Understanding Achilles'
Heel: Information
Dissemination,
Readability, and
Marketing in Urban
School Choice

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Abstract

Scholars have long acknowledged that the information parents have about schools is the "Achilles' heel" of school choice. Although much has been written about school choice, far less is known about the information disseminated to help families make choices. I construct a case study of the dissemination and accessibility of choice information in the Chicago Public Schools. I find that both the readability and content of the information disseminated limit its usefulness. In addition, a lack of centralized resources leads to both limited and disparate access. I conclude with modifications for improving information dissemination and accessibility.

Keywords

choice, accountability, change

While there are myriad reasons that opponents of school choice dispute its potential for improving education and providing a pathway toward educational equity, scholars have long acknowledged that information surrounding

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choice is its "Achilles' heel" (Bridge, 1978). Noneducation fields have documented the importance of information and information presentation for engaging in choice and decision making (see, for example, Bettman & Kakkar, 1977; Bybee, 1981; Kleinmuntz & Schkade, 1993; O'Reilly, 1982; Porat & Haas, 1969; Tversky & Kahneman, 1981); however, relatively little is known about the connection between schooling choices and the information generated to make these choices. As school choice in various forms proliferates, understanding the flow and dissemination of information will play a critical role in not only families' outcomes in the processes but also an understanding of choice systems (in)equitability. This is of particular importance in urban schools and districts, as over half of large urban districts provide some form of school choice to families (Whitehurst, 2016). In particular, as these districts serve large proportions of low income, often Black and Brown families, the issues of equity that underpin choice rhetoric and practice are subject to scrutiny. Educational inequality is highly concentrated in schools with high proportions of minoritized—again, particularly Black and Brown—students (Milner, 2015; Saporito & Sohoni, 2007). Choice is forwarded, in part, as a pathway toward equity; however, studies point to information disparities as one way that choice perpetuates rather than ameliorates education inequities. Understanding information—its flow, content, and use—is an integral part of understanding school choice, in particular, for large urban districts (Delale-O'Connor, 2017; Delale-O'Connor, 2018).

A critical aspect of disadvantage is connected to the information families receive around choice, including the content and quality of that information. If school choice is to remain a central part of the urban educational landscapes that serve low income and minoritized students, understanding the mechanisms that drive choice is necessary. Despite the understanding that information is in many ways at the core of choice participation, as Lubienski (2007) asserted, "surprisingly little attention" has been given to the quality, availability, and content of information available to families to make schooling decisions (p. 99). Indeed many studies have pointed to the importance of social network information in supporting school choice—citing the disparities between networks as a contributor to choice quality disparities (Holme, 2002; Neild, 2005; Saporito & Lareau, 1999), while important this has overlooked the role of more formally disseminated information. Studies using experimental methods to explore the importance of information for choice (Hastings & Weinstein, 2008) found that providing parents with simplified information on their schooling choices resulted in an increased likelihood that parents will choose academically higher achieving schools for their children. Drawing from No Child Left Behind (NCLB) information policies, Rich and Jennings (2015) found that families responded to new information

(in this case accountability-associated information about school quality) with transfers out of schools under probation—indicating a response to information; however, this response was unequally distributed across families, as economically poorer families were less likely to transfer either within or out of the district, and transfers connected to this information were more likely to be to other low-performing schools. Similarly, Henderson (2010) found evidence that families do respond with exit/transfer in particular to information about particularly poorly performing (policy sanctioned) schools.

Although the available research on the quality and content of school specific information for choice is currently limited, these few studies make such connections. In addition, there is ample evidence across other domains that information is integral to choice. A better understanding of the role of information in school choice would offer insight into the choice process and has the potential to improve choice outcomes for the most disadvantaged students and their families. However, little has been done to understand the ways that districts and schools disseminate information and the overall quality of that information. This article provides insight into these aspects of information and brings them together to better understand the role of information in school choice with a focus on the case of Chicago.

