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Laboratories of Reform? Human Resource Management Strategies in Illinois Charter Schools

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Introduction

Charter schools are publicly-funded educational entities that operate independently from local school districts and are exempt from certain state and local requirements, particularly with regard to teacher personnel policy. In exchange for this flexibility, charter schools are held more accountable for results and may be shut down if they fail to meet the expectations described in their performance contract (or charter). The premise is that this enhanced flexibility coupled with increased accountability will encourage educational innovations and efficiencies that improve student outcomes and could potentially inform and reform the operation of *all* schools. Thus, charter schools were originally conceived as "laboratories of reform" where new educational philosophies, technologies, policies, and practices could be tested and fine-tuned before being brought to scale beyond the charter sector. Further, because charter schools are schools of choice (i.e. no students are assigned to attend), these "laboratories of reform" are also meant to demonstrate how schools can react and reform in a competitive marketplace to yield new solutions to long-standing concerns, such as attracting and retaining the best teachers.

The degree to which charter schools have leveraged both flexibility and competition for successful innovation has been the subject of much debate. Early research indicated that charter schools were not particularly distinct from district (non-charter)[1] schools with regard to curriculum and instruction (American Federation of Teachers, 2002; Arsen, Plank, & Sykes, 1999; Lubienski 2003; Wells, 1998). However, recent studies (Grogan & Youngs, 2008; Podgursky, 2007; Preston, Goldring, Berends, & Cannata, 2012) suggest that, relative to district schools, charter schools tend to be particularly innovative with regards to organizational structures such as human resource management. As Wei, Patel, and Young (2014) observe:

> *To date, most studies have focused on the differences in student achievement between charter schools and traditional public schools, but few have sought to open the "black box" of charter schools to explore the factors underlying these differences. As charter management organizations grow and policymakers continue to pass favorable charter laws, a better understanding of organizational differences …between charter schools and traditional public schools can help identify the factors that influence student achievement and teacher retention. (p. 3)*

The aim of this study is to investigate the human resource (HR) management policies and practices in Illinois charter schools. Many recent education policy initiatives at the federal-, state-, district-, and school-levels have zeroed in on human resource management reforms as a route to strengthen the learning climate by bolstering teacher effectiveness, and, in turn, improve student achievement. The theory of action undergirding these reforms is that by implementing more research-based, efficient, and strategic HR policies, schools will be able to recruit more talented teachers, support and improve the performance of the teachers in their buildings, and retain and reward their most effective educators. Because charter schools

[1] This paper uses the terms "district school" and "non-charter school" interchangeably to refer to what others often call "traditional public schools."

are granted additional flexibility in many areas of HR management, and because evidence suggests that many charter schools are exercising this flexibility, the charter school sector presents a promising venue to test this theory of action.

To do this, we begin by reviewing existing research on charter school teachers and human resource management in education. Next, we conducted surveys and interviews with Illinois charter school leaders to document the strategies they use to attract, develop, and retain high quality teachers, and use descriptive statistics and examples from practice to present these findings and highlight trends across differently-situated charter schools. We then analyze these responses to discern overarching themes in these practices across schools and HR functions. Finally, we examine the relationships between distinct sets of HR management practices and school outcomes which the theory suggests ought to be affected—teacher retention, school climate, and student achievement. It is our hope that these analyses will demonstrate the degree to which Illinois charter schools are leveraging the flexibility allowed by the state's charter law to drive more strategic management of their human resources and yield findings about the effects of HR practices that can help guide personnel policies in both the charter and non-charter school sectors, where appropriate.

Background

The first Illinois charter schools opened in 1996, and there are currently 64 charter schools across 147 campuses in 13 school districts throughout Illinois, primarily in Chicago. With an overall enrollment of about 63,000 students, or about 3% of all the state's public schoolers, Illinois' charter school sector is larger than any single district in the state except Chicago Public Schools (CPS). As in other states, Illinois charters are schools of choice—i.e., no students are assigned to attend, enrollment is generally open to all students living in the district in which the school is authorized (though some zip code restrictions are allowed), the schools cannot charge tuition or have entrance exams or other admissions criteria, and enrollment is determined by random lottery if the school is oversubscribed. Unlike other states, all Illinois charters must be held by non-profit organizations, though charter holders can partner with for-profit companies (Charter Management Organizations, or CMOs) to manage schools. For example, the non-profit Chicago International Charter Schools (CICS) partners with several CMOs to manage day-to-day operations of their campuses. Charter school teachers in Illinois are also permitted to unionize, and Illinois currently has 30 charter school campuses across eight networks and single site, or "standalone," schools that have chosen to do so (Illinois State Board of Education, 2014).

Charter School Teachers

Studies comparing the characteristics of charter school teachers with those from non-charter schools generally find that, relative to teachers in district schools, charter school teachers are more likely to be uncertified and have higher average teacher licensure exam scores (Carruthers, 2012), and tend to graduate from more selective colleges and typically have substantially less teaching experience (Cannata & Penaloza, 2012). However, as Carruthers (2012) observes, it is unclear whether these differences arise because charter schools prefer teachers with different characteristics or because that is who they are able to attract, or some combination of these factors. Research also indicates that charter schools tend to spend more per pupil on administration (and less on instruction) compared to district schools (Arsen & Ni, 2012) and that teachers in charter schools tend to earn substantially lower salaries than teachers in district schools, even after accounting for differences in experience levels (Malloy & Wohlstetter, 2003; Cannata, 2010). According to a recent analysis by the Illinois Network of Charter Schools (2011), about half of the staff in Illinois charter schools have between one and three years of experience and certified charter school teachers overall earn an annual base salary of $21,496 less, on average, than teachers in Chicago Public Schools, and $29,384 less, on average, than certified teachers in other Illinois districts with charter schools, including lower salaries at all levels of experience.

The research literature also shows that teachers in charter schools tend to work longer hours, perceive heavier workloads, and receive less job security, putting them at greater risk for burnout and turnover (Malloy & Wohlstetter, 2003; Ni, 2012). Indeed, turnover data bear this out—charter schools in general tend to have higher teacher turnover rates than districts schools (Cannata & Penaloza, 2012) and charter school teachers are more likely to leave the profession than teachers in non-charter schools. (Cowen & Winters, 2013; Renzuilli, Parrott, & Beattie, 2011). However, Cannata (2010) suggests that much of this turnover

can be attributed to characteristics of charter schools and their teachers that are associated with higher turnover rates—such as urbanicity, lack of experience, and lower salaries—and concludes that, controlling for school demographics and teacher qualifications, there is no significant difference in school turnover rates between charter school teachers and teachers in district schools.

The research literature offers several explanations as to why charter schools might be staffed differently than district schools. One explanation could lie in the greater flexibility in professional development, tenure, hiring, and salaries that charter schools are granted relative to district schools (Cannata & Penaloza, 2012). It has been argued that charter schools (and schools of choice in general) utilize this flexibility to implement different HR management practices because of the pressure to use resources more efficiently (Cannata & Penaloza, 2012), to attract students and parents (Hoxby, 2002), or to meet increased accountability demands (Podgursky, 2007). For example, Hoxby (2002) suggests that charter school administrators place more value on the quality of teachers' colleges or teachers' math and science skills because these characteristics are appealing to potential consumers (i.e. parents and students). Another explanation may be that charter school teachers simply prefer different features with regard to the schools where they work than do non-charter teachers. Cannata and Penaloza (2012) suggest that these individual preferences interact with differences between education sectors to create different decision-making patterns. Podgursky (2007) notes that differences in organizational size and complexity might also contribute to observed differences in working conditions and human resource management strategies between charter and non-charter schools. That is, because charter schools tend to be smaller than school districts, this may allow their leaders to be more nimble in adapting to labor market changes or more efficient in hiring staff and monitoring their performance.

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Charter school teachers typically report more positive working conditions than teachers in district schools (Cannata & Penaloza, 2012) and recent studies (Milanowski, Longwell-Grice, Saffold, Jones, Schomisch, & Odden, 2009; Berry, Daughtrey, & Wieder, 2009) indicate that teachers value positive working conditions more than high salaries. In particular, relative to teachers in district schools, charter school teachers typically report a more supportive teaching environment, higher levels of autonomy, more influence on school policies and practices, and greater support from administrators and colleagues than do teachers in district schools (Wei, Patel, & Young, 2014; Renzuilli, Parrott, & Beattie, 2011; Canatta & Penaloza, 2012; Ni, 2012). Charter school teachers are also more likely than non-charter teachers to report shared values and cooperative effort amongst their colleagues and more innovative teaching strategies (Cannata & Penaloza, 2012). However, along some other dimensions of working conditions — such as school leadership, community, collegiality, collaboration, and professional development — both Ni (2012) and Wei, Patel, and Young (2014) found no differences between the perceptions of charter school teachers and those of teachers in district schools. Charter school teachers tend to be satisfied with their professional lives, their colleagues, and the school's education program (Malloy, & Wohlstetter, 2003) — but so do teachers across all sectors, and the findings on overall job satisfaction in charter versus district schools are quite mixed. Some studies (Renzuilli, Parrott, & Beattie, 2011) find that charter school teachers tend to be more satisfied with their jobs overall, whereas others find less overall satisfaction amongst charter school teachers (Cannata, 2010), and still others find no overall difference in teacher perceptions between sectors (Ni, 2012; Wei,

Patel, & Young, 2014). It is also important to remember that these research findings reflect nationwide trends, which can vary from state to state, school to school, and year to year, and thus may not necessarily be representative of today's charter schools in Illinois, or teachers at any specific school.

Human Resource Management in Education

Research indicates that teachers are the single most important school influence on student achievement gains, and that teachers vary quite substantially in their effectiveness at improving student achievement (Chetty, Friedman, & Rockoff, 2011; Rivkin, Hanushek, & Kain, 2005; Wright, Horn, & Sanders, 1997). As a result, HR management—the ways that schools recruit, select, train, evaluate, compensate, and retain teachers—has been at the forefront of recent education policy discussions. The strategic management of human resources has its roots in the study of private sector organizations, particularly amongst researchers in industrial and organizational psychology. Scholars typically agree that public agencies in general—and education institutions in particular—are among the least likely to implement effective human resource management strategies, which Podgursky (2007) attributes to public education's historic lack of competitive forces to drive HR innovation. However, a recent study by Fryer (2012) suggests that high-performing charter schools are able to distinguish themselves from low-performing charter schools through effective HR management practices.

Numerous education scholars have worked to conceptualize how the strategic management of human resources can be applied to school systems and used to improve student outcomes. These groups have developed several, complementary HR management frameworks, which we summarize in Table 1. While all of these frameworks include similar core concepts and functions, they are often decomposed into divergent components (and subcomponents). For example, the Strategic Management of Human Capital (SMHC) project out of the Consortium for Policy Research in Education (CPRE) utilizes a multilevel approach with eight microcomponents nested within three "macrcocomponents"— talent acquisition, talent motivation and development, and retention (Odden & Kelley, 2008; Odden & Kelley, 2009; SMHC, 2009; Heneman & Milanowski, 2011). The American Institutes for Research (2014) framework includes eight components (recruitment, hiring, induction, professional development, compensation and incentives, working conditions, and performance management) that are similar to SMHCs subcomponents, whereas the framework from the Carnegie Foundation for the Advancement of Teaching (Myung, Martinez & Nordstrum, 2013) consists of four broad components (acquire, develop, sustain, and evaluate) that are analogous to SMHC's macrocomponents. The Aspen Institute framework (Wurtzel & Curtis, 2008) also uses four overarching components—pathways into teaching, induction and tenure, performance management, compensation and rewards, and leadership development. Finally, TNTP (which used to be known as The New Teacher Project) has framework with nine components: recruitment, selection, training/certification, hiring/placement, on-boarding, evaluation/professional development, working conditions, compensation, and retention/dismissal. The components of these HR frameworks tend to progress sequentially from preservice preparation, recruitment and hiring, to onboarding and development, through evaluation and performance management, and, finally, to retention and compensation. These stages are represented vertically in Table 1, with the top portion

addressing components that are associated with the beginning of the teacher's career, and the components nearer the bottom representing the later portions of the school year or career.

Of course, these HR policies do not operate in isolation and must be considered in context of each other, as well as additional policies and procedures at the school, local, state and federal levels. Human resources alignment describes the degree to which each component is related to the other components and links these components together to optimize efficiency (Wutzel & Curtis 2008; SMHC, 2009). AIR's (2014) conceptualization of an HR framework depicts this system as a series of interdependent clusters, where each cluster acts as a cog to function with the other components to form a cohesive system. Scholars of HR management in education also emphasize that the individual components described in Table 1 do not operate independently from one another and that each organization should work to ensure that their HR policies and practices are aligned with each other and working toward the same goals (Heneman & Milanowski, 2011). For example, hiring, development, and compensation practices should all look for and reward the same attributes, so that teachers understand what high quality instruction looks like and how it can be attained (Gross & DeArmond, 2013).

Table 1

Summary of HR Management Frameworks

Strategic Management of Human Capital		Apsen Institute		American Institutes for Research	Carnegie	TNTP
Acquisition	Recruitment	**Pathways into Teaching**	Preparation	**Preparation**	**Acquire**	Recruitment
	Selection		Certification			Selection
	Placement		Sourcing	**Recruitment**		Training/ certification
Development	Induction	**Induction and Tenure**	Induction	**Hiring**		Hiring/placement
	Mentoring		Training & Development	**Induction**	**Develop**	On-boarding
	Professional Development		Tenure	**Professional Development**		Professional Development
	Performance management	**Performance management, compensation, and rewards**	Performance management	**Performance Management**	**Evaluate**	Evaluation
Retention	Compensation		Compensation & Non-Monetary Rewards	**Compensation & Incentives**	**Sustain**	Working conditions
		Leadership development	Leadership development	**Working Conditions**		Compensation
						Retention/ dismissal

Scholars also emphasize the importance of federal, state, and district policy contexts in discussions of HR management at the school level. Rice, Roellke, Sparks and Kolbe (2009) developed a "three-dimensional" HR policy typology that includes: level of policy (state, district, or school); type of policy (economic incentives, avenues into the profession, hiring strategies, professional development, and working conditions); and dimension of the problem (supply, recruitment, distribution, or retention). They and others (e.g. Odden & Kelley, 2009) note how different levels of policy can and should be aligned with one another, and discuss how some components, such as strategic placement of new hires, or types of policies, such as economic incentives, may be more appropriately associated with some levels than others.

Similarly, TNTP (2009) describes various "success factors," such as people, funding, political capital, data, and policy landscape, that can influence the HR management context. The current education policy landscape is particularly conducive for HR reform, and was spearheaded by TNTP's "The Widget Effect" (Weisberg, Sexton, Mulhern, & Keeling, 2009) which described how existing teacher evaluation systems failed to discern varying levels of performance and resulted in all teachers being treated similarly, regardless of effectiveness. Since the the publication of "The Widget Effect," however, a wave of HR management policies aimed at reforming how schools recruit, select, train, evaluate, compensate, and retain teachers have been enacted at the local, state, and national levels. For example, teacher evaluation reform was a central tenet of the US Department of Education's Race to the Top program, paving the way for Illinois' Performance Evaluation Reform Act, which spawned restructuring of teacher and principal evaluation policies and practices in local school districts throughout the state (Milanowski, Scott, Miller, Finster, Doll, Lewandowski, Roseland, White, Zaru, & McKithen, 2014). Despite this policy action, recent implementation reviews from Tennessee, Michigan, Georgia and other states conclude that, even under these redesigned evaluation systems, nearly all teachers are still rated in the highest two tiers (Sawchuk, 2013; Keesler, 2012; Georgia Department of Education, 2012), leading Daly (2014) to conclude that, "the widget effect is nearly as strong today as it was in 2009."

The overall thrust of the recent movement to reform HR management in education is a move away from compliance-driven policies and practices, and towards decisionmaking that is based on teacher performance (Gross & DeArmond, 2013; Weisberg, et al., 2009). The research literature highlights the importance of teacher recruitment and hiring procedures, with an emphasis on using evidence-based selection procedures to ensure alignment between the school mission and candidates' pedagogical skills and philosophies. Teacher performance would then be monitored via comprehensive teacher evaluation systems, utilizing multiple measures to ensure validity and reliability, so that information from these systems could be used to guide performance-based compensation and tenure programs that identify and reward the most effective teachers. Teacher data could then be used to customize mentoring and induction supports to socialize new teachers and improve performance, while professional development could be targeted to address identified weaknesses. Finally, high quality teachers would be retained through enhanced working conditions and via leadership development and other opportunities for advancement and recognition.

Methods & Data

The population for this study consisted of all Illinois charter schools during the 2013-14 school year. Because we were interested in human resource management, our unit of analysis was the level at which HR policy and practice are typically set, or the school level for standalone (non-networked) charter schools and the network level for multi-campus schools. For example, the standalone (non-networked, single campus) Springfield Ball Charter School was considered one unit, and the three KIPP campuses (Ascend, Bloom, and Create) were also considered one unit. Because Chicago International Charter Schools (CICS) are managed by several different charter management organizations (CMOs) at the time of our study—Charter Schools USA, Civitas Schools, Distinctive Schools/Quest, and Victory Education Partners—we considered CICS to be four distinct units of analysis. Using this definition, there were 57 charter school units in 2013-14.[2] Working with the Illinois Network of Charter Schools (INCS) to identify and recruit participants, we attempted to contact all 57 Illinois charter schools in fall 2013. Recruitment was conducted via e-mail and telephone calls, originating from both the research team and INCS. We attempted to contact representatives from each school a maximum of seven times, and no financial incentives were offered or provided for participation. Recruitment efforts continued throughout the 2013-14 school year, and 27 schools ultimately agreed to participate in the study, for a 47.4% participation rate. Figures 1a and 1b show the names and locations of the schools in our sample who were willing to be named in the report. Two additional schools, one from Chicago and one from outside of Chicago, volunteered to participate only on the condition of anonymity, so we refer to these as "anonymous charter schools" throughout this report. Because the sample includes some of the state's largest charter networks, the study participants represent 60% of the state's charter school students.

[2] Note that this figure differs slightly from those provided by the Illinois State Board of Education and other organizations due to our definition of the unit of analysis for this study and the way we count CMO-managed schools, as described above.

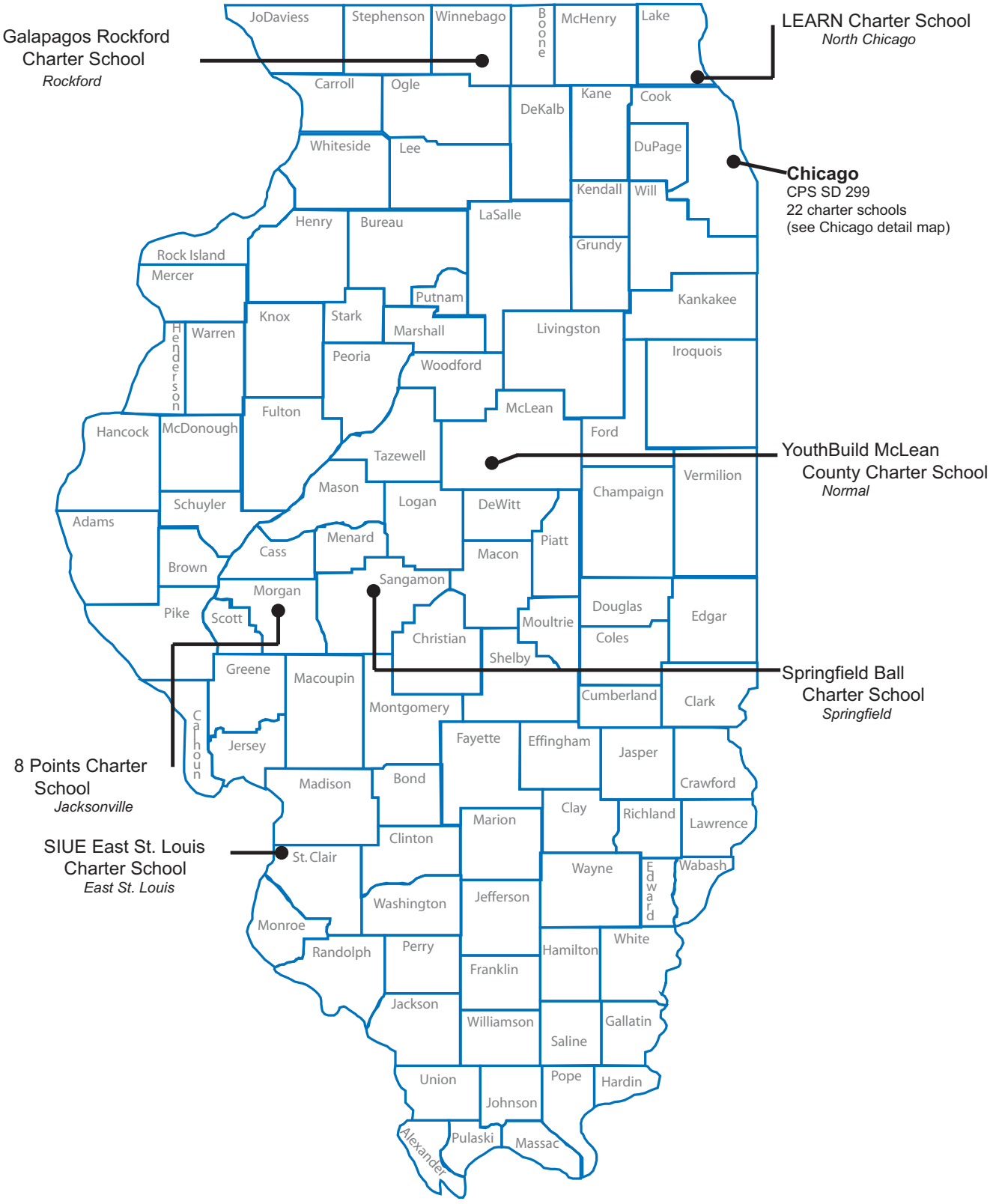

Figure 1a. Map of Illinois charter schools participating in this study.

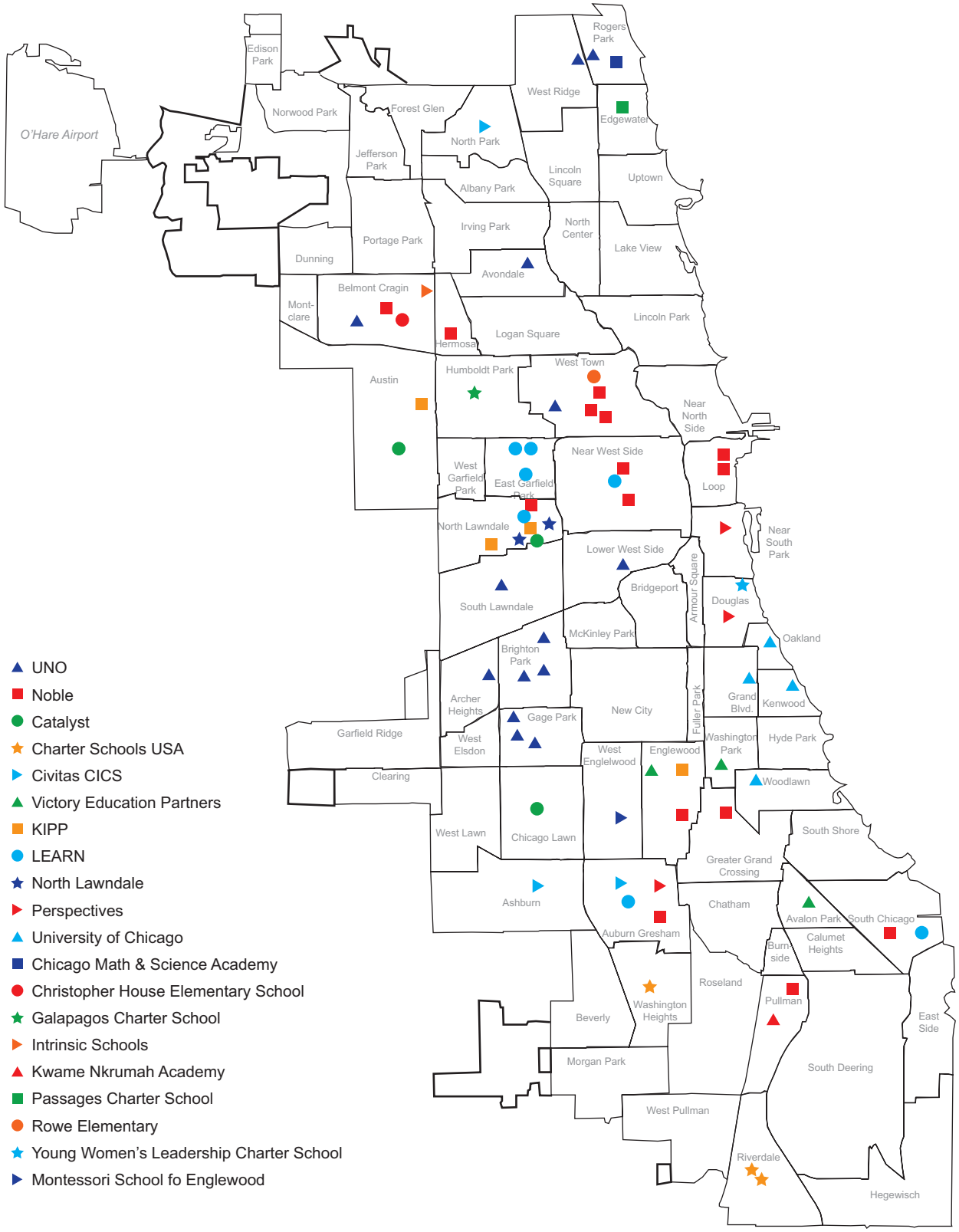

Figure 1b. Detail map of Chicago charter schools participating in this study.

Table 2 compares key descriptive statistics for the schools in our sample with schools that refused to participate. As shown in the table, the sample was comprised primarily of Chicago charter schools (78%) that had been established for at least five years (74%), with a median enrollment of about 600 students, relatively substantial proportions of whom were low income (88% free- or reduced-price lunch), English Language Learners (10%), African-American (59%), Hispanic (26%), and low achieving (mean Illinois Standards Achievement Test composite of 41.4 and mean Prairie State Achievement Examination composite of 24.5, compared to state averages of 59 and 54, respectively). The sample was approximately evenly divided between standalone (44%) versus networked or CMO-managed schools (56%), and between high schools (44%) versus elementary or middle schools (56%). The sampled schools were statistically similar to non-participants across each of these key measures. (Although the proportion of standalone, non-network affiliated schools was considerably lower in the sample than in the full population, this difference was not statistically significant.)

Table 2

Characteristics of Sample vs. Non-Sample Schools

School Characteristics	Sample	Non-Sample
% in Chicago (vs. rest of Illinois)	78%	77%
% Mature Schools (vs. schools less than 5 years old)	74%	60%
% Standalone (vs. network/CMO)	44%	70%
% High School (vs. Elementary/Mid)	44%	47%
Mean ISAT composite	41.4	43.2
Mean PSAE composite	24.5	25.6
Median student enrollment	597	457
% Low Income students	88%	84%
% ELL students	10%	5%
% African-American students	59%	69%
% Hispanic students	26%	20%
Unionized	15%	13%
N	*27*	*30*

The data for this study comes from interviews and surveys from the individuals in charge of human resources at each of the participating charter school units, typically principals at standalone schools and executive directors or HR directors for networks. Data collection occurred between October 2013 and June 2014. Each school leader was initially invited to participate in a phone interview, and the option to participate in an online survey version of the interview protocol was offered after multiple contacts and several months without an affirmative or negative response. Twenty respondents (74%) utilized the phone interview, and seven respondents (26%) completed the online survey. Interview and survey questions were built around the HR management frameworks described above, and focused on recruitment, hiring, professional development, evaluation, retention, and compensation. (The full interview and survey protocols can be found in Appendices A and B of this report.) The online survey mirrored the interview protocol, but worded some questions in a multiple choice format, populated with response options that were representative of the interviews that had occurred to date.

