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# Public-Private Partnerships, Accountability, and Competition: Theory versus Reality in the Charter Schools of Bogotá, Colombia

D. Brent Edwards Jr. University of Hawaii, Manoa &> David DeMatthews University of Texas, El Paso &> Hilary Hartley Institute of International Education

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**Abstract:** While charter schools are among the most prevalent public-private partnerships in the education sector, they are frequently only assessed by measuring outputs such as enrollment and test scores. In contrast, this article assesses the logic model behind charter schools, specifically the mechanisms of accountability and competition, through a study of the Concession Schools in Bogotá, Colombia, using a realist evaluation methodology. Despite the program's success in increasing access in marginalized areas, findings indicate that accountability and competition were hindered in practice—because of insufficient choice for parents and other unique organizational and

Journal website: <u>http://epaa.asu.edu/ojs/</u> Facebook: /EPAAA Twitter: @epaa\_aape Manuscript received: 4/6/2016 Revisions received: 1/12/2016 Accepted: 2/12/2016 political factors. For example, particular issues emerged that influenced the availability of viable charter operators to open and manage schools while political orientations, political shifts, and evaluation design issues affected the charter authorizer's ability to monitor, assess, and hold charters accountable. Successfully operationalizing public-private partnerships requires that the mechanisms underlying each link in the policy theory are carefully designed and supported, that they directly connect, and that the functioning of one does not adversely impact the others—a difficult task given the dynamic and sensitive nature of such mechanisms and the imperfect world of educational reform. The article concludes by reflecting on a number of issues, including charter school exit from the market, the need for accountability of charter authorizers themselves, the increasing political clout of charter management organizations and their allies, and the ways that these actors circumvent or avoid public accountability.

Keywords: charter schools; Colombia; public-private partnerships; accountability; competition; charter authorizers

# Asociaciones público-privadas, rendición de cuentas y competencia: Teoría versus realidad en las escuelas chárter de Bogotá, Colombia

Resumen: Si bien las escuelas chárter se encuentran entre las asociaciones público-privadas más relevantes en el sector educativo, con frecuencia sólo son evaluadas por sus indicadores de cobertura/matrícula y por los resultados de las pruebas. Tomando distancia de esta tendencia, este artículo evalúa los componentes del modelo que hay detrás de las escuelas chárter y, específicamente, se enfoca en los mecanismos de rendición de cuentas y competencia, en un estudio de caso sobre las Escuelas por Concesión en Bogotá, Colombia, utilizando una metodología de evaluación realista. A pesar del éxito del programa al permitir el aumento en el acceso a la escuela en áreas marginadas, los hallazgos indican que la rendición de cuentas y la competencia se vieron restringidas en la práctica debido a la escasa posibilidad que tienen los padres para elegir y a otros factores particulares de índole política y organizativa. Por ejemplo, surgieron problemas específicos que influyeron en la disponibilidad de agentes idóneos que pudieran asumir la apertura y administración de estas escuelas, además de algunos vacíos en los lineamientos políticos, cambios de gobierno y problemas en el diseño de instrumentos de evaluación. Esto restó capacidades a las autoridades educativas para supervisar, evaluar y responsabilizar a las escuelas chárter por sus resultados. Un modelo exitoso de asociación público-privado en el ámbito educativo requiere que los mecanismos que subvacen a la naturaleza de cada tipo de actor estén articulados, desde la teoría de la política, y que sean cuidadosamente diseñados. Estos mecanismos deben estar directamente conectados y su funcionamiento no puede afectar negativamente a los demás. Esta ya es una tarea difícil de lograr dada la naturaleza dinámica y sensible de estos mecanismos y de la poca claridad que hay en el mundo de las reformas educativas. El artículo concluye reflexionando sobre una serie de cuestiones. Entre ellas, la salida de escuelas chárter del mercado, la necesidad de exigirles una real rendición de cuentas, el creciente peso político que tienen las organizaciones que administran estas escuelas con sus respectivos aliados y las estrategias que tienen estos actores para eludir sus responsabilidades. Palabras-clave: Escuelas chárter; escuelas por concesión; asociación público-privado; rendición de cuentas; competencia; autoridades educativas

# Asociaciones públicas-privadas, rendição de contas e concorrência: Teoria versus realidade nas escolas de Bogotá, Colômbia

**Resumo:** Si bien las escuelas se ubican entre las asociaciones públicas-privadas más relevantes en el sector educativo, con frecuencia sólo son evaluadas por sus indicadores de cobertura / matrícula y por los resultados de las pruebas. Tomando distancia de esta tendencia, este artículo

evalúa los componentes del modelo que hay detrás de los colegios chárter y, específicamente, se enfoca en los mecanismos de rendición de cuentas y competencia, en un estudio de caso sobre las Escuelas por Concesión en Bogotá, Colombia, Utilizando uma metodologia de avaliação realista. A perda do sucesso do programa permite que o aumento no acesso à escola em áreas marginais, os vestígios indicam que a rendição de contas ea competência são encontrados restrições na experiência devido à possibilidade que têm os pais para escolher e outros Aspectos de índole política e organizacional. Por exemplo, surgiram problemas específicos que influenciam na disponibilidade de agentes que podem ser aprovados na abertura e administração de escolas, além de alguns casos nos lineamentos políticos, mudanças de governo e problemas no projeto de instrumentos de avaliação. Isto serve para as autoridades educativas para supervisionar, avaliar e responsabilizar as escolas para os resultados. Um modelo exitoso de associação público-privado no âmbito educativo requer que os mecanismos que subjacen a uma natureza de cada tipo de ator com articulados, da teoria da política, e que são costurados. Esses motores devem estar conectados diretamente e não podem afetar negativamente os demais. Esta é uma tarefa difícil de conseguir dada a natureza dinâmica e sensível destes mecanismos e da pouca luz que feno no mundo das reformas educativas. O artigo conclui reflexão sobre uma série de questões. Entre elas, a saída de escolas para o mercado, a necessidade de exigências para uma verdadeira rendição de contas, para o maior peso político que têm as organizações que administram essas escolas com seus respectivos aliados e as estratégias que possuem esses atores para eludir suas responsabilidades.

**Palavras-chave:** Escuelas chárter; escolas por concessão; associação público-privado; Rendição de contas; competição; autoridades educativas

## Introduction

At the broadest level, public-private partnerships (PPPs) can be defined as "cooperation of some sort of durability between public and private actors, in which they jointly develop products and services and share risks, costs and resources which are connected with these products" (Hodge & Greve, 2010, p. 4). The PPP label can apply to multiple types of reforms that promote private sector involvement (both individual and institutional) and introduce market-based values and mechanisms (Wolff, Navarro, & González, 2005). In education, the most well-known PPP policies are vouchers and charter schools, though a wide range of other PPP arrangements exist.<sup>1</sup> As will be further discussed, although there is a tremendous literature on charter schools, it tends to focus on outcomes generally and test scores specifically rather than on the functioning of the governance arrangements through which charter schools are overseen. This article contributes to this arguably under-researched area by presenting research on charter school accountability and competition in Bogotá, Colombia.

This research is particularly relevant given the global debates around the increasing influence and participation of private actors in education. That is, while PPPs in education have gained traction since the 1990s in the United States (Bulkley & Burch, 2011), they are also a global phenomenon with relevance for how education is delivered, managed, and evaluated (Patrinos, Barrera-Osorio, & Guáqueta, 2009; Robertson, Mundy, Verger, & Menashy, 2012). There are many indications of their increased relevance and influence. In the United States, for example, charter schools began in 1988 as a way for schools to respond to community preferences and to serve as

<sup>&</sup>lt;sup>1</sup> These other arrangements include any instance in which private actors contribute some aspect of the provision of public education, ranging from building construction to cleaning services, for example (Patrinos, Barrera-Osorio, & Guáqueta, 2009).

spaces for innovation and experimentation. However, starting in the late 1990s, a corporate dimension emerged in the form of charter management organizations (CMOs)—non-profit organizations that operate networks of charter schools. Many of these organizations have acquired significant political clout at the state and/or national level, particularly such chains as Uncommon Schools, Achievement First, and the Knowledge is Power Program (Au & Ferrare, 2015; Fabricant & Fine, 2012). PPPs also became prevalent in the provision of supplemental services (e.g., after-school tutoring, testing) in the wake of the passage of the No Child Left Behind Act of 2001 (Burch, 2006). Internationally, the situation is similar, where companies in many countries are being contracted for school management, learning technologies, data analysis, and teacher training, among other services (Ball, 2007, 2012).

Underlying the PPP phenomenon is an attractive logic that is promoted globally and which must be acknowledged at the outset, because it is this logic to which the present article responds. In promoting PPPs, policy entrepreneurs highlight four pathways through which they can lead to positive educational outcomes. These are: (a) operational flexibility of private entities (i.e., the ability to customize one's organization and service offerings), (b) bidding and selection processes (through which government agencies select private companies to provide a given service), (c) risk-sharing between the government and private sector (such that private companies will enter the market, knowing that they do not bear the full burden of failure), and (d) competition (through which public schools react to the threat of losing students) (Patrinos et al., 2009). Despite the somewhat specific nature of these pathways and the many assumptions embedded in the operation of each one, the debate in education has tended to boil down to findings related to discrete outcomes such as student achievement or student dropout rates (see, e.g., Carnoy, Jacobsen, Mishel, & Rothstein, 2005; Fabricant & Fine, 2012).<sup>2</sup> The problem with the nature of the debate is that essential aspects of the operation of PPPs are overlooked. By focusing on input-output research that assesses outcomes alone without unpacking the mechanisms by which outcomes are achieved, essential information is overlooked and we are left with a partial understanding of the engagement that connects private providers to government agencies and to each other.

In light of the above, this article thus seeks to inform and expand the debate around charter school governance. Doing so is especially important because there is evidence that public authorities are not satisfied with their ability to oversee charter schools and other supplemental service providers (Heinrich, 2010). Rather than responding to parental choice and working within established legal frameworks, many charter schools are instead choosing among parents (Jabbar, 2016), creating coalitions, and tapping into advocacy networks in order to change the rules of the game (Au & Ferrare, 2014; Henig, Holyoke, Lacireno-Paquet, & Moser, 2003). These examples signal that charter school governance faces challenges that are not anticipated by proponents. They also call into question the increasingly popular notion in the United States that CMOs represent a promising avenue for reducing dependency on traditional school districts (Farrell, Wohlstetter, & Smith, 2012). Scholars must therefore strive to better understand how and why charter school governance does and does not operate in practice as espoused in theory, and with what implications.

To examine these issues, the research in this study focused on a model of charter schools from Colombia known as Concession Schools (or, in Spanish, *Colegios en Concesión* [CEC]). It began in 1999 and is intended to provide education that is high quality, privately-managed, and publicly-funded to poor students in specific areas of Bogotá. This program has become a well-known and relatively high-profile reform; it has been promoted by the World Bank (see, e.g., Patrinos et al., 2009) and its founder has continued to feature in key conferences in the United States on private

<sup>&</sup>lt;sup>2</sup> It is worth noting, as well, that broad reviews have shown the effects of charter schools on student achievement to be mixed at best and typically no better than traditional public schools (e.g., Jeynes, 2012).

education led by such actors as the International Finance Corporation (2014) and the Brookings Institute (2015). The CEC program thus reflects education reform trends in the United States and internationally while also serving as a reform example itself that encourages the continuation of the PPP trend. These characteristics make the CEC program salient for understanding charter school governance in practice.