In this article, I constructed and analyzed a case study of choice information and dissemination in the third largest district in the United States, the Chicago Public Schools (CPS). Two primary questions animated this work, first, "How do a large urban district and the schools within it disseminate school choice information to families?" and, second, "What is the accessibility, readability, and content of school choice information?" I found that access to standardized information was limited, and there was disparate access across sources. Information-seeking families were required to be savvy, or at least somewhat knowledgeable, about both where and when information was disseminated, as well as what information and materials they needed to make an informed choice. Most materials lacked standardization, and high readability levels and misleading content potentially limited the accessibility and usefulness of available materials. In addition, schools used informational marketing tactics to generate interest without necessarily providing content or while providing misleading content. Finally, the most academically high achieving schools had the most comprehensive information available. However, these schools were the least available to students, boasting the most difficult admissions and the lowest acceptance rates.

Although CPS is the case employed here, the findings and challenges associated with choice are not exclusive to this district. Indeed, CPS provided a useful proxy because it faces many of the same challenges of other urban

districts, such as high poverty levels, highly segregated schools, budget cutbacks, and administrative turnover. The literature that follows provides a background on the general connection between information and choice, both in educational research and beyond, to illustrate both the impetus for and the context of my study.

The Connection Between Information and Choice

Information affects the choices that people make. Information and information presentation are not neutral, rather there are a number of predictable biases and responses to choice, which choice system designers can account for when structuring and disseminating information (see, for example, Kahneman, Knetsch, & Thaler, 1991; Samuelson & Zeckhauser, 1988; Thaler & Sunstein, 2008). Accounting for the ways that information influences choice is crucial to both furthering school choice research and improving school choice as a policy.

Information Problems

Theoretically, there are numerous ways that parents and students can find out about schools. In practice, researchers have found that basic information is often not easily accessible or that the available data are often not "user friendly" (Schneider & Buckley, 2002). There is a divide between information and the comprehension abilities of choosers (Schneider & Buckley, 2002). Furthermore, the interpretation of information is difficult because outcomes for schools are multidimensional, difficult to measure validly, and difficult to assess in terms of how educational "inputs" give rise to the outcomes (Bridge, 1978; Henig, 1994). Previous studies have demonstrated that race, social class, and education level affect the sources parents use for information about schools (see, for example, Ball & Vincent, 1998; Lareau, 1987, 2003; Schneider & Buckley, 2002). For instance, upper and middle-class families may have access to information that is typically unavailable to their working and lower income counterparts due to professional and social networks, as well as home-school connections. Higher educational attainment levels also tended to yield greater understanding of and connection to the school choice process. Others have also found that although perfect information is unnecessary for parents to make schooling choices in-line with their purported choice values, families with greater information achieve greater alignment (Schneider, Teske, Roch & Marschall, 1998). These outcomes are connected to the formal information available from schools and districts. However, to date, not much is known about these information sources.

Readability and Choice

Outside of education, studies reveal the ways that the content and presentation of information sources influence action. Looking at information and choice in health care decisions, scholars find that patient involvement in decision making required widely available and easily accessible information, as well as simplified formatting (Hibbard & Peters, 2003; Holmes-Rovner, Llewellyn-Thomas, Coulter, O'Connor, & Rovener, 2001). Presentation including pictorial representations, simple wording, and larger, clearer print yielded greater informational understanding (Davidhizar & Brownson, 2000).

The readability of available literature plays a role in what potential choosers know and the actions they take (Slaten, Parrot, & Steiner, 1999; Wegner & Girasek, 2003). An estimated 32% of adults in the United States have basic or below basic document literacy (the ability to search, comprehend, and use noncontinuous texts in various formats), roughly 43% have basic or below basic prose literacy (the ability to search, comprehend, and use continuous texts), and 55% have basic or below basic quantitative literacy (the knowledge and skills to perform quantitative tasks), the equivalent of fifth grade or lower skills (Baer, Kutner, Sabatini & White, 2009). There are numerous practical implications of a mismatch between document readability and reader literacy that apply both in education and health care, but to date, they have been studied primarily in the latter. Health and literacy studies have documented that there is frequently a large difference between the reading levels of materials disseminated to patients and their actual literacy levels (Miles & Davis, 1995; Wells, 1994). This difference results in a lack of understanding and, ultimately, no or misdirected action on the reader's part (Miles & Davis, 1995). A similar understanding of school choice literature, as being furthered in this study, may illuminate potential readability shortcomings of the materials and connect information to the choices families are (or are not) making.