Interview and survey responses were coded by at least two members of the research team—the principal investigator plus at least one trained graduate assistant. Each participant's coded responses were then sent to him or her for review and confirmation of interpretation, and coding adjustments were made in three cases. After this feedback, the raters agreed on 95% of the approximately 3,500 codes recorded, for a very high interrater reliability (Kappa = .887, p<.001). We then statistically describe these findings and also test whether there are any differences between groups of schools based on school characteristics: location (Chicago vs. non-Chicago), grade span (high schools vs. elementary and middle schools), network affiliation (network/CMO-managed vs. standalone), unionization status, and school maturity (five or more years old vs. less-established).

Limitations

Before we present our findings, it is important to note some key limitations of this study. First and perhaps foremost, our data are provided by school leaders and represent solely their interpretations or intentions with regards to HR management at a given school. Interviews and surveys with teachers and other school staff might reveal differing perceptions of the HR practices being enacted at these schools, or they could provide additional support for administrators' assertions. Further, it is possible that respondents may have inadvertently omitted some of the practices that occur at their schools due to the limitations or time constraints in the interview format. (Although this limitation was mitigated somewhat allowing each respondent to review his or her coded data to check for reliability and completeness.)

Second, despite efforts to include all Illinois charter schools in this study, we were only able to receive feedback from a limited sample (47% of schools, representing 60% of student enrollment). Although the schools in the sample are statistically similar to those who declined to participate on many key features, this does not necessarily mean that all of the results presented below are generalizable across all Illinois charter schools. It is possible that other, unmeasured features of schools that influence HR practices also led some schools to participate and others to decline.

Third, these findings present only a point-in-time snapshot of HR management practices in Illinois charter schools from the 2013-14 school year. In the time that it has taken to analyze these data and prepare this report, it is likely that some, if not many, of these practices have changed or evolved, especially given the "nimbleness" and adaptability of the charter sector as described in the research literature.

Finally, we want to emphasize that this study does not purport or intend to compare HR management policies and practices in charter schools with those in district schools. Though some data from others' studies of non-charter schools are included for context, we did not interview or survey any non-charter school representatives for this study, and do not have a comparison group of district schools. This is intentional in order to avoid positioning any sector in opposition or contrast to the other. We focus solely on charter schools to explore what we believe to be an understudied but important area of research, and particularly because of the size, rapid growth, and purported innovation of this sector, we felt closer examination was warranted at this time.

Human Resource Management in Charter Schools: Illinois Results in Context

This section summarizes the findings from our interviews and surveys with Illinois charter school leaders, beginning with teacher recruitment, and continuing on to hiring, professional development (orientation, mentoring, and inservice training), teacher evaluation, compensation, and retention and career advancement. We attempt to place these results in context by situating them alongside findings from similar studies and other relevant data. The section concludes with a summary of administrators' reflections on their successes and challenges across these realms of practice. For each component, we present descriptive statistics and illustrative examples of the range of HR management strategies employed in the participating charter schools.

Teacher Recruitment

The research literature suggests that it is difficult to attract teachers to charter schools for several reasons. First, most charter schools are located in urban areas with high student poverty and less desirable working conditions than suburban buildings, and teachers in the charter sector typically earn lower salaries than teachers in district schools (Cannata, 2010; Malloy, & Wohlstetter, 2003). Further, Cannata (2010) finds that most newly certified teachers disregard charter schools in their job searches due to confusion about whether charter schools are public or private entities and because they prefer to work in a sector with which they are more familiar. In fact, Cannata and Penaloza (2012) find that large proportions of prospective teachers only considered working in charter schools only after they failed to receive job offers from the non-charter sector, and over 40% of charter school teachers in their study chose their current school because it was the only position they were offered. However, these authors also observe that a small proportion of teachers actively seeks out charter schools, and research indicates that these teachers are attracted to charter schools for many reasons, including the positive working conditions described above, such as supportive administration and like-minded colleagues, and a desire to engage in educational reform (Malloy & Wohlstetter, 2003; Miron, Cullen, Applegate, & Farrell, 2007).

To find out more about how Illinois charter schools recruit teachers, we asked a series of questions designed to elicit where and how teachers are sourced. Most respondents (70%) reported recruiting teachers from local colleges (see Figure 2). Maintaining ties with local teacher preparation programs was viewed as an integral part of a "strategic talent pipeline," and several schools mentioned receiving university resume books to help scout prospective teachers. (Specific teacher preparation programs are detailed in Figure 3.)

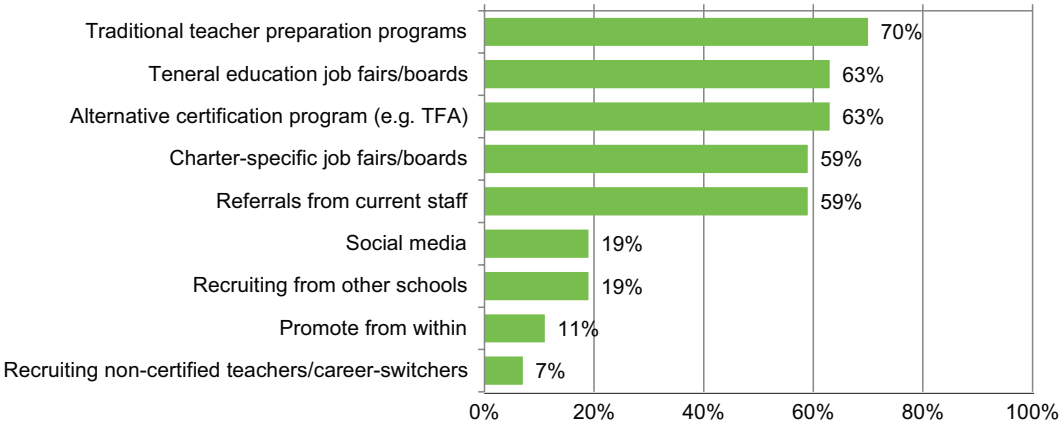

Figure 2. What strategies have you used for recruiting high quality teachers? (*n*=27)

A slightly smaller proportion of respondents (63%) noted recruiting through alternative certification pathways, typically Teach for America(TFA). This figure includes both TFA corps members and alumni (see Figure 3), as well as advertising in the TFA magazine and using the TFA alumni resume book. At the time of our interview, the Noble Network of Charter Schools was also working with the Relay Graduate School of Education to start the Noble-Relay Teaching Residency which aims to prepare their alumni for teaching positions with the network. At least one other school noted, on the other hand, that neither TFA nor college job fairs have been particularly fruitful in terms of recruiting teachers.

Another frequently cited strategy for recruiting high quality teachers was through education job fairs or online job boards (63%). Examples included K-12 JobSpot, the Illinois Literacy Council, and Teachers of Color magazine. UNO Charter School Network states that K-12 JobSpot has been particularly useful for their recruitment efforts. Christopher House Elementary School has had success using myEdMatch to post job descriptions, which allows teachers to submit applications and the principal to view applicants' profiles and teaching videos. North Lawndale College Prep uses the AppliTrack system used by numerous Illinois school districts, whereas recruitment for the Ball Charter School in Springfield is done almost exclusively through the Springfield Public Schools District 186 website. Charter schools located outside of Chicago (100% of five) and unionized charter schools (100% of four) were significantly more likely to recruit using general employment job fairs and job boards than non-Chicago charter schools (57%) and non-unionized schools (57%), respectively (see Appendix C).

Interviews also revealed that other schools (59%) reported success with charter-specific job boards or job fairs. Examples include posting openings directly on the school website and hosting their own job fairs or utilizing the Illinois Network of Charter Schools' job fairs and job board. However, multiple respondents noted that participation in most job fairs was not particularly useful in term of sourcing high quality teachers, but that they continued to send representatives mostly to "maintain a presence." For example, YouthBuild McLean County Charter School in Normal finds that most candidates at job fairs are simply looking for any job, and not specifically interested in working for their school or helping to fulfill their mission. General (not education-specific) job boards—such as InDeed, Simply Hired, Idealist, Monster, Careerbuilder, Craigslist, and local newspapers—were also frequently utilized, though few respondents found these to be particularly fruitful.

Sixteen respondents (59%) reported recruiting teachers via referrals from current staff members, with several noting that this strategy was the most effective for ensuring quality and fit with the school's mission. According to a representative from Rowe Elementary School:

> *Some of our strongest candidates have come by word of mouth—we have found that great teachers tend to be friends with other great teachers. Informal networks have spread the word about our school, and some of our best have sought us out rather than us searching for them.*

Several charter schools, including Catalyst Schools network, the CICS schools managed by Civitas, and The Noble Network of Charter Schools provide bonuses of up to $1,000 for successful referrals from current staff. They also noted that, despite a small advertising budget (less than $10,000), they have a "culture of recruitment," and cited data indicating that about 40% of referred candidates get hired, compared to less than 10% of those from other sources. Similarly, a representative from LEARN Charter School Network states that fully 20% of their staff were referrals from people currently in the organization.

Almost one in five (19%) respondents mentioned successfully using social media outlets, such as Twitter, LinkedIn, and Facebook, for teacher recruitment. Another one in five schools (19%) mentioned that they preferred to recruit teachers from other successful schools. One school in our study offered professional development opportunities to teachers from other schools that also served as a tool for recruiting new staff to the school, and another stated that teachers with experience at well-known charter networks such as MATCH, Uncommon, or KIPP would have "a leg up" if they applied. North Lawndale College Prep, on the other hand, explicitly tries not to recruit teachers away from other local charter schools. Some administrators also tapped their own extensive networks for staff. For example, the executive director of one school recruited talented teachers with whom she had worked during her previous experience in CPS. However, one recent study (Carruthers, 2012) suggests that teachers who move from district schools to the charter sector tend to be less effective (as measured by student achievement gains) than district teachers who remain in the non-charter sector, which the author indicates could be a sign that charter schools lack the institutional resources to outbid district schools in teacher recruitment.

Other schools, such as the Passages Charter School, noted that they primarily filled teaching positions by promoting certified teaching assistants from within their current staff (11%) and after posting vacant positions as required. One school that was in the startup phase at the time of our interview noted that members of their design team would likely be good candidates for teaching positions once the charter was approved because they could ensure buy-in and understanding of the school's mission. The Ball Charter School in Springfield has a unique arrangement with Springfield Public Schools (SPS) that allows District 186 teachers to take a five-year leave of absence to teach at the charter school without losing their place at their current school. Ball touts that one incentive for taking the leave is the extra professional development that teachers can bring back with them when they return to districts schools. They estimate that about a third of their applicants are current SPS teachers hoping to take advantage of this leave of absence.

Illinois's charter school law requires that, at most, 25% of teachers in each charter school can be uncertified (Illinois State Board of Education, 2014). Only a small proportion (7%) of the schools interviewed for this study stated that they were trying to take advantage of this flexibility, and even those cases seemed to be unique to the mission of the school. For instance, YouthBuild McLean County Charter School, which operates a dropout prevention and career preparation-oriented charter school, notes that about 25% of their staff are not certified but primarily hired because of their experience working in human services, social work, or professional careers, such as the construction industry. Several other schools, such as The University of Chicago Charter Schools, stated that their teacher recruitments pipelines tended to vary from year to year because no single source was consistently better than the others.

Several other recruitment strategies were mentioned less frequently, but are still worth noting. For example, KIPP uses five application deadlines throughout the year in order to create more interest, and 8 Points Charter School in Jacksonville, Illinois posts every position early in the spring, in order to begin compiling a quality applicant pool should a current teacher decide to leave later in the year. The Noble Network coordinates with the University of Chicago's Booth School of Business to do market research on recruiting untapped markets, such as suburbs on Chicago's south-side. Similarly, Galapagos Charter Schools are looking to "cast a wider net" to see if they can recruit candidates from high performing charter schools in other states, whereas UNO Charter School Network has tried to recruit outside of Illinois in the past, without much success. These strategies suggest that, when met with limited supply from existing teacher pipelines, these charter schools reacted by seeking out new pipelines or trying to become more efficient with their current approach.

Next, we asked about recruiting from particular teacher preparation programs or pathways (Figure 3). It is worth noting that the traditional pathway remains the most prominent form of recruitment amongst these charter schools, with 70% of respondents mentioning university-based teacher preparation programs. Specific universities were mentioned by more than half of respondents (56%), and unionized schools were significantly more likely

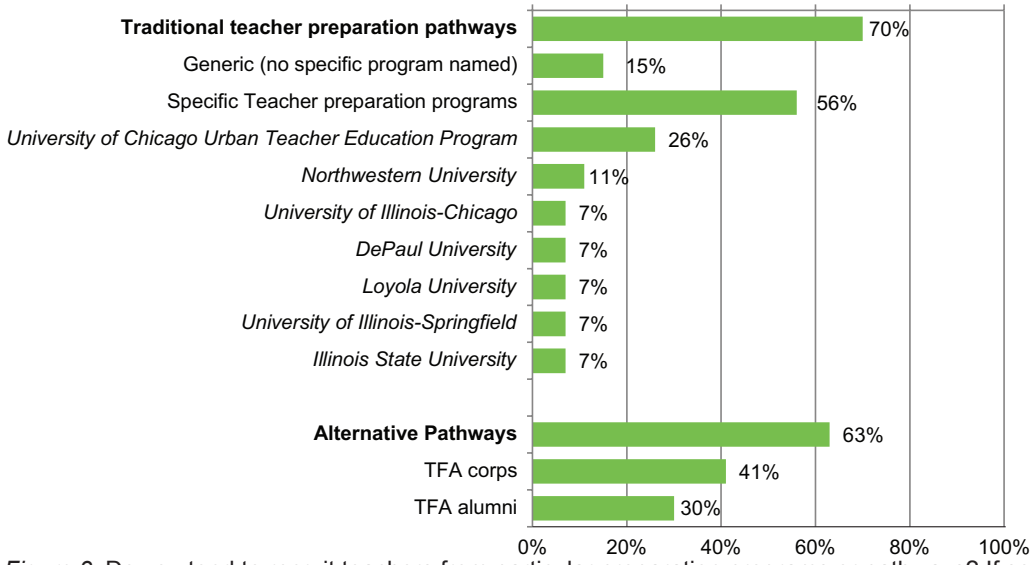

Figure 3. Do you tend to recruit teachers from particular preparation programs or pathways? If so, which programs/pathway? (*n*= 27)

to name specific teacher preparation programs (75% of four unionized schools) than were non-unionized schools (52%; see Appendix C). The specific colleges mentioned varied to some extent around the geographic location of the school. For example, the Southern Illinois University Edwardsville (SIUE) East St. Louis Charter High School noted that most of their staff were graduates of nearby SIUE, whereas Springfield Ball Charter School tends to recruit teachers from Illinois State University and the University of Illinois Springfield. Unionized charter schools were significantly more likely to recruit from traditional teacher preparation pathways (100% of four) and to name specific colleges from which they recruit teachers (75%) than were non-unionized charter schools (70% and 52%, respectively; see Appendix C).

Other schools tended to recruit from colleges that were closely aligned with their mission or educational focus. For example, the African-centered Kwame Nkrumah Academy finds Chicago State University's College of Education a reliable source of African-American candidates, and Catalyst Schools finds graduates of Loyola, DePaul, Concordia, and Dominican a good fit with their Lasallian philosophy. The Civitas-managed schools of CICS currently tend to recruit from teacher preparation programs at the University of Chicago and Northwestern, but, like other schools interviewed, are actively trying new strategies to recruit teachers from diverse backgrounds that are more reflective of the demographics of their student body. Several schools noted that they tend to recruit younger candidates, many fresh out of universities.

Almost two-thirds of respondents (63%) stated that they tended to recruit teachers from Teach for America (TFA) or other non-traditional preparation pathways. For example, UNO Charter School Network stated that 17% of their staff was TFA corps members and KIPP said that 60% were either TFA corps members or alumni. Relative to charter schools in Chicago, those outside of Chicago were significantly less likely to recruit teachers from the University of Chicago's Urban Teacher Education Program (0% of five non-Chicago schools vs. 33%) and to utilize Teach for America corps members (0% of five non-Chicago schools vs. 48%) and alumni (0% of five non-Chicago schools vs. 38%; see Appendix C). This is not particularly surprising, given geographic proximity and the fact that TFA does not operate elsewhere in Illinois. However, we also found that non-unionized charter schools were also significantly more likely to utilize TFA (65%) than unionized charter schools (50%; see Appendix C). More than a quarter (26%) of schools specifically mentioned efforts to recruit TFA alumni. In some instances, these efforts were alongside TFA corps members, while other schools, such as the CICS schools managed by Charter Schools USA tried to avoid corps members to focus on TFA alums. The anonymous Chicago school explicitly stated that they currently avoid TFA altogether, because corps members were not usually a good fit with the specific mission of their school. Nonetheless, even this campus had one TFA alumnus on staff.

Communication

Next, we asked charter school leaders to describe their communications with any sources of teachers. More than half of respondents indicated that they communicated with local colleges (56%) and Teach for America (52%). Chicago charter schools (62%) and unionized charter schools (100%) were significantly more likely to communicate with TFA than non-Chicago charter schools (0% of five) and non-unionized schools (70%), respectively (see Appendix C). The SIUE East St. Louis Charter High School notes that they have an "exclusive" partnership with SIUE that provides a clear pipeline with access to newly certified teachers, giving the school "first dibs" on SIUE graduates. Schools such as KIPP, Galapagos Charter Schools, and the Young Women's Leadership Charter School mentioned strong relationships with TFA. For example, Young Women's Leadership Charter School noted that TFA has been very supportive in helping the school find teachers to fill particular needs. Other campuses, such as the Charter Schools USA-managed CICS schools, state that they tended to communicate with local colleges and TFA primarily when they had a position that was especially hard to staff, such as a special education teacher or calculus teacher.

The research literature suggests that many charter schools use recruitment messages that strongly convey their organizational missions, and that successful schools send clear signals about what they expect of teachers (DeArmond, Gross, Bowen, Demeritt, & Lake, 2012; Gross & DeArmond, 2013). Studies also suggest that charter school teachers and teachers in non-charter schools have many similar preferences when deciding where to work, but charter school teachers tend to place more value than district school teachers on school mission and teacher involvement with school governance (Cannata & Penaloza, 2012). The majority (58%) of Illinois charter schools in our study reported emphasizing their school's mission and core values in their teacher recruitment materials (see Figure 4). The 8 Points Charter School in Jacksonville, Illinois includes the eight tenets of their school, The Montessori School of Englewood focuses on the Montessori education model in job postings, and Kwame Nkrumah Academy emphasizes their African-centered focus and village concept.

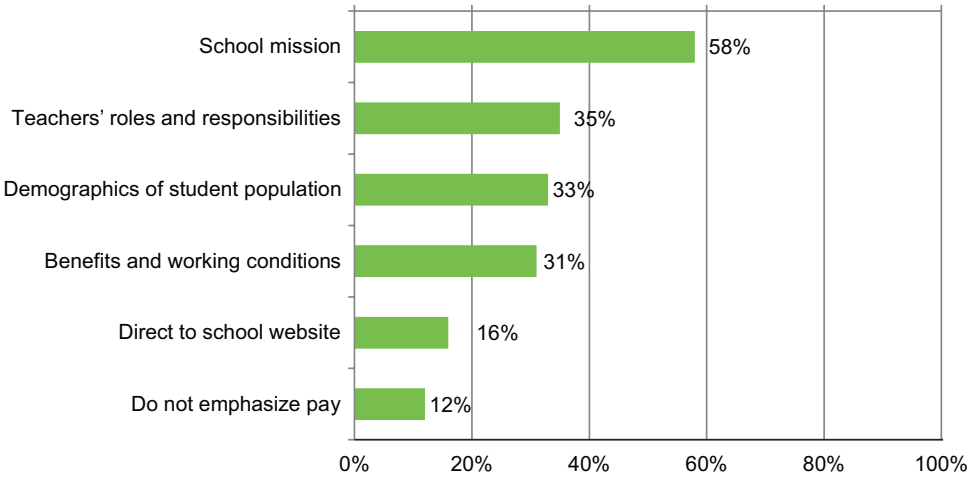

Figure 4. What are some examples of information you provide prospective applicants about the school or the position and how you promote the school as an attractive workplace? (*n*= 26)

Research also suggests that a school's performance level is the most important factor in attracting high quality teachers (Gross & DeArmond, 2010). Thus, it is interesting to note that the LEARN Charter School Network highlights the success of their organization in their recruitment materials, including data showing high school graduation and college enrollment rates. Similarly, North Lawndale College Prep believes that great teachers want to work at their school because it has a track record of good results.

Job postings from more than one third (35%) of schools noted specific teacher roles and responsibilities that might be beyond the expectations of the typical teacher, such as extended school days and longer school years. Especially in Chicago, these charter leaders made sure to note that their schools served economically disadvantaged students in an urban setting. Similarly, one third (33%) of respondents noted that they made sure to include details about their student population during teacher recruitment. According to some charter school leaders interviewed, these descriptions of student populations and teacher expectations were often geared to prepare potential teachers for the realities of the school and weed out candidates who were not interested in working in more challenging situations. In addition, a couple of schools noted that they purposefully omitted mention of teacher pay in their recruitment materials, both because they were worried it would not be competitive and because starting pay could vary widely based on the desirability of the candidate.

Just under a third (31%) of the schools interviewed emphasized teacher benefits and working conditions to promote the school as an attractive workplace. Chicago charter schools were significantly more likely to mention these features (40%) than those outside of Chicago (0% of five schools) and non-unionized school (36%) were also significantly more likely to emphasize benefits and working conditions than unionized schools (0% of four; see Appendix C). Typical aspects addressed included professional development and class sizes. For example, when recruiting staff, the Chicago Math and Science Academy focuses on teacher autonomy and flexibility in curriculum, financial incentives for high performance, and excellent medical benefits, including 100% employer-paid mental, dental, disability, and life insurance for employees and all of their family members.

Recruitment & Hiring Timeline

It is also important to consider *when* schools begin recruiting and hiring teachers. According to Levin and Quinn (2003):

> *[H]igh-quality teacher candidates regularly apply in large numbers to teach in hard-to-staff districts. The problem is, they do not get hired. The failure of many large urban districts to make job offers to new teachers until July or August is largely to blame for this problem. (p. 4)*

Gross and DeArmond (2010) have observed that charter schools in general do not appear to recruit or hire teachers earlier than district schools. Half of charter schools in our sample (50%) started recruiting for open teaching positions by the end of January (see Figure 5) and 70% reported hiring teachers by the end of May (see Figure 6). As leaders from Catalyst Schools point out, recruitment and hiring timelines have to keep pace with competing schools to avoid missing out on top candidates. Charter schools in Chicago tended to hire teachers significantly earlier in the year than those outside of Chicago (see Appendix C). Just

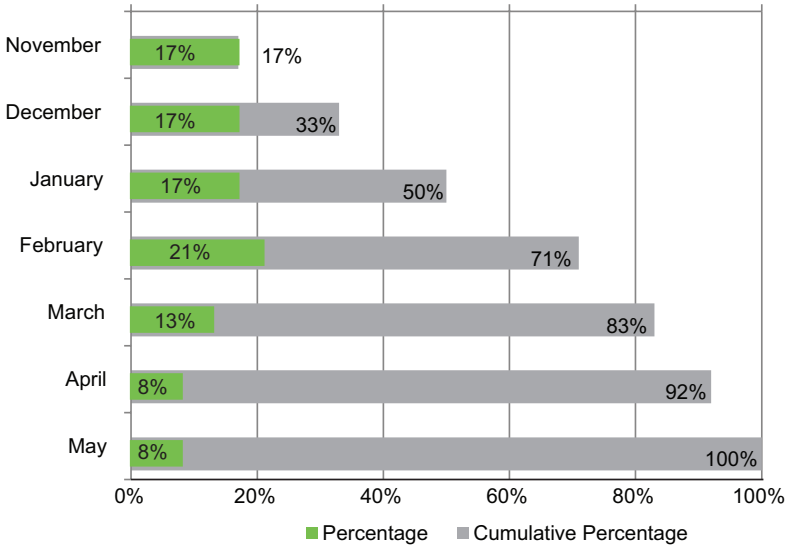

Figure 5. In what month do you start recruiting for open teacher positions? (*n*=24)

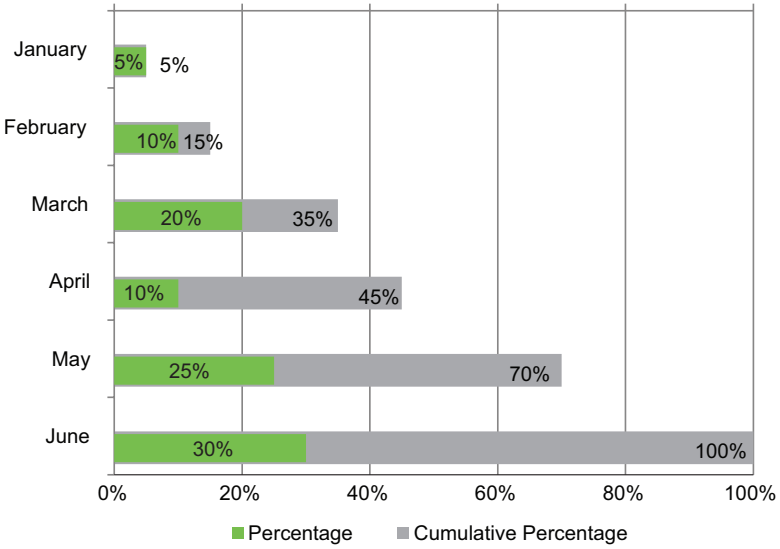

Figure 6. In what month do you typically hire new teachers? (*n*=20)

over half (53%) of Chicago charters hired teachers before May, whereas no charter schools outside of Chicago did so.

Recruitment efforts often involved multiple activities throughout the year, beginning as early as November. For example, the first of KIPP's five application deadlines during the 2013-14 academic year was in early November. For the 2013-14 school year, Intrinsic Schools began recruiting teachers with an open house in mid-November, communicated their needs for the next school year to suppliers such as TFA, and ramped up to a "full press" in January. However, Intrinsic Schools leadership points out that hiring in January might be too early, because some high quality candidates might not decide they are leaving other schools until later in the year. UNO Charter School Network allows each director to hire autonomously and each school has a different number of candidates, so recruitment timelines tend to vary by campus, even though leadership acknowledges that taking a longer time to make offers "can be detrimental to the candidate experience."

Selection Criteria

Next, we asked administrators to describe the qualities and characteristics they considered in determining whether to offer a position to a prospective teacher. We focus on these selection criteria because research from industrial and organizational psychology finds that measures of cognitive ability, especially when combined with work samples, non-cognitive assessments, and structured interviews, are good predictors of job performance (Schmidt & Hunter, 1998). Similarly, education research suggests that using multiple measures of teacher cognitive and noncognitive characteristics can help school improve the quality of the teachers they hire (Rockoff, Jacob, Kane, & Staiger, 2008). Nonetheless, prior studies suggest that school administrators tend to focus on personal characteristics with less predictive significance, such as collaboration and enthusiasm, when selecting teachers (Harris, Rutledge, Ingle, & Thompson, 2010; White, Brown, Hunt, & Klostermann, 2011). Some studies indicate that there are few differences between the teacher selection criteria used in charter schools and those used in district schools (Cannata & Penaloza, 2012), whereas others find that charter schools tend to have more extensive hiring practices than district schools (DeArmond, Gross, Bowen, Demeritt, & Lake, 2012).