Just as additional research is needed generally on the mechanisms of accountability and competition, so too is more research needed on the CEC model. It is the case that a couple quantitative studies have been produced on the effects of CECs on student achievement (Barrera-Osorio, 2006; Bonilla, 2011), but, as pointed out by Edwards (2014), the findings of these studies are open to interpretation due to issues of endogeneity and the lack of a true counterfactual. Given these issues, the present study takes as its focus the inner-functioning of the program's accountability and competition mechanisms.

In what follows, we will trace and unpack—through the application of a realist evaluation methodology—each of the mechanisms embedded in the theory of action of the CEC program. As will be shown, the findings from this study have implications for the extent to which mechanisms of accountability and competition in PPPs can be expected to materialize in practice through the introduction of charter-type programs. Importantly, the relationships of interest are not only those between parents and schools but also those between charter management organizations and the central office managers who oversee them. To address the above-mentioned issues, this paper moves through a number of sections. First, we review the relevant theory and evidence on charter schools, drawing on literature gathered by searching the Web of Knowledge, EBSCO databases, and Google Scholar for studies related to public-private partnerships generally and charter schools specifically. Second, we situate the CEC program within Colombia by explaining the relevant context. Third, we discuss the policy provisions and the theory of action that guide this program. Fourth, we detail the methodology employed for the study. Fifth, we present the results, which relate specifically to the processes of accountability and to the dynamics of competition that accompanied the Concession Schools. The final sections offer discussion, implications, and conclusion.

## Theory vs. Reality in the Literature

The literature on PPPs generally and on charter schools specifically has discussed for many years the theory of accountability and competition in education markets (Chubb & Moe, 1990). The former typically relates to the ability of a school district or other charter authorizers to monitor and, if necessary, take action against those private entities that are providing services related to public education (Crew & Anderson, 2003). Key aspects of this arrangement are the use of contracts and open-bidding processes. In theory, the open-bidding process should be transparent and competitive, and the contracts themselves should not only be awarded on the basis of past performance but should also include clear stipulations regarding performance requirements (Patrinos et al., 2009). Subsequently, those officials responsible for overseeing charter schools or other service providers can carefully monitor administrative behavior and/or academic outcomes, thereafter using poor performance as a justification for revoking charters or for cancelling contracts (Crew & Anderson, 2003). Of course, the logic of this arrangement presumes that performance criteria are clearly established, that public managers regularly collect the necessary decision-making information, and that those public managers have the ability and desire to exercise their authority (Lubienski, 2006).

The idea of competition in education markets also rests on a number of assumptions. In the case of charter schools, the primary assumption is that, as a result of the creation of multiple choices from which parents can choose, schools will be pressured to improve the quality of the education

offered (Chubb & Moe, 1990; Lubienski, 2003). Improvement is thought to be achieved through administrative and pedagogical innovation (Lubienski, 2003) and/or simply by strategically employing the school's resources in order to improve indicators such as test scores or dropout rates. Importantly, though, in order for competition to work in this way—that is, for an education market to function properly—not only must eligible parents be aware of and able to exercise their choices but school principals (or the parent company for the school) must also be incentivized to respond to the perception that other schools represent a legitimate threat to their survival. Only then will service providers attempt to minimize their costs and use resources more efficiently, leading to an education system that is more efficient overall (Rho, 2013).

The available evidence, however, suggests that accountability and competition often do not function in practice as they are presented in theory (Bulkley, 2001; Paino, Renzulli, Boylan, & Bradley, 2014; Rotherham, 2005). For example, on the issue of accountability, Crew and Anderson (2003), in their study of 103 charter schools in Florida, found that state law required charter schools to produce annual reports that contained information on school finances, faculty and staff, and the attainment of performance goals. However, in practice, the reports submitted by the schools complied with few of these legal requirements in that they "stated objectives in ways that could not be tracked or measured, provided very little baseline data and often made few references to the progress they had made toward the goals identified in their charter applications" (Crew & Anderson, 2003, p. 200). Moreover, "no school complied with the requirement that baseline data be presented that would permit a showing of the academic progress made by individual students during the time enrolled in the charter school" (p. 200). Compounding this situation was the fact that "no one in Florida's educational system [took] responsibility for annual analysis and reporting of data" and that "the Charter School Office claimed to have no mechanism to enforce [the annual report] requirement on recalcitrant schools" (p. 200).

Acar and Robinson (2004) conducted a study of accountability in the United States between K-12 public schools and private or non-profit organizations. On the basis of 38 interviews across 17 states, they found that four issues primarily affect accountability: (a) insufficient personnel on the part of the schools to monitor the private and non-profit partner organizations, (b) insufficient monetary resources to collect the necessary information, (c) difficulty in measuring service outcomes, and (d) inability to access the necessary information regularly and in a timely fashion. Other issues found to hinder the exercise of accountability were personal differences, communication issues, and frequent turnover in key personnel (Acar & Robinson, 2004). Thus, even when service provision arrangements are governed by contracts, there can be significant transaction costs that stem from untrusting and unstable relationships and a lack of information (Bulkley, 2001; Reeves, 2008). Recognizing these issues, the U.S. Department of Education (2007) recommended that charter school authorizers hire qualified staff members, support new school operators, and provide meaningful and transparent oversight.

However, even if the above recommendations are followed, accountability can be a significant challenge. In part, this is because accountability—contrary to how it is commonly presented by PPP advocates—is a concept that is difficult to operationalize in practice, not least because there are multiple ways to interpret and to define it. Diggs and Roman (2012), for example, interviewed 41 public procurement specialists, whose job it is to hold private providers accountable, and found the way accountability is understood depends on one's experience, organizational position, and career aspirations. Participants in their study noted that accountability can mean meeting legal requirements but it can also be interpreted as meeting informal or unofficial expectations. In terms of the former, it is important to note that legal requirements for

accountability vary greatly across political contexts (NACSA, 2015a; Vergari, 2001).<sup>3</sup> Relatedly, some scholars working on charter schools have emphasized four dimensions of accountability: performance (based, e.g., on academic outcomes), market (based on the provision of a distinct service to the community served), bureaucratic (based on compliance with relevant rules and regulations), and financial (based on acceptable use of public tax dollars) (Paino et al., 2014).

While these dimensions highlight that accountability is a multi-dimensional concept, research on charter schools also suggests that certain of these dimensions lend themselves more easily than others to punitive or castigatory action by government supervisors. The two most common reasons for charter school closure in the United States relate to finance (41.7% of closures) and mismanagement (24%), followed by academic performance (18%) (CER, 2011). Actions taken against charter schools are more common during the charter renewal year (NACSA, 2011), when closure is less politically contentious. These actions are also more frequently based on financial and bureaucratic compliance reasons because there is less room to dispute infractions as compared to language around academic performance (CREDO, 2009). The latter can be debated "until the cows come home," particularly by community supporters and charter school advocacy coalitions (Rotherham, 2005, p. 47; see also Au & Ferrare, 2014; Henig et al., 2003), especially since the language in contracts is often vague or ambiguous (Bulkley, 2001; Paino et al., 2014; Ziebarth, 2015). Ironically, then, where charter oversight agencies do have the necessary staff and funding to monitor these schools, the typical rationale for closure "contradicts the general perception that the success and accountability of a charter school is primarily measured in terms of academic achievement" (Paino et al., 2014, p. 530).

Despite the clear obstacles that confront accountability, Prusinski, Ruddy, Plucker and Cierniak (2014), in their study of mayoral authority over charters in Indianapolis, note that two strategies can reduce tensions. First, the cultivation of relationships with charter schools and, second, focusing on transparency (rather than political agendas) by publicly communicating student outcomes and school performance and by broadcasting and opening the meetings of the school board open to the public. Notwithstanding the studies reviewed here, there is scant evidence on how PPP oversight bodies manage the actors they oversee.

Similarly, very little research has been conducted on bidding processes. Though it is assumed that multiple private or non-profit organizations will compete for public sector contracts, what happens when this is not the case? Do public administrators (often known as charter authorizers) award contracts even where there is insufficient competition and, if so, with what implications for corruption and the ability to effectively manage and, where necessary, to punish these schools when they know that their governmental supervisors cannot easily replace them (if at all)? While these questions are in need of answers—especially in reference to charter schools—one study examined a bidding process wherein private companies were sought as partners for school construction in Portugal (Da Cruz & Marques, 2012). Here, the Portuguese government worked with the only willing private sector partner and, in so doing, found that this company could not "serve two masters" in that it prioritized profit making over public sector needs (Da Cruz & Marques, 2012, p. 756).

As for competition, while parents may see school choice as inherently valuable, research has shown that this is does not function smoothly as a mechanism of governance (Lubienski, 2003). For example, on information access, Alegre and Benito (2012) reveal that parents in advantaged socioeconomic positions are better able to access privileged information (i.e., insider information on a

<sup>&</sup>lt;sup>3</sup> For example, consider that in the United States, four types of entities can serve as charter school authorizers and supervisors: school districts, state boards or departments of education, other public entities (e.g., cities, counties or bureaus, colleges, universities), and boards created for this specific purpose (Vergari, 2001).

school through social networks) than marginalized families, who must rely on "under-capitalized channels" (i.e., publically-available information). This information asymmetry influences the choice sets that parents construct when exploring options for their children (Waslander, Pater, & van der Weide, 2010). It can also lead to greater segregation of students along socio-economic or racial characteristics (Reay, 2004).

The other side of the informational coin is that schools themselves can regulate what is known about them, and by whom (Jabbar, 2016). Lubienski (2003) concludes that school processes are opaque to outsiders, that schools enjoy "informational advantages over consumers" and that they have "disincentives to empower consumers with better, more actionable information" (p. 132). On this point, studies have shown that charter schools and private providers share only select information, or choose not to make information about their school widely available, precisely in an effort to influence the composition of their student body (Lubienski, 2003, 2006). Moreover, studies have shown that it can be the schools that choose students, as in New Orleans, where charter schools (but particularly the elite ones) selectively admit, exclude, and push out students and are thus highly stratified by race, income, and special education status (Adamson, Cook-Harvey, & Darling-Hammond, 2015; Jabbar, 2016).

Another strategy to influence parental choice is to focus on how the school is perceived that is, to focus on marketing materials and the use of symbolism to evoke emotion and to create positive mental images (Lubienski, 2003). Together, the promise of charter schools as espoused by reformers and the positive marketing materials generated by charter schools themselves may contribute to parents' allegiance to them. As Rotherham (2005) writes, "charter schools, even poorperforming ones, are proving wildly popular with parents" (p. 46)—a finding echoed by CREDO's (2013) study of charter schools in 16 states, where many parents "enroll their children in schools that are not performing as well or better than the local [traditional public schools (TPS)] options" (p. 83).

Research has found that marketing is also a strategy to which principals turn when they sense competitive pressure for their students, as opposed to focusing on improving educational quality (Jabbar, 2016; Kasman & Loeb, 2013). Studies have further investigated the circumstances in which principals sense competitive pressure. While geography—or the distance between TPSs and a potential competitor—strongly influences which schools principals perceive as competitors, researchers also found that principals tend to sense competitive pressure from those schools that are similar in terms of student achievement, race, poverty status, and enrollment size (Jabbar, 2015; Kasman & Loeb, 2013). Yet other studies have suggested that the perception of competition depends on the purpose of charter schools, for example, and the context into which they are introduced. Not surprisingly, TPSs may not perceive charter schools as a threat if the latter are intended to serve marginalized or low-performing students and if the TPSs experience no negative financial impact as a result of the charter schools (Waslander, Pater, & van der Weide, 2010).