Informing or Marketing?

The idea of marketing schools is not a new one; however, it grows as the availability of choice does. Drawing on parents' desires for their children's schools, West (1992) continued research designed to help schools determine the best factors to market and how. Lubienski (2007) found that districts are increasingly focusing time, energy, and financial resources on formal marketing to attract students. However, there is little actual information presented in these choice marketing materials (Johnsson & Lindgren, 2010).

Marketing includes not only the content of materials but also the ways and the spaces in which the materials are available. Jennings (2010) looked at the

	All high schools	Selective enrollment	Charter		Neighborhood/ general
Black/African American	50.3	32.2	58.5	69.5	45.3
White	9	25.7	4.4	2	8.6
Native American	0.2	0.4	0.1	0.1	0.2
Asian/Pacific Islander	4	13.8	1.5	0.3	3.6
Latinx/Hispanic	36.5	27.9	35.6	28.1	42.4

Table 1. Student Race/Ethnicity in CPS High Schools (2009).

Note. CPS = Chicago Public Schools.

ways schools are able to choose students, rather than the other way around, and demonstrated that principals have control over what families receive and, thus, their access to admission at choice schools. Similarly, the framing of materials along class lines (Stephens, Markus, & Townsend, 2007) may influence who finds high achieving schools appealing for their children, as the meaning of choice is fractured along class lines. Although marketing is a rising theme in educational literature, as of yet its discussion is limited in terms of the framing of the materials for choice (Jabbar, 2016). This article furthers this discussion by looking into the actual content of the materials, in the U.S. context.

Context

High School Choice in the CPS

The context for this article is the CPS, which at the time of this study (2007-2010) had close to 408,000 students, roughly 113,000 of whom attended high school. The third largest district in the country, the high school student population was just slightly over half Black (50.3%), more than a third (36%) Latinx, 9% White, 4% Asian Pacific Islander, and less than 1% (0.4) Native American Indian. As Table 1 demonstrates, the distribution of high school students across different types of high schools (charter, selective enrollment, etc.) varied, with selective enrollment schools boasting a disproportionately large percentage of White and Asian Pacific Islander students, Charter and Career Academies serving a disproportionately larger percentage of Black students, and Latinx students attending General/Neighborhood High Schools disproportionately higher than their representation across the high school population.

The district espoused an open enrollment policy, which, according to CPS documents, operated as follows:

Open Enrollment provides students the opportunity to enroll in any school in the district which does not have selective admission requirements. Open Enrollment Schools are identified in the school opportunities publication issued annually by CPS and consist of all non-magnet/magnet-cluster, non-selective enrollment, and neighborhood schools with attendance boundaries. . . If a student wishes to enroll in a neighborhood school or program outside of their attendance area . . . the student must submit an application for enrollment by the deadline identified in the school opportunities publication issued annually by CPS. (Chicago Public Schools, 2005, p. 1)

During the eighth-grade year, students were able to take tests to enroll in selective enrollment or other schools (such as Catholic schools), as well apply to other public high schools outside of their neighborhood. All students who lived within the attendance boundaries were automatically enrolled in their neighborhood school unless they applied to and were accepted into another school. Students in a given neighborhood, then, had three possible "choices": defaulting into their neighborhood high school, actively choosing their neighborhood high school among other options, or choosing another school.