For the Illinois charter schools in this study, the most frequently sought teacher characteristic (67%) was an understanding of and buy-in to the school's mission (see Figure 7). Studies from both the non-charter sector (Harris et al., 2010) and the charter sector (Gross & DeArmond, 2011) find that school leaders tend to seek candidates who fit their school's missions, and recent research suggests that person-organization fit can improve teacher effectiveness and reduce teacher turnover (Grogan & Youngs, 2011; Jackson, 2013;). As one of our participants put it: "hiring is probably the only time a school can establish its beliefs and be clear about what they want in a teacher." For example, North Lawndale College Prep's administration says the school is looking for teachers who are driven by the mission of helping every student graduate from college, and they attribute much of their success to mission alignment between teachers and the school. Similarly, the Noble Network seeks teachers whose disciplinary philosophy matches that of the school and who believe that low income students can learn and that Noble can help them achieve. We spoke with The Orange School as they were preparing to begin their first year, and they stated that one of their

Figure 7. What characteristics do you look for when considering whether to hire a prospective teacher at our school? (*n*=27)

biggest initial concerns was differentiating their mission from other local charter schools and identifying teachers who fit their mission.[3]

Almost half (48%) of the charter school administrators in this study also placed value on experience working with the types of students served by their schools, typically the urban poor. For example, several schools, including Catalyst Schools and North Lawndale College Prep, gave a leg up to applicants with experience in inner-city schools, regardless of sector. Other schools, such as the SIUE East St. Louis Charter High School, were especially interested in candidates who had ties to the community, and emerging research indicates that principals often prefer to hire teachers who live near their school (D'Amico, Earley, & Pawlewicz, 2015). The same proportion of schools (48%), including the Chicago Math and Science Academy and Young Women's Leadership Charter School, reported looking for teachers who were good collaborators. Content knowledge and academic achievement were mentioned by about two in five (41%) participants, especially in high schools. For example, the Noble Network sought teachers with a history of achievement and The University of Chicago Charter Schools wanted high school teachers to have deep content knowledge and comfort with college preparatory materials.

More than a third of the schools in this study (37%) mentioned they were looking for teachers who were open to feedback or displayed good pedagogical and classroom management skills. With regard to feedback, the Civitas CICS schools said that they sought teachers with some experience (1-4 years), but who were still open to changing their methods and willing to be observed and evaluated. Similarly, Perspectives Charter Schools stated they were looking for teachers who were "coachable." Chicago charter schools were more likely to seek teachers who were open to feedback (43%) than schools in the rest of the state (0%; see Appendix C). Regarding pedagogy, KIPP Chicago Public Charter Schools, Catalyst Schools, and the CICS-Charter Schools USA schools all mentioned planning and execution of lessons, typically measured through a sample lesson (see "Hiring Processes" below for more details). YouthBuild McLean County Charter School said they wanted teachers who could teach in a variety of modalities and were able to find multiple ways to connect their students with the content if the first attempt did not work.

Six schools (26%)—KIPP, North Lawndale College Prep, LEARN Charter School Network, Kwame Nkrumah Academy, Rowe Elementary School, and Galapagos Charter Schools—explicitly stated that they sought teachers who could provide evidence of student growth or had track records of student success, and non-unionized charter schools (30%) were significantly more likely than unionized charter schools (0% of four) to seek such evidence. For example, Galapagos asks teacher candidates to bring to their interview evidence of student achievement and growth. Thirty percent of schools in this sample sought teachers with a strong work ethic, and Chicago charter schools (33%) were significantly more likely to mention this feature than charter schools outside of Chicago (0% of five; see Appendix C). Smaller proportions the schools in this study also mentioned that they were specifically looking for teachers with experience with particular programs or curricula used by the school (11%) and the ability to use data (11%; see Figure 7). Though state law requires that 75%

[3] The Orange School subsequently withdrew plans to open in 2014-15. (http://www.dnainfo.com/chicago/20140225/rogers-park/orange-school-drops-plan-open-arts-focused-charter-on-north-side)

of charter school teachers be certified, only 15% of schools mentioned basic requirements such as certifications and background checks. However, it is possible that many respondents reasoned that such minimal qualifications went without saying. Interestingly, only two schools (7%) explicitly mentioned seeking teachers with extensive teaching experience, although it is difficult to determine whether administrators did not seek highly experienced teachers due to preference, or because they feel they are unable to attract such teachers.

It is also worth noting that principals in the Noble Network have complete discretion to hire (and dismiss) teachers, without any input from the network level, so the network representative interviewed for this study did not know the specific criteria that were used. According to the interviewee, Noble Network principals often shared tips about hiring, and the network uses a shared personnel management platform (they planned to move to customized version of TeacherMatch the following year). So while there may be some commonalities across the network in terms of selection criteria, there are also nuances by campus. For example, our contact said, some Noble Network principals might desire teachers who plan to stay in the profession long term, while others favor candidates who only anticipate staying for a couple of years.

Hiring Process

We then asked participants to describe various aspects of their typical teacher hiring process, including the steps taken, the individuals involved, and any artifacts collected. The first step in this process is typically an applicant screening, either by phone or by resume review. Tools such as the Haberman Star Teacher Pre-Screener (at Catalyst), AppliTrack (at North Lawndale College Prep and LEARN Charter School Network), and TeacherMatch (at Civitas CICS) were often used in this stage. TeacherMatch is a relatively new system in which candidates can post portfolios, resumes, and cover letter, then take a survey called the Educators Professional Index (EPI) that assesses their teaching capacity, problem solving skills, and attitudes and attempts to predict their likelihood for success in a given school. The school personnel involved in this stage are minimal, though the position responsible varies widely among schools and networks.

Applicants who progress through the initial screening then typically advance to the interview stage. (In some schools, such as Intrinsic Schools, the next stage would be to complete a full application, including essays.) This process can last up to a full day and often involves multiple interviews, including one-on-one, small group, and large group interviews. For example, the on-campus interview at Galapagos Charter Schools includes a fit interview, a demonstration lesson (see below), feedback, coaching, and practice related to the demonstration lesson, a tour of the school with an instructor, and a writing task. Intrinsic Schools use a full Saturday and involves up to five activities, including group data analysis, a content interview, and a fit interview. KIPP also uses a full day final interview. Rowe Elementary School uses an initial interview to assess mission fit, a second interview to determine pedagogical fit, and then a panel interview. Both 8 Points Charter School and UNO Charter School Network ask candidates to bring and review lesson plans. Administrators, teachers, parents, and occasionally students (where appropriate) can be involved in these interviews. For instance, at Ball Charter School in Springfield, six to eight candidates are selected for interviews, which are conducted by an administrator, a current

teacher, a board member, and a parent from the appropriate grade level. At YouthBuild McLean County Charter School, students also interview the candidate and their input is taken into consideration in the final decision.

Gross and DeArmond (2011) found that over half of the charter schools they visited required a teaching demonstration as part of the teacher hiring process. We found that 81% of the schools in the Illinois sample used demonstration lessons (see Figure 8). We heard several examples of how schools worked the logistics for this task. For example, Christopher House Elementary School prefers to visit the candidate's current school to observe lessons to get a better gauge on the rapport the teacher has built with his or her students, whereas Intrinsic Schools prefer video recordings from the candidate's current classroom and Passages Charter School will have the candidate substitute or teach summer school on their campus. YouthBuild McLean County Charter School provides an open-ended prompt to deliver a "creative" lesson in order to determine if the candidate shares their vision of creativity. The CICS schools managed by Charter Schools USA ask candidates to give one mini-lesson based on their own lesson plans and one based on the school's lesson plans. The University of Chicago Charter Schools use the school's instructional rubric and student feedback to evaluate the demonstration lesson, and KIPP judges the sample lesson on clarity, whether it is objective-driven and engaging, and whether the teacher has a strong presence in the classroom, then provides the candidate an opportunity to reflect on the success of the lesson. We also heard some critiques about demonstration lessons from schools that do not use them, particularly when teaching candidates are brought into the hiring school to for the lesson. These schools argued that such demonstration lessons are not helpful to the students who must participate and that they can be inaccurate and inauthentic, because the teacher has not built a rapport with the students. Proponents counter that assessing instruction in the demonstration lesson is secondary to gauging teachers' attitude. For example, some of the schools in this study provide feedback to the candidates regarding their demonstration lesson, at least partially to see how receptive they are to coaching.

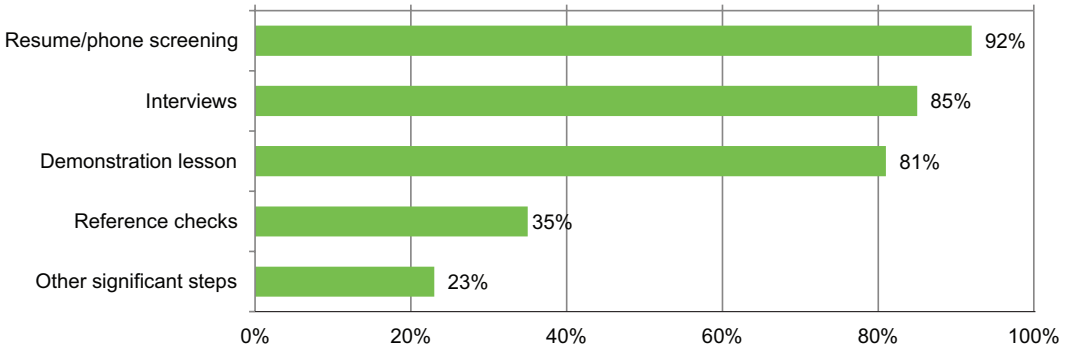

Figure 8. What steps generally occur between when an application is received and an applicant is hired? (*n*= 26)

Thirty-five percent of the schools we interviewed also noted using reference checks, and Chicago (40%) and non-unionized charter schools (41%) were significantly more likely to mention this step than were non-Chicago (0% of five) and unionized (0% of four) schools, respectively (see Appendix C). Some schools addressed this task much more seriously—and found them much more useful—than others. The Noble Network, for one, uses an especially rigorous reference check system, conducting lengthy and pointed phone interviews with at

least five references for each candidate. Noble Network candidates have been asked to provide up to 25 references, and references are often asked to nominate others who might be able to speak to the candidate's qualifications, and the school recently hosted a "reference-palooza" event to model this system for other local schools.

Evidence and artifacts collected during the hiring process include lesson plans, transcripts and other evidence of a candidate's academic performance, and essays (see Figure 9). For example, the SIUE East St. Louis Charter High School, Kwame Nkrumah Academy, Galapagos Charter Schools, Young Women's Leadership Charter School, The University of Chicago Charter Schools, Springfield Ball Charter School, YouthBuild McLean County Charter School, and KIPP all request sample lesson plans and portfolios. Galapagos Charter Schools, on the other hand, does not look at any teacher portfolios, but requests pictures of a previous classroom to use as a reflection on classroom environment and asks candidates to complete a response to an article on a controversial topic. Intrinsic Schools plans to begin collecting ACT scores and year-by-year college grade point averages, which some research (Dobbie, 2011) indicates may be more predictive of teacher effectiveness.

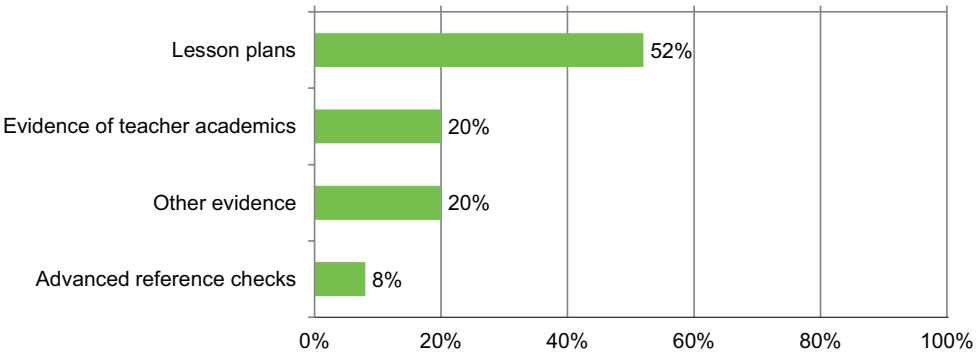

Figure 9. What sorts of evidence or artifacts are collected in the teacher hiring and selection process? (*n*=25)

According to Gross and DeArmond (2011), charter schools tend to involve a wide range of stakeholders in teacher selection in order to signal candidates about the school as a community. As shown in Figure 10, over three quarters (77%) of the schools we interviewed stated that teachers were involved in making hiring decisions, 19% of respondents involved parents, and 8% noted that student input was taken into account. Other representatives not listed in the figure include the charter school's authorizing agency and board members.

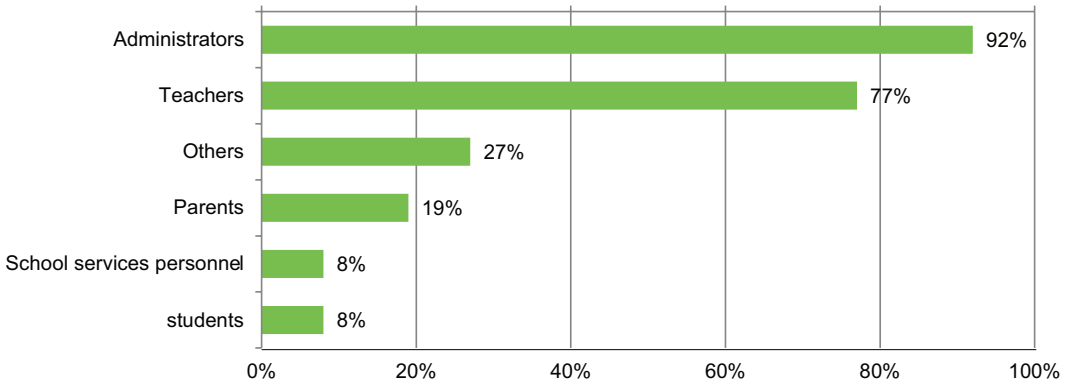

Figure 10. Who is involved in making decisions about whether or not a teacher is hired? (*n*= 26)

When it comes to making the final hiring decision, only a third (33%) of the schools interviewed relied solely on the principal's discretion (see Figure 11), though Chicago charter schools (41%) were significantly more likely than non-Chicago charters (0% of five) to leave this decision to the principal alone (see Appendix C). The plurality of sites in this study (48%) also included other school personnel in this decision, while campuses that belonged to a network often also included network staff. One third (33%) of the networked or CMO-managed schools interviewed for this study stated that network or CMO staff were involved in school-level staffing decisions.

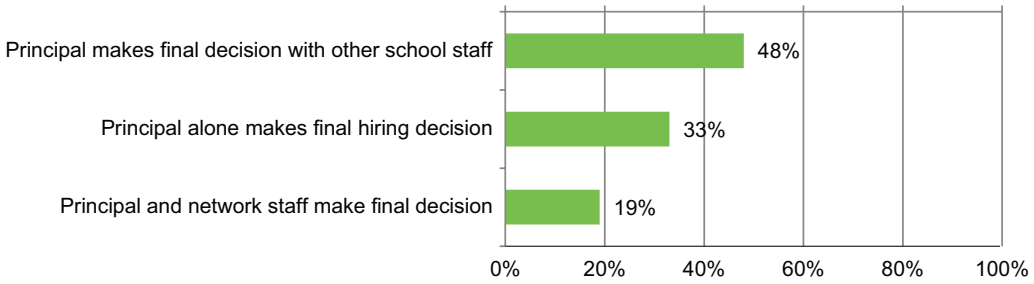

Figure 11. Who makes the final decision about whether or not a teacher is hired? (*n*= 21)

Orientation

Research from industrial and organizational psychology shows that socializing new employees through orientation can improve job performance and reduce turnover (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007) and successful CMOs provide intensive and ongoing socialization on the job (DeArmond, et al., 2012). All but one respondent (96%) in our sample reported having a formal orientation process for new teachers. As shown in Figure 12, the new teacher orientation process in these schools ranged from less than three days (29% of schools) to 11 or more days (34%), with an average of eight and a half days. To put this in context, the standard orientation for Chicago Public Schools is one day, and only 18% of the districts in the National Center on Teacher Quality's (NCTQ) teacher contract require more than four days of new teacher orientation. Interestingly, unionized charter schools tended to have significantly shorter new teacher orientation periods (M = 2.4 days) than did non-unionized schools (M = 10.0 days), and were significantly less likely to have orientation periods of two weeks or more (0% of four vs. 59%; see Appendix C). More mature charter schools—those that had been established for five or more years—were also significantly more likely than newer charter schools to have new teacher orientation periods lasting more than two weeks (100% vs. 35%; see Appendix C).

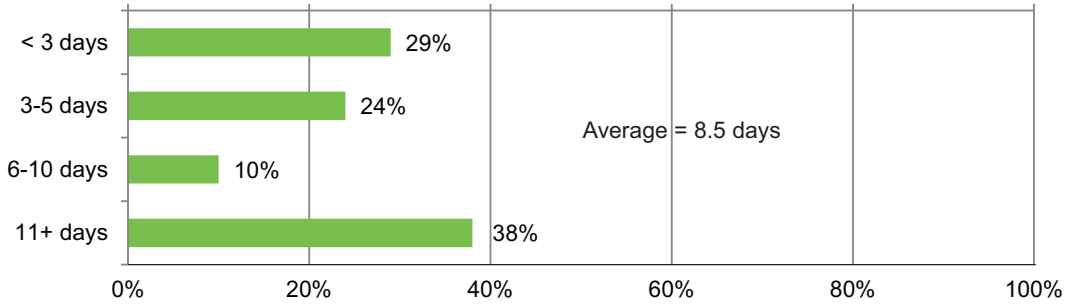

Figure 12. What is the duration of your orientation for new teachers? (*n*=21)

Seventeen schools in our sample also volunteered that they provided back-to-school orientation for all teachers, rather than solely for new employees. Figure 13 shows that the average duration for school-wide orientation (7.8 days) was slightly shorter than those solely for new teachers (8.5 days, Figure 14), meaning that new teachers generally reported to orientation shortly before the rest of the staff. These orientation periods typically took place in the week (or weeks) just prior to the beginning of the school year. For example, the Charter Schools USA-managed schools from CICS uses a three- to five- day new teacher orientation, followed by two weeks of school-wide professional development prior to the beginning of fall semester.

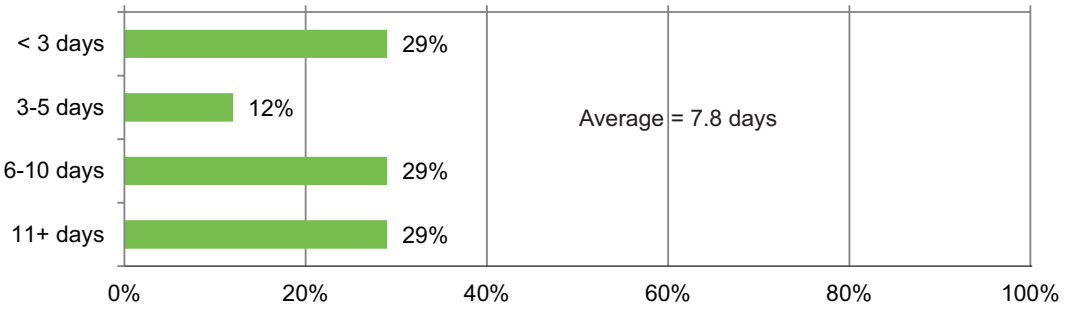

Figure 13. What is the duration of your orientation for all teachers? (*n*= 17)

Several schools also noted that they offer mid-year orientation as follow up or for teachers who were hired later in the year. For example, new teachers from Catalyst Schools meet three or four additional times throughout the school year for "Lasallian formation evenings" and new teachers from the SIUE East St. Louis Charter High School meet monthly for additional assistance. Similarly, Springfield Ball Charter School and the Civitas schools of CICS offer a second orientation session prior to the beginning of the second semester.

Gross and DeArmond (2013) find that successful school organizations spent considerable time socializing staff not just on instruction, but also around the school's mission and culture. As shown in Figure 14, new teacher orientation in these schools typically addresses logistical issues (48%), such the location of school bathrooms and training on computer systems, as well as more strategic issues, such as school culture (48%) or teacher evaluation systems (20%). Almost half (48%) of the schools in this study emphasized school culture

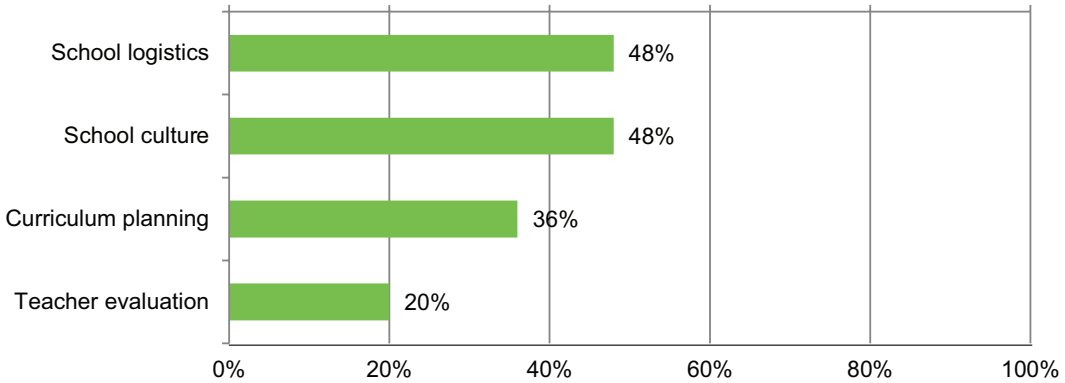

Figure 14. Please describe the content of your new teacher orientation process. (*n*=25)

during orientation—such as the learning "the Intrinsic Way" at Intrinsic Schools or the essential principles of Lasallian education at Catalyst Schools. The Civitas schools of CICS provide new teachers with background on the organization's mission, why teachers were hired, and in depth conversations about race, class, culture, and power based on common readings assigned over the summer.

These schools' orientations also often set aside time for curricular planning (36%), either individually or in teams alongside experienced staff, and to introduce new school-wide initiatives, such as UChicago Impact's Strategic Teaching and Evaluation of Progress (STEP) and balanced literacy at The University of Chicago Charter Schools. Christopher House Elementary School was beginning its first year at the time of our study, so all staff were new to the school. They organized a three week orientation in July that addressed the school's evaluation framework, expectations for students and teachers, and school policies and procedures. For subsequent orientations, they planned to include an additional week of orientation solely for new staff. Several schools, such as The Montessori School of Englewood, refer to this orientation period as "Institute." For instance, the Victory Education Partners schools of CICS have three weeks of summer institute beginning in August, where the school covers several techniques from Doug Lemov's Teach Like a Champion (2010), review components of the curriculum, develop interim assessments for unit planning, and review lesson planning. 8 Points Charter School in Jacksonville begins each year with a two week teacher institute, including two or three days just for new teachers, which provides an orientation to academic planning, family advocacy and home visits, and school policies and procedures. Overall, 20% of schools addressed their teacher evaluation systems during orientations, but unionized schools were significantly more likely to address this topic during orientation (75%) than were non-unionized schools (10%; see Appendix C).

Beyond orientation, some schools reported providing additional accommodations to new teachers (see Figure 15). New teachers at many schools receive additional coaching. For example, at Intrinsic Schools, new teachers are paired with master co-teachers in their "pods" for support. At Perspectives Charter Schools and The University of Chicago Charter Schools, new teachers are observed more frequently and provided additional coaching. Other schools, such as KIPP, support new teachers by allowing them to begin as residents or co-teachers before transitioning to a full teacher role once they gain experience. Some schools, such as LEARN Charter School Network, tend to reserve these reduced roles for first-year TFA corps members.

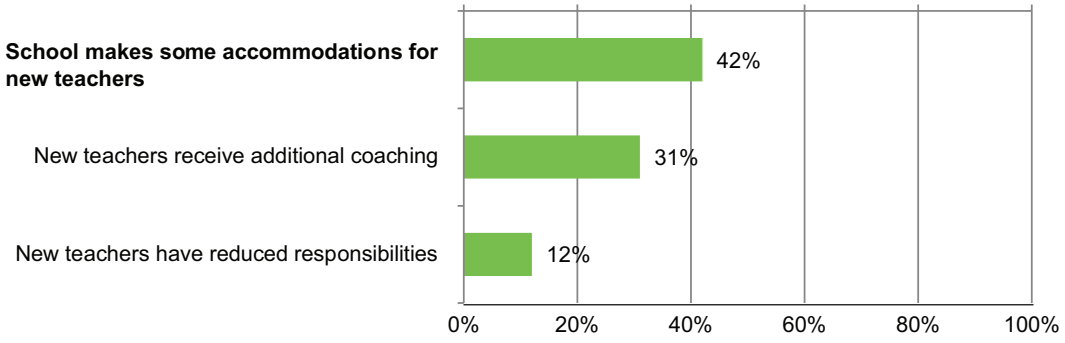

Figure 15. Does your school provide any other special accommodations for new teachers? (*n*= 26)

Mentoring

Illinois state law requires two years of mentoring for new teachers in district schools (NCTQ, 2015). Research finds that new teacher mentoring can have a positive impact on teacher retention (Ingersoll & Smith, 2004) and student achievement gains (Glazerman, Isenberg, Dolfin, Bleeker, Johnson, Grider, & Jacobus, 2010) in some circumstances, but only if the program is comprehensive, intensive, and is sustained over multiple years. About three-quarters (72%) of the schools interviewed for this study use mentoring to support new teachers, but these are just as likely to be informal systems rather than formal mentoring programs (Figure 16). In the formal programs, mentors and mentees may be paid a stipend (such as at Intrinsic Schools) and mentors observe novice teachers and provide feedback (such as at Passages Charter School) and have regular scheduled meeting time (such as at the Springfield Ball Charter School and 8 Points Charter School), in addition to any informal support they may provide. Informal mentoring programs, such as those at YouthBuild McLean County Charter School or Perspectives Charter Schools, might involve master teachers or instructional coaches who are not specifically paired with a single new teacher and may provide coaching to the staff as a whole. Unionized charter schools were significantly more likely than networked or CMO-managed schools to have a teacher mentoring program (100% vs 67%; see Appendix C).

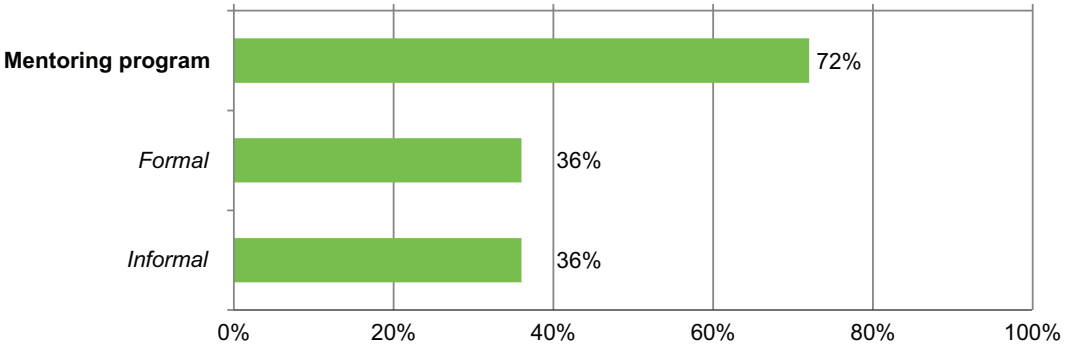

Figure 16. Does your school utilize a mentoring program for new teachers? (*n*=25)

Experienced teachers from the same grade or subject area typically serve as mentors in charter school mentoring programs. The Civitas CICS schools report that their mentoring program has been a "really important investment," but other schools interviewed were more skeptical about the utility of mentoring. For example, one charter school in our study recently discontinued their mentoring program after finding it was unsuccessful. Another school has moved to a more "logistical and emotional support" model of mentoring after finding little success using more instructionally-geared mentoring. These schools both offered several lessons to others considering similar programs. First, they say that mentors must find balance between their evaluative and formative functions. Schools also need to be very clear with communication about mentors' roles, especially when changes are made to the program. Finally, they note that charter schools in particular need to make sure they consistently have sufficient experienced teachers to staff the program.