Lastly, there is surprisingly little evidence on the link between competition and efficiency, though proponents often highlight this connection (Chubb & Moe, 1990). What evidence does exist suggests that the introduction of market mechanisms does not induce cost savings. Levin (1998), for example, concluded that the costs associated with overseeing a system of vouchers would actually increase system-wide administrative costs past their current levels (and without a concomitant rise in test scores). More recently, Rho (2013) analyzed the impact of contracting generally (e.g., for test development or cafeteria management) in more than 1,000 school districts in Texas over 12 years. Though her results do not speak directly to the issue of efficiency or total cost, she concludes that "More contracting generates greater bureaucracy, more bureaucrats presage more contracting, and the cycle continues," given the demands on school district administrators to supervise contractors

through new managerial systems (p. 335). Notably, the debate around efficiency fails to consider the emotional and financial cost imposed on students and their families by the disruption, trauma, and dislocation associated with charter school closure. This is an important gap since the most of the affected students "cannot get into higher performing schools, whose places are filled, and the schools that replace those that are closed in this highly stratified market are often doomed to be closed as low-performing in a few years themselves" (Adamson et al., 2015, p. 10).

## **Charter Schools in Colombia**

Based on national legislation passed in 1993, the city of Bogotá was able to assume management of its education system in 1995. Bogotá's autonomy included control over the funding transferred by the national government for health and education (Meade & Gershberg, 2008). While this funding increased dramatically during the 1990s, the national government experienced severe budgetary constraints after the economic crisis of 1998. Policy actors were thus looking for ways to reduce education spending and to make it more efficient and effective. Bogotá was dealing with other issues, as well. Though the number of teachers increased dramatically in 1996, student-teacher ratios varied widely due to a lack of information about student enrollment combined with poor management practices and the consequent difficulty of assigning teachers and financial resources based on educational needs (Castro, Pérez, & Alvarez, 2012). Enrollment projections were unreliable and educational demand across the city was poorly understood. As of 1997, the net enrollment rate at the primary level for Bogotá was 90.7%, while at the secondary level it was 83% (Castro et al., 2012). Ensuring access for all students in well-resourced classrooms with acceptable teacher-student ratios were thus key challenges. In 1998, following the election of Enrique Peñalosa as mayor, Cecilia Vélez was appointed the Secretary of Education for Bogotá.

Veléz would serve as Bogotá's Secretary of Education from 1998 to 2001, and would later become Minister of Education (2002-2010) for Colombia under President Álvaro Uribe. During her tenure as Secretary of Education for Bogotá, Vélez sought to address some of these systemic problems. She had three goals: enhance student results, increase access and retention, and improve management (Castro et al., 2012). Vélez instituted a number of reforms including student-teacher ratio parameters and standardized testing at select grade levels. However, the most notable reform of her tenure was the introduction of Concession schools. This initiative addressed the availability of schools in marginalized locations with high demand. Through a bidding process, successful private schools would construct and manage schools with public funds, as described in more detail below. A total of 25 Concession schools were constructed between 1999 and 2003.

# **CEC** Policy

#### **Policy Provisions**

Villa and Duarte (2005) and Bonilla (2011) have clearly laid out the legal, institutional, and theoretical facets of the how the CEC program was supposed to work, each of which we detail in what follows:

• <u>Contract duration</u>: Initial CEC contracts were established for 15 years—1999-2014. Future contracts were also written to terminate during 2014.<sup>4</sup> The shortest contracts granted were for 11 years, for those schools that opened in 2003.

<sup>&</sup>lt;sup>4</sup> Note that this statement does not apply to the renewal of contracts in 2014 for certain schools.

- <u>Selection of CMOs</u>: Eligible CMOs are organizations that already operate schools (typically private schools) and have agreed to operate an additional school constructed and funded with public money. Participating CMOs were to be selected—through a competitive bidding process—on the basis of their educational quality, as gauged by their performance and reputation.
- <u>CMO obligations</u>: CMOs have to provide formal education services in the form of a full, single-shift school day at the primary and secondary school levels to children from poor backgrounds, on specific premises, in return for a per capita fee. Half-day shifts are provided to preschool students. CMOs also have to provide each student with one meal daily, have to meet minimum governmental curriculum requirements, and must have the same academic year duration as TPSs, among other requirements (Bonilla, 2011).
- <u>CEC school infrastructure, features, and cost</u>: CECs were newly constructed specifically for this program, in marginalized areas with insufficient capacity to serve the student population. Beyond simply having classrooms, CECs are intentionally well-resourced, containing such features as recreation rooms, science laboratories, art rooms, technology rooms, a library, and multi-purpose fields. The average cost of each school was \$2.5 million, including the purchase of the land, construction, and school furniture and equipment (Villa & Duarte, 2005). According to Villa and Duarte (2005), not only should the quality of the building and its facilities be a source of pride to the children and the community, and not only should these schools raise expectations about the learning experience, but they should also be centers of social development for their communities.
- <u>School and teacher management requirements</u>: CMOs enjoy autonomy in school management, especially in the hiring of teachers and principals, though teachers must meet the legal requirements for their profession. Additionally, while teachers are paid in accordance with the national pay scale for public school teachers, they do not benefit from the job security conferred by the national Teaching Statute to teachers in TPSs (Villa & Duarte, 2005). As such, CECs are able to hire teachers on 10-month renewable contracts from a nonunionized pool of applicants, though some CECs offer longer contracts, up to 11.5 or 12 months. The implication is that—in contrast to TPSs—CECs have the ability to adjust their faculty each year (Bonilla, 2011).
- <u>CEC finance</u>: At the outset of the CEC program, the government funded the CECs at a rate of USD\$545 per student per year, in comparison with about USD\$430 for TPSs (Barrera-Osorio, 2006; Termes, Bonal, Verger, & Zancajo, 2015). More recently, in 2014, annual CEC funding per pupil averaged USD\$945, as a result of inflation (Termes et al., 2015). More current estimates for TPS per pupil funding are unavailable, and cost comparisons with TPSs are difficult to make, given the different services offered and the different length of the school days in CECs versus TPSs. That said, one study recently estimated the cost of providing similar services in TPSs, and found that it would cost USD\$2,091 per student annually (Secretaría de Educación de Bogotá, 2013).<sup>5</sup> Interestingly, over half (55%) of the increased cost per pupil in the TPS estimation is due to higher teacher salaries, with the implication that CECs spend significantly less on teachers.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> One TPS principal reported that he receives about \$1,000,000 pesos per student, which, if accurate, reflects the same amount received by TPSs 15 years ago (BOGACT15).

<sup>&</sup>lt;sup>6</sup> See Termes, Bonal, Verger and Zancajo (2015) for more on funding differences and finances related to CECs.

- <u>Student admission/selection</u>: Clear eligibility and admission criteria are set for CEC recipients: students must belong to the lowest socioeconomic strata<sup>7</sup> and must live near the school (Villa & Duarte, 2005, p. 114). The schools themselves are responsible for carrying out the selection process. Schools cannot use admission tests to make their decisions, and they must admit the most economically disadvantaged students first. Students for whom there is not space in the CECs are assigned to the nearest school to their residence with an available seat (Bonilla, 2011).
- <u>Accountability between government and CMOs</u>: According to the contract between the SEP and the CMOs, there are three accountability dimensions. Through periodic evaluations by the SEP, CMOs are accountable, first, for building management, second, for proper staff management, and, third, for student learning. For this last dimension, the CMOs not only have to submit to an independent assessment but also have to be rated "good" or "very good" every year; test scores may not be "unsatisfactory" for two consecutive years. In the event that test scores fall below this threshold, the contract stipulates that the charter may be terminated (Villa & Duarte, 2005).

#### Theory of Action

In line with the theory of charter schools more generally, proponents of the CEC program suggest that certain dynamics and outcomes (depicted in Figure 1) should result from the above-mentioned policy provisions. First, schools in this program should be more efficient because they are selected through a competitive bidding process, and because the CMOs face lower labor costs. Second, CECs should respond to the threat of accountability from the SEP, in that they can be closed if they do not perform well for multiple years on student achievement tests. Third, and finally, TPSs should feel a sense of competition with the CECs, because they may lose students if they do not improve the quality of education offered (Barrera-Osorio, 2006; Bonilla, 2011; Villa & Duarte, 2005).

Before proceeding, it should be noted that in the logic model the mechanism of parental choice is a different color than the rest of the diagram. This is done to reflect the fact that this mechanism was thought to be a secondary mechanism for school improvement. Together, the bidding process, the school evaluation system (based on student achievement), and the threat of government accountability were thought to be the primary drivers that would lead to superior performance of the CECs.

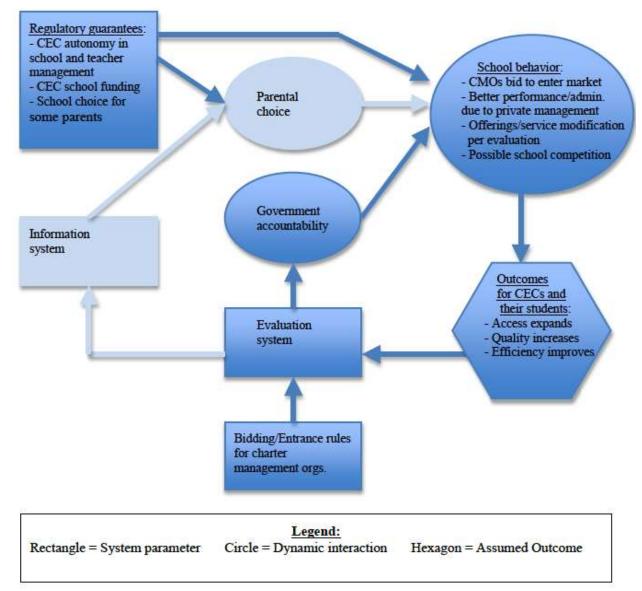
#### Profile of CECs in Bogotá

During 2005-2011, the CECs enrolled between 3.7 and 4% of students in Bogotá. Of the 39,667 students in CECs as of 2012, 7% were in preschool, 79% were in first to ninth grades, and 13% were in grades 10-11 (Secretaría de Educación, 2013). As for the schools themselves, they are located in the marginalized, peripheral areas of the city, with the majority (80%) located in the western and southern parts (Bonilla, 2010), as can be seen in Figure 2.

With regard to the CMOs, documents show that nine different organizations have granted charters. Three of these nine were "family benefit societies" (*cajas de compensación*, in Spanish). As Villa and Duarte (2005) explain, these are "private entities funded by two percent of the payroll of

<sup>&</sup>lt;sup>7</sup> Students' families must have income equivalent to level one or two of the "SISBEN" system (the System for the Selection of Beneficiaries of Social Programs), which is a "six-level classification used by the local government to characterize the socio-economic characteristics of a given dwelling. ... In general, residents of dwellings in the first 2 strata are considered the urban poor and pay, for example, subsidized prices for public utilities such as water and electricity" (Bonilla, 2011, pp. 16-17).

private companies and public institutions. Their purpose is to provide recreational, health, training, housing, and other services to affiliated workers" (p. 122). Those that have participated in the CEC program "have extensive experience in formal and non-formal education" (p. 122)—important because the CMOs selected needed to have previous experience with school management. The rest of the CMOs have been created—and are run—by members or affiliates of elite private schools, religious orders, or university-private school alliances.



*Figure 1.* Programmatic Logic Model of Concession Schools. Note: Adapted from Verger (2012).