Data and Method

The data for this analysis are part of a larger, mixed methods study examining how families choose high schools for their children. In this article, I used data from print and online sources available at choice events and from schools. I observed and collected print materials over three school years (2007-2010) at the CPS high school fair and open houses held throughout the city, as well as from online materials from those schools that maintained information on their own or district websites. I observed and documented field notes at the high school fairs and observed at the booths of all schools identified as schools of interest by parents and students interviewed for the larger project. In addition, I attended high school open houses at schools in the district that that participants in the larger study identified as schools of interest. The product of this data collection was three high school directories and over 300 pamphlets and handouts from high schools in the district. Because of the extensive observation and material collection, the data I discuss provide a comprehensive picture of what was disseminated both by the district and the individual schools within CPS.

To assess and compare the print documents, I employed readability analysis, as well as content analysis. Readability analysis is the examination of the difficulty of a text using different mathematical formulas (Bormuth, 1966; Klare, 1974). The analysis generates numerical scores that give an approximate idea of

the grade level or general difficulty of the text. At the time of study, prior research had not approached school choice information using readability analysis; however, more recently, Stein and Nagro (2015) assessed a sample of district's choice books using readability analysis. In addition, this method is employed frequently in health care studies to assess potential patient and parent/guardian understanding of print and online documents, as well as subsequent actions and decisions.

Content analysis is "a research technique for making replicable and valid inferences from texts. . . to the contexts of their use" (Krippendorf, 2004, p. 18; also cited in White & Marsh, 2006, pp. 23-27). Drawing from the print sources, I inductively determined themes that appeared across documents. I then compared these themes with those discussed in previous literature (Johnsson & Lindgren, 2010) and refined them based on themes discussed there. I determined the number of occurrences of each based on the type of sources. In addition, I described the ways that each theme is used within the larger document. I then compared these descriptions with statistical data collected by CPS to assess the validity of the claims schools make. With an understanding of the context, data, and methods of this study, I now turn to addressing the questions I posed at the beginning of the article.

Information Dissemination

To address my first question, "How do districts and schools disseminate school choice information to families?" I drew primarily from my observations and experience at CPS events. Although information can be disseminated by other non-school sources (e.g., religious or community organizations), as well as by individuals both in and outside of the school system, I focused on the formal information disseminated by CPS because all families, regardless of neighborhood, primary school attendance, or social and professional connections, should have access to these information sources. In addition, these are sources over which districts and schools can more systematically exercise control and change.

There were five primary sources of formal information dissemination employed by CPS: the high school fair, open houses, fliers and brochures, the high school directory, and school and district websites. As indicated in Table 2, these varied in terms of the information they provided, their availability to parents and students, their accessibility, and whether or not they were standardized across schools.

High School Fair

Each fall, the district held a high school fair at a large convention center in the near Southeastern part of the city. Most of the high schools in the district,

Table 2. Formal Methods of Information Dissemination.

Information type	Information provided	Availability	Accessibility	Standardized
High School Fair	School representation Brochures and fliers School achievements Demonstrations	I time per year Fall	Transportation Time Awareness Availability	No
Open Houses	Class specifics Demonstrations Faculty talks Facility tours	Throughout fall I time per school	Transportation Time Awareness Availability	No
Brochures and Fliers	Dates of open house Activity lists School location Philosophy/Motto	Individual high schools District events Mailings	Readability Reception	No
High School Directory	Comparative outcomes Philosophy School location Activities	High school fair Eighth-grade school	Readability Reception	Yes
Websites	Dates of open house Activity lists School location Philosophy/Motto	Online	Internet access Computer skills Readability	No

along with other high school-related services, provided families with information. During the course of the study, there were between 120 and 129 schools (or proposed schools) in CPS and the majority of them had a table at the fair to showcase their strengths, provide information, and respond to questions.

Annual attendance at the fair was estimated to be roughly 12,000 (there are approximately 29,000 eighth-grader students each year in CPS). Schools distributed flyers advertising open houses and brochures with curricular and extracurricular information at the fair. In addition to information from individual schools, CPS representatives hosted information sessions to explain the application process, as well as high school services offered by the district. The sessions focused on testing, deadlines, and application submission, and were directed toward parent attendance.