Professional Development

As Chadwick and Kowal (2011) observe, increasing the supply of great teachers is not just about finding and keeping the best talent using comprehensive and strategic recruitment and selection methods, but also about developing in-house talent. To tap into these practices, we asked a series of questions regarding professional development (PD) strategies. As shown in Figure 17), more than half (58%) of the schools in our study provided weekly early release (or late arrival) days for PD. These were typically in the form of half-days, with two to four hours of planned PD activity. Schools and networks typically tried to devote some of these early release days for school-wide or cross-campus collaboration, whereas other days were devoted to more individualized activities. For instance, North Lawndale College Prep uses about one-third of their early release days for department- or grade-level meetings focusing on three or four individual students, one-third for counselor led training (again focusing on just a few students), and the remaining one-third for school-wide activities such as faculty meetings. Similarly, Passages Charter School tried to devote about half of their PD time to school goals (such as Common Core implementation in 2013-14), a quarter to committees and cross-curricular collaboration, and another quarter to individual teacher work time, such as grading. YouthBuild McLean County Charter School says that they experimented unsuccessfully with "flexible Fridays" allowing staff more freedom to leave campus during early release time in previous years, but found that this could "get out of hand" quickly, as some staff were left to bear the brunt of the work to be done.

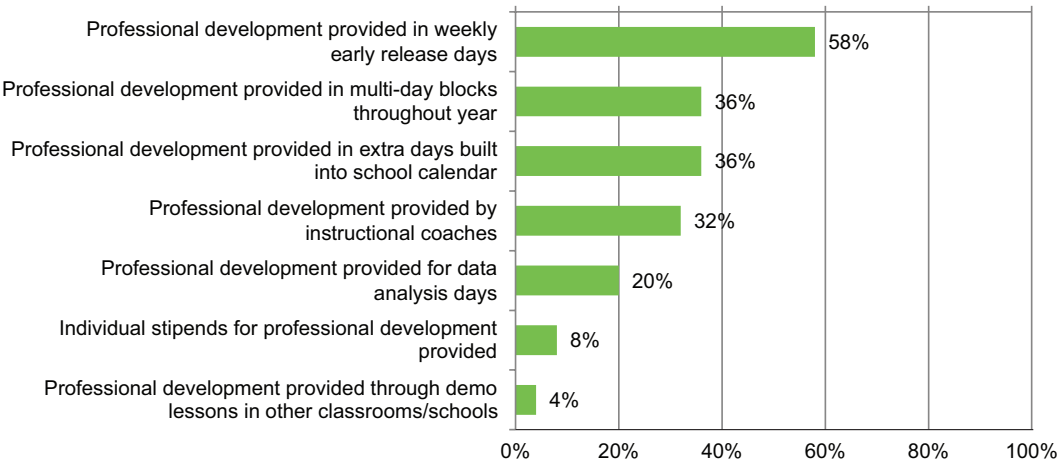

Figure 17. Which of the following features describe your approach to professional development? (*n*=25)

More than one-third (36%) of the schools interviewed used multi-day blocks throughout the year for PD. For example, YouthBuild McLean County Charter School has two 3-day workshops built into their annual calendar for PD from their national network, North Lawndale College Prep devotes two weeks at the end of each year for whole staff review of the previous year, and Galapagos Charter Schools use a one week intersession in October for PD. Another common PD approach was to build extra teacher work days into the school calendar (36%). The number of PD days built into school calendars ranged from three to nine (or one day per month). Springfield Ball Charter School provides teachers with two full days without students per quarter (one built into the contract plus one additional built into the calendar) —one devoted to PD led by their literacy specialists, and another for them to design lessons

integrating this PD. At one anonymous school, on the other hand, there is no PD built into the school calendar; instead, PD opportunities are acquired as they become available. Schools often used several of these PD strategies in combination in a given year.

Almost one third of the schools interviewed for this study (32%) explicitly noted using instructional coaching for professional development, and charter elementary and middle schools were significantly more likely to utilize instructional coaches for professional development (54%) than were charter high schools (8%; see Appendix C.) At UNO Charter School Network, every teacher has a professional growth plan aligned to their evaluation system, and master teachers provide daily observations and feedback and help connect teachers with the PD resources tailored to their needs. Galapagos Charter Schools and The University of Chicago Charter Schools described similar strategies using observations and coaching models to provide support and guide improvement. School leaders at Galapagos note that their instructors receive over 300 hours of PD each year, almost all of which is provided by in-house facilitators. At Christopher House Elementary School, teachers have individual stipends to pursue PD outside of the school, but also access to model lessons taught by the school's principal.

One in five (20%) of the schools in this study also used data analysis days as a primary PD strategy. For example, five of the six full-day PD sessions at Galapagos Charter Schools are focused on using data from their interim assessments to drive instruction. 8 Points Charter School in Jacksonville focuses on data during their Friday "late in" PD sessions, investigating school culture data, academic data, social-emotional data, and longitudinal data from the previous month. The Noble Network has quarterly network days where teachers from different campuses gather by grade level or subject to examine assessment data, determine who is having success, and what might have led to that success. Through these sessions, the network is able to learn from those doing well and begin to codify and disseminate best practices, while working to eliminate those practices that have been less successful.

Most of the charter schools in this study report that their PD tends to be a mix of individualized and school-wide opportunities (see Figure 18), however about a quarter (24%) reported relying primarily on school-wide PD. The Noble Network, KIPP, and Catalyst Schools networks all noted that their approaches to PD may vary from campus to campus. Springfield Ball Charter School said that, while they used to have individualized PD, they moved to school-wide during the 2013-14 school, which they feel has led to greater collaboration and discussion.

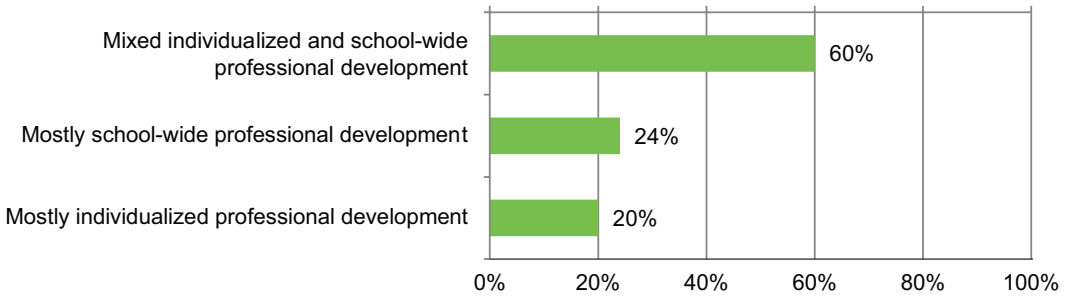

Figure 18. Do all teachers participate in the same professional development or is PD tailored for each teacher? (*n*=25)

Research from industrial and organizational psychology suggests that professional learning is most effective when based on a thorough needs assessment, in order to avoid spending money on unnecessary training, offering too little training, or offering the wrong kind of training (Brown, 2002). About one third (32%) of the charter schools in this study reported that their PD—individual or school- wide—was based on teachers' observed needs, and about one third (32%) of administrators said that PD was based around school goals (see Figure 19). For example, at The University of Chicago Charter Schools, the principal, instructional coach, and mentors use data from teacher evaluations and walk-throughs to determine PD needs. At the Civitas CICS schools, PD is tailored to each campus and based on that school's specific needs and goals (as determined by the school's staff). PD content is chosen, at least in part, by the leadership team at just over half (52%) of the schools, whereas PD is determined, at least in part, with teacher input, at more than one third of schools (36%), typically through a self-reported needs assessment. Several schools offer PD that is selected by leadership as well as PD selected by teachers. For example, The Noble Network of Charter Schools have quarterly network PD days and also allow staff to vote on teacher-led PD on topics, and if more than five teachers sign up, the session will be offered. About a quarter (24%) of the schools interviewed explicitly mentioned using school data such as assessment results to help guide PD. For instance, the board and administration of Kwame Nkrumah Academy determine PD each year based on school data. Catalyst School's network-wide PD is based on their analysis of assessment data, and the Victory Education Partners-managed schools of CICS use interim assessment results to guide PD. Relative to charter schools in Chicago, those outside of Chicago were significantly less likely to use school goals (0% of five vs. 37%) to direct professional development, and non-unionized charter schools (33%) were significantly more likely to use data and assessment results to direct PD content than were unionized schools (40% of four; see Appendix C). A general theme across these responses is that PD is oriented around individual or school needs, rather than dictated from afar or undertaken simply to meet external requirements. One exception was a YouthBuild McLean County Charter School, where the national organization determines local PD content.

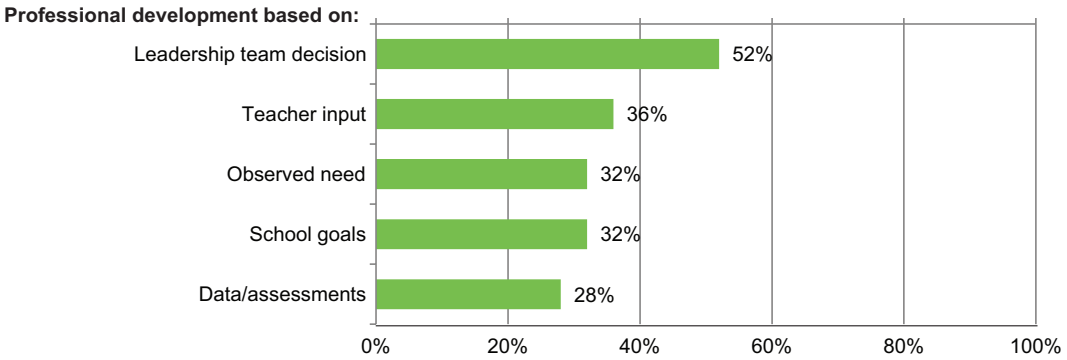

Figure 19. Which methods do you use to determine the focus of professional development? (*n*=25)

Teacher Evaluation

Next, we asked several questions about teacher evaluation policies and practices. It is worth noting that several charter school networks do not utilize system-wide teacher evaluation systems and, instead, devolve many major decisions about teacher evaluation to the school level. For example, according to Harris (2014), the Noble Network allows the principal at each campus to design his or her own teacher evaluation system. For this reason, data for some schools are somewhat sparse in this section, but this degree of flexibility permitted at the network level with regard to teacher evaluation is noteworthy in its own right. In fact, the Noble Network states that principal autonomy is central to the network's theory of change, and that they have become even less centralized over time.

Our first set of questions about teacher evaluation centered on the evaluation standards and observations. As shown in Figure 20, about half (52%) of the schools interviewed used Charlotte Danielson's Framework for Teaching (2011) to rate teacher performance during classroom observations. The Danielson Framework is widely utilized in school districts throughout Illinois—the earlier INCS (2011) study found that three quarters (75%) of participating Illinois charter schools used the Danielson Framework, and it is also the professional practice measure used in the state's default teacher evaluation model and the statewide teacher evaluator certification course ("Growth through Learning"). However, our study also found that unionized charter schools (100% of four) were significantly more likely than non-unionized charters (43%) to use the Danielson Framework, and significantly less likely to use locally-developed or "home grown" evaluation standards and rubrics (0% of four vs. 52%; see Appendix C.)

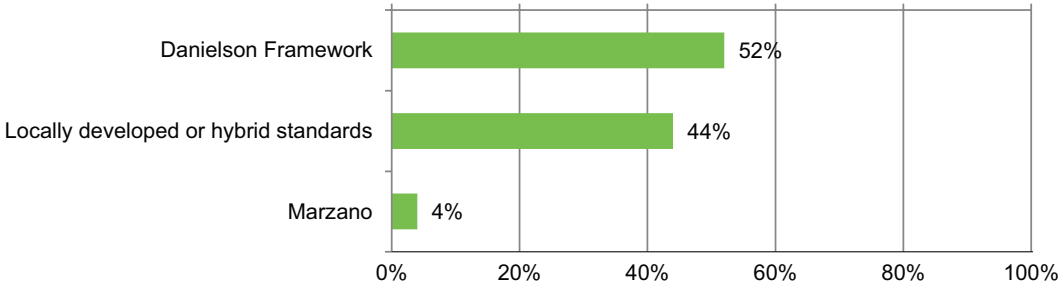

Figure 20. If classroom observations of teachers' instructional practice included as part of your summative evaluation ratings, which teacher performance rubric does your school use during classroom observations? (*n*= 25)

The Charter Schools USA CICS schools use the Marzano (2007) teacher evaluation model, and the remaining schools (44%) use a locally developed evaluation framework or some combination of these models. For example, KIPP schools have their own teacher evaluation rubric that is used network-wide throughout the country. The University of Chicago Charter School uses a home-grown instructional rubric for both teacher evaluation and for assessing demonstration lessons during teacher hiring. The rubrics measure skills such as differentiation, classroom management, and cultural competence, and evaluators can use all or just parts of the rubric, depending on the teacher, the observers, and their goals. Intrinsic Schools found that existing off-the-shelf evaluation rubrics were not a good fit for classrooms such as theirs that use little direct instruction. They were working to design their own

professional practice rubrics at the time of our interview, and, in the meantime, observers were scripting the lessons they observed and tracking time on task rather than using any formal evaluation rubric.

More than two in five (41%) schools in this study used more than one observer to rate each teacher's practice, and 18% used three observers (see Figure 21). This is important because recent research indicates that using multiple observers substantially increases the reliability of teacher evaluation ratings and can reduce the burden on principals (Ho & Kane, 2013; White, Cowhy, Stevens, & Sporte, 2012). In all but one of the schools interviewed (96%), principals or other administrators conducted at least some of the classroom observations. More than a third (35%) of the schools in this study utilized peer observations by master teachers and other teacher leaders as part of their teacher evaluation systems. The Illinois Network of Charter Schools (INCS, 2011) also found that many Illinois charter schools used multiple observers and include peer observations. Charter schools in Chicago were significantly more likely to utilize multiple observers (56%) than charters outside of Chicago (0% of five; see Appendix C).

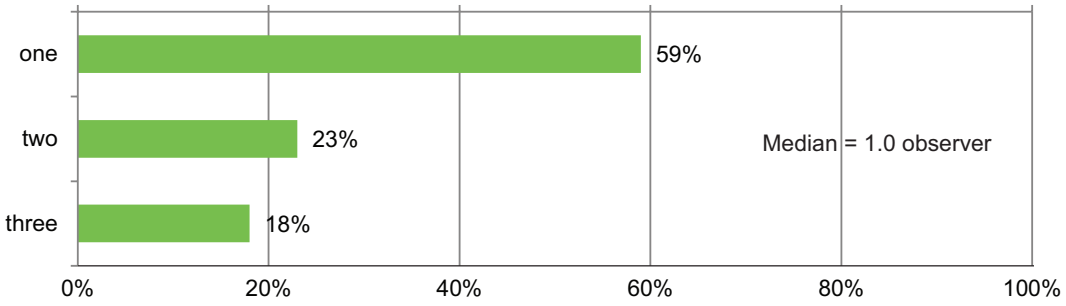

Figure 21. How many different observers rate each teacher's practice? (*n*=22)

About three quarters (79%) of the schools interviewed also reported that observers received training and regular recalibration, which is also important for improving reliability of ratings (Cantrell & Kane, 2013). Many schools used the Growth through Learning modules for this training, and some, such as Christopher House Elementary School and the SIUE East St. Louis Charter High School, also worked with trainers from the Danielson Group.

Research also indicates that multiple observations for teacher evaluation are more reliable than a single observation (Kane & Staiger, 2012), and Illinois' Performance Evaluation Reform Act requires that, by 2016-17, all teachers in district (non-charter) schools must be observed at least twice (Illinois General Assembly, 2010). As shown in Figure 22, the average school in this study used four classroom observations for each teacher's evaluation, and 43% of the schools used six or more observations. Charter schools in Chicago tended to use significantly more observations for teacher evaluation (more than 10) than did the five non-Chicago schools (4.1; see Appendix C). A prior study (INCS, 2011) found that a much smaller proportion (about a third) of the Illinois charter schools sampled used three or more formal observations each year, and it should be noted here that many schools in our sample used informal or walk-through observations in teacher evaluations, and some included these in their responses. For example, teachers at Christopher House Elementary School receive two unannounced observations per week of varying duration, each focusing

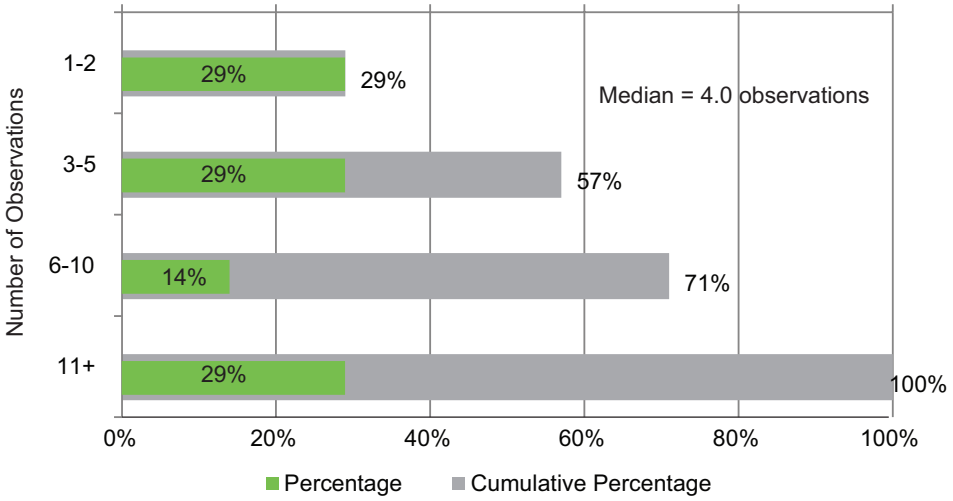

Figure 22. How many formal observations do teachers undergo as part of the evaluation process? (*n*=21)

on a specific component or domain of the Danielson framework, which count toward their summative evaluation rating. The five charter schools in Donaldson and Peske's (2010) study also used frequent, structured observations of teachers throughout the school year as part of their evaluation. Teachers at the Charter Schools USA CICS schools have a 5-minute administrative walk-through at least once a week, a 20-minute observation every week, and a walkthrough every other week, along with longer formal observations at least twice a year, all of which contribute to their summative rating. Similarly, Harris (2014) reports that Namaste Charter School uses 12 short informal observations and two longer formal observations for teacher evaluation. Some schools, such as UNO Charter School Network, do not conduct any observations solely for evaluation purposes, and others, such as KIPP, do frequent observations for coaching that do not factor into evaluation ratings.

Illinois' PERA law will require that new teachers and teachers with prior low evaluation ratings be observed three times, more often than veterans and those with high prior ratings (Illinois General Assembly, 2010). While charter schools are not required to comply with PERA, the number of observations for evaluation at these charter schools occasionally varied depending on the status of the teacher being observed. In some schools, inexperienced or marginally performing teachers were subject to more observations than experienced or high performing teachers. For example, in the Civitas CICS schools, teachers who are still developing receive three observations each year, whereas teachers rated at the highest level receive only two.

Student growth and other measures

Next, we asked charter school leaders to describe the other, non-observational data that are included in their teacher evaluations. Illinois' recent Performance Evaluation Reform Act (PERA) requires that, by the 2016-17 school year, student achievement growth must account for at least 30% of each teacher's summative evaluation score (Illinois General Assembly, 2010). Illinois charter schools, however, are not required to comply with PERA (Illinois

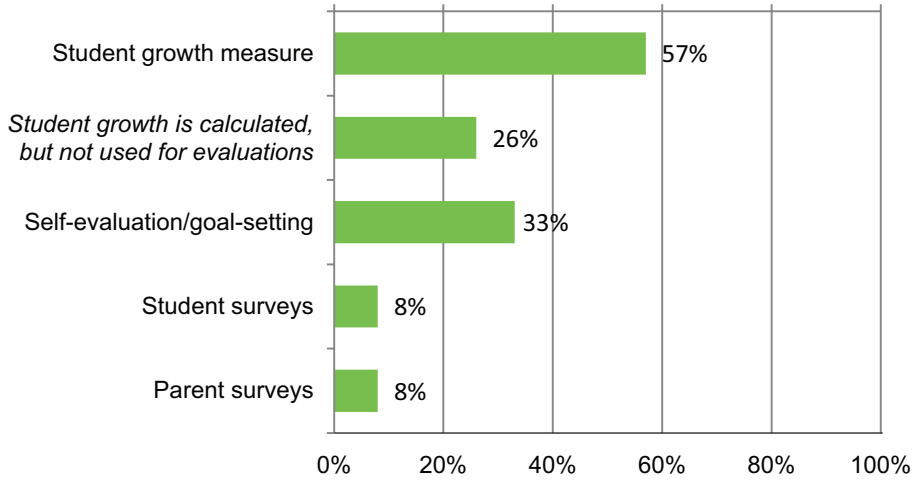

Figure 23. What data are included as part of teachers' formal evaluation ratings? (*n*=23)

General Assembly, 2010). As shown in Figure 23, more than half (57%) of the schools in this study used student growth for teacher evaluation. For comparison, only about 35% of the CMOs studied by DeArmond et al. (2012) and 50% of the Illinois charter schools in the INCS (2011) survey used some form of student growth measure in their teacher evaluations. When asked to describe the contribution of student growth to a teacher's final evaluation score, though, many schools we interviewed could not put a precise weight on this measure. For example, The University of Chicago Charter Schools say that teacher evaluation scores are "not formulaic," and that raters are allowed to take into account effort, growth, and context (such as whether a teacher was new to a subject), and give credit for coming close to meeting goals. Similarly, YouthBuild McLean County Charter School said that student growth was "important, but not heavily weighted." Kirkham (2012) notes:

> *[S]ome charter networks in Chicago have no formal written evaluations at all, giving individual principals the discretion to hold teachers accountable as they choose…and not bound by an overall district policy or a union contract that stipulates system-wide performance goals.*

Teacher evaluation in the Noble Network fits this description well, and also uses no overall summative rating. For schools that were able to cite a specific weight, the range was between 5% (Civitas-CICS) and 50% (LEARN). However, a recent article (Kirkham, 2012) indicates that student growth accounts for as much as 70% of a teacher's rating in some Chicago charter schools..

An additional quarter (26%) of the schools in our study calculated student growth scores for each teacher, but did not include this in their evaluations. Similarly, Donaldson and Peske (2010)'s study revealed that, although student growth was important for teacher evaluation, none of the five charter schools they studied formally included value-added data in their teacher evaluations. In our study, for example, both 8 Points Charter School and the Charter Schools USA-managed CICS schools utilize student growth data to direct professional development and support, but do not include this as part of the formal teacher evaluation.

Assessments used to calculate student growth for teacher evaluations were similar to those used in other evaluation systems in the state (Milanowski, et al., 2014) and included UChicago Impact's STEP, the Northwest Evaluation Association's Measures of Academic Progress, ISBE's Illinois Standard Achievement Test (ISAT) and Prairie State Achievement Examination (PSAE), and ACT's Educational Planning and Assessment System (EPAS).[4] Student growth on these assessments typically only applied to teachers in self-contained classrooms or core subjects like reading and math. Similar to other public schools (Milanowski et al., 2014), charter school teachers in "untested" subjects are often evaluated using student growth from teacher-created assessments and portfolios. For example, non-core teachers at Civitas CICS schools work collectively with administrators to develop Student Learning Objectives (SLOs) for evaluation, North Lawndale College Prep uses department-designed assessments for untested subjects, and Passages Charter School uses portfolios for their specialized content areas. However, there were some exceptions—for example, at Intrinsic Schools, social studies teacher evaluations included student growth in reading, and at the Victory Education Partners' CICS schools, art and gym teacher evaluations simply did not include a student growth component.

It is important to note that many schools also included other measures in their teacher evaluations, which—unlike student growth data—might be available for all teachers, including those in non-tested grades and subjects. For example, The University of Chicago Charter Schools use on-track indicators, which take into account student GPA and attendance rates, as part of the evaluation for all 6th–12th grade teachers, including data for students in their advisory or homeroom, as well as the subject(s) they teach. One third of the schools interviewed (33%) included self-evaluations or goal-setting, and non-unionized charter schools (40%) were significantly more likely than unionized charters (0% of four schools) to use self-evaluations (see Appendix C). Smaller proportions of schools included student surveys (8%) and parent surveys (8%) in teacher evaluation, and unionized charter schools were more likely to use parent surveys for teacher evaluation (50% of four) than were non-unionized schools (0%). Several other schools in this study used parent and student surveys for school improvement purposes, but not for teacher evaluations. For instance, the SIUE East St. Louis Charter High School and North Lawndale College Prep both analyze Illinois 5Essentials on school learning conditions, and KIPP uses their own "healthy schools" survey. Both Catalyst Schools and Civitas CICS schools factored teacher attendance in their evaluations.

Recent research suggests that teacher evaluation results can be successfully used to improve teacher performance and to help districts retain more of their best teachers than its least effective teachers (Dee & Wyckoff, 2015). So, we also asked charter school leaders how the results of teacher evaluation were used (see Figure 24), and specifically about the implications for teachers who had particularly high or low evaluation scores (see Figure 25). As shown in Figure 24, evaluation results were used in the majority of schools (52%) for formative purposes to direct PD by identifying weaknesses. Several schools, such as KIPP and the Noble Network, noted that evaluation scores were primarily used for instructional

[4] The ISAT and PSAE were linked to Chicago schools' accountability policy through 2012-13, and the NWEA and EPAS have been used as part of the policy beginning in 2013-14.

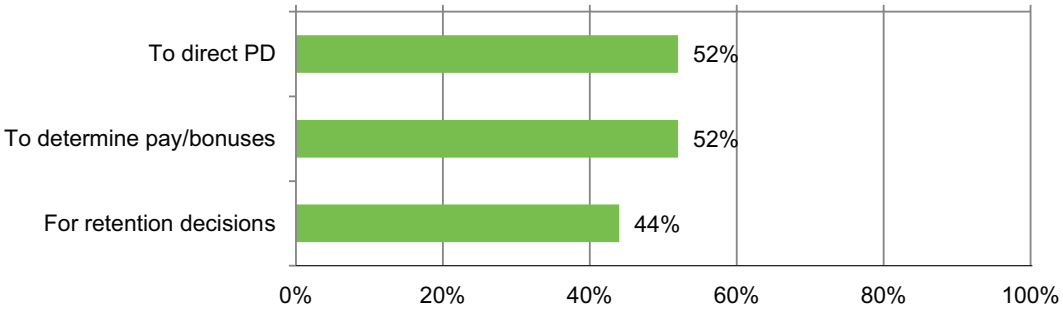

Figure 24. How are the results of teacher evaluations used at your school? (*n*=25)

improvement and served as "an extension of coaching." Donaldson and Peske (2010) report that the charter schools in their study also used evaluation primarily for growth and continuous improvement, and Gross and DeArmond (2013) describe similar practices in the schools they studied:

> *Rather than engage with each other only around a formal evaluation schedule, leaders and colleagues in these schools used embedded development and evaluation to constantly work together to improve their practice. (p. 12)*

In just over half (54%) of the schools interviewed, low evaluation ratings resulted in more intensive coaching or feedback, including remediation or growth plans (see Figure 25) whereby they could be let go if they did not improve after a predetermined period of time. For example, at the Civitas CICS schools, teachers with unsatisfactory evaluation ratings are put on an intervention plan describing their goals for improvement and supported with a consulting teacher for mentorship who was rated highly in the area where the teacher is struggling.