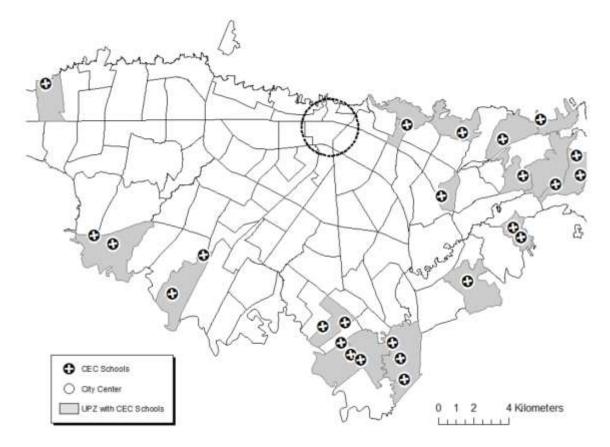


Figure 2. Spatial Distribution of Concession Schools in Bogotá

Note: North on this map corresponds to the left side. The subdivisions depicted are zonal planning units (UPZs), the smallest subdivision within the city; they are used by city officials for planning purposes. UPZs "are defined such that the urban and economic characteristics of the housing units within them are very similar" (Bonilla, 2011, p. 17). Source: Bonilla (2011).

#### Methodology

Methodologically, we drew on realist evaluation (Pawson, 2006; Pawson & Tilly, 1997). A realist evaluation is ideal for the present study because its purpose is to help unpack the inner workings of a program. Rather than asking what the *effect* or outcome of a certain program is, the idea is to trace and investigate the *logic* of that program. The benefit of this approach is the production of findings specific to the set of circumstances in which the program is embedded. Put differently, producing such findings is advantageous because it helps to construct a body of knowledge about the outcomes that can be expected from different programs—with their specific logics—given particular technical, institutional, and political characteristics of the context.

This approach is also appropriate for the study of the CEC program because prior studies have not inquired as to how this program or similar PPPs in various contexts work, but rather have focused on whether or not presumed mechanisms have produced certain outcomes. Thus, by presenting the results of a realist evaluation, we seek (a) to clarify the details of the program's logic model, (b) to analyze the extent to which (and whether or not) the assumed theory of action operates in practice, and (c) to derive lessons for the reform of such programs.

#### **Data Collection**

Table 1

Data collection occurred during May-December 2013. A number of specific data collection strategies were employed that aligned with the purpose of this study and with the realist evaluation approach. Specifically, data collection entailed: gathering previous program evaluations, seeking out relevant literature (e.g., related to the historical, political, and institutional context of education in Colombia), conducting interviews and focus groups with a range of key actors who work within and outside the country's education system, visiting CECs and TPSs, collecting documents from individual schools, and assembling statistical information on the schools in the final sample (more on this below). These strategies allowed us not only to identify the logic model for the CEC program but also to compare the theory of the program with an in-depth understanding of its operation in practice.

A total of 30 persons were interviewed. Interviews times ranged from 15 minutes to 1 hour 45 minutes, with the average being 45 minutes. In accordance with both the focus of the study and the methodology employed, the interview protocol was based on the program logic but also sought to understand the contextual factors that affected policy component operation in practice. The individuals interviewed were specifically selected because they occupied positions of relevance to the policy in question and because they had intimate knowledge of the CEC program that pertained to: the program's origins, the relationship between CECs and nearby TPSs, the dynamics of interaction between charter management organizations (CMOs) and the relevant managers within the Bogotá School System (*Secretaria de Educación Publica*, or SEP), the CMO bidding process, and the administrative strategies and behavior of the CECs themselves.

Table 1 lists the interviews conducted with officials from the Ministry of Education (MINED), representatives of the SEP in Bogotá (including those whose job it was to evaluate the CECs), directors of CMOs, and principals from both CECs and their neighboring TPSs, among others. To give an idea of the valuable perspectives gained from participants, consider that in-depth interviews were conducted with the Minister and a Vice-Minister of Education for Colombia during 2002-2010, two Secretaries of Education for Bogotá during 1998-2003, the Director (as of 2013) of the Colombian Institute for Educational Evaluation (ICFES, for its name in Spanish), the first Director of CEC expansion for the MINED, the Director of Educational Coverage for Bogotá during 1999-2002, and the Director (as of 2013) of Evaluation for the SEP of Bogotá.

Summary of Interview Participants according to Position Held	NI -
Interviewee Position	No.
Ministry of Education of Colombia Officials	5
Secretary of Education of Bogotá Officials (Not including	
principals interviewed)	5
Charter School Management Organization Leadership (Not	
including charter school principals)	3
Education Specialists (Professors, Economists, Evaluators,	
International Organization Staff)	7
Charter School Principals	5
Public School Principals	5
Total	30

Summary of Interview Participants according to Position Held

To understand the administration of CECs, the principals of five separate Concession schools were interviewed from a single locality in the southern part of Bogotá. This locality was

chosen for its high concentration of CECs (with 20% of them located here) as well as for its population density, since previous research has shown that competition mechanisms tend to function better in such areas (Elacqua, Schneider, & Buckley, 2006). In addition to performing school visits and interviewing all CEC principals in this particular locality, the principal of the TPS nearby to each CEC was also sought out for interviews.<sup>8</sup> In all, 10 principals were interviewed: five from CECs and five from TPSs. The Director of the SEP office in that locality was also interviewed to grasp the extent to which competitive dynamics in fact developed. As interviews with parents were not conducted, this represents an area for future research.

#### **Data Analysis**

Analysis entailed a number of stages. The first stage required that we interrogate the documents and archives collected in order identify the theory of action of the program. To do this, we organized documents in chronological order by document type and by source. Then we repeatedly and carefully analyzed prior studies in order to benefit from the understanding of program logic arrived at by other scholars. Next, we verified and (where necessary) corrected our initial understanding by systematically investigating program documents and CEC contract language. The quantity and detailed nature of available program documents and literature made it possible to flesh out a detailed understanding of the underlying logic based on these sources. Finally, during interviews with the original designers of the program, we triangulated our findings regarding the logic model.

The theory of action guided the analysis of data. By collecting data on each of the logic model's dimensions and then analyzing that data against how the CEC program is supposed to function, we were able identify the strengths and weaknesses of the how the program is thought to work. To carry out this analysis, we first coded our documents and interview transcriptions (with codes derived from the logic model, see Figure 1), following which coded text was grouped and systematically analyzed vis-à-vis the assumptions embedded in each component of the logic model. In doing so, we noted where practice both aligned with and diverged from policy theory (as explained and visually depicted in the following section). Memos were used to record these insights as well as insights related to the contextual and institutional conditions that promoted and impeded the policy from functioning as envisioned. From this analysis, representative direct quotes were chosen for inclusion in the present article (taking into account space limitations), where they shed light or characterized exceptionally well recurring themes. Throughout the findings section, interview acronyms are included in parentheses to indicate which actors spoke to a given point (e.g., NATACT1, BOGACT1).

# Findings

Following the flow of the logic model presented above, our discussion of findings is spread across multiple sections. The issue of accountability is divided across the following sub-sections: (a) bidding process, (b) evaluation system, and (c) governmental accountability actions. Subsequently, the issue of competition is divided among: (a) information system, (b) parental choice, and (c) school behavior. These grouping reflect the components that should combine in practice to produce properly functioning mechanisms of accountability and competition.

<sup>&</sup>lt;sup>8</sup> For three of the five CECs in the locality of focus, one nearby TPS principal was interviewed; for one of the CECs, two nearby principals were interviewed; and for one CEC, it was not possible to interview the nearby TPS principal.

#### **Components of Accountability**

**Bidding process.** The findings on the bidding process are surprising; the initial process lacked competition. First, this was because the SED determined the entities they wanted to serve as CEC management organizations based on the test results of their existing schools. The SED then worked backwards to determine the criteria for bidding process participation (NATACT7).

Second, the lack of competition resulted from the bidding guidelines. The point here is that applicants—from the pool identified by the SED—had to meet extensive criteria regarding the provision of services (see policy provisions section of this article for details), and they had to do so for a level of per-pupil funding that was fixed (at the beginning). The implication is that it was difficult for organizations to make themselves eligible given the bidding requirements (NATACT6). One consequence of this situation is that the SED actually had to persuade a number of organizations to participate in the bidding process (NATACT4).

Third, the lack of competition was due in part to the initial skepticism of qualified bidders. The Jesuits, nuns, and leaders of elite private schools were not only confused as to the exact nature of the CEC program, but also had to be convinced that the government would provide continual funding for the program (NATACT6). The quote below, from the CEC program's first coordinator wihtin the SED, adds further depth to these issues:

It was my job, I went to the schools we selected, we made a list of schools, ... I met with the board of directors of all of the schools, of those we had chosen, and I presented the project, and it was a disaster, but I convinced them. For example, I remember meeting with the board of directors of the *Gimnasio Moderno*, some old men who didn't understand anything, and they said, "this is going to cost us," and I explained that it wasn't going to cost them anything, and they asked where the school was going to be, and I said in Icará [(a peripheral and marginalized area of the city)], and they said it was going to be very difficult, and it was like this with all of the groups, even more with the religious communities. I had to present to them and explain to them and a have thousand meetings, show them the contract ... With the nuns it was absolutely impossible, ... [they] didn't understand anything (NATACT6, int 1, p. 20)

**Evaluation system.** This is one of the most important aspects of the CEC program, since, in theory, it provides the informational basis upon which the SED may decide to close schools and upon which charter schools may modify their behavior and mix of service offerings. Documents collected revealed that two evaluations (2004 and 2009) have been conducted, in addition to more frequent audits. Audits are focused on contract compliance, and are conducted by the government's comptroller office. In addition to reviewing paperwork and the physical state of the school, audits also review enrollments to ensure that students are actually receiving services (BOGACT3). The SED also checks to ensure that CECs are providing one snack to students per day, as stipulated by the contract.

While regular audits focus on compliance, CEC evaluations assess performance and focus on the quality of services delivered. Evaluations are conducted by outside firms, occur over the course of a single day, and involve surveys that may be taken by students, parents, and even teachers. These surveys include questions regarding academics, the quality of classes, and how well classes are liked, for example. Teachers are often asked about the school's education plan and curriculum (BOGACT3).

Despite their importance, the usefulness of the evaluations is mixed. The first evaluation by Corpoeducación (2004)—included only a general summary of each of the CECs followed by an overall descriptive discussion of such issues as leadership, school climate, pedagogical approach, community engagement, school administration, etc. The other evaluation obtained—that by IDEP (2010), performed in 2009—was superior in its design because it created an index based on weighted scores on a range of dimensions related to CEC operation and performance. Some of the dimensions examined include stakeholder participation in school processes, teaching practices, student achievement, institutional organization, etc.

For the CECs, the first evaluation was more useful because it could be used—due to its descriptive nature—to formulate an improvement plan. The later evaluation frustrated CEC leadership because of the perception that the evaluation was inadequate (due to its methodology, which involved assigning a score from one to four for the various dimensions of CEC performance mentioned above) as well as from the sense that the findings of the evaluation were politically predetermined given the election in 2008 of a new, left-wing administration (under the leadership of Samuel Moreno Rojas, of the Alternative Democratic Pole Party) and the fact that IDEP is a governmental ministry that is not entirely independent, as the evaluating agency should be (BOGACT1). The latter of the two evaluations, the IDEP study, was the only one to give grades to the CECs, as the CEC contracts initially envisioned. Ten of the 25 CECs received an overall score below 80%, and for student achievement only four CECs scored over 80%. Perhaps this is a key reason why the CECs did not think highly of the evaluation—because most of them received poor marks.

Another point of contention for some of the CECs was the subsequent improvement plans the SED required following the IDEP evaluation. To that end, a principal from the Don Bosco CEC describes:

The [SEP] received the evaluation report from IDEP and said that improvement was needed ... institutional improvement, and they said that this was found from an external evaluation, that was supposed to have been independent, and so we implemented improvement plans, ... we used a general format and these were inserted into the work plans of each institution ... we created them and the [SEP] visited two or three months later and said they were tracking the progress. ... *They proposed an improvement plan and, in 2009-2010, implemented this plan* (BOGACT11, p. 7-10, emphasis added).