Open Houses

Following the high school fair, schools across the city held open houses from early October to late November. Schools disseminated information about open house dates at the fair, on individual school websites, and at some elementary schools. With the exception of the Office of Academic Enrichment, which provided information about the selective enrollment and magnet schools' open houses, at the time of study, there was no centralized calendar of the high school open houses. In their literature and on the district website, CPS instructed parents to contact schools of interest to find out about their open house dates. Schools held open houses at their school site and offered visitors the opportunity to see the building, talk to teachers and students, and find out more about the school's curricula.

Brochures and Fliers

Brochures and fliers made up the bulk of the print resources available for choice. They were distributed at both the high school fair and open houses. They were also available upon request from the high schools, and some schools mailed information directly to families. Brochures and fliers varied widely and were produced by individual schools and/or school departments (e.g., athletic or academic departments in the school). Brochures typically provided a description of both the academic and extracurricular activities offered in the school. Some included pictures and historical information, such as the founding of the school and notable alumni. Although there was mention made of colleges that former students attend and school testing improvements, none of the brochures disseminated included test scores.

High School Directory

CPS distributed a high school directory at the high school fair and made it available at the elementary schools across the city. Updated annually, the directory was also available as a PDF at the district's website. It contained an introduction to choice in CPS, including an overview of the process, important dates, definitions of the types of schools available, and an explanation of how to read the school profiles contained in the book. The directory was divided into three sections based on geographic location. Each section contained individual profiles for the schools in that area, listed in alphabetical order. Standardized profiles appeared in the directory and included a brief description of the school submitted by the principal, the school's address, demographic statistics, admissions requirements, and scorecard information

about school and student performance, which included a rank score based on a particular school's outcome compared with other schools of the same type.

Websites

School websites were the final formal way that the district and schools disseminated information for school choice. Similar to the print sources discussed above, there was a great deal of variation from site to site; some websites included information specific to the needs of prospective students, such as applications and open house information, and others offered little more than an address and logo. Over the 3 years of data collection, the websites improved dramatically, with close to 100% of schools hosting one by the final year. Over that time websites were also linked to the district site, making them easier to find. They also contained greater information about the school, including current events and achievements.

The district also maintained a website with information comparable with the print High School Directory that provides information about each high school, including school type, location, demographics, and "scorecard" assessment data. The site offered a comparison feature where information seekers can check boxes for up to four schools and generate a side-by-side comparison for school location, number of students, grades served, dress code, application boundaries, academic progress (ACT and meeting or exceeding state standards), and student connection (absences, extracurricular participation, and student report of feeling safe).

Dissemination Context and Differences

Like many choice offering districts, CPS disseminated information in a variety of ways, each with advantages and limitations based on availability, time, and potential costs to families. With the exception of the High School Directory, there was little standardization across schools' information sources and dissemination methods, creating the potential for information disparity across schools, as well across families. As shown in Table 2, the district and schools disseminated information in ways that influenced who was able to access it. The High School Fair, the district's primary mode of dissemination, occurred only once each school year and at a location that may have been difficult to access depending on where families live, their access to transportation, and their ability to pay for associated transportation costs. Open houses required an additional time and travel commitment and further require knowledge of when they are occurring, as well as a mode of transportation to access them. Brochures and fliers were often difficult for families to obtain

outside of open house and fair events, although requests to schools typically yielded them. Their primary limitations revolved around readability and the usefulness of the information provided in understanding the school's offerings (discussed below). The high school directory was the most standardized offering; however, it too required reading comprehension skills that may be above the audience using it. Finally, websites, which improved over the data collection period, required both Internet access and computer skills. However, these were available continuously for those with access.

Dissemination varied in notable ways based on school type. Across all source types, it was easier to obtain information about the most academically high scoring schools (selective enrollment and magnet) in the district. In print, these schools provided detailed substantive information, including SAT and ACT scores, college acceptance and attendance after graduation, and application process, more readily than their nonselective counterparts.

Overall, there were limitations placed on information accessibility based on not only the family's awareness of when and where events are occurring but also their ability to get there based on time and cost. Furthermore, the information available from each school source was not standardized, thus yielding different content, quantity, and quality across schools. With this overview of how the schools and district offer information and how it differs across schools and sources, I now turn to information content and quality to see what families can potentially learn from the formal information sources.

