorporate the issues of "tastes, needs, propensities or aptitudes." I contend that social technologies for economic exchange such as those discussed so far might well bring to the fore in a very transparent way that which Bourdieu says neoliberalism and neoclassical economics fail to foster. But these social platforms could transfigure such things so they might not be recognizable as "tastes" or "needs" or "propensities" or might become something else entirely but mistaken as underlying economic dispositions. Nonetheless, these new technologies, which will put individuals, groups, organizations all on the same platform for economic and social exchange, will invite a new sociological approach to understanding financial exchange, social exchange, and in the future the financing of education globally.

Bourdieu also decried the tyranny of the price system (in theory) and price effect (in reality) (2005, Kindle Location 3660) without recourse to the formation of social capital or extant social liquidity. Potts et al.'s work (2008), cited above, recognized that social interactions and their attendant social liquidity shape market and extra-market relations, affecting notions such as "risk" and that

“Economic and cultural evolution is a consequence of this process” (p. 170).

Although they concluded that this information is accessed in a manner that informs exchange separately from price, it is not certain that this is the case, at least not today. Bourdieu contended that neoclassical economics and neoliberal policies make price tyrannical to the exclusion of all else, and even Knorr-Cetina and Bruegger (2003) recognized that Hayek and others saw information as embedded in price (p. 915). For Bourdieu “It is not prices that determine everything, but everything that determines prices” (2005, Kindle Location 3660), but I believe the point is that: One, economics will have to find more fruitful ways to examine what informs price, and; two, the emerging social platforms (placing social exchanges proximate to economic exchange) will cause economists and sociologists to reconsider the relationship between the social and economic. The implications for organizations making large-scale financial investments and how potential concomitant social feedback informs price or vice versa are not yet clear, of course, but will constitute crucial considerations when contemplating a future global market for education.

An additional consideration for the future market, related to the calculation of price and value, will be the relative roles of different kinds of capital – economic, social, cultural– particularly in regards to financial markets for education. Bourdieu writes that “positions these agents occupy in those structured microcosms that are economic fields” affects “the economic practices of agents and the very potency of their ‘networks’” in addition to that caused by social capital itself (2005, Kindle Location 3685). The position includes the

relative size of the agent, the totality of capital it possesses, in addition to its location in relation to other agents. This issue of economic practices and social capital, e.g. decision-making in a market context, being affected by position in a market is important when considering the role of capital because:

various species of capital do not act only indirectly, through prices; they exert a structural effect, because of the adoption of a new technique or the control of a larger market share, etc. modifies the relative positions and the yields of all the species of capital held by other firms. (Kindle Location 3612)

Our emerging social platforms for economic exchange (or economic platforms for social exchange, if you like) have the potential to change the social capital of actors in a given market and potentially change the position of that actor in the market. In other words, as the social exchange possible on these platforms becomes more transparent and more prominent, and social liquidity increases in a way not previously describable (think of the volume and pace of Twitter posts, instant messaging, etc.), the shape of a market, the size of market actors, and the relation of market actors to one another might be radically different than those factors are in a traditional financial market or a traditional social exchange. Because of the social investment in education compared to other financial markets, a global market for investing in education is ripe for development in a way that, deploying social technology and inviting Social Economy investment, suggests a market of a different shape, size, and scope than previously has been witnessed.

None of the above considerations are antithetical to the epistemology and ontology of an economic government –issues related to knowledge and choice –

outlined earlier and throughout this dissertation. This is particularly so regarding knowledge, as it is “part of everything that determines price.” However, it is not obvious where Bourdieu’s requests to reconsider the social structure of the economy will lead. What will be the role of something like global education policy studies in the context of such an online market?

Even as previously cordoned-off types of knowledge and exchange are put side-by-side on a new market platform (that catalyzes social and economic exchange) with multiscalar scope and global reach, the distinctions between the types of knowledge will continue to be blurred. Such a collapse should not be seen as necessarily hazardous to the academic or the classroom practitioner, despite neoliberal technologies that have resulted in epistemological collapses with marginalizing effects. Rather, these new marketplaces and their collapsing of epistemologies suggest the potential for a reorientation of the relationship between the economic and the social that has been dominant for the last twenty-plus years in government and development across the globe. And a new economic sociology will be required to describe these marketplaces, including that for financing education, and, potentially, for the global circulation of educational knowledge and practice.

### **Conclusion: The Future(s) of Global Educational Policy Studies**

In a 2005 article “Re-imagining and rescripting the future of education,” Susan Robertson writes that “Futures are not inevitable. They are imagined and created but always with the legacy of the past bound into their very fabric” (p. 168). Robertson’s article examines two possible futures for schooling, both

evolving from the same global present and its use of certain technologies that draw us closer and closer to a global economic government of education. Robertson concludes that “we have to be willing to imagine the creation of institutions and social relations that maximize outcomes for all individuals rather than a few,” and that her work fell short of that goal (p. 68). The work I have presented in this dissertation has attempted to delineate certain aspects of “the legacy of the past” I believe are most importantly “bound into the very fabric” of the futures I speculate upon for the global financing (and government) of education. However, while I have not attempted to construct a future that ameliorates the failings of neoliberalism, I have laid the groundwork for additional explorations in research and policy-making which can further Robertson’s aspirations. And I believe that work like Robertson’s and other global comparativists will change as a result of the evolution in the government of education.

In the last twenty or more years, theorizing about the construction and global circulation of educational knowledge has developed two strains descended from a world systems model (Arnone, 2009). Over time the two strains, one conflict-based and one culture-based, have been explored in such ways that more of a spectrum has emerged, now dominated by “transfer researchers [who] typically place a premium on understanding how agency and structure interact to limit and enable the mobility and liquidity of knowledge” (Sobe and Ortegón, 2009, pp. 52-3) and neo-institutionalists who emphasize the role and practices of “World-level entities [that] circulate a particular discourse

and agenda on an international scale, and thus foster consensus on an issue ...” (Sobe and Ortégón, 2009, p. 55). While transfer scholars like Steiner-Khamsi (2010) emphasize the importance of the details of how local policy makers are networked globally and the (usually discursive) details of recontextualization, neo-institutionalists deconstruct the epistemology of globally circulated knowledge and the structural means by which it moves. Robertson and Dale’s (2009) notion of a multiscale framework goes some way toward suggesting how the local and the global are in multi-faceted, multi-directional, but in mutual relation with one another. Whether structurally, epistemologically, or anthropologically focused, recent approaches in comparativist policy research in education, with few exceptions, are decidedly critical of neoliberal policies and education economics and fail to attempt an approach that includes the economic government of education within the existing streams of research so a dialogue may take place around the issues raised by World Bank policy and the like. Sobe and Ortégón (2009) utilize Knorr-Cetina (2003) as a trope to describe the construction and circulation of educational knowledge but use her description of a market as a “scopic” and “global reflexive system” without ever acknowledging that those neologisms describe a market, let alone the significance of that. Thus, in a way, Sobe and Ortégón (2009) fail to acknowledge that the global circulation of education knowledge operates like a market.