This quote clearly describes an instance of government accountability of the CECs in that the CECs had to develop improvement plans following the IDEP evaluation—plans on which the government followed up. Moreover, the 2011 audit reveals further accountability mechanisms. The SED, through the School Coverage Unit, communicated with the CECs and, where necessary, demanded through official correspondance that they rectify service provision compliance problems identified by previous audits (Controloria de Bogotá, 2011).

SEP has not taken drastic action to punish CECs where they did not comply with regulations, although there is some evidence that the SEP has taken appropriate steps to monitor CEC behavior and to ensure that the CECs implement corrective action. For much of the life of CEC program, it was uncertain whether or not the SEP would be willing to take more punitive measures, such as issuing fines or revoking contracts for sustained non-compliance and/or inadequate performance. Evidence in this area (up through 2014) suggested that the SEP was reluctant because of the dispute around the legitimacy of recent evaluations conducted by IDEP.

Prior to 2014, the SEP's evaluation system worked to ensure that CECs meet legal requirements related to: personnel qualifications, student snack provision, infrastructure management, student enrollment quotas, and appropriate student selection. At the same time, the

SED's ability to hold schools accountable for student achievement was limited. This was a result of the somewhat vague language in CEC contracts (discussed further below) around how CECs are to be graded, and the inadequate nature of the evaluations, which have tended to be descriptive in nature, except for the IDEP evaluation of 2009. Here, however, the study's utility is undercut by the perception of a lack of independence on the part of IDEP (also discussed further below).

**Governmental accountability actions and dynamics.** In Bogotá, the CECs have been accountable to the SED's School Coverage Unit and, within that, the Office of CEC Coordination. Three forms of accountability were envisioned when the CEC program began: building management inventory, supervision of compliance with rules on teaching by the SEP and assessment of the attainment of learning objectives, which is to be measured by an independent party. The way the system is set up, the SEP (with assistance from its relevant financial and legal offices) should be able to hold CECs accountable in each of these areas on the basis of the evaluations and audits previously discussed. In practice, however, the operationalization of accountability is hindered by a number of factors.

The first issue is that the enforceability of accountability is problematized by a lack of clarity regarding CEC expectations. Though CEC contracts state that the ability to operate a CEC can be revoked if "the results that the concessionaire receives are rated 'poor' by the independent evaluator during two successive school years," it is often unclear—even among those who work in the education system—what level of achievement students in CECs should obtain for the CEC to remain in good standing. One source of this confusion is the fact that the contracts do not define what constitutes poor, good, or superior performance. A commonly assumed—but inaccurate—requirement is that CECs must perform better than TPSs.<sup>9</sup>

The second issue relates to the poor and politically-tense relationship that has developed between CECs and the city's leadership. In the first half of the 2000s, during the time of the administration under which the CEC program began, the SEP had a productive relationship with the CECs, despite (or perhaps because) it monitored and worked with them closely. The following quote from the Director of Coverage in the early 2000s (who was charged with overseeing the CECs) explains this well:

Despite having millions of other obligations in my role as Director of Coverage, I took the time to make surprise visits, to be very involved, and this was a deterrent to any irregularities because I arrived unannounced to any school and reviewed everything, and ... where it was dirty and where the children were alone without a teacher, ... I said "how is this possible? You are shameless." And the next day it would be corrected.... They had great respect for me because they knew that I had been there from the beginning, because I understood the contract perfectly, and because they knew what they were required to do—and if they performed poorly, there would be serious consequences, but they were never necessary because the CECs were very.... In these first few years, they were very judicious. And I, more than believing in supervision, I believe in building alliances, that is, I contract you and I don't pursue you like the police but rather I form a team with you. In this way I built a relationship with them. I am not the enemy who is going to review everything; we are a team so that this functions, and that leads to good results (NATACT6, p. 26).

<sup>&</sup>lt;sup>9</sup> Note, though, that some concessionaires have voluntarily included clauses in their contracts stipulating that their schools must obtain scores that are, in fact, better than those received by TPSs in their respective localities (BOGACT5).

However, the relationship between the SEP and the CECs changed starting in 2004, when the leftwing party (under the leadership of Mayor Luis Eduardo Garzón, of the Independent Democratic Pole Party) took control of SEP administration for the first time since the CEC program began. The supervision of CECs under the new administration became more distant, hands-off, and perfunctory, while the relationship as a whole was restricted only to the conduct of evaluations and audits. As one CMO director stated: "The relationship is only those evaluations for which they send people. You attend to the evaluators and show them what you have to show them" (BOGACT5, p. 16). Another CMO director added to this: "the communication has been very poor for a few years between the School Coverage Unit and us. What we do is fight, defend ourselves, make claims nothing constructive" (BOGACT17, p. 17). In large part, this tense relationship stems from the antiprivatization and anti-charter school position of Bogotá's mayors since the election of Luis Garzón in 2004.

In this context, the CMOs were skeptical that accountability for CECs became a priority for the mayor's office in the run-up to the 2014 expiration of CEC contracts. Previously, in the post-2004 era, while the CECs were subject to criticism, they were not closely monitored by the SED. For these reasons, the evaluations have taken on a "political tint." From the perspective of CEC principals, these evaluations have been performed to show that CECs "don't work, that they haven't had superior achievement, that students dropout just the same, that the academic results aren't better" (BOGACT11, p. 5).

The result of these dynamics is that accountability was rendered moot for many years during 2004-2014 due to the weak nature of the evaluations and the unclear criteria for defining acceptable performance. The mayor's office did take formal action that would threaten the status of the CECs, in particular because it knew that the CECs would challenge both the methodology of the evaluations as well as the lack of independence of evaluating agency. From this situation, we see that accountability, in practice, depends on a number of factors that go beyond the simple, mechanistic assumptions often offered to justify charter schools. More will be said about the implications of these findings later in the article.

#### **Components of Competition**

**Information system.** Conceivably, an information system for a PPP program might collect and communicate information on a range of aspects to a variety of actors. In the case of the CEC program, however, the primary issue around which information is communicated relates to the availability of spots in CECs. In terms of timing, CECs announce any open seats they might have during August or September. In order to advertise open seats, the CECs typically place announcements on posters outside their schools. According to interviewees, other means of communication around open seats include television, newspapers, and circulars sent out to the families of students. Word of mouth across families is also reported by numerous principals to be a primary means of information sharing (BOGACT3, BOGACT8). In reality, however, very few seats open up each year. This is because very few students dropout or leave the CECs once enrolled. The result is that seats only tend to open up at the preschool level, since there is a preschool associated with each CEC that feeds into it.

Many parents are aware of the limited number of new spots each year. The former coordinator of the CEC program describes this situation well: "Look, in the CECs, the new spaces are known three months in advance, parents are around like hens looking for them" (NATACT6, p. 42). Thus, while CECs are required by law to announce any openings to the public, it is a formality that is not necessary in order to fill the available spots. Indeed, the principals indicated that they would not advertise the open spots if they did not have to because they already have a backlog of

requests from parents. Each individual CEC is then responsible for facilitating the student selection process.

**Parental choice**. Parental choice is, in part, a function of system capacity and the existence of spots from which to choose. In the locality examined for this study, there are 3,300 more slots available in TPSs than students enrolled (Secretaría de Eduación, 2013). In practical terms, what this means is that parents know that their children will not be without a school to enroll in, even if it is not in a CEC, since demand for CECs is well above supply.

Indeed, limited supply seems not to have stunted demand—that is, the availability of few spots has not discouraged parents from attempting to exercise their choice. In the words of one CEC principal, "There were 5,000 kids at the door of each CEC" when they opened the first 16 (NATACT6, p. 27). One CEC principal also commented that parents request spaces every day because CECs are considered to be privileged and because, as such, enrolled students value the schools (BOGACT6, p. 13). Another principal noted that, on average, for every opening at their CEC, there are seven applicants (BOGACT11, p.14)

More than being about private management, however, parents simply want their children to receive a quality education. In this respect, the high levels of demand should come as no surprise, particularly given that the localities that contain CECs were those where education has not only traditionally been of low quality but also where, in the late 1990s and early 2000s, there were not enough schools to house each neighborhood's children. Going from this situation to one where a brand new school is built and put on offer, it is to be expected that demand would far exceed supply.

Inter-school dynamics. Apart from the bidding process, it has been suggested that competition should also materialize among individual CECs and TPSs in practice. However, the findings from our research are not consistent with this assumption. TPSs overwhelmingly tend not compare themselves with CECs; in the words of one TPS principal, the CEC program "has not affected us at all" (BOGACT9, p. 2). And the director of the Local Education Office rejected the notion of competition, stating instead that "each school has its autonomy, its own program" (BOGACT18, p. 7). CEC leadership also does not perceive TPSs as competition. One CMO director stated: "I know many public school directors from the Secretary of Education that appreciate us as a concession school, they don't view us as a threat" (BOGACT17, p. 19).

Three factors emerge as to why competition has not developed. The first factor relates to the difficulty of enrolling in the CECs given excess parental demand. Put differently, there are few enough CECs that the TPSs do not feel threatened by the prospect of losing their student population. The second factor relates to the drastically unequal starting points of the CECs and TPSs. CECs have newer physical infrastructure, access to newer resources and a longer instructional day. TPSs know that they cannot compete with the infrastructure and amenities offered by the CECs. Third, as noted previously, competition is lacking because TPSs know that they will still have a student body to serve. Those characteristics which make CECs more attractive to parents are structural and, as such, are out of the hands of TPS principals. Consequently, TPS principals resign themselves to dealing with the issues within their schools over which they have some influence. As opposed to competition, what develops on the part of TPS principals is a sense of jealousy and envy, particularly with regard to such supplemental services as social workers and school psychologists (BOGACT8).

**Student selection.** We found that CECs manage the student selection process directly. In selecting students, there are three criteria that principals must take into account. The first and most influential is sibling status—that is, whether the applicant is a sibling of an enrolled student. The

second is the vulnerability status of the family, which includes families that have been displaced (e.g., due to natural disaster) as well as families in poverty as defined by the System for the Selection of Beneficiaries of Social Programs. To qualify for enrollment under the poverty indicator, families must be in the lowest two strata, which are the strata of those families who also pay subsidized prices for public utilities such as water and electricity (Bonilla, 2011). The third criterion is geographic; students who live closer to the school are given higher priority.

Not all students are selected before the school year commences, because there are times when a spot may open up mid-year because a student moves, dropouts out, or repeats a grade. In these cases, the CECs contact waitlisted students and their parents and administer a series of interviews and tests to learn more about them. According to a principal from one CEC, these diagnostics include academic tests and meetings with a psychologist in order to better know the student's needs and to become familiar with the family "so that when the child is enrolled the CEC can channel the student according to their strengths and weaknesses" (BOGACT10, p. 13). Although the principals interviewed did not indicate that the selection process is used to choose more desirable students, it clearly could lend itself to this outcome, whether intentionally or unintentionally, particularly given the overwhelming demand from parents and the fact that some principals reported having 10 applicants for each opening.

In this context, it is important to note that our interviews with CEC principals affirmed that students have been rejected for reasons of capacity. This aligns with what Miñana (2010) found in his study of education reform in Colombia during 1994-2005. In a focus group he conducted, principals asserted that the first wave of 16 CECs "were at liberty to select" their students (p. 161). Though CEC contracts have always stated that students should be from the poorest two socioeconomic strata and should live near the school, it is possible, as mentioned, that principals could target other student characteristics as grounds for selection. In the end, while it is not clear how or why CEC principal discretion supposedly declined, Miñana (2010) writes that the leftist governments during 2004-2011 were "able to end the privileges these schools had and to partially revert the policy" (p. 168).