Print Analysis

As described above, print materials were the core of formally disseminated information. Their readability and content affected families' understanding of their options, so to address the second question—"What is the accessibility, readability, and content of school choice information?" I performed readability analyses on the High School Directory and brochures disseminated at the high school fair. Through these numerical results, I established potential for understanding the print documents available to them for choice. I also performed content analysis on these documents. I used content analysis to determine what information schools are providing, as well as how they present certain aspects of their schools. As indicated previously, I collected these materials over 3 years of attendance at both open houses and the high school fair, and they include three "Options for Knowledge" high school directories and over 300 pamphlets and handouts. For continuity, I limited the sample to the 120 schools that remained in the sample across years.

Readability test	Full sample	Far south	Near north	Central
Flesch-Kincaid	12.82	12.52	12.58	13.11
	(2.32)	(3.09)	(2.22)	(1.95)
Gunning Fog	14.07	14.09	13.49	14.41
0 0	(2.60)	(2.73)	(2.45)	(2.62)
Smog	11.45	11.32	Ì1.17	11.69
	(2.01)	(2.84)	(1.79)	(1.64)
Average grade	13.87	13.86	13.54	13.11
	(1.94)	(1.97)	(1.99)	(1.91)
	N = 120	N = 28	N = 35	N = 57

Table 3. Readability in Grade Level by School Location.

I found that, across school types and location, material readability hovers at around a high school to mid-way through college education, higher than an estimated 53% of Chicagoans 16 and older can read (Baer, Kutner, Sabatini & White, 2009; Reaves, 2010). In terms of content, schools focused primarily on extracurricular activities and academic rigor in their information. However, qualitative content was misleading particularly in terms of academic rigor, as it does not always reflect the actuality of the school. The following section provides more detailed insight into the content and quality of choice information. It concludes with the implications of these aspects of choice documents for choosing families.

Readability

There are multiple formulas considered suitable for generating readability scores. I present three of the most common: the Flesch–Kincaid Grade Level, the Gunning Fog score, and the SMOG index. In addition, I include an average score that represents the mean across five readability tests (those mentioned above, as well as the Coleman–Liau Index and the Automated Readability Index), indicating the average grade level of readability for each document.

The rows in Table 3 indicate the readability scores for a particular readability formula and are measured in year levels of schooling it would take to read at that level. Table 3 indicates that overall readability across schools and documents was just below an associate's degree level education (13.87 years).

Readability matters to families' potential comprehension of the materials presented, assuming their access to them. Although it has been overlooked in educational research, the health care connections between readability and action discussed previously make it clear that readability affects what people can and will do, thus making it important to consider when thinking about

information and school choice. Documents with readability levels that correspond to their audiences' ability (i.e., higher readability for audiences with greater literacy, lower readability for audiences with lower literacy levels) have the greatest likelihood of compelling action (von Wagner, Steptoe, Wolf & Wardle, 2008). However, when producers cannot determine a specific audience due to widespread dissemination, as is the case with generally distributed choice materials, aiming toward a lower than average readability level increases the likelihood of greater comprehension. Because literacy is negatively related to poverty (Davidhizar & Brownson, 2000), and 86% of the population that CPS serves is of low income, the district and schools need to sustain extra awareness of all documents they disseminate. At the time of study, a literacy survey of the population asserted that approximately 53% of adults in Chicago have low or limited literacy (Reaves, 2010), indicating a reading level at or below a fifth-grade level. Much of the available literature for school choice would be inaccessible to them. This readability analysis shows that across school types and locations, documents do not take into account the literacy of the population. As a result, even if families obtained access to materials, they may have been unable to read or comprehend them.

Content Analysis

In addition to readability analyses, I also performed content analysis on the print documents disseminated by CPS, using inductive coding to determine the areas most frequently mentioned in the literature. For this portion of the analysis, I focused on only the CPS schools that have high school directory report cards that include state testing outcomes (N=103). This sample excluded schools that were proposed, but not yet open during the study period; schools that opened within the past school year; and special education schools. I eliminated these schools from this portion of the analysis to provide a comparison between the aspects of schools mentioned in their literature and statistical data (testing outcomes, extracurricular activity, etc.) reported by the district on these measures.