Surely traditional neo-institutional strains, network-and-transfer strains, and more micro-social strains will come together as a market forms for financing education. The potential markets I have described here certainly embody

aspects of each conceptual approach but suggest both more and less, depending on which speculation captures the future. Most intriguing and promising is a future market that enables micro- and meso-social relations and exchanges of knowledge on a global scale while forming a market for financing education which represents an authentic alternative to one that privileges economic capital. In fact, merely wishing for a market that only accomplishes the former suggests a future where the financing of education either remains as it is today or becomes part of an exclusively financial market. The latter is a possibility that both emerging technology and yearnings for social and economic justice point towards.

Although my work is rooted in a materiality embodied by technologies such as SABER or Bloomberg or Kickstarter, on the one hand, and comparative approaches suggested by the likes of Meyer, Boli, and Ramirez (1997) or Robertson and Dale (2009) or Steiner-Khamsi (2006; 2010) or Sobe and Ortegon (2009) on the other hand, by bringing the material and the metaphorical together, this work attempts something different than the work of those cited. By speculating on what a market may look like based on SABER or other technologies, I am taking a risk by painting a more detailed picture of the global circulation of educational knowledge and practice in the future, going beyond even a global economic government of education. I am not using financial terms such as “borrowing” and “lending” as metaphors for how educational knowledge circulates. And I am not drawing analogies between global educational conferences and global financial centers. Rather, I am suggesting the erasure of

such distinctions that cause others to attempt comparisons. In some ways, I am selling this market, promoting a picture of the future that may or may not be optioned by my readers. Additionally, the potential alternative markets could be parallel or counter, but they will be a mutation of what has come before. Peters and Reveley (2015) acknowledged that the current debate revolves around “Whether digital capitalism is fundamentally challenged by, or seamlessly able to absorb, new forms of peer production...” (p. 3). Emerging markets will be powered by the same inscription and digital technologies as before but the emergence of embedded social technologies will play an increasingly prominent role and a new type of market will emerge. I am not offering a model or a metaphor to describe such a future. I have provided a distinct speculation about how the future will look. My purpose has not been to conclude in a conceptual manner whether or not the circulation of knowledge is comprehensible in terms already developed or to conclude that my speculation requires new conceptual tools. My purpose is to speculate on the details of a very real terrain which can be fertile for policy researchers and policy makers alike. I am therefore literally identifying the future market.

Policy researchers can lay what they currently observe over this detailed terrain I am depicting, then test to what degree the Bank or other actors are making into a global market the circulation of educational knowledge and practice. Such work and consideration is particularly needed in terms of understanding the global financing of education, as today someone in suburban Chicago can be purchasing bonds that finance education in Mozambique. For



policy scholars, the implications of the globalization of the finance of education have not been sufficiently considered. Additional scrutiny from comparativists should be given to private corporate practices and technologies of government, as there are increasingly global economic giants in the private sector whose activity is affecting global policy circulation. My speculation in this chapter might contribute to forming a framework or lens against or through which such activity can be better understood. Likewise, future research can and should explore the ways social media and social technology platforms are being used in educational policy contexts. My rather breezy approach to the Bank's Twitter feed belies a serious belief that, like it or not, knowledge construction that will affect policy decisions and practices will increasingly be constructed partially through media like Twitter. Furthermore, institutions like the Bank increasingly will have to develop and deploy social media policies and that will invite additional scrutiny, just as the role of social media in state government plays a major role in the shape and trajectory of publics and political dissent. A final area that deserves greater scrutiny, also related to knowledge construction at institutions like the Bank or OECD, is the use of the visualization technologies heavily relied upon for my discussion in Chapter 4 and Chapter 5. Johanna Drucker's work informed some of what I proposed in those chapters, but much more can be done to explore how visual epistemologies are intersecting with the epistemology of economic government in education.

For policy makers all of that highlighted above and more holds true. My speculation, as any good speculation would, might suggest for them a future for

education policy and practice that emerges from the current hegemony, instead of a retrenchment of Keynesianism or the welfare state. So few policy critiques have offered plausible alternatives to an economic government of education. Tikly (2014) points out well what has been missing in recent criticism of The World Bank's latest policy manifestations and the dangers of a fatalistic approach towards neoliberal educational policy (p. 350, p. 347 respectively), even as he tries to locate where the future critical work needs to be done in order for critics of World Bank policy to move beyond fruitless reactionism. The alternative markets I suggest retain the same notion of market as being the site for an exchange, but what remains to be determined are the details of what are exchanged and how. These markets still invite choice-making by participants, some economically-based, some not, some hybridized. Rather than build from an extensive conceptual base to abstract the future, I looked and will continue to look at the material details of other online platforms currently burgeoning to see how those platforms suggest a future for the circulation of educational knowledge and practice. By looking at social platforms such as Kickstarter or Indiegogo or DonorsChoose, I suggested a future powered by many of the same material technologies that power SABER –digitization, visualization, statistical analytics– but explored how these emerging online platforms' social bases could address at least aspects of exchange that financial markets do not currently address. Among those aspects is to activate the social construction of non-economic knowledge that speaks to a social affinity instead of an economic affinity; additionally, that activation has the potential for more immediacy than something

like SABER currently offers but which is offered to existing online financial traders. This same potential for immediacy enables a microsocial opportunity, then, that SABER does not currently empower, a microsocial opportunity based on non-economic knowledge. And that microsocial opportunity embodies the promise of a future global circulation of educational knowledge exceeding one premised only on economic exchange. Knorr-Cetina and Bruegger (2002) wrote of how their work raised important questions, including “how we are to understand the global social systems embedded in the respective economic transactions” (p 906). However, I think the future market will re-balance the question of whether or not we are witnessing social exchanges embedded in economic relationships or vice versa, and this might too address what Bourdieu has attempted to do in reconciling sociology and economics (2005). While I will not go as far as an economic sociologist might, an economic sociology can be suggested by what I am presenting which understands more than one speculative future for global education policy and practice. Whether or not a future governed by a financial economy or a social economy is the future we experience could be as much a matter of how readers of this dissertation respond to what it depicts. Even as I sell one future educational market, I suggest another. Both are rooted in the same observations, ideas, and developments laid out in my previous chapters, but what is most exciting is learning where readers will place their bets.