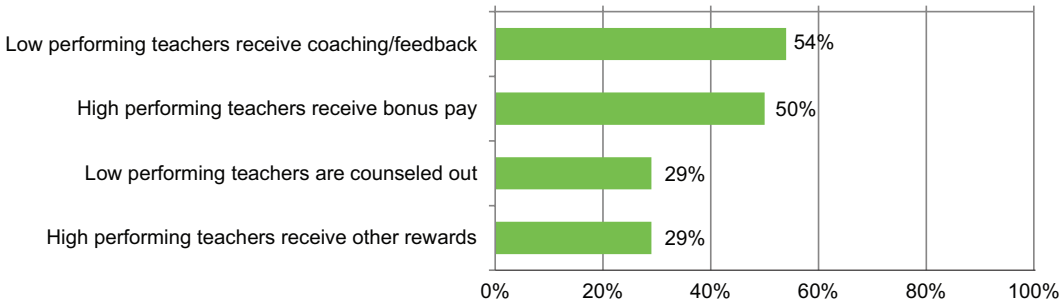

Figure 25. Do you provide any additional opportunities/recognition for high-performers or any interventions/consequences for low-performers? (*n*=24)

Prior research (Center on Reinventing Public Education, 2007) suggests that charter schools are more likely than district schools to dismiss low-performing teachers, though a recent study (Cowen & Winters, 2013) found little relationship between teacher effectiveness and teacher attrition in charter schools. Illinois Senate Bill 7 (Illinois General Assembly, 2011) required that teacher performance be used as a "primary criterion" in retention decisions in all district (non-charter) schools, beginning in the year of our study (2013-14). As indicated in Figure 25, among the schools in our study, it was much more common for low teacher evaluation scores to result in intensive coaching (54%) rather than being dismissed (29%).

Nonetheless, evaluation scores factored into retention decisions in 39% of the schools interviewed for this study.[5] For example, Galapagos Charter Schools reports using teacher evaluation scores to make decisions about layoffs, to counsel teachers out of the school, or to make changes in work responsibilities or job assignments. We also found that high performing teachers received non-financial rewards, such as increased opportunities for advancement or additional flex time, in 29% of schools, and Chicago charter schools were significantly more likely to offer such rewards (35%) than were non-Chicago charters (0% of five).

Compensation

Next, we asked charter leaders to describe features of the compensation systems, including base pay levels, factors that contribute to salaries, and any recruitment bonuses they may offer. Several schools were reluctant or unable to provide precise starting salaries[6] and were often more willing to cite typical pay ranges. As shown in Figure 26, reported base pay ranged from $55,000-$60,000 (Intrinsic Schools) to $30,000 (YouthBuild). For context, the average annual salary for a fully certified, first year teacher is $50,653 in Chicago Public Schools and $37,092 in Elgin U-46 (the only other Illinois district tracked by the National Council on Teacher Quality dataset; NCTQ, 2015). Actual starting salaries for teachers at these schools could vary based on numerous factors, and the low end of this range typically applied to newly minted teachers with no experience, TFA corps members, or teachers with reduced responsibilities. Thus, the starting salaries reported by each school were partially dependent upon whether such teachers were currently employed. Similarly, starting salaries

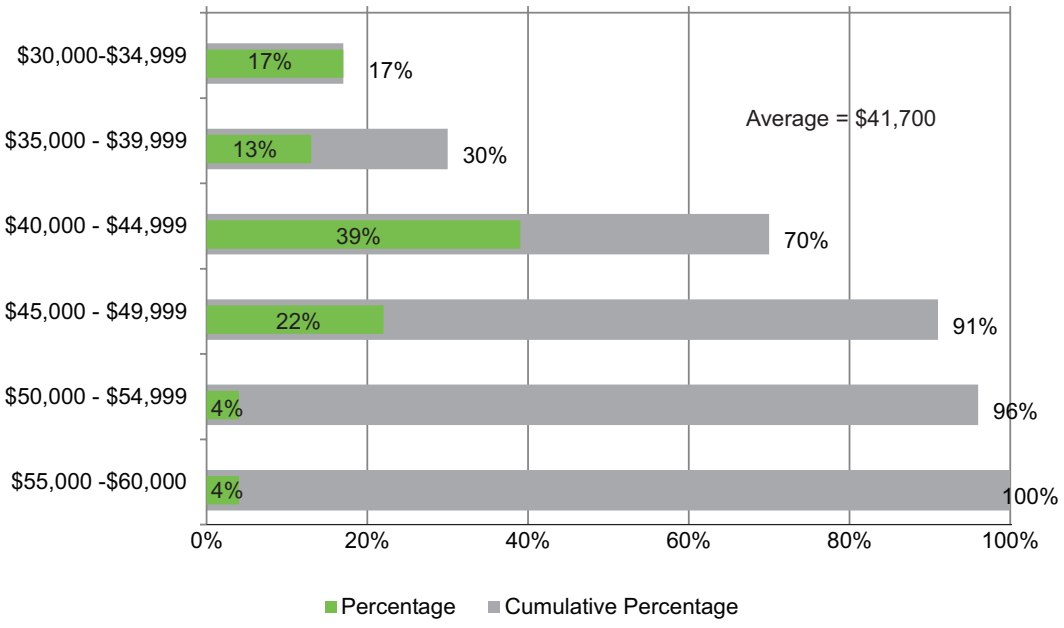

Figure 26. What is the approximate base pay for a teacher who is new to your school? (*n*=23)

[5] It is worth noting that these "retention decisions" could also include encouraging a teacher to remain at the school, as was the case in some schools, such as Intrinsic.

[6] Salary (and other) data for Illinois public school teachers, including charter school data, are publicly available and posted to the Illinois State Board of Education annually via the Teacher Service Record at http://www.isbe.net/research/htmls/teacher_service_record.htm

in Chicago charter schools tended to be significantly higher (M = $43,882) than those in non-Chicago charter schools (M = $34,220), reflecting regional differences in cost of living and the salaries in other local schools (see Appendix C).

Several respondents reported beginning salaries in relation to surrounding districts, indicating their sensitivity to the local market. For example, the Noble Network reported salaries that are "not competitive with CPS or the suburbs, at least before bonuses," and KIPP stated they are "competitive with other charters." More than half (52%) of the schools in our study used some form of market-rate to set teacher pay levels (see Figure 27). At UNO Charter School Network, starting salary depends on the candidate and the subject area, and one anonymous non-Chicago charter school considers market rates, but starting salaries are negotiated between each teacher and school administration. Several schools, such as Catalyst Schools network and North Lawndale College Prep, noted that they have conducted multiple salary surveys to examine typical teacher pay in their areas. North Lawndale says they have studied salaries closely and try to position themselves close to the average of Chicago charter schools, but this still leaves them lagging $8,000 to $15,000 behind CPS for some teachers. The school is trying to close this gap, and notes that teachers often begin near CPS levels, but that the school cannot keep pace with annual salary increases. Intrinsic Schools has tried to tie beginning salary levels to CPS (modeled at $55,000-$60,000) and linked experienced teacher salaries to the city and suburbs, hoping to be able to offer teachers more than they were making at their previous school. Similarly, Ball Charter School in Springfield examines candidates' prior salaries in order to remain competitive. However, in the end, Intrinsic Schools, as well as other schools such as Christopher House Elementary School, concluded, "We can't compete with CPS on salary."

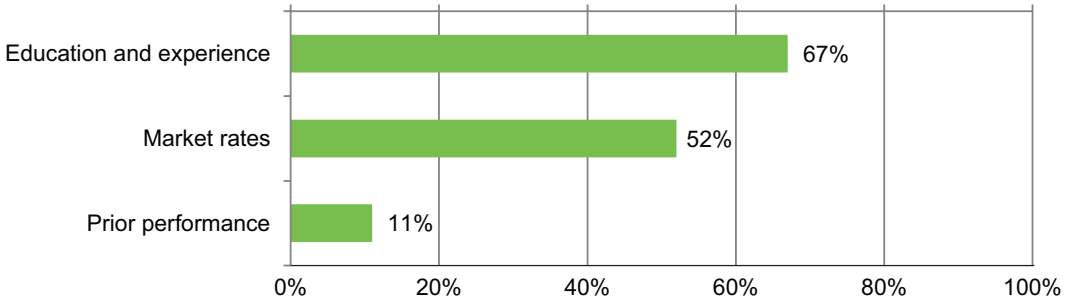

Figure 27. How is the base pay level determined at your school? (*n*=27)

Principals in the Noble Network determine teacher salaries at the school level and have a great deal of flexibility, within a range of about $20,000. Noble Network principals have access to salary data from other campuses in the network and use these data for benchmarking, but they are still able to make exceptions. For instance, a Noble Network principal may offer a higher starting salary if the candidate is coming from a higher paying field, such as consulting. Salaries at Noble Network schools are not bound by teaching experience, only by what the principal is willing to pay. However, if a teacher applies to multiple Noble campuses and multiple network principals would like to hire him or her, the principals will agree on a common offer and do not compete on salary. According to the network staff, candidates rarely turn down offers from Noble Network and go elsewhere because of salary.

Existing research finds that about two-thirds of charter schools use salary schedules based on education and experience to determine teacher salaries, compared to nearly all non-charter public schools (DeArmond, Gross, & Goldhaber, 2007; Podgursky, 2007). In our interviews, two thirds (67%) of respondents mentioned base pay levels were determined by a combination of education and experience, as in typical district salary schedules (see Figure 27). Unionized charter schools were significantly more likely to base salaries on education and experience (100% of four schools) than non-unionized schools (61%; see Appendix C). Only the CICS schools managed by Victory Education Partners explicitly noted having a fixed salary schedule. UNO Charter School Network attempts to keep teachers with similar background and experiences near the same salary, but they exercise some flexibility and do not use a fixed schedule. Springfield Ball Charter School, the LEARN Charter School Network, and The University of Chicago Charter Schools use broad salary bands based, in part, on education and experience, but with some flexibility within each band determined by other factors. Kwame Nkrumah Academy pays higher salaries for teachers who have obtained an advanced degree, although numerous studies indicate that master's degrees generally have no association with teacher effectiveness (Clotfelter, Ladd, & Vigdor, 2007; Chingos & Peterson, 2011) and the state of North Carolina recently moved to eliminate teacher salary increases associated with earning some master's degrees (Banchero & Rutland, 2013).

Four schools in our study stated that base pay level was determined, at least in part, by teacher performance. For example, salary levels at KIPP are determined by the teacher's achievement at the school. Salary growth at Intrinsic Schools will flatten if the teacher is not progressing toward "master" status. At Ball Charter School in Springfield, movement between salary bands is determined via portfolio review. Prior research suggests that charter schools are more likely than district schools to use financial incentives to recruit for hard-to-staff positions (DeArmond, Gross, & Goldhaber, 2007). Five schools in this study (19%) also offered bonuses for hard-to-staff positions such as special education, clinicians, high school math and science, and Mandarin. These amounts are generally in line with prior research showing that 15% of charter schools use subject-area incentives (DeArmond, Gross, & Goldhaber, 2007), though our study shows that unionized schools (75% of four) were significantly more likely to use such market-based bonuses than non-unionized schools (9%; see Appendix C.). Our interviews also reveal that incentives to attract teachers from these areas were reflected in salaries rather than as bonuses at many other schools, and that unionized charter schools were significantly more likely to offer bonuses for hard-to-staff positions (75%) than non-unionized charters (9%; see Appendix C). Nearly one in five schools in our sample (19%) offered signing bonuses or covered relocation expenses, ranging from $750 to $2000.

We also asked leaders to describe the maximum potential annual earnings for a classroom teacher at their schools, assuming they achieved all variable pay awards. Maximum salaries ranged from about $50,000 to over $100,000, with a median of $70,000 (see Figure 28). (One other school, which is staffed solely with half-time teachers, is excluded from these results.) On the low end of this range was YouthBuild McLean County Charter School at around $50,000, who noted that their most senior teacher had about ten years experience and that they could potentially offer higher salaries if necessary to keep a highly effective teacher. At the other end of the spectrum, UNO Charter School Network says their highest paid teachers could earn in the mid-$90,000 range if they met their performance goals, and teachers in the top salary tier at Ball Charter School in Springfield can earn over $100,000. Unionized charter schools in general offered the potential for significantly higher maximum salaries ($91,000) than their non-unionized counterparts ($69,786). (Note that individual educator salary data, by school, are publicly available via ISBE's annual Teacher Service Record at http://www.isbe.net/research/htmls/teacher_service_record.htm.) To put these figures in context, the maximum annual salary available to teachers is $97,695 in Chicago Public Schools and $90,599 in Elgin U-46, and about $75,000 across 116 of the largest urban school districts in the country (NCTQ, 2015).

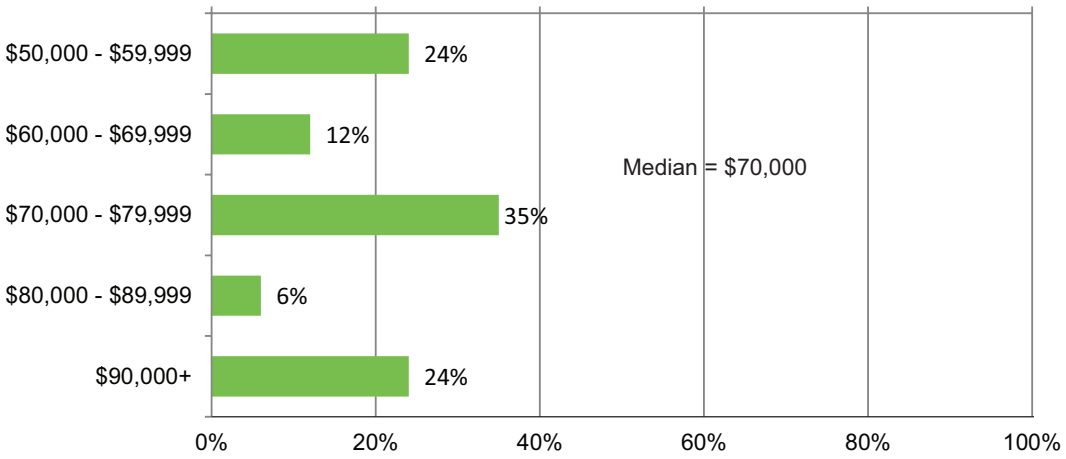

Figure 28. What is the maximum annual potential earnings for a classroom teacher at your school? (*n*= 17)

Performance Pay

Previous research suggests that charter schools are more likely than non-charter public schools to offer merit pay and other pay incentives (Gross & DeArmond, 2010), so we asked schools to describe any additional compensation that teachers could earn beyond their base salaries. Our interviews revealed that 44% of respondents used some form of performance-based pay. This figure is slightly higher than prior research showing that about one-third of charter schools use performance incentives, compared to about 15% of non-charter schools (DeArmond, Gross, & Goldhaber, 2007; Gross & DeArmond, 2010; Illinois State Board of Education, 2014). We also find that networked or CMO-managed charter schools were significantly more likely to offer performance-based pay (60%) than were standalone charter schools (20%; see Appendix C).

An earlier study of Illinois charter schools (INCS, 2011) found that 60% of Illinois charter schools tied some portion of teacher pay to teacher performance, though only 17% linked teacher compensation directly to student outcomes. The performance-based compensation systems in the Illinois charter schools studied here were typically linked to multiple measures, including student growth. For example, variable pay at one anonymous Chicago school includes five components: attendance and planning, student performance, teacher performance, collegiality, and community relations. This system, currently in its second year of implementation, was designed by teachers and participation is voluntary (teachers who opt out receive a simple 3% cost of living longevity raise). The specifics of performance pay in the Noble Network vary from campus to campus, but generally include multiple years of historical student achievement and non-achievement data. At YouthBuild McLean County Charter School and North Lawndale College Prep, performance pay is clearly linked with teacher evaluation results, which are based on multiple measures. North Lawndale also offers a school-wide bonus pool based on meeting school-wide goals, but they point out that the availability of funds for their pay system and the small size of rewards have been problematic in the past. In fact, three additional schools mentioned that they were interested in implementing a performance-based pay system, but lacked the funding to do so. For context, the two Illinois districts in the National Council on Teacher Quality's district contract database report that the teacher's evaluation has no effect on pay (NCTQ, 2015). One quarter (25%) of the schools interviewed also offer teachers additional pay for taking on additional duties. Such duties can include before and after school assignment, sponsoring student clubs, data analysis, and teacher leader roles. In addition, North Lawndale College Prep and the Civitas CICS schools offer small bonuses (between $500 and $1000) based on teacher attendance.

As shown in Figures 24 and 25, evaluation results were linked to teacher compensation in about half of the schools interviewed. In most instances, this takes the form of a one-time bonuses, such as at UNO Charter School Network, where teachers are eligible for bonuses ranging from $2000 to $14,000 on top of their base pay depending on their score on the school's "STRIVE" evaluation system. Ball Charter School in Springfield and the Civitas CICS schools use evaluation results, in part, to determine whether teachers can advance on their tiered salary systems, rather than for direct bonuses. Teachers at Ball can submit a portfolio for review once every three years to advance across five salary tiers. These portfolio reviews are optional but are the only way to move up a tier, and evaluation ratings (along with experience) are an important part of this portfolio. At the Civitas CICS schools, teachers are placed into one of three salary bands (novice, associate, or professional) based on their evaluation scores and experience, and teachers in the "professional" band can receive a bonus of up 5%, based on their evaluation ratings. In addition, high evaluation ratings were rewarded with other, non-monetary incentives in 27% of these schools. For example, Passages Charter School has offered high performing teachers extra vacation time and longer contracts. UNO Charter School Network uses teacher evaluation ratings to help identify internal talent and determine which teachers to place into their master teacher residency program.

Figure 29 describes the maximum size of all annual performance-based pay awards offered by nine schools who responded to this question. As shown in the figure, performance bonuses ranged from $1000 to more than $10,000 with a median of $3000. Of course, these are the maximum awards, and most of the responding schools offered a range of performance awards. For example, UNO Charter School Network teachers can earn bonuses of $2000, $4000, $8000, or $14,000 based on their evaluation score. Similarly, Noble Network teachers earn a 5% bonus for professionalism and meeting expected goals, and teachers who surpass all of their goals can earn bonuses of up to 25%. YouthBuild, in contrast, offers a 5% maximum bonus.

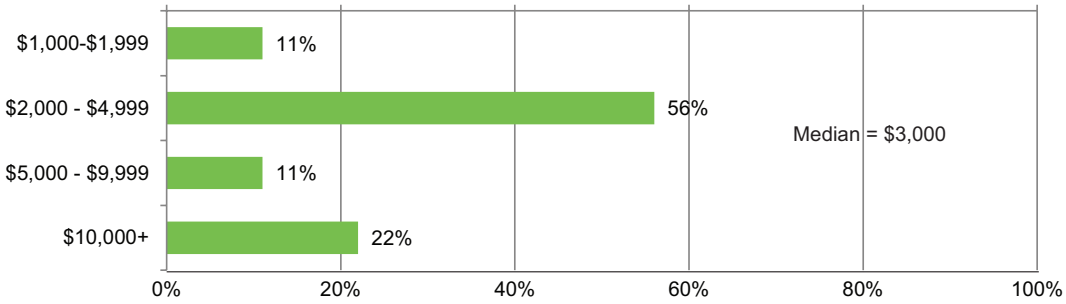

Figure 29. What is the maximum amount of performance-based pay offered?[7] (*n*=9)

Retention

Our next set of interview questions focused on charter school leaders' strategies for retaining and rewarding successful teachers, including differentiated retention and pay strategies, maximum compensation levels, and career advancement pathways. Research from industrial and organizational psychology suggests that the best predictors of employee turnover include job satisfaction, organizational commitment, and comparison with alternative employment. (Griffeth, Horn, & Gaertner, 2000). Sawchuk (2015) has reported that the competition for high quality teachers has made retention a high priority for some charter schools, but it is worth noting here that, in general, the charter school leaders with whom we spoke for this study did not view teacher retention as a substantial challenge in their schools.

First, we asked administrators to discuss the steps they take to encourage their best teachers to remain at their schools (see Figure 30). The most frequently mentioned retention strategy among these charter schools was to solicit input from teachers and offer increased influence over school decision-making. This approach was utilized by 52% of the schools interviewed, and non-Chicago charter schools were significantly more likely to use increased teacher voice as a retention strategy (100%) than were Chicago charters (40%; see Appendix C). Principals in Noble Network can be flexible with the hours teachers are required to work, taking teachers' needs into account. For example, a Noble Network principal may allow a successful teacher to work from 10:00 a.m. to 6:00 p.m. instead of the typical hours if this fits better with his or her schedule. At Intrinsic, this is operationalized through an emphasis on school culture where the principal is collaborative and teachers participate in shared leadership opportunities so they feel valued. This might include reducing teachers' responsibilities where possible (though school leaders note they still demand a lot), and making sure that

[7] We assumed a base salary of $50,000 for computing bonus amount expressed as percentages.

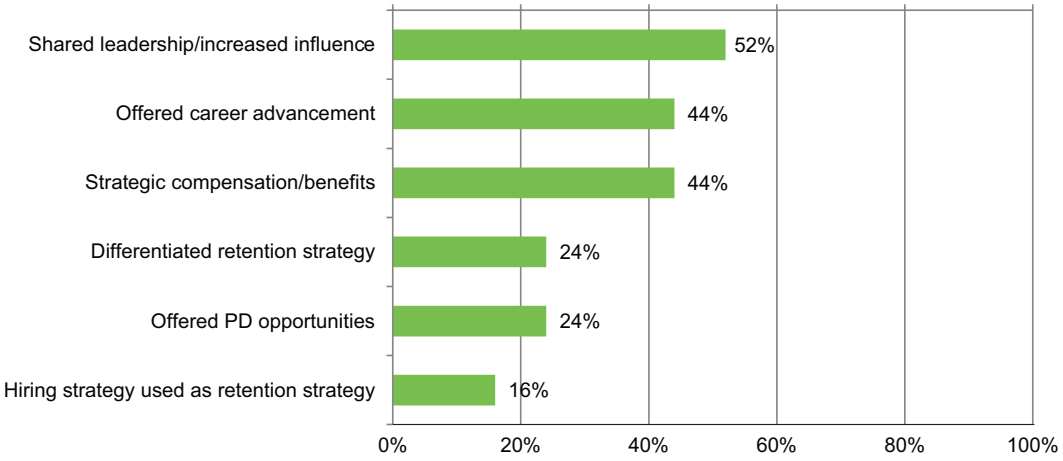

Figure 30. Can you provide some examples of things your school has done to attempt to retain successful teachers? (*n*= 25)

teachers have the materials they need or can obtain them quickly. Such strategies are well-aligned with research from industrial and organizational psychology, which suggests that organizational commitment is influenced most strongly by leaders who treat their employees fairly (Herscovitch & Meyer, 2002).

Almost half (44%) of the schools interviewed stated that they used career advancement pathways to help retain successful teachers. Typically, this meant that high performing teachers were often tapped to advance to instructional coach or similar hybrid teacher-administrator positions. This was especially the case in growing networks, such as KIPP, which offer more opportunities for upward mobility and the salary increases these entail. For example, the Christopher House Elementary School developed an emerging leaders program that provides professional development and stipends for talented teachers. The University of Chicago Charter Schools, on the other hand, report difficulty retaining teachers who want to move into leadership positions. Despite hiring for leadership ability and developing leadership through the fellows program, the school has no plans for expansion and limited room for upward mobility, so teachers often move to other networks in order to advance their careers.

An identical proportion of leaders (44%) noted that they used strategic compensation or increased benefits to help retain teacher talent. For instance, Ball Charter School in Springfield states that they pay more than their local district, but also note that there is more work involved in teaching at their school than in district campuses. This strategy could also take the form of generous benefits. For instance, 8 Points Charter School in Jacksonville pays 100% of teacher health insurance costs with no deductible and UNO Charter School Network offers tuition reimbursement. An anonymous Chicago charter school noted that they will make accommodations to retain their best teachers, including assigning extra duties and responsibilities to help increase salary. Passages Charter School reports that they have had considerable success in offering extra sick or vacation days, and will also allow highly effective teachers to be signed to multiyear contracts, rather than the typical year-to-year appointments. Similarly, Noble says they will do "whatever it takes" to ensure that successful

teachers remain at their schools. For example, when their leadership noticed that talented teachers were leaving to start families, they opened a daycare center in order to support and retain these staff. Monahan (2014) describes similar practices in KIPP and other charter schools outside of Illinois.

Other retention strategies mentioned by multiple schools included additional PD opportunities (24%) and high-quality hiring (16%). Charter schools in Chicago were significantly more likely to try to use PD opportunities (30%) and hiring (20%) as teacher retention strategies than were their counterparts outside of Chicago (0% for each). In addition, networked or CMO-managed charter schools (27%) were significantly more likely to try to use hiring as a retention strategy than standalone schools (0%) and more mature charter schools (32%) were significantly more likely to try to use hiring as a retention strategy than schools that had been operating for fewer than five years (0%; see Appendix C). Schools that reported using PD as a tool for retention included North Lawndale College Prep, which has encouraged several teachers to pursue (and receive) Fulbright scholarships, and Civitas CICS, whose formal mentoring program was developed, in part, as a response to retention issues. Schools that mentioned hiring as a retention strategy, such as the Civitas CICS schools and KIPP, believed that hiring practices that ensured a good person-organization fit and identified teachers with a long-term commitment to the school could improve retention, and recent research evidence (Grogan & Youngs, 2011) suggests that this is possible.

About a quarter of respondents (24%) said they practiced differentiated retention strategies for high performing versus low performing teachers. We explored this strategy in more depth with several questions to discern how unsuccessful teachers are treated differently than successful teachers with regard to retention efforts. About four in ten (42%) of respondents said that they had encouraged low performing teachers to leave the school by counselling out, with several schools pointing out that their teachers are at-will employees on year-to-year contracts. Leadership from the SIUE East St. Louis Charter High School said that it was a "pretty cut and dried" process at their school that unsuccessful teachers could not be retained, due to university policy. At the Noble Network of Charter Schools, unsuccessful teachers do not earn their expected bonus and are let go at the end of the year, and The Montessori School of Englewood says they use observations and action plans to coax teachers out or help them understand they are not meeting standards. Nonetheless, multiple schools noted that non-renewing teachers was a rare occurrence. For example, one school (that requested to remain anonymous) notes that they have only counselled out three teachers over the last ten years.

One quarter of schools (25%) stated that they put low performing teachers on improvement plans and give them a set period of time to improve. For instance, the Victory Education Partners CICS schools and the Chicago Math and Science Academy both provide support and additional PD for struggling teachers, and pointed out the importance of documenting these efforts. The University of Chicago Charter Schools said that they address unsatisfactory performance on a case-by-case basis, taking into account whether the teacher shows determination to improve and is open to feedback.

We also asked each of these administrators whether their school used any sort of teacher tenure program. None of the schools in this sample granted tenure and few comments were recorded about the role of tenure (or lack thereof) on these schools' human resource

management strategies. As noted above, Passages Charter School occasionally offers multi-year contracts to teachers who have proven to be highly successful. Otherwise, all teachers in these schools worked on yearly contracts as at-will employees.

Career Advancement

Chadwick and Kowal (2011) find that successful CMOs are adept at finding teachers with leadership potential and supporting their career advancement. So, we asked charter leaders to describe any specific pathways for career advancement that may be available for teachers at their schools. We classified responses into two broad categories—those that resembled existing teacher career pathways and those that represented new opportunities for teacher leadership opportunities—and several schools provided pathways from both categories (Figure 31).