Drawing from the words and phrases that appeared most frequently, I initially generated a list of 15 general themes. I compared these themes with the 10 proposed by Johnsson and Lindgren (2010) to pare the list to seven overall themes used by schools. There was overlap across three areas: atmosphere, cooperation (renamed partnerships), and special activities (renamed extracurricular activities), two of which I renamed based on the language used by the schools in this study. The data for this study also generated themes of academic rigor, accolades and awards, career focus, and uniqueness. These categories were similar to those found in the Johnsson and Lindgren study; however, due

Table 4. Choice Literature Content.

Attribute	% of schools mentioning	Examples
Extracurricular activities	94	Sports teams Academic teams Theatrical opportunities
Academic rigor	58	College preparatory curriculum "Academic rigor"
Supportive atmosphere	38	Socio-emotional aspects of school Teacher involvement Safety
Partnerships	31	Business connections Family connections Community connections
Career preparation	29	School to work programs Career start
Uniqueness	28	First/only school with
Accolades and awards	24	Awards won Money/scholarship
	N = 103 profiles	

to differing context (theirs was a pilot of a mid-sized city in Sweden) and study purpose (they focused exclusively on marketing), the elements that they chose to put together along thematic lines were highlighted in different ways and were less relevant in my data. Below, I provide an overview of both the frequency of these attributes in the choice literature and examples of each. I then discuss the relevance of the content for schooling choices.

As shown in Table 4, reference to extracurricular activities appeared the most, with almost all schools (94%) highlighting this in their available information. Following behind this (58%) was the academic rigor or challenge of the school. Just over a third of schools (38%) highlighted partnerships with outside parties, with just slightly less citing their partnerships and career preparation offerings (31% and 28%, respectively). Twenty-eight percent of schools referenced the "uniqueness" factor, and accolades or awards won by the school, students, or faculty merit mention by 24% of the schools studied.

Across schools, the way themes are addressed ranged from unclear sentiments to concrete examples. The exception to this was extracurricular activities. These generally appeared as a list, except when a school had achieved a particular accolade on that activity, and then it is highlighted with more detailed text. In contrast, academic rigor, which received the second greatest mentions, varied tremendously across schools. For example, some schools

described their programs as "rigorous," or the school itself as a "true college preparation school." Other schools talked about their "academically challenging" curricula. Some provided more specific examples of programs or student outcomes that reflect this rigor. The remaining categories offered a similar range, often focusing more on promoting than necessarily informing. Under the theme of "partnerships," for example, schools included the names of outside collaborators that donated money, services, or in-kind gifts to the school. When it was more detailed, this information indicated whether they offer internships or other activities as a result of the partnership.

Content/Score Comparison

Although schools chose to highlight particular aspects of education, their scores and programs did not always reflect this advertising. Understanding the differences between the marketing aspect of choice literature and the available quantitative data provides insight into the potentially misleading aspects of choice information.

Academic rigor provided the most marked contrast between marketing literature and actual scores. Of the 58% of schools that highlighted their academic rigor, 45% of them had 30% or fewer of their students meet or exceed state standards on the Prairie State Achievement Exam (PSAE). This is compared with a statewide average of 53% for the same year (CPS Office of Performance, 2009). Looking at another measure of academic performance available from CPS, 60% of the schools that highlighted their academic rigor in choice literature saw less than 50% of students making expected gains. The district used "Expected gains" as a measure to compare how well students learn within a year (indicated by the series of standardized tests taken across their high school career), as compared with other students who started high school at the same performance level (CPS, 2009). For example, the two lowest scoring high schools in the district (scoring 3% and 4% on the PSAE meet/exceed measure and 35% and 32% in expected gains) were also two that highlighted their academic rigor in their literature.