## REFERENCE LIST

- AFT. (2015). Consolidated Financial Statements, June 30, 2014. Washington D.C.: American Federation of Teachers, AFL-CIO. Retrieved from: <http://www.aft.org/about/financial>
- AFT. (2015a). About Us. Washington D.C.: American Federation of Teachers, AFL-CIO. Retrieved from <http://www.aft.org/about>
- AFT. (2015b). NYC teacher pension fund pledges \$1 billion to investment in post-sandy reconstruction and other critical infrastructure. Washington D.C.: American Federation of Teachers, AFL-CIO. Retrieved from <http://www.aft.org/about>
- Alexander, L. (2013). Cyberfinancing for economic justice. *William & Mary Business Law Review*. 4(2). Rev. 309, 308-83. Retrieved from <http://scholarship.law.wm.edu/wmblr/vol4/iss2/2>
- Alexander, N. (2001). Paying for Education: How the World Bank and the International Monetary Fund influence education in developing countries. *Peabody Journal of Education*, 76(3/4), 285-338. DOI:10.1207/S15327930PJE763&4\_16
- Arias, C.R., Garcia, J. & Corpeno, A. (2015). Population as auditor of an election process in Honduras: The case of the VotoSocial crowdsourcing platform. *Policy & Internet*. DOI: 10.1002/poi3.86
- Becker, G., & Michael, R. (1973). On the new theory of consumer behavior. *Swedish Journal of Economics*, 378-96.
- Becker, G. (1994). *Human capital: A Theoretical and empirical analysis with special reference to education* (3rd Ed.). Chicago: University of Chicago Press.
- Becker, G. (2008). Human Capital. *The library of economics and Liberty*. Retrieved from <http://www.econlib.org/library/Enc/HumanCapital.html>
- Beckert, J. (2009). The Social Order of Markets. *Theory and Society*, 38(3), 245-69. DOI: 10.1007/s11186-008-9082-0

- Belk, Russel. (2014). Sharing versus pseudo-sharing in Web 2.0. *Anthropologist*. 18(1), 7-23.
- Ben-Porath, S. (2012). School choice and educational opportunity: Rationales, outcomes and racial disparities. *Theory and Research in Education*, 10(2), 171-189.
- Bernstein, Basil. (1990). *The Structuring of pedagogic discourse: Class, codes, and control*. London: Routledge.
- Bernstein, Basil. (2000). *Pedagogy, symbolic control, and identity: Theory, research, critique*. Oxford: Rowman & Littlefield.
- Betts, J. (2010). School quality and earnings. In D. Brewer, & P. McEwan (Eds.), *Economics of Education* (pp. 52-59). New York: Elsevier.
- Bloomberg, LLP. (2015). Company overview of Thomson Reuters. Retrieved from: <http://www.bloomberg.com/quote/tri:cn>
- Bloomberg, LLP. (2015a). Government Bond Listing. Retrieved from <http://www.investopedia.com/university/how-to-use-bloomberg-terminal-computer-system/news-market-monitors.asp>
- Bloomberg, LLP. (2015b). News stories. Retrieved from <http://www.investopedia.com/university/how-to-use-bloomberg-terminal-computer-system/news-market-monitors.asp>
- Bockman, J. (2011). *Markets in the name of socialism: The left-wing origins of neoliberalism*. Stanford, CA: Stanford University Press.
- Bonal, X. (2002). Plus cá change ...the World Bank global education policy and the post-Washington consensus. *International Studies in Sociology of Education*. 12:1, 3-22.
- Bourdieu, P. and Saint-Martin, M. (1974). Scholastic excellence and the values of the educational system. In J. Eggleston (Ed) *Contemporary research in the sociology of education*. Methuen, London.
- Bourdieu, P. (2005). Principles of an economic anthropology. In N. J. Smelser, & R. Swedberg (Eds.), *The Handbook of economic sociology* (2nd ed). New York: Russell Sage Foundation.
- Bourdieu, P. (2005a). *The social structures of the economy*. (Chris Turner, Trans.). [Kindle version.] Retrieved from Amazon.com.

- Brabham, D.C. (2015). *Crowdsourcing in the public sector*. Washington D.C: Georgetown University Press.
- Brewer, D., & Hentschke, G. (2008). The global phenomenon of publicly-financed, privately-operated schools. In M. Berends, M. Springer, D. Ballou, & H. Walberg (Eds.), *Handbook of Research on School Choice* (pp. 227-46). New York: Earlbaum.
- Brewer, D., Hentschke, G., & Eide, E. (2010). Theoretical Concepts in the Economics of Education. In D. Brewer, & P. McEwan (Eds.), *Economics of Education* (pp. 3-8). New York: Elsevier.
- Cammack, P. (2004). What the World Bank means by poverty reduction, and why it matters. *New Political Economy*, 9(2), 189-211.  
DOI:10.1080/1356346042000218069
- Campaign Cut Off Point. (2015). Buy study time for Cheah Hui. Retrieved from <https://www.indiegogo.com/projects/buy-study-time-for-cheah-hui#/story>.
- Cengage. (n.d.). About Us. Retrieved from <http://www.cengageasia.com/en/About-Us>
- Chakrabarti, R., & Roy, J. (2010). The economics of parental choice. In D. Brewer, & P. McEwan (Eds.), *Economics of Education* (pp. 336-42). San Diego, CA, USA: Elsevier.
- Chui, M., Manyika, J., Bughin, J., Dobbs, R., Sarrazin, H., Sands, G., & Westergen, M. (2014). The social economy: unlocking value and productivity through social technologies. *McKinsey Global Institute Report*.
- Clarke, Marguerite. (2012). *What matters most for Student Assessment Systems: A Framework paper*. SABER Working Paper Series. Washington, D.C.: The World Bank Group.
- Collins, C. and Wiseman, A. (2012). Eds. *Education strategy in the developing world: Revising the World Bank's education policy*. U.S.A.: Emerald Group Publishing.
- Costin, Claudia. (2015, May 14). Raising learning and equity issues at The World Education Forum. Retrieved from <http://blogs.worldbank.org/education>
- Dale, R. (2004). Forms of governance, governmentality and the EU's open method of coordination. In W. Larner & W. Walters (Eds.), *Global*