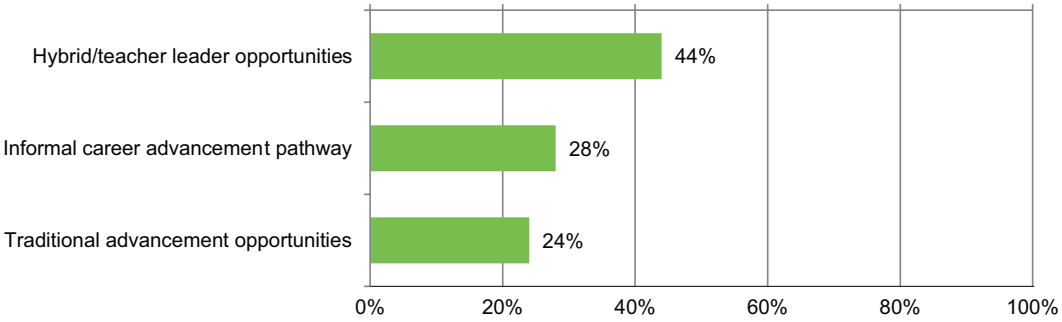

Figure 31. Does your school offer any specific pathways for career advancement? (*n*= 25)

About a quarter (24%) of schools mentioned traditional career advancement pathways, such as lead teacher, department chair, or curriculum development positions. However, almost half (44%) of the schools in this study utilized more innovative pathways, including master teacher, leadership development, and instructional coach positions. For example, teachers at the University of Chicago Charter Schools can be nominated for a leadership fellowship, a year-long forum focused on leading change initiatives aligned with school goals. The school notes that many fellows have gone on to leadership positions, either within their network (if available) or in Chicago Public Schools (often when no positions are available within the network). Similarly, KIPP offers the Miles Family Fellowship and the Fisher Fellowship, which identify potential leaders and prepares them to open new KIPP campuses. KIPP also uses several hybrid teacher leader roles that involve observing other teachers, facilitating weekly meetings, and working with the school's leadership team. In addition, Intrinsic Schools was piloting a program to train future principals, and Catalyst identified potential leaders and provided financial support for coursework from Northwestern University's non-profit management program that they believed would be especially useful for future charter school administrators. Chicago charter schools (55%) and non-unionized charter schools (52%) were significantly more likely to offer these hybrid teacher-leader roles than were those outside of Chicago (0% of five schools) and unionized charters (0% of four), respectively (see Appendix C).

More than a quarter of schools (28%), including Christopher House Elementary School and Springfield Ball Charter School noted that they do not currently have any formal career advancement programs, but they still try to hire from within or otherwise assist teachers in advancing their careers where possible. As noted above, these informal career advancement pathways were most prevalent in expanding networks that were interested in growing their own candidates to fill newly created leadership positions. Similarly, 8 Points Charter School in Jacksonville noted that it was difficult to create pathways because they are a small school with few positions to which teachers could advance, and North Lawndale College Prep notes that there were numerous opportunities for advancement when the network was expanding, but few now that expansions has ceased. As a result, they say, some teachers have left for leadership positions in other networks.

Administrator Reflections on HR Management

Finally, we asked charter school leaders to reflect on the HR management strategies they thought were most successful and least successful, and to discuss any new initiatives they planned to implement in the near future.

Most Successful Strategies

When we asked administrators to reflect on their most and least successful human capital initiatives, teacher development was viewed as a strength. More than one in four schools (27%) named teacher support among their most successful HR management ventures (see Figure 32). For example, 8 Points Charter School stated that their most successful HR management strategy has been:

> *...non-bureaucratic, non-institutional communication with staff members. [We] want staff members to be comfortable and have a good, direct relationship with administration. [We] want to support teachers, be receptive of their needs and what's going on. Support is really important.*

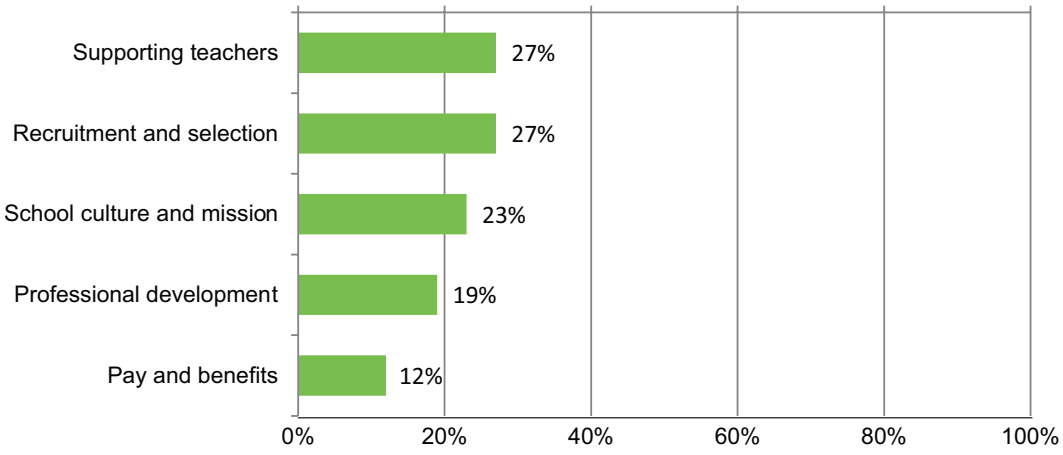

Figure 32. In your opinion, what human capital management strategy has been the most successful at your school? (*n*=26)

Similarly, KIPP was most proud of "making sure teachers have access to all the resources and support they need," and the administration at Christopher House Elementary School responded that, rather than throwing new initiatives at teachers, they allow teachers to have a strong voice and they listen to teachers' desired changes, thoughts, and interests. It is also worth noting here that the Civitas CICS schools named the formation of a teachers union as one of their greatest successes. While Civitas leadership reports that negotiating with their union has had its challenges and is still a work in progress, they say that it is not the "kiss of death" as others had predicted. Because the administration had previously established a strong rapport with teachers, they were able to work with the newly-formed union to implement a robust evaluation system and the school is proud to provide a positive example of how labor-management relations can work successfully in charter schools. Interestingly, non-unionized charter schools (32%) were significantly more likely than unionized charters (0% of four) to name teacher support as their most successful HR strategy (see Appendix C).

Just over a quarter (27%) of the participants in this study said that their most successful HR management strategy has come in the area of teacher recruitment and selection. Passages Charter School states that their most successful HR initiative has been grooming and promoting staff from within. UNO Charter School Network and LEARN Charter School Network both cited their ability to recruit high quality teachers through referrals among their most successful HR strategies. Both LEARN and Passages noted that these specific recruitment pathways have helped ensure new teachers are mission-aligned and mission-driven from the outset. The Civitas CICS schools are particularly excited about their relationship with TeacherMatch and the potential of the EPI survey.

Almost a quarter (23%) of school leaders reported that their most successful HR management initiative was developing a strong school culture or mission. For example, both Kwame Nkrumah Academy and the anonymous, non-Chicago charter school tout the family-like atmosphere at their schools, and North Lawndale College Prep cites great mission alignment among staff.

About one-fifth of schools (19%), including Galapagos Charter Schools and the Young Women's Leadership Charter School, listed professional development as one of their most successful HR management strategies. For example, one anonymous school felt their PD focus, including a one-on-one coaching model and weekly support for both in school and out of school issues, helped even the best and most experienced teachers meet new challenges every year. The University of Chicago Charter School specifically singled out its leadership fellows program, which they feel has helped with both recruitment and retention of great teachers, and let teachers know that the schools is invested in them and will support their growth.

Teacher retention and compensation issues were not frequently mentioned in charter school leaders' assessments of the strengths of their HR management systems. A small proportion of administrators (12%) named teacher pay and benefits among their most successful HR management strategies. Among these responses, both Catalyst Schools and 8 Points highlighted generous benefits packages—Catalyst Schools links the costs of teachers' benefits with their salary levels to make them more affordable, and 8 Points Charter School provides 100% of teacher health care costs and believes this has played a large role in attracting and retaining effective teachers.

Least Successful Strategies

About a third of respondents (33%) stated that their least successful human capital efforts have been around recruiting high quality teachers (see Figure 33). Most noteworthy, several schools were worried that they have not been able to be as selective as they would like in recent years, especially when recruiting for hard-to-staff positions. For example, several networks reported that their applicant pools appear to be shrinking in recent years, especially with regard to math and science teachers, and that applicants have less experience and diversity than they desire.

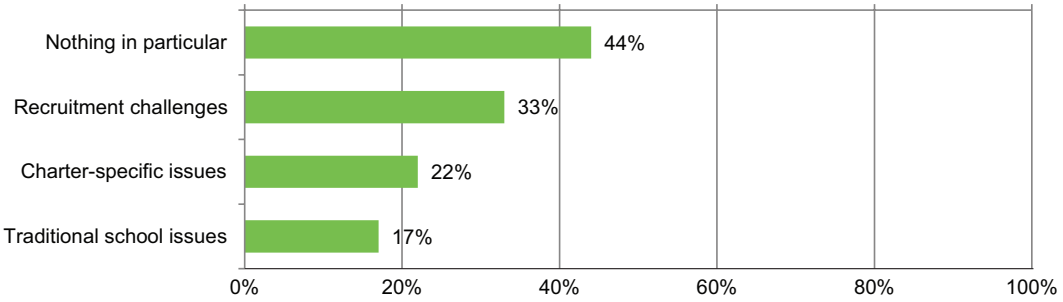

Figure 33. Were there any human capital management innovations you attempted that were unsuccessful or that you would not recommend to other schools? (*n*=18)

We classified the remaining items mentioned as least successful into "charter-specific" issues and "typical" school problems. Charter-specific issues (22%) included failed or stalled attempts to utilize the flexibility granted to charter schools or by virtue of being non-unionized, such as an inadequate performance-based pay plan at North Lawndale College Prep or "anything that's overly bureaucratic" at Noble Network schools. Typical school problems (17%) involved issues such as an ill-designed mentoring program at Catalyst and staff taking advantage of "flexible Friday" time at YouthBuild.

Future Initiatives

New and improved teacher recruitment strategies topped the list of future HR management initiatives that Illinois charter schools have planned for the near future (see Figure 34). For instance, KIPP feels that they will need to start recruiting earlier and grow their recruitment pipelines in order for the network to expand as they have planned. Both LEARN Charter School Network and the Civitas CICS schools would like to recruit more diverse teacher candidates, and several schools (including the SIUE East St. Louis Charter High School)

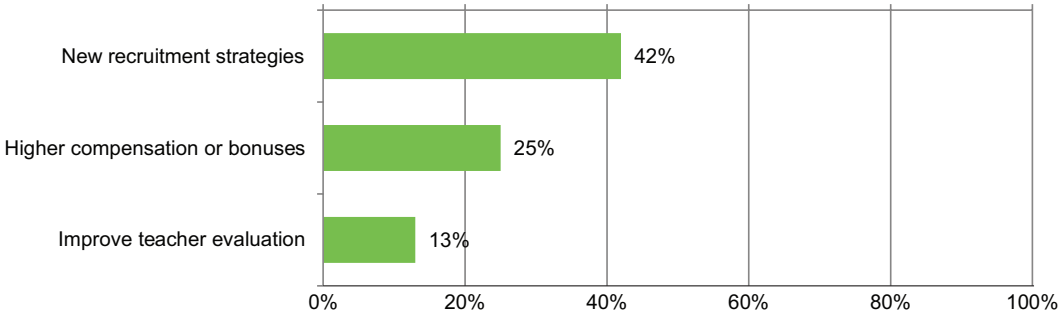

Figure 34. Are there any new human capital management initiatives that you are planning to or would like to begin in the near future? (*n*=24)

noted they hoped this report could provide guidance as to how other charter schools are addressing this issue. UNO Charter School Network hoped to start a recruitment incentive program and Intrinsic Schools has plans to improve their hiring process by implementing lessons learned from the "reference-palooza" event. Noble has been working with other charter networks to investigate and benchmark their applicant pools. They note that they accept only 7.7% of applicants, but want to find out more about how this compares with other schools. The unionized Springfield Ball Charter School is investigating how non-union schools manage the teacher hiring and firing processes to see if there are any successful strategies they could adopt.

Teacher compensation also ranked near the top of the list of HR management initiatives that charter school administrators planned to implement in the near future. One quarter (25%) of respondents said they hoped to increase teacher pay or introduce new bonus plans. Christopher House Elementary School was designing a new performance bonus system at the time of our interview, Passages Charter School was working to implement mid-year bonuses, and another (anonymous) school was considering a "dynamic pricing" model to help attract dual language teachers. Several additional schools, including, SIUE East St. Louis Charter High School and 8 Points Charter School, said they had plans to be more strategic and innovative with teacher compensation once funds were available to do so.

Other teacher retention initiatives that schools were considering included career mapping initiatives at LEARN Charter School Network and UNO Charter School Network, and multi-year contracts at Passages Charter School. Noble Network leadership mentioned the need to improve their teacher data systems to allow the network to track career trajectories and analyze retention and attrition patterns. School leaders in our study also expressed interest in learning about how other schools are addressing teacher retention and compensation needs in the charter sector. Other schools' strategies for offering competitive salaries and benefits, and dealing with retirement, contracts, and retention were all mentioned prominently among issues that charter leaders hoped to learn more about from this study.

Improving teacher evaluation was also prominent in the list of future HR management initiatives. For instance, North Lawndale College Prep is working to reduce the burden of the REACH evaluation system on principals, and the Victory Education Partners schools of CICS hope to implement a 360° feedback system. Other future initiatives around teacher development and evaluation these charter schools hoped to accomplish included more teacher-led professional development opportunities at Young Women's Leadership Charter School and new teacher mentoring initiatives at LEARN Charter School Network and Kwame Nkrumah Academy.

Analysis

The common perception of HR management strategy in charter schools is one of "burn and churn"—hiring young, low-paid teachers, often prepared through alternative routes like Teach for America, and working them long hours until they burn out and are quickly replaced by more of the same. As Sawchuk (2015) notes, "the image of the harried 20-something teacher burning out after 60-hour weeks in her charter school has become a stock type in education debates." In the same article, the president of a Chicago-based charter school teacher union refers to this model as "a feature of charter schools rather than a bug in them," whereas charter school leaders, on the other hand, note than many of their long hours are devoted to preparing and supporting their staff (Sawchuk, 2015).

The findings from this study indicate that HR management in Illinois charter schools is more complex and varied than this common perception would suggest. To help summarize these HR practices, we used the coded survey and interview response data described above to develop composite measures that allow us to look across HR functions and view them as a system, rather than isolated components. Each composite describes a set of HR practices that are both theoretically and statistically linked with one another, and a school's score on a given measure represents the proportion of its practices that were classified into that specific category. Using this process, we were able to identify four broad themes that describe HR management strategy in Illinois charter schools:

1. incentivist reforms;
2. teacher support and empowerment;
3. information-rich decision-making; and
4. mission-driven practices.

We were able to calculate scores on all four of these composite measures for 25 of the 27 schools in our sample (93%),[8] and each of these cross-cutting themes are each discussed in more detail below. Looking at charter schools' rankings across these four composite measures (see Table 3) reveals that there is little to no positive correlation between these sets of practices, indicating that they are identifying distinct HR strategies. There was a moderate, but statistically significant negative correlation (-.482) between incentivist practices and the teacher empowerment approach, which would be theoretically consistent with these frameworks.

As illustrated in the following descriptions, there was considerable variation in charter school HR management strategies, with some schools emphasizing incentivist HR practices, and others emphasizing teacher empowerment, mission-driven culture, and information-rich decision-making, or some combination of elements from each of these approaches, along with more traditional and less strategic HR practices. For example, at one school in our

[8] Rowe Elementary School and The Orange School are omitted due to missing data on HR practices.

Table 3

Correlations between HR Practices Composites

	Mission-Driven	Information-Rich	Empowerment	Incentivist
Mission-Driven	—			
Information-Rich	-.11	—		
Empowerment	-.02	.11	—	
Incentivist	-.16	-.23	-.48*	—

*. Correlation is significant at the 0.05 level (2-tailed).

sample, 7% of the HR practices could be considered mission-driven, 20% information-rich, 20% teacher empowering, and 8% incentivist, whereas another school's practices were rated as 14% mission-driven, 7% information-rich, 5% teacher empowerment, and 22% incentivist. The range for each set of practices was between 0% and 20%, and the overall average for each set of practices fell precisely between 10% and 11%. Further, these HR strategies tended to overlap one another to a considerable degree. That is, while some schools may appear to espouse one HR strategy over the others, almost all schools used practices from each of the four composite measures to some degree.

Incentivist Reforms

One common theme we noticed across the schools in our study and across HR management functions was incentivist-oriented reform strategies. "Incentivist reform" (Lubienski, Gulosino, & Weitzel, 2009; Scott & Jabbar, 2014) is a term used to describe the policy approach that involves individual or organizational inducements and market-like principles to promote improved student outcomes. In this instance, the term is used to refer to HR management practices that utilize financial or other incentives and practices borrowed from the business world to promote improved student and teacher performance. Human resources practices that typify this approach include performance-based pay, recruiting from alternative certification pathways, and setting salaries based on market rates.

Although incentivist practices are commonly associated with charter schooling in the mass media and public perception—and they are, indeed, embraced by many of the schools in this study—these schools continue to engage in many practices that could be considered decidedly non-incentivist. For example, our study shows that almost two thirds (63%) of the schools recruited teachers from alternative certification routes, it is important to remember that an even larger proportion (70%) of schools reported recruiting teachers from university-based teacher preparation programs, and several campuses mentioned that TFA was not a good fit for their school. Similarly, though more than half (52%) of these schools used some form of market-rate to set teacher pay levels and 44% of respondents used some form of performance-based pay, two-thirds of the schools in this study used teaching experience and advanced degrees to set base pay levels. And despite having the flexibility to hire some non-certified teachers, only 7% actively recruited from this pool. Whereas more than half (57%) of the schools in this study used student growth measures to evaluate their teachers, a sizeable proportion (26%) calculate student growth scores for teachers, but specifically choose to use these solely for formative purposes. Teacher evaluation scores factored into teacher retention decisions in 39% of these schools, and 42% of respondents said that they had encouraged

low performing teachers to leave their school. Again, however, it is worth noting that many schools in this study stated that non-renewing teachers was a rare occurrence, and Gross and DeArmond (2013) also report that dismissing low performing teachers was not a high priority in the high functioning CMOs that they studied. The incentivist reform scale developed from these data (α = .79) includes 14 items, which are displayed along with the percentage of schools that used each practice in Figure 35.

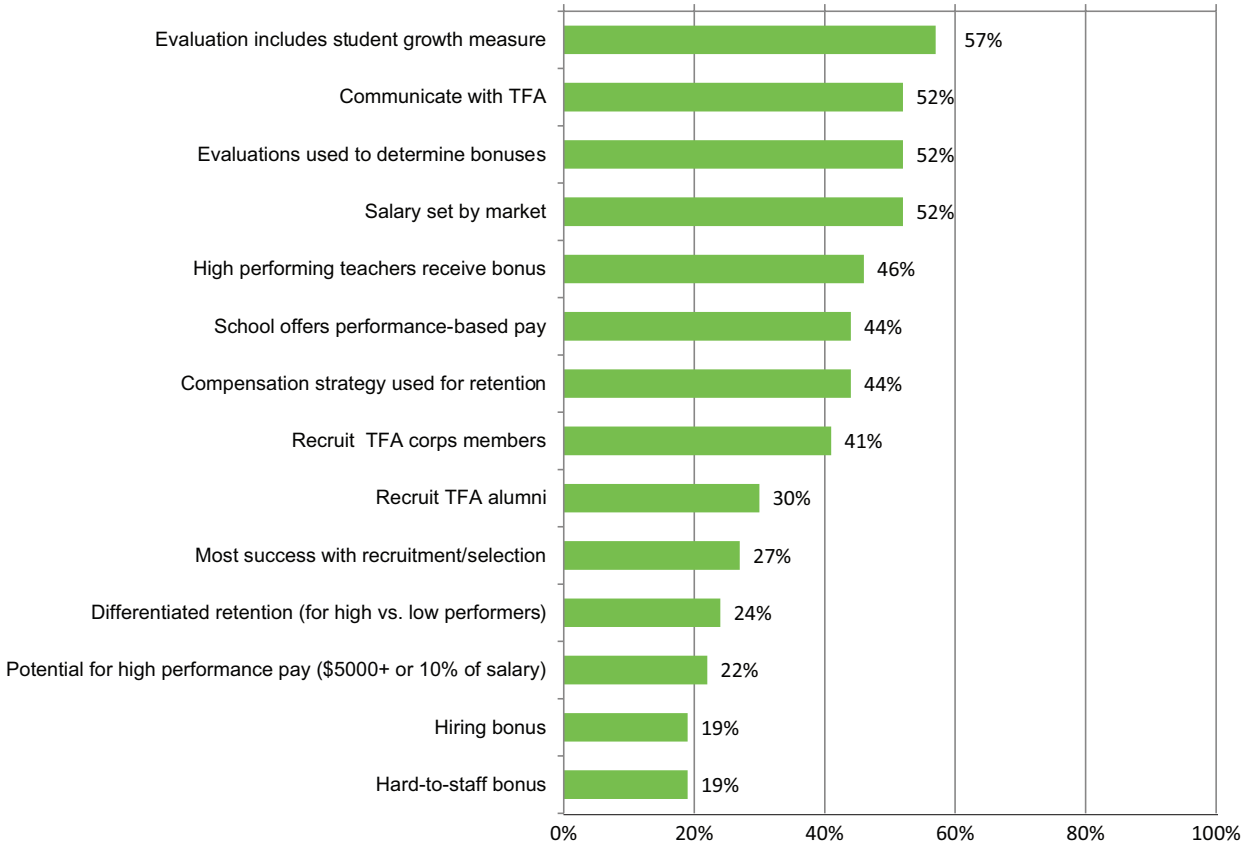

Figure 35. Percentage of schools using each type of incentivist reform practice.

Scores on the incentivist composite ranged between 0.00 and 0.22 with a mean of 0.10. That is, between 0% and 22% and, on average, 10% of the HR practices in these charter schools could be classified as part of the incentivist scale. Table 4 displays the schools in this study that had the highest scores on the Incentivist HR practices measure (i.e. the highest proportions of incentivist HR practices).

Table 4

Highest Ranking Schools on Incentivist Reform Measure

School	Incentivist Composite Score
UNO Charter Schools	0.22
Chicago Math & Science Academy	0.21
Passages Charter School	0.18
LEARN Charter Schools	0.17
The Noble Network of Charter Schools	0.16
YouthBuild McLean County Charter School	0.15
KIPP	0.13
University of Chicago Charter Schools	0.11
Civitas (CICS)	0.11
Galapagos Charter Schools	0.11
North Lawndale College Prep	0.11

Teacher Empowerment

The second theme observed across responses in this study was teacher empowerment. Research suggests that teachers' perceptions of empowerment and autonomy are linked with increased job satisfaction, reduced work stress, organizational and professional commitment, and new teacher retention (Bogler & Somech, 2004; Klecker & Loadman, 1996; Lui 2007; Pearson & Moomaw, 2005) Nonetheless, according to a recent Gallup survey (2014), teachers are the least likely professional group to believe that their opinions matter in their work, and numerous scholars have decried the loss of teacher autonomy via mechanisms such as scripted curricula (see, e.g., Crocco & Costigan, 2007; Milner, 2013). Both Kahlenberg and Potter (2015) and Petrilli and Northern (2014), however, have noted that charter schools have been at the vanguard of new teacher leadership models and providing teachers a voice in school governance. Cannata and Penaloza (2012) found that charter schools teachers tend to place more value than district school teachers on teacher involvement with school governance, and that charter school teachers are more likely than non-charter teachers to report cooperative effort amongst their colleagues. And, compared to teachers in district schools, charter school teachers typically report a more supportive teaching environment, higher levels of autonomy, more influence on school policies and practices, and greater support from administrators and colleagues (Canatta & Penaloza, 2012; Ni, 2012; Renzuilli, Parrott, & Beattie, 2011; Wei, Patel, & Young, 2014).

Over three quarters (77%) of the schools we interviewed stated that teachers were involved in the hiring process, and teachers were involved in the final hiring decision at almost half (48%) of the schools. Teachers played a role in determining their own PD opportunities in more than one third (36%) of the schools in this study. More than a third (35%) of the

schools included peer observations and one third (33%) included self-evaluations in teacher evaluation ratings. Teachers in one school in this study designed a voluntary performance-based pay plan, and numerous schools offered their highest performing teachers an increased voice in school decision-making, increased autonomy, or career advancement opportunities. One school even provided stipends for teachers to pilot new programs at their school. In fact, the most frequently mentioned teacher retention strategy, mentioned by more than half (52%) of the schools in this study, was to solicit input from teachers and offer increased influence over school decision-making. Principals at some schools in this study have made special accommodations, such as providing childcare or redesigning the school staffing schedule, to meet teachers' needs. Almost half (44%) of the schools in this study provided clear career advancement pathways beyond the opportunities that are typically available to most teachers. More than a quarter (27%) of these schools named teacher support as one of their most successful HR management initiatives, with several schools feeling their biggest success was in helping teachers to have a voice in school policy and making teachers feel like "they are the most important group in the school and their work is important." The composite teacher empowerment measure (α = .74) developed in this study includes 16 items, which are displayed along with their observed frequencies in Figure 36.

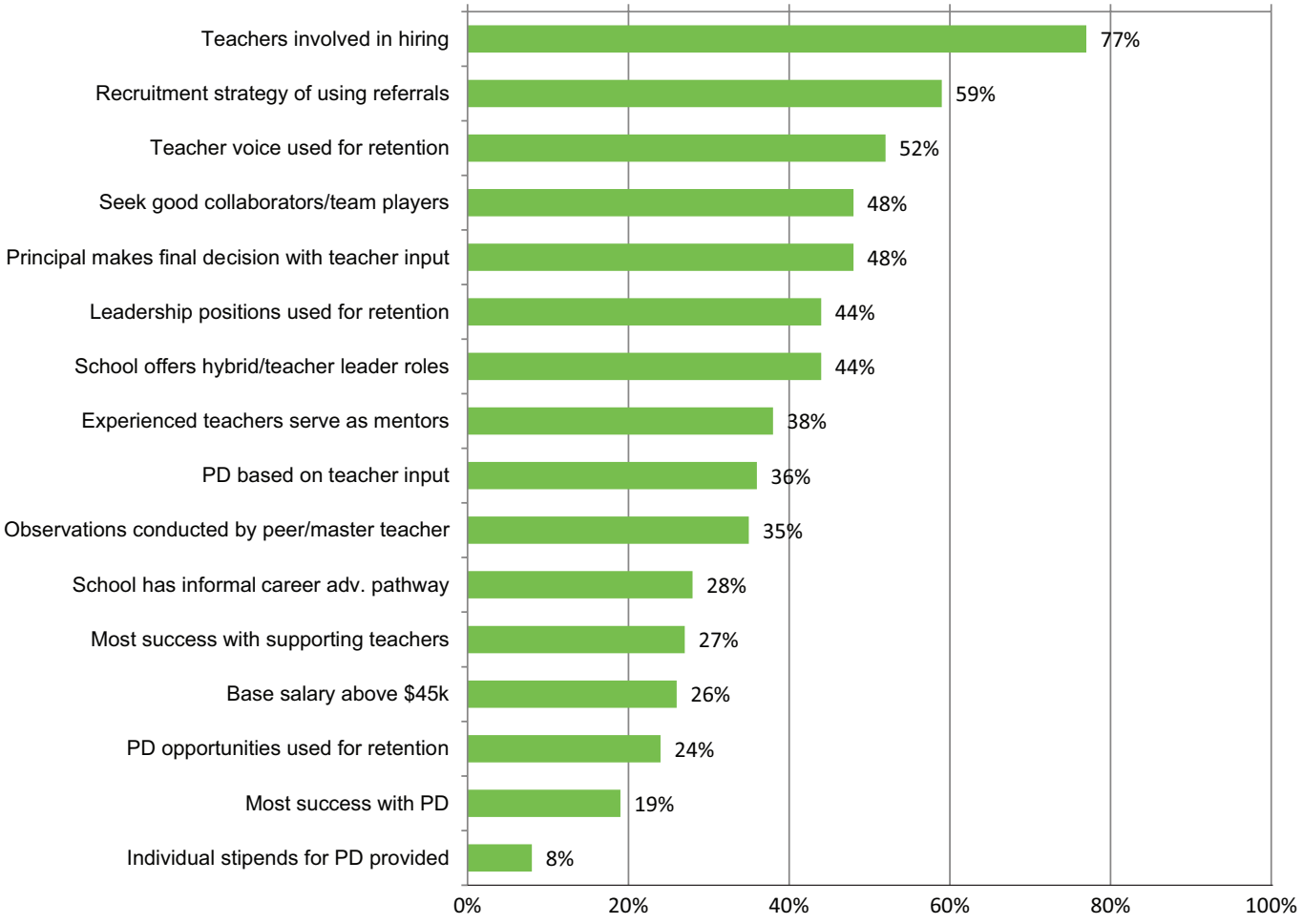

Figure 36. Percentage of schools using each type of teacher empowerment practice.