From a long-term perspective, there could be practical consequences from principal discretion in student selection at the outset of the CEC programs. Over time, student achievement could be positively skewed in comparison with TPSs in the same locality as an implication of initial selection practices whereby students with more "cultural capital" (Jabbar, 2016) were chosen, as the principals interviewed by Miñana (2010) assert, especially since CEC principals have both assessed and selected students from among those eligible. And, since the SED has changed the criteria to give preferential treatment to siblings, a positive bias could be sustained over time, though the impact may likely be minor.

## **Discussion and Implications**

The CEC policy has been a partial success. Access certainly increased as a result of the construction of 25 CECs, with these schools serving just under 40,000 students (or 4% of all students in Bogotá) in 2012. The fact that CECs served marginalized areas of the city and were targeted to disadvantaged students is also a success. Moreover, the government and the private sector showed that they could work together to address a pressing issue, though the functionality of this relationship varied over time, an issue to which we will return below. We found that the most significant—if imperfect—successes could be seen in the fact that (a) performance-based contracts were established, (b) evaluations and audits were conducted, and (c) the latter of these (i.e., audits) were used as the basis for enacting bureaucratic accountability (i.e., ensuring that CECs followed

relevant rules and regulations). This last success is important to emphasize, since in contexts such as the United States many states do not require regular audits let alone require regular, performancebased evaluations of charters.

Yet there were also a number of shortcomings of the CEC program. We further discuss and draw out the implications of—both—this program's successes and shortcomings in what follows. The implications offered should be interpreted as hypotheses to be researched further in future studies given that the present findings are based on the case of a single policy. Additionally, out of a desire to inform policy and practice, we will continue to consider the implications of this study not only for Colombia but also for the United States, a country with perhaps largest and most well-established charter school sector (NAPCS, 2014). Extrapolating to the United States context is appropriate and valuable as the challenges faced by states are similar to those confronted in Bogotá (processes for monitoring, accountability, bidding, etc.), even though the details of charter oversight arrangements vary across states (NACSA, 2015a).

#### Accountability Relationships

The fact that personal relationships were at the heart of the accountability relationship in Bogotá—rather than impersonal mechanisms of punitive action, as theory suggests—is consistent with emerging research in this area (Bulkley, 2001; Prusinski et al., 2014). Viewed in context, this finding also suggests that the successful operationalization of accountability in PPP arrangements requires a significant investment in personnel and time, not to mention the presence of an amicable political climate. As seen in the present case, the relationships were closest and most functional at the beginning of the program, before all 25 CECs were completed, and before the change of political party in the mayor's office. City authorities supported the existence of these schools and the official charged with oversight could reasonably monitor and maintain relationships with CEC leadership. Despite the centrality of these findings, the issue of human resources and funding for charter oversight offices needs to be explored further, given that only vague guidelines exist in this area. Even in the United States, the National Association of Charter School Authorizers (2013) only states that a quality charter school authorizer should provide "sufficient financial resources ...in accordance with national standards and commensurate with the scale of the charter school portfolio" (p. 6).

Having adequate personnel is necessary for reducing transaction costs and for facilitating bureaucratic accountability, but it cannot overcome the need for actionable criteria for performancebased accountability. This is particularly so since performance-based accountability metrics commonly come into play once relationships break down and charter schools fall out of favor politically (Rotherham, 2005)—as in the case of CECs in Bogotá. Although CEC contracts included a clause stating that student achievement could not be rated as poor for two consecutive years, the meaning of poor was not defined. Not surprisingly, significant resistance arose on the part of CEC leadership when a politically-compromised evaluation agency later defined this term as it carried out an evaluation of the CECs. PPP contracts require specificity, clarity, and transparency when it comes to the definition, measurement, and usage of performance indicators, particularly when charter schools and political officials hold divergent agendas.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> On measurement, it should be noted that debate among academics is ongoing with regard to the feasibility of successfully implementing a methodology in practice that not only measures key outcomes such as student achievement, but which can also control for differences in background characteristics between CEC students and TPS students, for example (Klees & Edwards, 2014; Lubienski, Weitzel & Lubienski, 2009).

#### **Performance Targets**

A further implication of the CEC case is that actionable performance targets should be set even, or especially, when conditions are favorable (i.e., when charters and politicians are on the same page). This should be done in preparation for times when the relationship is more tense, in order to minimize the political aspect of accountability, though as other scholars have found, charter schools and their advocates have been shown-e.g., in the cases of Washington state and Washington, D.C.—to lobby for the reform of legal frameworks with which they do not agree (Au & Ferrare, 2014; Henig et al., 2003). The CEC case and the broader literature thus suggest that, for PPPs to work in practice a further condition is the establishment of designated, impartial agencies for the evaluation of charter schools (which may or may not be the same agencies that evaluate traditional public schools) in order to ensure that there is no conflict of interest and that agency selection cannot be politically motivated. Complicating this condition is the fact that charter schools-both in Bogotá and in the United States-are held to different standards. CECs, for example, were allowed to voluntarily insert additional performance requirements into their contracts, while charter schools in the United States are similarly held to language that varies across their individual charters. This situation raises the question, first, of cost, given the significant investment that would be required to develop agencies that can appropriately evaluate numerous different contracts (Levin, 1998). Second, it raises the question of whether there should be explicit performance criteria below which charter schools should be closed—an approach that is being pursued in a handful of U.S. states (NACSA, 2013)—or else receive support for improvement. To the extent that such technical assistance is supportive, it could have the effect of improving relationships, increasing charter school buy-in to evaluation systems, and enhancing bureaucratic accountability (Diggs & Roman, 2012; Reeves, 2008).

#### **Charter Oversight Agencies**

There are yet other reasons to be concerned with the capacity of charter oversight bodies and the evaluation systems they employ. A key area of absence in the present case and in charter school governance generally is teaching and leadership performance evaluation. Some charter schools observe and provide feedback to their teachers in addition to offering professional development opportunities at times. But the question remains: How can charters be held accountable for being innovative and providing students with high-quality instruction, especially if charters are specifically serving the most marginalized student populations? Moreover, what kinds of evaluations can be conducted that can be used for charter improvement, including but going beyond student achievement? The present study complements the observations of other scholars (Bulkley, 2001; Vergari, 2001) in that it provides some insight to the difficulty of and the challenges to such a task. Bureaucratic and financial accountability (based on feeding students, selecting students, inventory, and accounting audits) are easier to identify and address, and it is more difficult to claim that such audits are politically-biased. On the other hand, assessing student achievement, leadership, pedagogy, and teacher quality is far more complex, value-laden, more open to criticism, and more easily attacked as politically-charged. Potential avenues to explore for judging charter schools beyond quantitative indicators of student achievement—include accreditation processes, qualitative and peer evaluations of the issues mentioned above (e.g., when it comes to leadership, teaching, community engagement), as well as community and parent assessments of charter performance (Bulkley, 2001).

A key job of charter oversight agencies is also the initial authorization of providers—a process from which a number of lessons emerge. First, not only did we find that even a city with one million students can be susceptible to insufficient competition for government contracts to

manage publicly-funded schools, but we also found that the time and effort required of government officials rises as the pool of potential private sector partners decreases. In Bogotá, this was a side effect of the stringent requirements imposed by the government to be eligible to manage publics schools, though other factors also contributed to low levels of private sector interest; namely, these factors were, first, a lack of faith from potential partners that the government would not unexpectedly cease to fund the program and, second, a lack of comprehension around the nature of the program. We thus suggest that certain conditions can facilitate the successful introduction of PPP schemes, including (a) adequately announcing and informing relevant stakeholders of the program's features and (b) cultivating relationships with private sector partners before the start of the program in order to generate interest, understanding, and trust. For charter school policy and practice in the United States, these suggested conditions place additional pressure on the already limited resources of charter oversight bodies, particularly local education agencies, which during 2007-2012 authorized 87.6-89.8% of all charters (Prusinski et al., 2014), though only 18% of them had a budget for this activity (NACSA, 2013). Due to this dilemma, cities such as Philadelphia recruit volunteers to evaluate charter school proposals (Mezzacappa, 2014). Far from being able to develop relationships, conduct evaluations, carry out audits, or assess teaching and leadership, many U.S. charter school offices are struggling to review and approve initial applications (Bulkley, 2001). The case of CECs in Bogotá thus helps to underscore areas that deserve further attention in presumably more developed education systems.

#### **Bidding Process**

Returning to the bidding process, a further point on accountability and competition needs to be explored. In Bogotá, rather than weeding out weaker applicants through competition, the SED found itself in a position where it was forced to work with all willing actors who met the minimum criteria. This dynamic raises questions about how to define sufficient competition as well as about the practical implications for accountability of a lack of surplus providers, particularly in the event that the initially selected CMOs have their charters revoked. What is a school system (or charter authorizers more generally) to do, especially in the short run, if in a neighborhood with inadequate capacity, it is discovered through evaluation that a charter school is in grave violation of its service requirements? This is certainly a relevant concern given that previous research has suggested that private providers in PPP arrangements tend to prioritize their own needs (e.g., remaining financially solvent) over the prerogatives of their public sector counterparts (e.g., providing student meals) (Da Cruz & Marquez, 2012). In this regard, we suggest a further condition for PPP policy is that the size of the program be limited such that, even after the selection of participating providers, there is a surplus of available partners, should it be necessary to revoke a school's charter. Not only would this put the locus of control back in the hands of government managers, but it would also introduce an aspect of accountability, since private sector partners could reasonably be replaced in the event of non-compliance.

#### Competition

Separately, the present study found that competitive dynamics were not evident in practice, despite rhetoric around charter schools to the contrary. What this study suggests is that charter schools, unless implemented on a more than marginal basis, will not induce competition between schools, particularly where there are too few charters to meet demand, such that public schools are not in jeopardy of being closed. Ironically, this condition raises the question of efficiency in the use of public resources, since it would necessarily entail excess capacity in the education sector to allow students to transfer from one to the other based on their preferences. However, in the case of

Bogotá, beyond excess student and parent demand for CECs, it is important not to overlook the demotivating effect that the differential assignation of resources has on TPS principals. As they emphasized, the fact the CECs received new and impeccably equipped schools was out of their control, and thus TPS principals understood that they simply could not compete with the CECs. In addition to introducing significant numbers of charter schools, one would also have to ensure that the playing field is constructed such that principals are motivated and compelled to compete. In practice, however, in numerous U.S. cities throughout the Northeast and Midwest, rather than create conditions to realize PPP theory by allowing for excess capacity and by equally equipping schools, authorities have shuttered dozens of public schools in the name of cost cutting, often while allowing for charter school expansion (Dowdall, 2011). Where competitive environments have been created—e.g., in Detroit, New Orleans, and Washington, D.C.—a counter-intuitive finding emerges that charter schools "sort themselves based largely on their preferred clientele" (Lubienski, Gulosino, & Weitzel, 2009, p. 641). As we discuss below, the case of Bogotá provides insights into how this happens.