*governmentality: Governing international spaces* (pp. 174-94). New York: Routledge.

- Dale, R. and Robertson, S. (2009). Beyond methodological 'isms' in comparative education in the era of globalization. In Cowen, R. and Kazamias, A. (Eds.). *The International Handbook of Comparative Education* (pp. 1113-1128). New York: Springer.
- Dean, M. (1999). *Governmentality: Power and rule in modern society*. London: Sage.
- Dill, D. (2003). Allowing the market to rule: The case of the United States. *Higher Education Quarterly*, 57(2), 136-57. DOI: 10.1111/1468-2273.00239
- Dilts, J. (2015). Rocky Ridge Music Center 2015 Scholarships. Retrieved from <https://www.indiegogo.com/projects/rocky-ridge-music-center-2015-scholarships>.
- Drachenberg, R. (2011). The open method of coordination in European education and training policy. *EUSA 2011*. Retrieved from [http://www.euce.org/eusa/2011/papers/111\\_drachenberg.pdf](http://www.euce.org/eusa/2011/papers/111_drachenberg.pdf)
- Edwards, D. Brent. (2012). The approach of the World Bank to participation in development and education governance: Trajectories, frameworks, results. In C. Collins and A. Wiseman (Eds.), *Education strategy in the developing world: Revising the World Bank's education policy*, (pp. 249-274). U.S.A.: Emerald Group Publishing.
- Eide, E., & Showalter, M. (2010). Human Capital. In D. Brewer, & P. McEwan (Eds.), *Economics of Education* (pp. 27-32). New York: Elsevier.
- Elacqua, G., & de Gobierno, E. (2006). *Enrollment practices in response to vouchers: Evidence from Chile*. The National Center for the Study of Privatization in Education. Columbia University, Teachers College.
- Ewalt, Francois. (1991). Insurance and Risk. In G. Burchell, C. Gordon, & P. Miller (Eds.), *The Foucault Effect* (pp. 197-210). Chicago: The University of Chicago Press.
- Fejes, A. (2008). Historicizing the lifelong learner: Governmentality and neoliberal rule. In A. Fejes, & K. Nicoll (Eds.), *Foucault and lifelong learning: Governing the subject* (pp. 87-99). New York: Routledge.
- Fenwick, Tara, and Edwards, Richard. (2011). Considering materiality in educational policy: Messy objects and multiple reals. *Educational Theory*, 61(6), 709-726. DOI: 10.1111/j.1741-5446.2011.00429.x

- Flanigan, S., & Morse, R. (2014, June 18). How *U.S. News* calculated the best colleges rankings. *U.S. News and World Report*. Retrieved from <http://www.usnews.com/education/best-colleges/articles/2013/09/09/how-us-news-calculated-the-2014-best-colleges-rankings?>
- Fligstein, N., & Dauter, L. (2007). The sociology of markets. *Annual Review of Sociology*, 33, 105-28. DOI: 10.1146/annurev.soc.33.040406.131736
- Foucault, M. (1977). *Discipline and Punish*. (A. Sheridan, Trans.) New York: Vintage.
- Foucault, M (1988). Critical theory/ intellectual theory, interviews with Gerard Raulet. In L. Kritzman (ed.), *Michel Foucault: Politics, Philosophy, Culture: Interviews and Other Writings, 1977–1984*. London: Routledge.
- Foucault, M. (1991). Governmentality. In G. Burchell, C. Gordon, & P. Miller (Eds.), *The Foucault Effect* (pp. 87-104). Chicago: The University of Chicago Press.
- Foucault, M., Senellart, M., & Collège de France. (2008). *Birth of Biopolitics: Lectures at the College de France 1978 – 79*. England: Palgrave Macmillan.
- Federico, Giulio. (2001 September). IMF Conditionality. Retrieved from <http://www.nuffield.ox.ac.uk/economics/papers/2001/w19/IMFConditionalitySept2001.pdf>
- Friedman, M. (1955). The role of government in education. In R. Solo, & M. Friedman (Eds.), *Economics and the public interest*. New Brunswick, NJ: Rutgers University Press.
- Friedman, M. (1997). Public schools: Make them private. *Education Economics*, 5(3), 341-344. DOI: 10.1080/09656299700000026
- Gamble, A. (2006). Hayek on knowledge, economics, and society. In E. Feser (Ed.), *The Cambridge companion to Hayek*, (pp. 111-131) New York: Cambridge University Press.
- Gauri, V., & Vawda, A. (2003). *Vouchers for basic education in developing countries: A principal-agent perspective*. World Bank Research Observer. Washington, D.C.: World Bank. DOI: 10.1093/wbro/lkh017
- Girdwood, John. (2007). Reforming the World Bank: From social-liberalism to neo-liberalism. *Comparative Education*. Vol. 43(3), 413-431.