Scores on the teacher empowerment composite ranged between 0.05 and 0.20 with a mean of 0.10, meaning that between 5% and 20% of the HR practices in these charter schools could be classified as part of the empowerment scale, and 10% of the HR practices at the average school were considered empowering to teacher. The highest ranking schools based on the teacher empowerment measure are displayed in Table 5.

Table 5

Highest Ranking Schools on Teacher Empowerment Measure

School	Teacher Empowerment Composite Score
Christopher House	0.20
The Montessori School of Englewood Charter	0.18
Anonymous (Chicago)	0.18
Young Women's Leadership Charter School	0.15
Anonymous (non-Chicago)	0.13
Intrinsic Schools	0.12
Civitas (CICS)	0.12
KIPP	0.11
North Lawndale College Prep	0.11
Springfield Ball Charter School	0.10
8 Points Charter School	0.10

Information-Rich Decision-Making

Another cross-cutting theme emerging from this research was charter schools' use of information-rich, data-driven decision-making. This particular label is meant to serve in contrast with the teacher hiring process first described by Liu and Johnson (2006) as "late, rushed, and information-poor." Stanton and Matsko (2010), Hannaway and Jupp (2010), and "The Widget Effect" (Weisberg et al., 2009) all describe ways that school administrators can use multiple data sources to measure teacher performance and, in turn, use teacher performance measures to drive HR practices such as teacher placement, professional development, retention, and career advancement. Data-driven management is often closely associated with charter schools (Fryer, 2012; Shapiro, 2015). In fact, Schneider (2013) suggests that this association borders on the extreme: "For all the talk about a thousand flowers blooming, charter schools are sliding in the direction of monoculture and top-down governance, bringing to life an obsession with the quantifiable."

Most of information-rich HR practices observed in these charter schools center around teacher selection. Liu and Johnson (2006) and Gross and DeArmond (2013) both argue that schools use "information-rich" hiring processes to both gather information about the candidate and convey information about the school to the candidate. For example, just over a quarter (26%) of the schools in our sample asked teacher candidates to provide evidence of student growth or records documenting student success during the hiring process. Liu and Johnson (2006) also note that an early hiring process is important to allow time for schools to collect in-depth data about teaching candidates, and this study shows that fully half (50%) of our sample started recruiting for open teaching positions by the end of January and the majority of schools (70%) reported hiring teachers by the end of May. We found that the

hiring process in these schools often lasts up to a full day and involves multiple interviews and other job tasks, and teaching demonstrations were used in hiring decisions in 81% of the schools in our sample. Another recent study (Cannata, Rubin, Goldring, Grissom, Neumerski, Drake, & Schuermann, 2014) suggests that information-rich hiring can involve using the school's teacher evaluation instruments to screen teacher candidates, just as we found at The University of Chicago Charter Schools. The in-depth reference checks described at the Noble Network also contribute to information-rich selection decisions.

Many of the schools in our study also exhibited information-rich decision-making around teacher evaluation and professional development. For example, 20% of the schools devoted some PD days entirely to data analysis. Almost a quarter of schools (24%) used school data such as assessment results to guide professional development opportunities. Numerous schools used instructional coaches to frequently observe classrooms and collect data for purposes of both evaluation and professional development, and just over a quarter (26%) of schools used student growth data to inform professional development. Teacher evaluation processes in sample schools were also quite information-rich—41% of respondents used multiple observers to rate teachers practice (with 18% using three observers) and 43% included six or more classroom observations. Information-rich compensation practices that were observed include the salary surveys used by schools to ensure their pay was competitive and based in data. Some schools also used information-rich career advancement practices, by using teacher performance data to select high performing teachers for instructional coaching or other hybrid teacher-administrator positions. Figure 37 shows the 17 items that make up the information-rich decision-making measure ($\alpha = .74$) derived from our data and displays the percentage of schools that used each practice.

Table 6 displays the schools in this study ranked that ranked the highest on the information-rich practices measure. Between 0% and 22% and, on average, 11% of the HR practices in these charter schools could be classified as part of the information-rich decision-making scale.

Table 6

Highest Ranking Schools on Information-Rich Decision-Making Measure

School	Information-Rich Decision-Making Composite Score
Victory Education Partners (CICS)	0.22
Intrinsic Schools	0.20
Christopher House	0.20
Galapagos Charter Schools	0.20
University of Chicago Charter Schools	0.18
The Noble Network of Charter Schools	0.16
The Montessori School of Englewood Charter	0.14
LEARN Charter Schools	0.14
North Lawndale College Prep	0.13
Charter Schools USA (CICS)	0.13

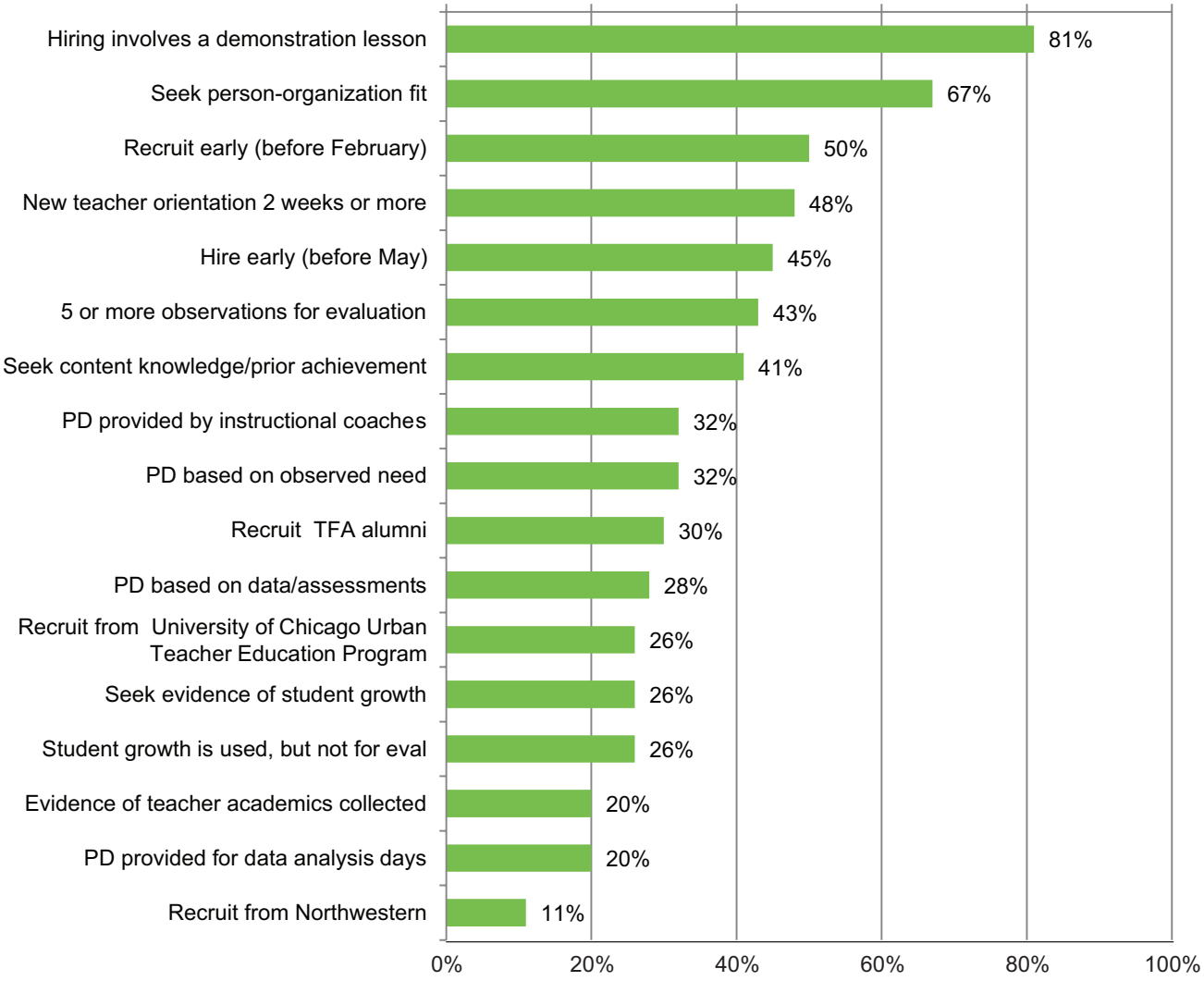

Figure 37. Percentage of schools using each type of information-rich HR practice.

Mission-Driven Human Resource Management

The final theme developed from these responses is the notion of mission-driven HR management. As previously noted, studies from both the charter (Gross & DeArmond, 2011) and non-charter (Harris et al., 2006) sector find that school leaders seek candidates who fit their school's missions, and some research suggests that this fit is predictive of both teacher productivity and teacher retention (Jackson, 2013; Grogan & Youngs, 2011). The mission-driven HR strategies observed in our study are similar to what Gross and DeArmond (2013) refer to as "HR with a purpose." Their research has found that leaders of successful charter management organization use "purposeful HR" practices to recruit, hire, develop, and retain a teaching staff that matches with their school's mission and their particular improvement strategies—or, as they put it in another publication, "who are not only good, but who are also a good match." (DeArmond et al., 2012, p.27) Perhaps as a result, Cannata and Penaloza (2012) have found that charter school teachers tend to place more value than district teachers on school mission, and that charter school teachers are more likely than non-charter teachers to report shared values amongst their colleagues.

Gross and DeArmond (2013) find that mission-driven schools use the teacher recruitment process to ensure that candidates understand and buy into the school's mission. The majority (58%) of the schools in this study reported emphasizing their school's mission in teacher recruitment materials, and the most frequently sought teacher characteristic (67%) was buy-in to the school's mission. One third (33%) of the schools in this study used recommendations from current staff to recruit teachers, with several noting that this strategy was especially fruitful because it helped ensure that candidates understood and embraced the school's culture. One school also noted that grooming and promoting staff from within helped ensure new staff are mission-aligned from the outset. Many other schools in our sample hired for mission-alignment by offering hiring bonuses to particularly desirable candidates or recruiting teachers from programs such as TFA or specific colleges that shared their core values. DeArmond et al. (2012) note that schools can create a common understanding of school goals by providing on-the-job socialization through intensive orientation. The typical teacher orientation "institute" in our sample schools lasted 8.5 days, and almost half (48%) of the schools focused on school culture during this period. Almost half (44%) of the schools also customized their teacher evaluation system to fit their school's mission and educational philosophy, rather than using off-the-shelf standards and rubrics. Finally, almost a quarter (23%) of school leaders in this study reported that their most successful HR management initiative was developing a strong school culture or mission. The mission-driven HR measure ($\alpha = .73$) developed from our interviews and surveys with charter school leaders includes 14 items, which are displayed along with the percentage of schools that used each practice in Figure 38.

Between 2% and 19%, and an average of 11% of the HR practices at each school in this study could be classified as part of the mission-driven decision-making scale. The highest ranking schools based on the mission-driven HR practices composite are displayed in Table 7.

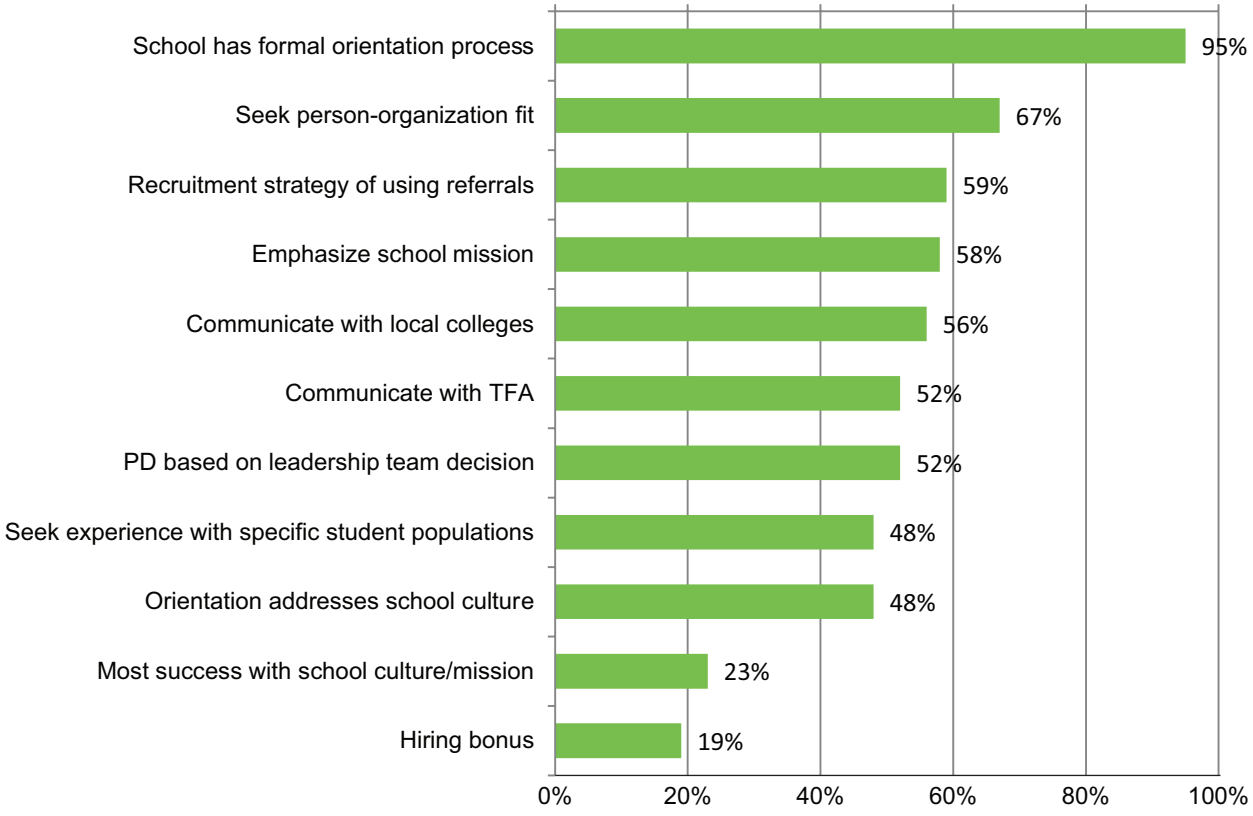

Figure 38. Percentage of schools using each type of mission-driven HR practice.

Table 7

Highest Ranking Schools on Mission-Driven Practices Measure

School	Mission-Driven Practices Composite Score
Perspectives Charter Schools	0.19
Catalyst Schools	0.17
The Noble Network of Charter Schools	0.16
LEARN Charter Schools	0.16
North Lawndale College Prep	0.15
Young Women's Leadership Charter School	0.15
The Montessori School of Englewood Charter	0.14
UNO Charter Schools	0.14
Civitas (CICS)	0.14
8 Points Charter School	0.13
Anonymous (non-Chicago)	0.13

Differences by School Characteristics

Next, we investigated whether different types of charter schools were more (or less) likely to use these incentivist, teacher empowerment, information-rich, or mission-driven HR practices (see Table 8). This analysis revealed that, on average, Chicago charter schools use significantly more information-rich decision-making practices (12%) than non-Chicago charter schools (5%), and that standalone charter schools use significantly fewer incentivist practices (5%) and significantly more teacher empowerment practices (13%) than network-affiliated charter schools (13% and 8%, respectively). But perhaps more importantly, new charter schools (those that had been in operation for fewer than five years) use significantly lower proportions of incentivist practices (3%) than their more mature counterparts (12%). Though not statistically significant, it is interesting to note that unionized schools were typically more incentivist than non-unionized schools, which could indicate that heavily incentivist schools are likely to become unionized.

Table 8

Human Resource Composite Measures, by School Characteristics

	Location		Unionized		Grade Level		School Age		Network/CMO	
	Chicago	No	Yes	No	Elem /Mid	HS	Newer	Mature	No	Yes
Incentivist	.10	.08	.12	.09	.10	.10	**.03**	**.12**	**.05**	**.13**
Teacher Empowerment	.10	.09	.09	.10	.10	.10	.14	.09	**.13**	**.08**
Information-Rich	**.12**	**.05**	.08	.12	.13	.09	.15	.10	.11	.11
Mission-Driven	.11	.10	.12	.11	.10	.12	.10	.11	.11	.11

Bold: $p < .05$

Human Resource Management Practices and School Outcomes

For the final stage of our analysis, these coded HR practices data were linked with school data from education agency records, including the ISBE school report card and Chicago Public Schools' (CPS) assessment reports to explore the relationship between these HR strategies and important school outcomes—namely teacher retention, school learning conditions, and student achievement. All school demographic and outcome data were from the 2013-14 school year, to match the timeframe during which the HR practices data were collected. All campus-level data were student weighted and aggregated to the network level to match the level of aggregation at which the HR practices data were collected. To measure teacher retention, we used teacher retention rates from 2013-14 published in the ISBE state report card, which reflect the 3-year average percentage of full-time teachers returning to work at a given school from year-to-year.[9] For school learning conditions, we used three "essentials" from the Illinois 5Essentials survey that is administered statewide—ambitious instruction, effective leaders, and collaborative teachers—as well as five narrower elements: teacher influence, school commitment, academic press, new teacher socialization, and teacher collaboration. We use the 5Essentials data because prior research indicates that strength in the learning conditions measured by this survey have a positive impact on student outcomes (Bryk, Sebring, Allensworth, Easton, & Luppescu, 2010). We focused on these specific

[9] Several schools in our sample did not have three years of teacher retention data and thus were excluded from this phase of the analysis.

elements of the 5Essentials because they coincide with outcomes we would expect to be related to our HR composite measures.

Numerous achievement measures were available for these analyses. Throughout the state, students in 3rd through 8th grade are given the ISAT and 11th graders take the PSAE. The Illinois State Board of Education reports the proportion of students at each school scoring proficient or above on these assessments, as well as an ISAT growth score and an "all tests composite," which represents the overall proportion of a school's students who met or exceeded state standards across all ISBE administered tests (including the ISAT, PSAE, and the Illinois Alternate Assessment). We were also able to obtain 2012-13 and 2013-14 average scale scores in math and in reading for this analysis, which are statistically superior to the "proportion meeting or exceeding" data that ISBE typically reports (Ho, 2008). Students in Chicago schools take additional assessments, including the Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) for elementary and middle schoolers and the Educational Planning and Assessment System (EPAS) for high schoolers. Results of these assessments are published on the CPS website at http://cps.edu/SchoolData/Pages/SchoolData.aspx.

None of these achievement measures were ideal in terms of both coverage or design. As shown in Table 8, no single assessment was available for all schools in our sample, and those with the most coverage (the statewide exams) were administered only once per year, making it difficult to measure academic growth over the course of a year. For these reasons, we used the available data to produce our own school outcome measures that could compensate for these weaknesses. The first, labeled "IERC Combined" (see Table 9), is simply an average of each school's average ISAT and PSAE scale scores, standardized by grade level, and weighted by the number of that school's students taking each test in the given year. For a second measure, we regressed each school's IERC Combined score for 2014 on their IERC Combined score from 2013 and the proportion of students receiving free- and reduced-price lunch (FRL) to create a "predicted" 2014 score. The "IERC residual" score reflects the difference between this predicted score and each school's actual 2014 IERC combined score, and reflects school achievement adjusted for prior school achievement and school poverty relative to all schools statewide. Both of the IERC created measures utilized the universe of Illinois Public Schools for purposes of modelling and standardization.

Table 9

Availability of Assessment Results

School Outcome Measure	Proporation of Schools with Data
ISBE Teacher Retention Rate (2014)	68%
ISAT Growth Scores (2014)	60%
ISAT Scale Scores (2013 and 2014)	60%
PSAE Scale Scores (2013 and 2014)	40%
ISBE All Tests Composite Scores (2013 and 2014)	88%
NWEA Average RIT Growth (2014)	56%
EPAS Combined Scale Growth Average (2014)	44%
IERC Combined ISAT and PSAE Scale Scores (2013 and 2014)	76%
IERC Residual Score (2014)	76%

As shown in Tables 10 and 11, the status (or point-in-time) measures of achievement that were available (i.e. ISAT and PSAE scale scores, the IERC combined score, and ISBE's all tests composite) were all highly positively correlated with one another. However, the growth (or achievement gains) measures (i.e. ISAT growth, NWEA RIT growth, EPAS growth, and IERC residual) were not significantly related to each other, or—in the case of NWEA RIT growth and some of the other growth measures—negatively correlated. Further, the ISAT growth score was consistently and highly correlated with all of the status measures—which is not desirable for a growth measure and indicative of bias. Similar problems plagued the IERC residual score to a lesser extent.

Table 10

Correlations between 2014 Reading Assessment Results

	ISAT Scale Avg	PSAE Scale Avg.	Standardized Combined	ISBE All Tests Composite	ISAT Growth	NWEA Avg. RIT Growth	EPAS Combined Scale Growth	IERC Residual
ISAT Scale Avg (n=16)	—							
PSAE Scale Avg. (n=11)	.76*	—						
Standardized Combined (n=19)	.90**	.95**	—					
ISBE All Tests Composite (n=23)	.93**	.90**	.97**	—				
ISAT Growth (n-15)	.87**	.78*	.80**	.80**	—			
NWEA Avg. RIT Growth (n=14)	.12	.26	.39	.36	-.013	—		
EPAS Combined Scale Growth (n=11)	.23	.77*	.43	.40	.43	.22	—	
IERC Residual (n=19)	.51	.66*	.61**	.63**	.65**	.11	.77*	—

* Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed)

Table 11

Correlations between 2014 Math Assessment Results

	ISAT Scale Avg	PSAE Scale Avg.	Standardized Combined	ISBE All Tests Composite	ISAT Growth	NWEA Avg. RIT Growth	EPAS Combined Scale Growth	IERC Residual
ISAT Scale Avg (n=16)	—							
PSAE Scale Avg. (n=11)	.88**	—						
Standardized Combined (n=19)	.97**	.96**	—					
ISBE All Tests Composite (n=23)	.95**	.86**	.89**	—				
ISAT Growth (n-15)	.93**	.83*	.96**	.80**	—			
NWEA Avg. RIT Growth (n=14)	.44	.65	.23	.62*	.16	—		
EPAS Combined Scale Growth (n=11)	.37	.58	.41	.40	.44	.19	—	
IERC Residual (n=19)	.60*	.48	.51*	.21	.73*	-.30	.40	—

* Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed)

Our general strategy for modelling the association of HR practices with all three outcomes (teacher retention, school climate, and student achievement) was to use linear regression while statistically controlling for other school variables, such as poverty or prior achievement levels, that could influence the given outcome. We used 2014 outcomes as the dependent variable because our HR practices data were collected during the 2013-14 school year, and entered each of the HR practices composite scores simultaneously as independent variables.[10] For the achievement status measures, we controlled for the prior year's achievement using 2013 results for the same assessment in the same subject (reading, math, or composite). For the growth measures, prior achievement is already included in the dependent variable, so no additional pretest measures are introduced into the models. School poverty (FRL) is not included in the models using the "IERC residual" measure because it is already included in the calculation of the residual score.

Because of the wide array of assessments available, each with its own advantages and disadvantages, and low correlations amongst growth measures, we opted to include multiple outcome measures in the statistical models we report. We used the ISBE all tests composite and IERC combined measures because they captured the largest proportion of schools (>75%). We used the IERC residual scores because they also cover a large proportion of schools and are correlated with the ISAT growth measure (which were appealing because they are tracked by the state education agency and appear on the statewide school report cards) without being as tightly linked with the achievement status measures. We used the NWEA RIT growth scores, despite their relatively low coverage rate (44%) and the lack of results from schools outside of CPS, because this assessment is administered multiple times each year and was specifically designed to measure student growth. Tables 11-14 present the results using these different school outcomes and showing standardized coefficients (β) to express the magnitude of effect and allow the reader to compare our findings across the various models.

Table 12

Standardized Coefficients for HR Practices on Teacher Retention

	Model 1: 2014 Teacher Retention		Model 2: 2014 Teacher Retention	
	(R Square = .149)		(R Square = .515)	
	β	p	β	p
% Mission-Driven	-0.26	0.42	-0.21	0.41
% Info Rich	-0.05	0.88	0.62	0.10
% Empowerment	0.17	0.61	0.49	0.11
% Incentivist	0.10	0.75	0.35	0.21
FRL 2014	-0.11	0.75	0.25	0.42
Chicago			-1.06	0.02*

* $p<.05$.

[10] We also modelled the results without controlling for school poverty and with dummy variables for location (Chicago vs. non-CPS), school level (HS vs. non-HS), network affiliation (standalone vs. networked or CMO-managed), and school age (>= 4 years vs. <=3 years), and used stepwise procedures to enter the independent variables individually and in a different sequence. Each of these approaches yielded results similar to those presented here.

The results presented in Table 11 indicate that these HR strategies have no statistically significant relationship with three-year teacher retention rates, as measured on the ISBE report card (see Model 1, Table 11). The introduction of a Chicago dummy variable (i.e., Model 2) substantially improved the explanatory value (R squared) of the model but did not add any predictive power to the HR practices. The large negative coefficient indicates the Chicago charter schools in this sample have significantly lower teacher retention rates than those outside Chicago. It is perhaps worth noting here that prior research (DeAngelis & Presley, 2007) has shown that CPS schools on average tend to have slightly higher teacher retention rates than do schools in the rest of the state. Further, as highlighted in the background section of this paper, there are numerous teacher characteristics (such as age and educational background) which also influence attrition and which may vary widely from campus to campus between these schools (and between these schools and schools not included in the sample), and retention rates in isolation cannot distinguish productive from unhealthy attrition. But this initial analysis suggests that the HR practices—at least as measured here—have little systematic relationship to teacher attrition once school poverty and location are taken into consideration.

To see if HR practices are related to school learning conditions, we examined the relationship between our composite practice measures and indicators of ambitious instruction, effective leaders, and collaborative teachers derived from the Illinois 5Essentials survey. Table 13 shows that the HR practice measures have no statistically significant association with any of the three school climate measures (ambitious instruction, effective leaders, or collaborative teachers). This is somewhat surprising given that several components of the climate indicators tap into constructs such as shared vision and teacher influence that ought to be directly related to the themes in mission-driven and teacher empowerment HR practices composites.

Table 13

Standardized Coefficients for HR Practices on School Climate

	5Essentials: Ambitious Instruction		5Essentials: Effective Leaders		5Essentials: Collaborative Teachers	
	(R-Square = .157)		(R-Square = .297)		(R-Square = .215)	
	β	*p*	*β*	*p*	*β*	*p*
% Mission-Driven	0.36	0.20	0.14	0.56	0.27	0.32
% Information-Rich	-0.11	0.69	-0.46	0.08	-0.26	0.33
% Teacher Empowerment	0.10	0.72	0.36	0.18	0.34	0.25
% Incentivist	-0.07	0.80	0.16	0.55	0.12	0.67

We also compared the HR strategies with selected subscales of the Illinois 5Essentials survey that measured constructs that we believed ought to be sensitive to our composite HR measures: teacher influence, school commitment, academic press, new teacher socialization, and teacher collaboration (see Table 14). As hypothesized, the analysis indicated that teacher empowerment practices were positively and statistically related to the 5Essentials teacher influence measure. Information-rich decision-making was inversely related with the 5Essentials school commitment measure. That is, higher levels of information-rich decision-making practices were associated with lower school commitment, as measured by the 5Essentials. This may be indicative of the "top-down monoculture obsessed with the quantifiable" as Schneider (2013) suggests—where teachers may feel they are treated as data-points rather than individuals. We also found that teacher empowerment practices had a statistically significant and negative association with the 5Essentials measure of academic press, meaning that higher levels of teacher empowerment were associated with lower academic standards and expectation for students.