#### **Student Selection**

Following from the above point, an essential issue relates to student selection. Although the CEC program included three guidelines for student selection (related to student socio-economic status, student home location, and student sibling status), the fact of surplus demand has created a situation where CEC principals can-even while meeting legal stipulations-still select the students they prefer from among a pool of qualified applicants. The principals in this study conceded as much, specifically in regard to admitting students after the school year begins, when there is an unexpected open spot. They stated that they administer academic tests and conduct meetings between the potential student and the school psychologist. These activities can serve as mechanisms for filtering out students who may be special needs or who may require remediation-a finding which is consistent with prior research on charter school admission practices (Lubienski, 2006). Moreover, these filtering mechanisms are in addition to the fact that parents with more economic and social capital are able to spend more time in and around the school, volunteering and contributing their energy in an effort to build a relationship with the principal in an attempt to raise the value of their stock to influence admissions decisions—a finding which is also consistent with previous research (Alegre & Benito, 2012). In this way, it is not the parents who put pressure on the school through competition but rather the school that puts pressure on the parents to contribute to the school so that their child may be given priority for selection. Since parents and principals can be expected to seek advantage, these findings suggest, first, that a lottery system should be implemented or else student selection should be coordinated in a more impartial way by the charter oversight office and, second, that further attention should be brought to this issue, not least because PPP theory tends to overlook it.

#### **Communication with Parents**

Lastly, the present case suggests that communication with parents about CEC quality is a further task that should be assumed by the charter oversight office, if the goal is ensure that parents can make educated choices. In Bogotá, parents only know what CECs tell them, what they hear by word of mouth, and what they read in the newspaper, which is often politicized. Although CEC test scores have been made available online, information should be made more readily available and more widely broadcast (e.g., in the form of pamphlets, info sheets, TV segments, radio announcements). Though such strategies will not entirely replace information channels that rely on social capital, performance information would be easily accessible, especially for marginalized families. This would be an important step, given that families often make decisions based on the

stigma attached to public schools or based on advertising materials (Lubienski, 2003). These influences then contribute to parental allegiance to charter schools, even when their outcomes are not better than TPSs, as has been the case in numerous U.S. states and cities (CREDO, 2013). Parents vote with their feet, but perhaps they have little information about the charter except for the fact that it is not the traditional public school and that fellow parents positively perceive it.

# Conclusion

Within and outside the United States, charter schools have gone from being seen as an alternative mode of school management to a mode that is at the heart of the—often contested—education reform agenda. The same is true in Bogotá where the CEC program was created in the late 1990s, at a particular moment in Colombian educational reform, in an attempt to address issues of educational access and quality in marginalized areas of the city. The research for the present article was conducted in order to shed light on less-often discussed aspects of this high-profile reform. A false logic exists in many mainstream and economic/rational conceptions of charters and competition that this paper helps to expose. Simply inserting a charter into a community and expecting it to stimulate market forces and influence public and charter school behaviors is naïve at best. Accountability, competition and the system features on which they depend (e.g., evaluations, information access for parents, choice, relationships, etc.) are far more complicated than theory suggests, and they require specific contextual conditions. In practice, a political and organizational environment must be capable of ensuring appropriate evaluation mechanisms, regulations, and school-community-district rapport, for example, prior to expecting market forces to impact the quality of education provided in a region.

This study also raises additional concerns that we hope will be taken up in future research. First is the issue of barriers and costs to charter school closure. As CREDO (2009) has noted, "The charter school movement to date has concentrated its formidable resources and energy on removing barriers to charter school entry into the market. It is time to concentrate equally on removing the barriers to exit" (p. 8). A natural next step from the evaluation and auditing of PPPs generally and charter schools specifically is to confront the matter of how service providers can and should exit the market—and how this can be done in a way that takes into account costs for the public. For example, should charter schools and their leadership be required to repay public tax dollars or to return profits they may have earned while promising but not providing acceptable levels of education quality? Moreover, how can students transition out of charter schools in the least disruptive way possible? While the debate around CEC closure in Bogotá continues to be a contentious topic (International Education News, 2015)-with charter schools and their parents lobbying to keep as many charter schools open as possible in the face of government evaluations recent research has highlighted the pain and trauma associated with dislocation from charter school failure (Adamson et al., 2015). It is particularly important to further investigate and raise the profile of the barriers and costs to charter exit since these aspects do not currently factor into the theory and rhetoric around PPPs, which promote the appealing ways that charters, for example, should work without attending to the backend costs for families and public finance.

The second issue relates to accountability for charter authorizers themselves. For all the focus on holding service providers accountable, there is surprisingly little discussion and research on how charter authorizers themselves are managed, monitored or sanctioned, though this issue is starting to receive more attention (NACSA, 2015a, 2015b). The need for accountability of charter oversight offices is evinced in the present case in that public officials in Bogotá ignored the requirement that the evaluating agency be independent. Just like Bogotá, many U.S. states do not

have standards for the entities that authorize charters (only 16 of 42 states with charters do) (Education Commission of the States, 2015). Moreover, where accountability processes exist, there are two additional issues. First, these processes can be lengthy, labor-intensive, and poorly-defined, as in Missouri, where the department of education must (a) determine that the charter authorizer is in material noncompliance with its sponsorship duties, (b) provide reasonable time for remediation, (c) conduct a public hearing, and (d) give a recommendation for corrective action to the state board of education (Education Commission of the States, 2015). Second, in political contexts that are favorable to charter schools, these processes may be more helpful to charter schools than for taking action in the public interest. In Colorado, for example, charter schools or their representatives can request revocation of the charter schools act (Education Commission of the States, 2015). While this may be reasonable, the point here is that taking accountability seriously means examining and improving its basis across the board.

By extension, the final issue for further consideration is the threat that charter schools individually and the charter movement broadly poses to democratic accountability of education, especially given that charter schools often are not forced to respond to competition, as theorized. Voters in Bogotá are, at most, able to influence charter policy through mayoral elections, since the SEP falls within the mayor's purview. There are similar situations in the United States, where voters directly elect school board members, mayors, or governors (depending on the state context), who then exercise control or influence over charter policy. But as studies have recently noted, internationally and in the United States (e.g., in Louisiana, New Jersey, Washington), networks of think tanks, philanthropists, chambers of commerce, CMOs, education corporations, and policy entrepreneurs, among others, have combined to advance charter school policy in ways that circumvent public accountability, at least in the short term (Au & Ferrare, 2014, 2015; Ball, 2007, 2012; DeBray, Scott, Lubienski, & Jabbar, 2014; Russakoff, 2015). Consequently, grave concerns must be raised about the "disproportionate power of super wealthy individuals and their related philanthropic organizations relative to public education policy and the democratic decision-making process of individual voters" (Au & Ferrare, 2014, p. 17; see also Bulkley & Burch, 2011). While there are no easy answers, this situation, together with evidence that pro-charter actors are inhabiting key administrative positions at each level from the local to the state to the federal (Bracey, 2005; Lytle, 2013; Persson, 2015), raises the question of what to do about accountability. These questions are not only for charter schools but also for the offices that authorize and fund them and for the networks of intermediary organizations that promote and advance charter policy, not least because these aspects of education systems, within and outside the United States, tend to be governed, at least ostensibly, by bureaucratic-rationality that is beyond the reach of democratic scrutinyespecially for the most marginalized communities- and is instead influenced by the preferences of system managers and the outside influences by which they are pressured.

#### References

- Acar, M., & Robinson, P. (2004). Accountability challenges in networks and partnerships: Evidence from educational partnerships in the United States. *International Review of Administrative Sciences*, 70(2), 331-344. <u>https://doi.org/10.1177/0020852304044260</u>
- Adamson, F., Cook-Harvey, C., & Darling-Hammond, L. (2015). Whose choice? Student experiences and outcomes in the New Orleans school marketplace. Stanford, CA: Stanford Center for Opportunity Policy in Education.

Alegre, M., & Benito, R. (2012). 'The best school for my child?' Positions, dispositions and

inequalities in school choice in the city of Barcelona. British Journal of Sociology of Education, 33(6), 849-871. <u>https://doi.org/10.1080/01425692.2012.686896</u>

- Au, W., & Ferrare, J. (2014). Sponsors of policy: A network analysis of wealthy elites, their affiliated philanthropies, and charter school reform in Washington State, *Teachers College Record*, 116(8), 1-24.
- Ball, S. (2007). *Education plc: Understanding private sector participation in public sector education*. New York: Routledge.
- Ball, S. (2012). Global education inc. New York: Routledge.
- Barrera-Osorio, F. (2006). The impact of private provision of public education: Empirical evidence from Bogota's Concession Schools. Work Bank Policy Research Working Paper 4121. Washington, DC: World Bank.
- Bonilla, J. (2010). El impacto de los Colegios en Concesión en el rendimiento académico. Presentation given to the Department of Economics at the University of Maryland, College Park, USA, July 6, 2010.
- Bonilla, J. (2011). Los Colegios en Concesión: Reto del nuevo alcalde de Bogotá, la silla vacia. Available at: <u>http://lasillavacia.com/historia-invitado/28990/juandbonilla/los-colegios-en-concesion-reto-del-nuevo-alcalde-de-bogota</u>
- Bracey, G. (2005). Charter schools' performance and accountability: A disconnect. Education Policy Studies Laboratory. Arizona State University. Available at: http://nepc.colorado.edu/files/EPSL-0505-113-EPRU.pdf
- Brookings Institute. (2015). The future of global education: What is the role of non-state actors? March 5-6, 2015, Washington, DC.
- Bulkley, K. (2001). The accountability bind. *Education Policy Analysis Archives*, 9(37), 1-22. http://dx.doi.org/10.14507/epaa.v9n37.2001
- Bulkley, K. & Burch, P. (2011). The Changing Nature of Private Engagement in Public Education: For-Profit and Nonprofit Organizations and Educational Reform, *Peabody Journal of Education*, 86(3), 236-251. <u>https://doi.org/10.1080/0161956X.2011.578963</u>
- Burch, P. (2006). The new educational privatization: Educational contracting and high stakes accountability. *Teachers College Record*, 108(12), 2582-2610. <u>https://doi.org/10.1111/j.1467-9620.2006.00797.x</u>
- Carnoy, M., Jacobsen, R., Mishel, L., & Rothstein, R. (2005). The charter school dust-up: Examining the evidence on enrollment and achievement. Washington, DC: Economic Policy Institute.
- Castro, J., Pérez, A., & Alvarez, A. (2012). *Historial institucional: Secretaría de Educación Distrital*. Bogotá: Corporación Internacional para El Desarrollo Educativo.
- Center for Education Reform. (2011). The state of charter schools: What we know—and what we do not—about performance and accountability. Washington, DC: CER.
- Chubb, J. E., & Moe, T. M. (1990). *Politics, markets and Americas schools*. Washington, DC: The Brookings Institution.
- Controloria de Bogotá. (2011). Informe de auditoría gubernamental con enfoque integral modalidad especial: Colegios en convenio. Bogotá: Secretaría de Educación Distrital. Corpoeducación. (2004). Evaluación Intregral Proyecto de Concesión Educativa: Informe Final.
- CREDO. (2009). Multiple choice: Charter school performance in 16 states. Stanford, CA: CREDO.
- CREDO. (2013). National Charter School Study. Stanford, CA: CREDO.
- Crew Jr., R. E., & Anderson, M. (2003). Accountability and performance in charter schools in

Florida: a theory-based evaluation. *American Journal of Evaluation, 24*(2), 189-212. https://doi.org/10.1177/109821400302400204