DOI: 10.1080/03050060701556372

- Gordon, C. (1991). Governmental rationality: an introduction. In G. Burchell, C. Gordon, & P. Miller (Eds.), *The Foucault Effect: Studies in Governmentality* (pp. 1-51). Chicago: The University of Chicago Press.
- Gunderson, M., & Oreopoulos, P. (2010). Returns to Education in Developed Countries. In D. Brewer, & P. McEwan (Eds.), *Economics of Education* (pp. 37-43). New York: Elsevier.
- Gueye, Dame. (2015). Private education for-all web platform. Retrieved from [https://www.kickstarter.com/projects/2019266027/private-education-for-all-web-platform?ref=nav\\_search](https://www.kickstarter.com/projects/2019266027/private-education-for-all-web-platform?ref=nav_search).
- Hall, M. H., Barr, C.W., et. al. (2005). The Canadian nonprofit and voluntary sector in comparative perspective. Toronto: Imagine Canada. Retrieved from: <https://www.imaginecanada.ca>
- Hanushek, E., & WoBmann, L. (2010). Education and economic growth. In D. Brewer, & P. McEwan (Eds.), *Economics of education* (pp. 60-67). New York: Elsevier.
- Hastings, J., Kane, T., & Staiger, D. (2006, May). Parental preferences and school competition: Evidence from a public school choice program. Cambridge, MA: National Bureau of Economic Research.
- Hately, L & Malhotra, K. (1997). *Between Rhetoric and Reality: Essays on Partnership in Development*. Retrieved from <http://www.nsi-ins.ca/wp-content/uploads/2012/10/1997-Between-Rhetoric-and-Reality-Essays-on-Partnership-in-Development.pdf>
- Hayek, F. A. (1945). The use of knowledge in society. *The American Economic Review*, 35(4), 519-30.
- Hayek, F. A. (2008). *The Road to Serfdom*. In *The Collected Works of F.A. Hayek*, Volume II, Bruce Caldwell (Ed). New York: Routledge.
- Heyneman, S. P. (2012). When models become monopolies: The making of education policy at the World Bank. In C. Collins and A. Wiseman (Eds.). *Education strategy in the developing world: Revising the World Bank's education policy*, (pp. 43-62). U.S.A.: Emerald Group Publishing.
- Hubbard, L., & Kulkarni, R. (2009). Charter schools: Learning from the past, planning for the future. *Journal of Educational Change*, 10(2-3), 173-189.

- Hunt, A. (1996). Governing the city: Liberalism and early modern modes of governance. In A. Barry, T. Osborne, & N. Rose (Eds.), *Foucault and political reason: Liberalism, neo-liberalism, and rationalities of government* (pp. 167-88). Chicago: University of Chicago Press.
- Husein, A.H. (2014). *EdStats: Big Data, Better Policies, Learning for All*. Retrieved from <http://blogs.worldbank.org/education/edstats-big-data-better-policies-learning-all>
- International Finance Corporation (IFC). (2014). Education project – El Comercio. Project 33332. Retrieved from: <http://ifcextapps.ifc.org/ifcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/3e7aa6e43323b97d85257c8a006e147b?opendocument>
- International Finance Corporation (IFC). (2014a). FINEM – SME. Project 28680. Retrieved from: <http://ifcextapps.ifc.org/ifcext/spiwebsite1.nsf/78e3b305216fcdba85257a8b0075079d/1f06dd74f0ef801485257770004dfa65?opendocument>
- International Monetary Fund. (1997). *World Economic Outlook*. Retrieved from: <http://www.imf.org/external/pubs/weomay/chapter1.pdf>
- International Monetary Fund. (2010). IMF Executive Board Approves Major Overhaul of Quotas and Governance [Press release]. Retrieved from: <http://www.imf.org/external/np/sec/pr/2010/pr10418.htm>
- International Monetary Fund. (2015). @IMFNews. Washington D.C.: The International Monetary Fund. Retrieved from: <https://twitter.com/IMFNews>.
- Jones, P.W. (2007). *World Bank Financing of Education: Lending, Learning, and Development*. 2<sup>nd</sup> Edition. New York: Routledge.
- Jones, P. W. (2007a). Education and world order. *Comparative Education*. Vol. 43(3). 325-337. DOI: 10.1080/03050060701556273
- Khamat, S. (2011). The Poverty of theory. The World Bank's system approach to education policy. In S. Klees, J. Steven, J. Samoff, & N. Stromquist (Eds.). *The World Bank and education: Critiques and alternatives*, (pp. 33-48). Boston: Sense Publishers.
- Keohane, R. (2004). Global governance and democratic accountability. In D. Held and M. Koenig-Archibugi (eds.) *Taming Globalization: Frontiers of Governance*. (pp. 130-159). Cambridge: Polity Press.

- Kickstarter. (2015). Retrieved from <https://www.kickstarter.com/learn?ref=nav>.
- Klees, S. (2012). World Bank and education: Ideological premises and ideological conclusions. In S. Klees, J. Samoff, & N. Stromquist (Eds.), *The World Bank and Education: Critiques and Alternatives* (pp. 49-68). Boston: Sense Publishers.
- Klees, S. (2015). @ProfKlees. Retrieved from <https://twitter.com/ProfKlees>
- Klees, S. Samoff, J. and N. Stromquist. (2012). Preface. In Klees, S., Samoff, J. and N. Stromquist (Eds.), *The World Bank and Education: Critiques and alternatives*. New York: Sense.
- Knorr-Cetina, K. (2003). From pipes to scopes: The flow of architecture of financial markets. *Distinktion, Scandinavian Journal of Social Theory*, 4(2), 7-23. DOI: 10.1080/1600910X.2003.9672857
- Knorr-Cetina, K., & Bruegger, U. (2002). Global microstructures: The Virtual societies of financial markets. *American Journal of Sociology*, 10(4), 905-50. DOI: 10.1086/341045
- Lange, O. (1936). On the economic theory of socialism: Part one. *The Review of Economic Studies*, 4(1), 53-71.
- Larner, W. (2000). Neo-liberalism: Policy, ideology, governmentality. *Studies in Political Economy*, 63. Retrieved from <http://spe.library.utoronto.ca/index.php/spe/article/view/6724/3723>
- Larner, W. and Walters, W. (Eds). (2004). *Global Governmentality: governing international spaces*. New York: Routledge.
- Levin, H. L. (1999). The Public-Private nexus in education. *American Behavioral Scientist* 43: 124 -137. DOI: 10.1177/00027649921955191
- Levin, H. M., & Belfield, C. R. (2003). The Marketplace in education. *Review of Research in Education*. Vol. 27(1), 183-219. DOI: 10.3102/0091732X027001183
- London Stock Exchange (2015). Thomson Reuters. Retrieved from [www.londonstockexchange.com/products-and-services/connectivity/software-houses/reuters.htm](http://www.londonstockexchange.com/products-and-services/connectivity/software-houses/reuters.htm)
- MacKenzie, D. (2011). The credit crisis as a problem in the sociology of knowledge. *American Journal of Sociology*, 116(6), 1778-1841. DOI: 10.1086/659639