Much of the information that schools offer is lacking in "hard" content. Schools are able to use euphemistic descriptions of their programming and overlook shortcomings altogether. Because schools can draw from a host of themes, comparison across schools is also difficult, particularly without examining more quantitative measures (test scores, graduation rates, etc.) that are often difficult for families to comprehend, even when they have access to them. Rather than informing families, information instead serves marketing purposes. Although the scores I cited here are available to parents, they are often difficult to interpret or understand. Parents then must rely

either on these difficult to understand statistics for a source of comparison or on their or others' impressions based on experience with the schools.

Conclusion

This study explored the connection between formal choice information and school choice through a case study of CPS. Issues of equity underlie these connections, and this study points to disparities surrounding dissemination, readability, and marketing. Indeed, these findings illustrate the ways that formal information can offer limited and disparate access, lack standardization, and forward marketing rather than informing, all of which can potentially exacerbate choice-based inequities.

Much of the formal information disseminated about school choice is disseminated in the finite spaces of open houses and the high school fair. These attendance-based activities required families to be both informed about the time and location of such events and able to access them. Although print material is available from other sources, it is difficult to read and frequently offers little substance about the schools themselves. The lack of standardized information production across schools means that readability and information varied greatly across materials. Schools offered different information in their choice literature, providing parents with different, often incomparable vantage points for each school. In this case, the high school directory offered a standardized overview of each of the schools, as well as directions on how to use and understand the information presented within. Furthermore, different types of dissemination offered different types of information. Without attending the events where materials are distributed, there was little chance for choosing families to obtain "insider" information to increase chances of a successful application to the school of their choice. This type of information was often revealed in the form of informal discussions with faculty, staff, and students attending the events, as well as through information sessions at both the open houses and the high school fair. It was not readily or obviously available to all.

Knowledge of dissemination, content, and readability also tied strongly into the idea of marketing. Individual schools took different tactics both to position themselves as desirable and to have some control over their applicants. As has been documented previously (Jennings, 2010), schools are able to influence what kinds of students (and parents) apply through the ways that they offer applications, where they "advertise," and how they structure their application. This was particularly true for charter schools within CPS, as they were frequently on different time lines for their lotteries and had different applications that sometimes required a visit to the school for an information

session or open house to obtain an application. Other noncharter schools may have had applications and materials available, but were able to influence application by offering insider advice to families participating in the open house and other information sessions.

Drawing from other educational literature (Johnsson & Lindgren, 2010; Lubienski, 2007; West, 1992), as well as from outside of education (Stephens et al., 2007), it is clear that through both language and dissemination practices, districts and individual schools are able to use "information" practices as marketing. Some schools disseminate more detailed information, application instructions, or other items that would increase the chances of successful application at the open house—an event that requires effort on the part of student or parent to attend and helps schools to determine the more active and engaged parents and students. Other schools are able to advertise qualities that they do not exhibit, for example, indicating academic rigor where there is none. The language presented in the literature assumes a particular view of choice not necessarily accessible to all families. Information becomes a tool for selling schools, rather than informing families.

Although information is only one aspect of choice policy, its role is important and merits greater study. Further study connecting families more explicitly to the choice materials and seeing how they affect their choice behaviors would lend greater relevance to the importance of information dissemination, as well as highlight more potential changes for information practices. Future studies connecting information more explicitly to the marketing tactics and intentions of schools would demonstrate how the overlap between "informing" and "marketing" serves to influence parental decisions. Because this study is limited to information disseminated in English, it overlooked those for whom English is not a primary language—a critical population in many urban districts; additional work could look explicitly at accessibility based on language, as well.

While a variety of more intensive changes to choice systems from restructuring to total elimination have been suggested, the above findings point specifically to the need for standardization of formally disseminated information. In addition, this standardization should take into account readability levels and tactics for improved readability. Such changes offer the potential to make information more useful, while also limiting marketing tactics.

Although information is only one aspect of choice policy, its role is important and merits greater study. Understanding the role of information in the school choice process offers insight into the ways districts and schools influence choice and provides a potential starting point for improving access to choice.

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