- Da Cruz, N., & Marques, R. (2012). Mixed companies and local governance: No man can serve two masters. *Public Administration, 90*(3), 737-758. <u>https://doi.org/10.1111/j.1467-9299.2011.02020.x</u>
- DeBray, E., Scott, J., Lubienski, C., & Jabbar, H. (2014). Intermediary organizations in charter school policy coalitions: Evidence from New Orleans. *Educational Policy*, 28(2), 175-206. <u>https://doi.org/10.1177/0895904813514132</u>
- Diggs, S., & Roman, A. (2012). Understanding and tracing accountability in the public procurement process: Interpretations, performance measurements, and the possibility of developing public-private partnerships. *Public Performance & Management Review*, 36(2), 290-315. <u>https://doi.org/10.2753/PMR1530-9576360207</u>
- Dowdall, E. (2011). Closing public schools in Philadelphia: Lessons from six urban districts. Pew Charitable Trusts. Available at: <u>http://www.pewtrusts.org/en/projects/philadelphia-research-initiative</u>
- Education Commission of the States. (2015). Charter schools: Online database. Available at: <u>http://www.ecs.org/html/educationIssues/CharterSchools/CHDB\_intro.asp</u>
- Edwards Jr., D. B. (2014). Public-Private Partnerships in Colombian Educational Governance: The Case of Bogotá's Concession Schools. Amsterdam: University of Amsterdam.
- Elacqua, G., Schneider, M., & Buckley, J. (2006). School choice in Chile: Is it class or the classroom? Journal of Policy Analysis and Management, 25(3), 577-601. <u>https://doi.org/10.1002/pam.20192</u>
- Fabricant, M., & Fine, M. (2012). *Charter schools and the corporate makeover of public education: What's at stake?* New York: Teachers College Press.
- Farrell, C., Wohlstetter, P., & Smith, J. (2012). Charter management organizations: An emerging approach to scaling up what works. *Educational Policy*, 26(4), 499-532. <u>https://doi.org/10.1177/0895904811417587</u>
- Heinrich, C. (2010). Third-party governance under No Child Left Behind: Accountability and performance management challenges. *Journal of Public Administration Research and Theory*, 20(1), 59-80. <u>https://doi.org/10.1093/jopart/mup035</u>
- Henig, J., Holyoke, T., Lacireno-Paquet, N., & Moser, M. (2003). Privatization, politics, and urban services: The political behavior of charter schools. *Journal of Urban Affairs*, 25(1), 37-54. <u>https://doi.org/10.1111/1467-9906.00004</u>
- Hodge, G., & Greve, C. 2010. Public-private partnerships: governance scheme or language game? *Australian Journal of Public Administration, 69*(1), S8–S22. <u>https://doi.org/10.1111/j.1467-8500.2009.00659.x</u>
- IDEP. (2010). Resultados de la III fase de evaluación de los CECs: Informe final de evaluación. Bogotá: IDEP.
- International Education News. (2015). Do charter schools in Colombia provide sufficient accountability and choice? Available at: <u>https://internationalednews.com/2015/07/08/do-charter-schools-in-colombia-provide-sufficient-accountability-and-choice/</u>
- International Finance Corporation. (2014). Rethinking education: Shaping the future. IFC's 6<sup>th</sup> International Private Education Conference. April 1-2, 2014, San Francisco, CA.
- Jabbar, H. (2015). Competitive Networks and School Leaders' Perceptions The Formation of an Education Marketplace in Post-Katrina New Orleans. *American Educational Research Journal*, 52(6), 1093-1131. <u>https://doi.org/10.3102/0002831215604046</u>
- Jabbar, H. (2016). Selling schools: Marketing and recruitment strategies in New Orleans. *Peabody Journal of Education*, 91(1), 4-23. <u>https://doi.org/10.1080/0161956X.2016.1119554</u>
- Jeynes, W. (2012). A meta-analysis on the effects and contributions of public, public charter, and

religious schools on student outcomes. *Peabody Journal of Education*, 87(3), 305-335. https://doi.org/10.1080/0161956X.2012.679542

Kasman, M., & Loeb, S. (2013). Principals' perceptions of competition for students in Milwaukee schools. *Education Finance and Policy*, 8(1), 43-73. <u>https://doi.org/10.1162/EDFP\_a\_00082</u>

Klees, S., & Edwards Jr., D. B. (2014). Knowledge production and technologies of governance. In

- T. Fenwick, E. Mangez, & J. Ozga (Eds.), World yearbook of education 2014: Governing knowledge: Comparison, knowledge-based technologies and expertise in the regulation of education. (pp. 31-43). New York: Routledge.
- Levin, H. (1998). Educational vouchers: Effectiveness, choice, and costs. *Journal of Policy* Analysis and Management, 17(3), 373-392. <u>https://doi.org/10.1002/(SICI)1520-</u> 6688(199822)17:3<373::AID-PAM1>3.0.CO;2-D
- Lubienski, C. (2003). Innovations in education markets: Theory and evidence on the impact of competition and choice in charter schools. *American Educational Research Journal*, 40(2), 395-443. <u>https://doi.org/10.3102/00028312040002395</u>
- Lubienski, C. (2006). School diversification in second-best education markets: International evidence and conflicting theories of chance. *Educational Policy*, 20(2), 323-344. https://doi.org/10.1177/0895904805284049
- Lubienski, C., Weitzel, P. & Lubienski, S. (2009). Is there a "consensus" on school choice and achievement? Advocacy research and the emerging political economy of knowledge production, *Educational Policy*, 23(1), 161-193. <u>https://doi.org/10.1177/0895904808328532</u>
- Lytle, J. (2013). Philadelphia School District deconstruction—A case requiring consideration, *Perspectives on Urban Education. 10*(1) Available at: <u>http://www.urbanedjournal.org/</u>
- Meade, B., & Gershberg, A. (2008). Making education reform work for the poor: Accountability and decentralization in Latin America. *Journal of Education Policy*, 23(3), 299-322. <u>https://doi.org/10.1080/02680930801923823</u>
- Mezzacappa, D. (2014, November 11). With days until deadline, 46 new charter applications: The district is asking universities for volunteers to help evaluate them. *The Notebook*.
- Miñana, C. (2010). Políticas neoliberales y neoinstitucionales en un marco constitucional adverso. Reformas educativas en Colombia 1991-2010. *Propuesta Educativa*, 34(2), 37-52.
- NAPCS. (2014). A growing movement: America's largest charter school communities. Washington, DC: NAPCS.
- National Association of Charter School Authorizers. (2011). The state of charter school authorizing 2011. Chicago, IL: NACSA.
- National Association of Charter School Authorizers. (2013). The state of charter school authorizing 2013. Chicago, IL: NACSA.
- National Association of Charter School Authorizers. (2015a). On the road to better accessibility, autonomy, and accountability: State policy analysis. Chicago, IL: NACSA.
- National Association of Charter School Authorizers. (2015b). Principles and standards for quality charter school authorizing. Chicago, IL: NACSA.
- Paino, M., Renzulli, L., Boylan, R., & Bradley, C. (2014). For grades or Money? Charter school failure in North Carolina. *Educational Administration Quarterly*, 50(3), 500-536. <u>https://doi.org/10.1177/0013161X13505289</u>
- Patrinos, H., Barrera-Osorio, F., & Guaqueta, J. (2009). The role and impact of PPPs in education. Washington, DC: World Bank.
- Pawson, R. (2006). Evidence-based policy: A realist perspective. London: Sage. https://doi.org/10.4135/9781849209120

Pawson, R., & Tilley, N. (1997). Realistic evaluation. London: Sage.

- Persson, J. (2015, July 5). Feds awarded Colorado charter schools \$46 million because of "hiring and firing" rules. PR Watch. Available at: <u>http://www.prwatch.org/</u>
- Prusinski, E., Ruddy, A., Plucker, J. & Cierniak, K. (2014). Chartering new waters: The Indianapolis mayoral transition and the charter school community. *Educational Policy*, 29(4), 617-644. <u>https://doi.org/10.1177/0895904813510776</u>
- Reay, D. (2004). Exclusivity, exclusion, and social class in urban education markets in the United Kingdom. Urban Education, 39(5), 537-560. <u>https://doi.org/10.1177/0042085904266925</u>
- Reeves, E. (2008). The practice of contracting in public private partnerships: Transaction costs and relational contracting in the Irish schools sector. *Public Administration, 86* (4), 969-986. https://doi.org/10.1111/j.1467-9299.2008.00743.x
- Rho, E. (2013). Contracting revisited: Determinants and consequences of contracting out for public education services. *Public Administration Review*, 73(2), 327-337. <u>https://doi.org/10.1111/j.1540-6210.2012.02682.x</u>
- Robertson, S., Mundy, K., Verger, A., & Menashy, F. (Eds.) (2012). Public private partnerships in education: New actors and modes of governance in a globalizing world. Cheltenham, UK: Edward Elgar. <u>https://doi.org/10.4337/9780857930699</u>
- Rotherham, A. (2005). The pros and cons of charter closures. In Lake R., Hill P. T. (Eds.), *Hopes, fears, & reality: A balanced look at American charter schools in 2005* (pp. 43-52). Seattle, WA: National Charter School Research Project.
- Russakoff, D. (2015). The prize: Who's in charge of America's schools. New York: Houghton Mifflin Harcourt.
- Secretaría de Educación. (2013). Bogotá D.C.: Caracterización sector educativo, año 2012. Bogotá: Oficina Asesora de Planeación.
- Termes, A., Bonal, X., Veger, A., & Zancajo, A. (2015). Public-Private Partnerships in Colombian Education: The Equity and Quality Implications of "Colegios en concesión". PERI working paper. <u>http://www.periglobal.org/role-state/document/public-private-partnerships-colombian-education-equity-and-quality-implications-</u>
- USDOE. (2007). Supporting charter school excellence through quality authorizing. Washington, DC: USDOE.
- Vergari, S. (2001). Charter school authorizers: Public agents for holding charter schools accountable. *Education and Urban Society*, 33(2), 129-140. https://doi.org/10.1177/0013124501332003
- Villa, L., & Duarte, J. (2005). Concessionary public schools in Bogotá: An innovation in school management in Colombia. In L. Wolff, J. Navarro, P. Gonzalez (Eds.), *Private education and public policy in Latin America*, (pp. 95-130). Washington, DC: PREAL.
- Waslander, S., Pater C., & van der Weide, M. (2010). Markets in education: An analytical review of empirical research on market mechanisms in education. OECD Education Working Papers, No. 52, OECD. <u>https://doi.org/10.1787/5km4pskmkr27-en</u>
- Wolff, L., Navarro, J., & González, P. (2005). Private education and public policy in Latin America. Washington, DC: PREAL.

# About the Authors

#### D. Brent Edwards Jr.

University of Hawaii, Manoa donalde@hawaii.edu

D. Brent Edwards Jr. is an Assistant Professor of Theory and Methodology in the Study of Education at the University of Hawaii, Manoa. His work focuses on (a) the global governance of education and (b) education policy, politics and political economy. Within these two research lines, Edwards has focused on investigating the rise of global education policies and the influence of international organizations, as well as trends related to educational privatization (e.g., charter schools, low-fee private schools), decentralization, and community participation.

#### **David DeMatthews**

University of Texas, El Paso dedematthews@utep.edu David DeMatthews is an Assistant Professor in the Department of Educational Leadership and Foundations at the University of Texas at El Paso. A former high school teacher and school administrator in Baltimore and Washington, D.C., he has published on topics such as school leadership, urban education, special education, bilingual education, and social justice.

#### Hilary Hartley

Institute of International Education

hilaryrhartley@gmail.com

Hilary Hartley is the Regional Lead for the Western Hemisphere in the Scholar Exchanges Division of the Institute of International Education (IIE). Hilary served as the Senior Program Officer for Mediterranean Europe and Central America at the International Student Exchange Programs (ISEP), where she managed university level exchange programs. Hilary holds a master's in International Development Studies with emphases in Latin America and International Education from the Elliott School of International Affairs at the George Washington University in Washington, DC. Hilary also holds bachelor's degrees in Spanish and Political Science from San Diego State University in California. She has lived and worked in Uruguay and Spain, traveled throughout Latin America, and is fluent in Spanish.

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