- Marcus, G. E. and Saka, E. (2006). Assemblage. *Theory, Culture & Society*, 23(2-3), 101-09. DOI: 10.1177/0263276406062573
- McEwan, P. (2010). Empirical Research Methods in the Economics of Education. In D. Brewer, & P. McEwan (Eds.), *Economics of Education* (pp. 9-14). New York: Elsevier.
- Mincer, J. (1958). Investment in human capital and personal income distribution. *The Journal of political economy*, 66(4), 281-302. Retrieved from: DOI:10.1086/258055
- Montanari, F. (2012). Forms of economic discourse, the crisis, and financial markets analysis and research perspectives: From actor network theory to semiotics. *Sociologica*, 3, 1-22. DOI: 10.2383/72701
- Monzon, J.L., Chaves, R. (2008). The European social economy: Concepts and dimensions of the Third Sector. *Annals of Public and Cooperative Economics*, 79(3/4), 549-577.
- Morse, R. (2014, June 18). Best value schools methodology. *U.S. News & World Report*. Retrieved from <http://www.usnews.com/education/best-colleges/articles/2013/09/09/best-value-schools-methodology>
- Mozambique: Student Assessment. (2009). *SABER Country Report*. Washington, D.C.: The World Bank Group. Retrieved from: [http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting\\_doc/CountryReports/SAS/SABER\\_SA\\_Mozambique\\_CR\\_Final\\_2009.pdf](http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/CountryReports/SAS/SABER_SA_Mozambique_CR_Final_2009.pdf)
- Mundy, K. & Menashy, F. (2012). The World Bank, the International Finance Corporation, and private sector participation in basic education: Examining the Education Sector Strategy 2020. *International Perspectives on Education and Society*, 16, 113-131. DOI: 10.1108/S1479-3679(2012)0000016010
- Nicoll, K., & Fejes, A. (2008). Mobilizing Foucault in studies of lifelong learning. In A. Fejes, & K. Nicoll (Eds.), *Foucault and lifelong learning: Governing the subject* (pp. 1-18). New York: Routledge.
- Olssen, M. (2008). Understanding the mechanisms of neoliberal control. In A. Fejes, & K. Nicoll (Eds.), *Foucault and lifelong learning: Governing the subject* (pp. 34-47). New York: Routledge.
- Open-tube. (2015). Top 5 crowdsourcing platforms. Retrieved from <http://open-tube.com/top-5-crowdsourcing-platforms>

- Organization for Economic Co-operation and Development (OECD). (2013). *Education at a Glance 2013: OECD Indicators*. OECD publishing. DOI: <http://dx.doi.org/10.1787/eag-2013-en>
- OECD. (2014). PISA 2012 results in focus. OECD publishing. Retrieved from <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>
- Patrick, F. (2013). *Neoliberalism, the Knowledge Economy, and the Learner: Challenging the Inevitability of the Commodified Self as an Outcome of Education*. ISRN Education, 2013. Retrieved from <http://www.hindawi.com/journals/isrn/2013/108705/>
- Patrinos, H, Barrera-Osorio, F, and Guaqueta, J. (2009). *The role and impact of public-private partnerships in education*. Washington, D.C.: The World Bank Group.
- Patrinos, H., & Psacharopoulos, G. (2010). Returns to education in developing countries. In D. Brewer, & P. McEwan (Eds.), *Economics in Education* (pp. 44-51). New York: Elsevier.
- Pearson PLC. (2014). *Pearson English announces major partnership with world's largest social network for language learning, busuu*. Retrieved from: <https://www.pearson.com/news/announcements/2014/april/>
- Pearson PLC. (2015). *Press Release*. Retrieved from [www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/press-releases/2015/2014-FULL-PRESS-RELEASE-AND-FINANCIALS.pdf](http://www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/press-releases/2015/2014-FULL-PRESS-RELEASE-AND-FINANCIALS.pdf)
- Pearson PLC. (2015a). *The story of our year: Annual report and accounts 2014*. Retrieved from <https://www.pearson.com/ar2014.html>
- Pearson PLC. (2015b). *Transforming our Business – Geographies*. Retrieved from [www.pearson.com/about-us/transforming-our-business/geographies.html](http://www.pearson.com/about-us/transforming-our-business/geographies.html)
- Pearson PLC. (2015c). *Transforming our Business – Higher Education*. Retrieved from [www.pearson.com/about-us/transforming-our-business/higher-education.html](http://www.pearson.com/about-us/transforming-our-business/higher-education.html)
- Peck, Jamie. (2010). *Constructions of neoliberalism*. New York: Oxford University Press. [Kindle version]. Retrieved from [www.amazon.com](http://www.amazon.com)

- Perry, Brian. (2015). Beginner's guide to the Bloomberg terminal. *Investopedia*. Retrieved from <http://investopedia.com/university>
- Peters, M. (2005). The new prudentialism in education: Actuarial rationality and the entrepreneurial self. *Educational Theory* (2), 122-137. DOI: 10.1111/j.0013-2004.2005.00002.x
- Popkewitz, T.S., Olsson, U., & Petersson, K. (2007). The Learning society, the unfinished cosmopolitan, and governing education, public health, and crime prevention at the beginning of the twenty-first century. *Educational Philosophy and Theory*, 38 (4), 431-449. DOI: 10.1111/j.1469-5812.2006.00203.x
- Poteliene, S., & Tamasauskiene, Z. (2013). Human capital investment: Measuring returns to education. *Social Research*, 4(33), 56-65. Retrieved from [http://www.su.lt/bylos/mokslo\\_leidiniai/soc\\_tyrimai/2013\\_33/poteliene\\_tamasauskiene.pdf](http://www.su.lt/bylos/mokslo_leidiniai/soc_tyrimai/2013_33/poteliene_tamasauskiene.pdf)
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Robertson, S. (2012). Placing teachers in global governance agendas. *Comparative Education Review*, 56(4), 584-607. DOI: <http://dx.doi.org/10.1086/667414>
- Robertson, Susan L. (2012a). The strange non-death of neoliberal privatization in the World Bank's *Educational Strategy 2020*. In Klees, Steven J., J. Samoff, and N. Stromquist (Eds.). *The World Bank and Education: Critiques and alternatives*, (pp. 189-208). Boston: Sense Publishers.
- Robertson, Susan L. (2012b). Researching global education policy: Angles in/on/out . Robertson. In Verger, A., M. Novelli, and H.K. Altinyelken (Eds.). *Global education policy and international development: New agendas, issues and policies*. New York: Continuum Press, pp. 32-52.
- Rogers, H. & Demas, A. (2013). *The what, why, and how of the Systems Approach for Better Education Results (SABER)*. Systems Approach for Better Education Results (SABER). Washington DC: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/2013/04/18070354/systems-approach-better-education-results-saber>
- Rojas, Cristina. (2004). Governing through the social: Representations of poverty and global governmentality. In W. Larner & W. Walters (Eds.), *Global Governmentality: Governing international spaces* (pp. 97-115). Routledge: New York.

- Rose, N. (1996). Governing "advanced" liberal democracies. In A. Barry, T. Osborne & N. Rose (Eds.), *Foucault and political reason: Liberalism, neo-liberalism, and rationalities of government* (pp. 37-64). Chicago: University of Chicago Press.
- Rose, N. (1999). *Powers of freedom: Reframing political thought*. Cambridge, U.K.: Cambridge University Press. [Kindle version] Retrieved from [www.amazon.com](http://www.amazon.com)
- Samoff, Joel. (2012). "Research shows that...": Creating the knowledge environment for Learning for All. In S. Klees, J. Samoff, & N. Stromquist (Eds.), *The World Bank and education: Critiques and alternatives*, (pp. 143-158). Boston: Sense Publishers.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1-17.
- Sidorkin, A. (2009). *Labor of learning: Market and the next generation of educational reform*. Rotterdam: Sense Publishers.
- Simons, M. (2007). *The learning society and governmentality: An introduction*. Malden, MA: Blackwell.
- Simons, M., & Masschelein, J. (2008). The governmentalization of learning and the assemblage of a learning apparatus. *Educational Theory*, 58(4), 391-415. DOI: 10.1111/j.1741-5446.2008.00296.x
- Sikkink, D., & Emerson, M. O. (2008). School choice and racial segregation in US schools: The role of parents' education. *Ethnic and Racial Studies*, 31(2), 267-293.
- Smelser, N. J., Swedburg, R. (2005). Introducing economic sociology. In Smelser and Swedburg (Eds.), *The handbook of economic sociology*. (2<sup>nd</sup> Edition), (pp. 3-26). New York: Princeton University Press.
- Smith, A. (2013). *An inquiry into the nature and causes of the Wealth of Nations*. Hertfordshire, U.K.: Wordsworth Editions Ltd.
- Smolka, C. and Heinerth, C. (2014). The Best of both worlds: Conceptualizing trade-offs between openness and closedness for sharing economy models. Retrieved from: <http://unerinnovation.mit.edu/conf2014/282115148171894989/>

- Sobe, N.W. (2011). Educational accountability and global governmentality. In Gita Steiner-Khamsi and Florian Waldrow (Eds.) *World yearbook of education, 2011: Policy borrowing and lending*, (pp. 80-94). London: Institute of Education.
- Sobe, N.W. and Ortegon, N.D. (2009). Scopic systems, pipes, models and transfers in the global circulation of educational knowledge and practices. In T. Popkewitz and F. Rizvi (Eds.), *Globalization and the study of education* (pp. 49-66). New York: NSSE/Teachers College Press.
- Sodexo. (2014, June 18). *About Us*. Retrieved from <http://www.sodexo.com/en/group/presentation.aspx>
- Steiner-Khamsi, Gita. (2006). The economics of policy borrowing and lending: A study of late adopters. *Oxford Review of Education*, 32 (5), 665-678.
- Steiner-Khamsi, Gita. (2010). The politics and economics of comparison. *Comparative Education Review*. 54(3), 323-342.
- Steiner-Khamsi, Gita. (2012). For All by All? The World Bank's global framework for education. In S. Klees, J. Samoff, & N. Stromquist (Eds.), *The World Bank and education: Critiques and alternatives*, (pp. 3-20). Boston: Sense Publishers.
- Stromquist, N. P. (2002). *Education in a globalized world: The connectivity of economic power, technology, and knowledge*. New York: Rowman & Littlefield.
- Stromquist, N. P. (2012). The gender dimension in the World Bank's education strategy. In S.J. Klees, J. Samoff, and N.P. Stromquist (Eds). *The World Bank and education: Critiques and alternatives* (pp. 159-172). Boston: Sense Publishers.
- Suspitsyna, T. (2010, September). Accountability in American education as a rhetoric and technology of governmentality. *Journal of Education Policy*, 25(5), 567-586. DOI: 10.1080/02680930903548411
- Taylor, S. (1997). Critical policy analysis: Exploring contexts, texts, and consequences. *Discourse: Studies in the Cultural Politics of Education*, 18(1), 23-25.
- Thomson Reuters. (2015). About Us. Retrieved from <http://thomsonreuters.com/en/about-us.html>



- Thomson Reuters. (2015a). Annual Report. Retrieved from <http://ir.thomsonreuters.com/phoenix.zhtml?c=76540&p=irol-reportsAnnual>
- Tikly, L. (2003). Governmentality and the study of education policy in South Africa. *Journal of Education Policy*, 18(2), 161. DOI: 10.1080/0268093022000043074
- Tikly, L. (2014). Review. *Comparative Education Review*, 58(2), 344-355.
- Torres, C. A. (2009). *Education and neoliberal globalization*. New York: Routledge.
- Tremblay, C. (2009). Advancing the social economy for socio-economic development: International perspectives. *Public Policy Paper Series Number 01*. Canadian Social Economy Research Partnership.
- UNESCO Institute for Statistics. (2012). Adult and youth literacy, 1990-2015: Analysis of data for 41 selected countries. Retrieved from <http://www.uis.unesco.org/Education/Documents/UIS-literacy-statistics-1990-2015-en.pdf>
- United Nations. (2015). @UN. New York: The United Nations. Retrieved from <https://twitter.com/UN>.
- Vasa, S. (2015). Democratic evaluation & crowdsourcing: It's a match! *Journal of MultiDisciplinary Evaluation*, 11(24), 83-89.
- Verger, Antoni and Bonal, Xavier. (2012). "All things being equal?" Policy options, shortfalls, and absences in the World Bank Education Strategy 2020. In S. Klees, J. Samoff, & N. Stromquist (Eds.), *The World Bank and education: Critiques and alternatives*, (pp. 125-143). Boston: Sense Publishers.
- Weingarten, R. (2015, May 14). For profit private school is not a solution to solve poverty. Retrieved from: <https://twitter.com/rweingarten>
- West, Kanye. (2015). @kanyewest. Retrieved from <https://twitter.com/kanyewest>
- Wing, K. T., Pollak, T. H., & Blackwood, A. (2008). *The Nonprofit Almanac 2008*. Urban Institute Press.

- Woodward, Ben. (2015). Send Ben to the conducting masterclass. Retrieved from: <https://www.indiegogo.com/projects/send-ben-to-the-conducting-masterclass>.
- World Bank. (1998). *Partnership for development: Actions for the World Bank*. A Discussion Paper. Retrieved from <http://www.worldbank.org/html/extdr/pfd-discpaper.pdf>
- World Bank. (1999). *Education Sector Strategy*. Washington D.C., World Bank Group.
- World Bank. (2005). 2005 Education Sector Strategy Update (ESSU) - Achieving Education For All, Broadening our Perspective, Maximizing our Effectiveness. World Bank Group. Washington D.C.
- World Bank. (2009). *EdInvest News Bulletin*. Retrieved from [http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/edinvest\\_home/newsbulletinseptember2009](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/edinvest_home/newsbulletinseptember2009)
- World Bank. (2009a). *EdInvest Newsletter - Facilitating Investment in the Global Education Market*. Retrieved from [http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/edinvest\\_home/newsletter](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/edinvest_home/newsletter)
- World Bank. (2009, March). Education for the knowledge economy. Retrieved from <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20161496~menuPK:540092~pagePK:148956~piPK:216618~theSitePK:282386,00.html>
- World Bank. (N.D.) Overview of EdInvest. Retrieved from [http://www.ifc.org/wps/wcm/connect/Topics\\_Ext\\_Content/IFC\\_External\\_Corporate\\_Site/EdInvest\\_Home/Overview/](http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/EdInvest_Home/Overview/)
- World Bank. (2011). *Learning for All: Investing in people's knowledge and skills to promote development: The Education Sector Strategy 2020*. Washington D. C.: World Bank Group.
- World Bank. (2014). ADePT Education. Retrieved from <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTPROGRAMS/EXTADEPT/0,,contentMDK:22678950~menuPK:7332355~pagePK:64168182~piPK:64168060~theSitePK:7108360,00.html>
- World Bank. (2014a). *Treasury FAQs*. Washington D.C., World Bank Group. Retrieved from [http://treasury.worldbank.org/cmd/htm/faq\\_english.html](http://treasury.worldbank.org/cmd/htm/faq_english.html)

- World Bank. (2014b). *SABER in action: An overview strengthening education systems to achieve learning for all*. Washington DC: World Bank Group. Retrieved from [http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting\\_doc/in\\_actions/SABER\\_in\\_Action\\_Overview.pdf](http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/in_actions/SABER_in_Action_Overview.pdf)
- World Bank. (2014c). The fourth programmatic social reform loan project. Project ID 083968. Retrieved from: <http://www.worldbank.org/projects/P083968/pe-programmatic-social-reform-loan-iv?lang=en>
- World Bank. (2014d). The first phase of the tertiary education student assistance program. Project ID P085593. Retrieved from: <http://www.worldbank.org/projects/P085593/mx-apl-tertiary-educ-student-ass?lang=en>
- World Bank. (2015). About the World Bank Treasury. Washington D.C.: World Bank Group. Retrieved from [http://treasury.worldbank.org/web/about\\_worldbank.html](http://treasury.worldbank.org/web/about_worldbank.html).
- World Bank. (2015a). @WBG\_Education. Washington D.C.: World Bank Group. Retrieved from: [https://twitter.com/WBG\\_Education](https://twitter.com/WBG_Education)
- World Bank. (2015b). @World Bank. Washington D.C.: World Bank Group. Retrieved from: <https://twitter.com/worldbank>.
- World Bank. (2015c). SABER. Retrieved from: <http://saber.worldbank.org/index>
- World Bank. (2015d). Student Assessment Ratings and Data, Mozambique. Retrieved from: <http://saber.worldbank.org/index.cfm?indx=7&PD=5>
- World Bank. (2015e). Open Knowledge Repository. Retrieved from <https://openknowledge.worldbank.org/discover> [Accessed 9.8.15]
- World Bank. (n.d.). *About SABER*. Retrieved from: <http://saber.worldbank.org/index.cfm?indx=5>
- World Bank. (n.d.a). Implementation Status & Results Report. MZ-Education Sector Support Program (P125127). Report No: 1SR4475. Retrieved from <http://documents.worldbank.org/curated/en/2015/03/24151838/mozambique-mz-education-sector-support-program-p125127-implementation-status-results-report-sequence-08>

Zelizer, V. (1979). *Morals and Markets: The Development of Life Insurance in the United States*. New York: Columbia University Press.

## VITA

Kaine Osburn was born in Frankfort, Kentucky, USA and raised in Wilmette, Illinois. Before attending Loyola University Chicago, he attended The University of Illinois at Chicago, where he earned his Master of Arts in English and American Literature in 1995. From 1989 to 1991, he attended Southeast Missouri State University, where he earned a Bachelor of Arts in English.

While a doctoral student at Loyola, Kaine served as Principal of Niles West High School in Skokie, Illinois, a large and accomplished diverse public school outside of Chicago. Currently, Kaine serves as the Deputy Superintendent of Naperville Community Unit School District 203, a suburban school district serving 17,000 students in 22 schools. Kaine resides in his hometown, Wilmette, with his wife Jenny, a teacher, and their two sons.