Table 14

Standardized Coefficients for HR Practices on Subscales of School Climate

	5Essentials: Teacher Influence		5Essentials: School Commitment		5Essentials: Academic Press		5Essentials: New Teacher Socialization		5Essentials: Teacher Collaboration	
	(R Square = .570)		(R Square = .409)		(R Square = .335)		(R Square = .325)		(R Square = .163)	
	β	*p*	*β*	*p*	*β*	*p*	*β*	*p*	*β*	*p*
% Mission-Driven	0.27	.18	-0.04	.86	-0.01	.98	0.21	.39	0.24	.38
% Info Rich	-0.30	.16	-0.06*	.03	0.01	.95	-0.36	.18	-0.09	.77
% Empowerment	0.60*	.01	0.23	.37	-0.63*	.03	0.35	.20	0.18	.56
% Incentivist	0.49	.05	0.09	.73	-0.14	.62	0.21	.47	0.32	.33

* $p<.05$.

Next, we examined the relationships between our measures of HR practices and school achievement, controlling for other explanatory variables. The results shown in Table 15 indicate that HR practices have little statistical relationship with achievement status measures (Models 1-3) and that prior achievement alone explained the vast majority of the variation in current achievement status. However, the models using the IERC residuals (Models 4 & 5) indicate that incentivist HR practices have a relatively large, positive, and statistically significant correlation with math achievement beyond what one would expect given their school poverty levels and prior math achievement. Note that, because of the different ways that the outcomes were generated in the models, Models 4 and 5 measure the over- or under-achievement of the sample schools *relative to predicted values based on the distribution of scores for the state as a whole*, whereas Models 1-3 only examine over- or underachievement *relative to the sample of schools participating in our study*. So, the differences in findings from these two sets of statistical models could be interpreted to mean that incentivist HR strategies are associated with over- (or under-) performance in math relative to the state as a whole, but not amongst the charter schools in this small sample. It is also important to observe that the suite of incentivist practices were consistently positive and larger in magnitude than the other HR practice scales in each of Models 1-3, though not to the level of statistical significance. Because we had previously found that incentivist practices were associated with school maturity, we wanted to make sure these models were picking up the effects of HR

practices rather than school age, so we also ran models accounting for this factor and found similar, which yielded similar results. That is, increased math gains were still associated with incentivist practices, rather than the number of years the school had been established.

The results from the NWEA RIT growth models (Models 6 & 7) suggest that this finding should be interpreted with caution, however, as they show no consistent or statistically significant relationship between incentivist practices and achievement growth in either reading or math. In fact, Models 6 and 7 indicate that neither the HR composites nor school poverty help explain RIT growth on the NWEA MAP. Taken together, these results suggest that incentivist practices may have some positive association with math achievement, but that this is largely dependent on how school achievement is being measured and cannot be construed as causal. There is little evidence from these analyses that any of the other set of HR practices has a significant association with differences in school achievement as measured in this study.

Table 15

Standardized Coefficients for HR Practices on Achievement

	Model 1: 2014 IERC Combined Reading		Model 2: 2014 IERC Combined Math		Model 3:2014 ISBE All Tests Composite	
	(R Square = .871)		(R Square = .885)		(R Square = .937)	
	β	*p*	*β*	*p*	*β*	*p*
% Mission-Driven	-0.08	0.49	0.09	0.45	-0.02	0.81
% Info Rich	-0.03	0.84	-0.10	0.46	0.08	0.33
% Empowerment	-0.11	0.38	-0.09	0.46	-0.02	0.81
% Incentivist	0.11	0.41	0.23	0.12	0.11	0.18
FRL 2014	0.03	0.84	-0.08	-0.49	-0.05	0.54
2013 Pre-Test	0.90*	0.00	0.86*	0.00	0.90*	0.00

* $p<.05$.

	Model 4: 2014 IERC Reading Residual		Model 5: 2014 IERC Math Residual		Model 6:NWEA RIT Growth Reading		Model 7: NWEA RIT Growth Math	
	(R Square = .231)		(R Square = .379)		(R Square = .453)		(R Square = .378)	
	β	*p*	*β*	*p*	*β*	*p*	*β*	*p*
% Mission-Driven	-0.04	0.87	0.22	0.33	-0.52	0.11	-0.44	0.19
% Info Rich	0.10	0.71	-0.27	0.24	0.08	0.81	0.23	0.49
% Empowerment	-0.10	0.72	-0.11	0.66	-0.31	0.36	-0.11	0.75
% Incentivist	0.39	0.17	0.52*	0.05	-0.43	0.27	0.01	0.97
FRL 2014					0.41	0.18	0.30	0.34

* $p<.05$.

Summary

Throughout this report, we have quoted various accounts describing charter schools as "laboratories of reform" or "black boxes" with HR strategies depicted as "burn and churn," and a "top-down" "monoculture." In a sense, these depictions are each right and wrong, to varying degrees. As suggested by the research on cross-sector student achievement differences—and as is the case in describing HR practices amongst district schools—charter schools are not a monolith, and there is a wide diversity of both practice and results, perhaps due to the flexibility charter schools are granted. Because of this diversity, it is difficult to generalize about the HR practices in the charter sector and would be an oversimplification to paint the entire sector (or any sector for that matter) with a broad brush. Nonetheless, several trends in charter school HR management uncovered in this study are worthy of discussion.

Recruitment. The charter schools in this study relied on *both* alternatively certified (specifically TFA corps members and alumni) and traditionally prepared teachers to staff their schools. Indeed, some schools felt TFA was a bad fit for their school philosophy, and, despite some flexibility to do so, there was little discussion of hiring non-certified teachers except under extenuating circumstances. Job fairs—even those geared toward the charter school sector—were generally viewed as unproductive. Instead, referrals from current staff members were often viewed as the most fruitful source of new teachers and several schools offered referral bonuses for current teachers to facilitate this practice, particularly because this helped ensure candidates understood and bought into the school mission. Many schools also emphasized their unique mission in the teacher recruitment and selection processes to help ensure organizational fit from the outset. The Chicago schools in this study also tended to recruit and hire much earlier in the year than the schools described in the 2003 TNTP study in order to keep pace with CPS as well as one another.

Hiring. The hiring processes reported by these schools were generally thorough and deliberate, often involving full-day campus visits by teacher candidates with demonstration lessons. Current teachers were typically heavily involved in this process, interviewing candidates and weighing in on the selection process, and network staff generally devolved teacher hiring to the school level. Recruitment and hiring initiatives were at the top of administrators' lists of reported successes, failures, and future initiatives, indicating the prominent place these activities occupy in the minds of charter school leaders. There was worry from some corners that applicant pools have been shrinking and becoming less diverse in recent years, and that schools could not be as selective as they would like, especially for hard-to-staff positions. They fear that this may become more problematic as the charter sector continues to expand and other schools and districts become more strategic and competitive with their hiring practices.

Professional Development. Teacher support was frequently mentioned among these schools' most successful HR initiatives, but overall, innovation in the area of PD was underdeveloped in comparison to the other major HR functions addressed in this report. One area where these schools stood out was new teacher orientation, which often consisted of intensive,

multi-week training periods. Mentoring and other accommodations and supports for new teachers were not a strong focus of many of the school leaders interviewed. Instructional coaching was common, particularly at the elementary/middle school level.

Evaluation. Teacher evaluations were characterized by the use of numerous, often informal, classroom observations and the use of home-grown observation rubrics, as opposed to off-the-shelf tools such as the Danielson Framework, which is in prevalent use throughout the state. Many schools incorporated student growth measures into teacher evaluation scores, though evaluation scoring was rarely formulaic, and numerous schools that were able to calculate growth measures chose to use them solely for PD, and the evaluation process itself was typically spoken of in more formative than summative terms.

Compensation. As suggested in the literature, teacher salaries in these schools were relatively low, whereas utilization of performance pay was relatively high. Many schools incorporated elements of market-based pay by offering higher salaries for hard-to-staff positions and allowing principals a substantial degree of latitude in making offers, but most schools continued to take teacher education and experience into account with salaries in order to remain competitive. Performance-based pay was typically linked to multiple measures of teacher performance, including evaluation results, and referral bonuses were used to encourage recruitment of like-minded colleagues. Several administrators noted that they wanted to be more strategic and innovative in this area, but lacked stable funding to do so.

Retention. Shared leadership and increased teacher input were viewed as key retention strategies across these schools. Some schools attempted to reduce turnover at the front end by using mission-driven recruitment strategies to ensure fit from the outset. Administrators were often willing to make generous accommodations to retain successful teachers, but also willing to let less effective educators leave, noting that teachers were typically on year-to-year contracts, though pointing out that non-renewal was quite rare. Leadership development was a strong component of schools' support and retention strategies. High-performing teachers were often tapped for instructional coaching or administrative positions, particularly within growing networks, several of which used fellowship programs to formalize the process.

Human Resource Management Differences by School Characteristics

This report also highlights key differences in charter school HR practices based on school characteristics. No statistically significant differences in HR practice were observed between elementary/middle schools and high schools and between standalone charter schools and network- or CMO-managed charter schools. We found only one statistically significant difference in HR practices between charter schools that had been established for fewer than five years and their more mature counterparts—new charter schools were more likely than mature charters to have a new teacher orientation that lasted for two weeks or more. However, we found numerous differences in HR practices between unionized and non-unionized charter schools and between charter schools in Chicago and those not in Chicago, suggesting that school location and unionization status play important roles in HR policy and practice.

With regard to teacher recruitment and hiring, unionized charter schools (*n*=4) were significantly more likely than non-unionized charter schools (*n*=23) to recruit teachers using non-charter specific job fairs and job boards, to recruit from local colleges in general, as well as specific university-based teacher preparation programs, and to communicate recruitment needs with local colleges. Non-unionized charter schools were more likely recruit from TFA, emphasize benefits and working conditions in recruitment materials, and to seek evidence of student growth and use reference checks in teacher hiring. In professional development, unionized charter schools were more likely to address teacher evaluation during orientation periods and to utilize new teacher mentoring programs. Non-unionized schools, on the other hand, were significantly less likely to base PD content on leadership team decisions, but significantly more likely to base PD on data and assessment results. A prior study (Price, 2011) found that unionized charter schools typically allow for extended school years, however, our study found that non-unionized charter schools tended to have much longer new teacher orientation periods than their unionized counterparts.

Teacher evaluations in unionized schools were more likely to utilize Danielson's Framework for Teaching than locally-developed standards and rubrics, and less likely to include teacher self-evaluations, but more likely to include parent surveys. We found that unionized charter schools were significantly more likely to set teacher base salaries using education and experience that were non-unionized charters, which is consistent with prior research (Price, 2011). However, we found that unionized charter schools were significantly more likely than non-unionized charters to to offer bonus for hard-to-staff positions. We also found that non-unionized schools were more likely to offer hybrid teacher-leader opportunities and to say that teacher support has been their most successful HR strategy.

Statistically significant differences were also observed between Chicago and non-Chicago schools across more than 20 of the HR management practices tracked in this study. Notably, Chicago charter schools were significantly more likely than non-Chicago schools to recruit from the University of Chicago and from TFA corps members and alumni, and to communicate staffing needs with TFA. Non-Chicago charter schools were more likely to recruit using general (not charter-specific) job fairs and job boards. Chicago charter schools are more likely to emphasize benefits and working conditions in recruitment materials and to hire teachers much earlier in the year. Chicago charters are also more likely to seek teachers who are open to feedback and have a strong work ethic, and more likely to mention using reference checks in the hiring process and to leave final hiring decisions to the principal alone. Chicago charters are more likely than non-Chicago charters to base PD content on schools goals, but there are no other differences between Chicago and non-Chicago schools with regard to teacher orientation, mentoring, and professional development. Teacher evaluations in Chicago are more likely to include multiple observers and a higher number of teacher observations. Non-Chicago charter schools are more likely to use increased teacher voice as a strategy for retention, but Chicago charters are more likely to offer non-financial rewards to high performing teachers, higher base salaries, and innovative teacher-leader roles. Substantial differences between Chicago and non-Chicago charter schools are in line with prior research suggesting that HR policies are highly sensitive to local contexts such as the policies of surrounding districts (Gross & DeArmond, 2010). Chicago charter schools must compete not only with CPS—which has substantially more resources and has partnered with TNTP and other organizations to develop a sophisticated HR strategy—but also the

high concentration of other charters in the city. Further, many Chicago charter schools are in regular communication with one another and work together to share practices through events such as the "reference-palooza." Non-Chicago charter schools, on the other hand, are often situated in districts with less progressive and lower-resourced HR divisions, and do not have other charter schools with which to compete (or share practices).

Crosscutting Human Resource Management Strategies

Next, we looked across schools and across HR functions to view these systems more holistically, and were able to identify four broad themes that were related both theoretically and statistically: 1) incentivist reforms, including performance-based pay and strong relationships with TFA, that are commonly associated with charter schools and the school reform movement in the media; 2) teacher empowerment practices, such as career advancement opportunities and involving current teachers in school decision-making; 3) information-rich decision-making, whereby principals track performance using multiple data sources and use this information to drive HR practices; and 4) mission-driven practices, such as a focus on organizational fit during the hiring process and organizational culture during orientation. These themes can help us build toward a typology of school HR practices, and we find that most schools have elements of each theme, although certain schools may emphasize one strategy more than the others.

We were also able to identify some statistically significant relationships between these crosscutting HR strategies and school characteristics. Specifically, we found that standalone schools use a significantly lower proportion of incentivist practices and a significantly higher proportion of teacher empowerment practices than network-affiliated charter schools. But perhaps most interestingly, our study showed that charter schools that had been in operation for fewer than five years used significantly lower proportions of incentivist practices than their more mature counterparts, which could signal that the current generation of charter schools are shifting away from the incentivist practices commonly associated with the sector.

Human Resource Management Practices and School Outcomes

Finally, we explored the relationship between HR practices and the school outcomes that our theory of action suggests they ought to affect. In doing so, we find that there is little direct relationship between any of the four crosscutting HR strategies and three-year teacher retention rates or any of the broad school learning conditions considered (ambitious instruction, effective leaders, or collaborative teachers). However, we find that evidence that HR strategies do have statistically significant relationships with some more narrow aspects of school climate. Specifically, our data suggest that teacher empowerment practices were positively associated with teacher influence, which provides some confirmatory evidence for our HR practice measures. Findings showing that empowerment practices were negatively linked with academic press and that information-rich decision-making was inversely related to school commitment were less straightforward and warrant further investigation.

We used results from multiple assessments with various statistical models to investigate the relationships between HR practices and student achievement gains. Taken together, these results suggest that incentivist practices may have some positive association with schoolwide math achievement gains, but this is largely dependent on how achievement gains are measured. The link between incentivist practices and achievement gains should be explored further, including efforts to determine whether any particular practices associated with the incentivist theme are particularly effective. There is little evidence from these analyses that any of the other set of HR practices has a consistent and direct association with school achievement gains in math or reading.

Discussion

Because charter schools are granted extra flexibility and subject to more competitive market conditions, they are expected to implement more innovative and efficient HR management strategies than non-charter, district schools. The descriptions and examples of charter school HR practices documented in this report illustrate that, in many areas, many charter schools are certainly performing in accord with what are considered to be state-of-the-art approaches to HR management. But this is far from universally the case, and many schools in this study retained elements of very traditional HR management practices. Nor is it unique to the charter school sector, as it is likely that very few practices described in this report have not been attempted in some non-charter sector schools. Instead of breaking entirely new ground, the HR strategies presented in this report represent more of a fine-tuning or customization of typical HR functions and a freedom to experiment with variations on mainstream practices to compete in a given labor market or meet a school's specific mission. Rather than recruiting from entirely new pipelines, the schools are working to make existing pipelines more efficient or honing in on particular teacher characteristics within the current pipeline. Instead of completely reinventing the way PD is delivered, they instead focus on delivering more targeted and useful content through the existing channels. Rather than completely dismissing the use of education and experience to set teacher salaries, they use this as a starting point to remain competitive, while allowing sufficient flexibility for adjustments based on market value or organizational fit. Instead of persisting with *de rigueur* reference checks viewed almost uniformly as worthless, they find a way to make this a highly informative and valuable aspect of the teacher hiring process. It is in these subtle but important fine-tunings and customizations and experimentations where charter schools may be most innovative and cutting edge, with HR reforms that are more evolutionary than revolutionary.

However, it would be premature to call any of them "best practices," because there is still much to learn about their associations with outcomes that matter to teachers, students, and parents. In Illinois in particular, we need a better data systems in order to be able to compare the effectiveness of HR—and other—practices on a statewide scale, including regular assessments that are designed to measure growth and a longitudinal data system linking students with schools and classrooms for purposes of research and school improvement. The state's development of a longitudinal data system with common identifiers and implementation of the Partnership for Assessment of Readiness for College and Careers (PARCC) exam should help with this in coming years, though it is presently too early to tell if this will be the case. It might also be useful to investigate the effect of HR practices on other important outcomes that were not included in this study, including non-cognitive factors such as student grit and mindset, and to explore whether certain combinations of practices across various HR tasks—for example, information-rich recruitment and selection, mission-driven PD and teacher evaluation, incentivist compensation systems, and empowering retention strategies—are more productive than other combinations or any single approach in isolation. Given the range of school missions espoused throughout the charter sector, it may also be worthwhile to investigate whether the impact of mission-driven HR practices is mitigated by the particular mission they set out to serve.

While it is difficult to draw any causal conclusions about the impact of HR practices described in this report, it is clear that many are consistent with the employment features that teachers find attractive and that address perceived weaknesses in the current educational system in general, and the teaching profession in particular. These features include increased teacher voice in school policy and curriculum decision-making, enhanced leadership and career advancement pathways, individualized professional development, opportunities for collaboration, acknowledging and rewarding success, and working with like-minded colleagues around a common mission. However, future research efforts are needed to compare these findings with a larger sample of schools, including schools from the non-charter sector, and to gather feedback from teachers regarding their perceptions of and reactions to the HR management practices described in this report. For example, what some administrators may describe as (and intend to be) "teacher empowerment" or "enhanced opportunities," may be perceived by teachers as contributing to the "burn and churn" rather than alleviating it. Indeed, Sanchez (2015) suggests that overbearing workloads have been a prime motivation for the formation of teachers unions in Chicago charter schools, indicating that, at least in some instances, these additional responsibilities are viewed as unnecessarily burdensome.

Implications

This report has also made it exceedingly clear that principals play a large role in shaping and executing personnel strategy, which underscores the importance of developing HR management skills in our school administrators. Principals play an important role in many aspects of HR management, especially attracting and retaining teachers (Milanowski & Kimball, 2010), and recent research has shown that successful principals excel at both hiring the most effective teachers from other schools and retaining the most effective teachers in their own schools (Loeb, Kalogrides, & Béteille, 2011). Other studies suggest that principals need and crave additional training in the analytical skills that are required to use data for strategic HR management (Schuerman, Goldring, Cannata, Drake, Grissom, Neumerski, & Ruben, 2014). Thus principal preparation and inservice training and coaching can serve as vital levers for HR reform and school improvement. Principals could also be supported in these tasks through distributed leadership in the form of "operations managers" or similar staff who handle budgeting or other administrative responsibilities, freeing the principal's time and increasing his or her capacity for these HR management tasks (Odden & Kelley, 2008). Further, some of these "innovative" HR management decisions at charter schools may come about more out of necessity than by design. With limited resources and no "district-level" support, some charter leaders may have little option but to be creative and quickly accelerate sometimes inexperienced and nontraditionally trained staff into more advanced roles and responsibilities in order to make the most of their available capacity.

The state education agency and, in the non-charter sector, local education agencies also have a role to play in assisting school leaders with human resource management. Researchers in this field (Gross & and DeArmond, 2013; Milanowski, & Kimball, 2010) have noted that states and districts can support HR management by communicating clear expectations about its importance, providing access to high quality teacher data, and developing best practices models for principals, as CPS has done through its "model staffing initiative" in partnership with TNTP (Aportela & and Goetz, 2008; TNTP, nd). They also stress that principals need

to be provided the time and the autonomy to make important HR decisions at the school level (DeArmond, et al. 2012). As noted by the Noble Network of Charter Schools in this study, their HR strategy is "all about principal autonomy." Network staff work to get talented principal into each campus and provide clear metrics of success, then provide principals space to collaborate and learn from each other's' best practices. Further, unlike many aspects of schooling, HR management is an area ripe for experimental research, and school or district HR offices (charter or otherwise) could play a role in advancing this agenda by, for example and as illustrated in this report, tracking the success rates of various teacher recruitment pathways and using these data to inform future hiring decisions.

Finally, the continued growth of the charter sector in this state and nationally, along with ongoing reforms to teacher evaluation and tenure in Illinois and across the country, suggest that neither charter schooling nor efforts at HR management reform are going away any time soon. So, if charter schools are to serve as laboratories of reform in the area of HR policy, then researchers, policymakers, and, perhaps most importantly, educators—from both inside and outside the charter school sector—will need to examine their experiences, and be open to learning from both the successes and the failures from the charter school sector. Recent efforts at charter-district and even charter-Catholic school collaborations throughout the country (see Rocheleau, 2012; Shapiro, 2015; Yatsko, Cooley Nelson, & Lake, 2013; Yatsko and Bruns, 2015) provide promising examples of how this model could work, and we hope that this report can contribute to the conversation.

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Appendix A: Phone Interview Protocols

1. Describe the process your school uses to recruit new teachers.
2. What is your base pay for a teacher that is new to your school and how is that determined?
3. Describe your typical recruitment pool.
4. What do you look for when selecting new teachers?
5. What steps occur between when an application is received and an applicant is hired?
6. Does your school have an orientation process for new teachers? If so, please describe.
7. Does your school have a mentoring program for new teachers? If so, please describe.
8. Briefly describe your school's approach to professional development.
9. Briefly describe your school's teacher evaluation program.
10. How are evaluation results used at your school?
11. How would you describe your "retention strategy"? Is there anything in particular that you do to attempt to retain successful teachers (or not retain unsuccessful teachers)?
12. Do teachers receive variable pay (i.e. bonuses)? If so, how is variable pay awarded and how much?
13. What is the maximum annual earnings potential for a classroom teacher at your school?
14. Does your school offer any specific pathways for career advancement?
15. Does your school have a tenure program? If so, please describe how it works.
16. In your opinion, what HR strategy has been the most successful at your school, or is there anything you're doing that other schools should definitely try?
17. Were there any HR management innovations you attempted that were unsuccessful or that you would not recommend to other schools?
18. Are there any new HR management initiatives that are planning to or would like to begin in the near future? If so, please describe.
19. Is there anything else that you would like to discuss or any additional questions we should be sure to ask to other schools we interview?

Appendix B: Online Survey

- What has been your most successful strategy for recruiting high quality teachers (e.g. posting on particular job boards, networking with specific organizations, referrals from current staff, etc.)?
- What are some examples of information you provide prospective applicants about the school or the position and how you promote the school as an attractive workplace?
- In what month do you start recruiting for open teacher positions? [drop down for months]
- In what month do you typically hire new teachers? [drop down for months]
- What is the approximate base pay for a teacher who is new to your school? [fill in blank starting with $]
- How is that base pay level determined? (check all that apply)
    - Experience
    - Advanced Degrees
    - Market Rate (benchmarking against other schools or districts)
    - Negotiated between teacher and school
    - Set salary schedule
    - Other [Text Box]
- Do you offer any monetary incentives (beyond base pay) to recruit new teachers in hard-to-staff positions or particularly desirable new teachers?
    - No
    - Yes
        - If yes, what is the typical amount of the incentive? [Text Box]
        - If yes, what subjects are classified as hard to staff? [Text Box]
- Do you tend to recruit teachers from particular preparation programs or pathways?
    - No
    - Yes
        - If so, which programs/pathways? [Text Box]
- Do you have any communication with any particular sources of teachers (e.g. preparation programs, Teach for America) about the particular type of teachers your school needs (e.g. content area, specific skills, etc.)?
    - No
    - Yes
        - If so, please describe. [Text Box]
- Is there anything else we should know about your teacher recruitment strategy? [Text Box]
- Please rate the following characteristics from “most important” to “least important” when considering whether to hire a prospective teacher at your school:

	Most Important (pick up to three)	Very Important	Somewhat Important	Not Important
Teaching philosophy (mission fit)				
Academic ability				
Ability to work well with others				
Level of caring and compassion				
Communication skills				
Work ethic				
Leadership traits				
Creativity				
Demographic characteristics (like race, gender, or age)				
Quality of teacher education program from which the candidate graduated				
Flexibility to teach a wide range of grades/ subjects				
Ability to teach a specific subjet, program, or type of student				
General pedagogical skill (teaching strategies, child development, classroom management, etc.)				
Evidence of student growth				
Other [fill in blank]				
Other [fill in blank]				

- What steps generally occur between when an application is received and an applicant is hired? [Text Box]
- Please rate the following tools from “most useful” to “least useful” in terms of assessing the quality of a prospective teacher at your school.

	Most Useful (pick up to three)	Very Useful	Somewhat Useful	Not Useful
Resume (i.e. degrees, colleges, teaching experiences, etc.)				
Work experience outside of teaching				
Rapport during the interview				
Substance of responses during the interview				
Screening instruments as Teacher Insight or STAR teachers				
Demonstration lessons				
Portfolios or lesson plans				
Other [fill in blank]				
Other [fill in blank]				

- Who makes decisions about whether or not a teacher is hired? (select all that apply)

	Involved in Process	Final Decisionmaker
Network/central administrative (non-school) staff		
Principal		
Other school administrators (Assistant Principal, Director of Instruction, etc.)		
Department Chairs		
Other teachers		
Students		

- Please describe any additional data (e.g. lesson plans, assessments, portfolios, etc.) you collect during the hiring process. [Text Box]
- Is there anything else we should know about your teacher hiring strategy? [Text Box]
- Does your school have a formal orientation process for new teachers?
    - No
    - Yes
        - If so, please describe (be sure to include duration and content) [Text Box]
- Does your school provide any other special accommodations for new teachers (e.g. lighter teaching load or more planning time)?
    - No
    - Yes
        - If so, please describe. [Text Box]
- Does your school utilize a formal mentoring program for new teachers?
    - No
    - Yes
        - If yes, please describe. (e.g. How are mentors selected? How are mentors and mentees paired?) [Text Box]
- How much time is built into the school calendar for PD? [Text Box]
- Do all teachers participate in the same PD or is PD tailored for each teacher? [Text Box]
- Who determines the content of professional development? [Text Box]
- How do they make this determination? [Text Box]
- Is there anything else we should know about professional development strategy? [Text Box]
- Are classroom observations of teachers' instructional practice included as part of their summative evaluation ratings?
    - No
    - Yes
        - If yes, which teacher performance rubric does your school use during classroom observations?
            - An off-the-shelf model like Danielson, Marzano, Kim Marshall, other [select one]
            - A home-grown model
            - Other [please describe] [Text Box]

- How many formal observations do teachers undergo as part of the evaluation process?
    - 1-2
    - 3-5
    - 6-9
    - 10+
- Who typically observes teachers for purposes of evaluation? (check all that apply)
    - Principals
    - Other administrators
    - Department chairs/lead teachers
    - Other teachers
- How many different observers rate each teacher's practice?
    - 1
    - 2
    - 3 +
- Do observers receive any kind of training on making observations, providing feedback, and calibrating their ratings, such as Growth through Learning?
    - No
    - Yes
- Are student achievement growth measures included as part of teachers' summative evaluation ratings?
    - No
    - Yes
        - If yes, which assessments are used for the teacher growth measures in "tested" subjects (such as math and reading)? [Text Box]
        - If yes, how is student growth measured for teachers of "non-tested" subjects? [Text Box]
- Are there any other data (student surveys, parent feedback, self-evaluations, etc.) that are included as part of teachers' formal evaluation ratings?
    - No
    - Yes
        - If so, please describe [Text Box]
- How are the results of teacher evaluations used at your school?
    - Additional opportunities or recognition for high-performers?
    - Interventions or assistance for low-performers?
    - Is there anything else we should know about your teacher evaluation strategy? [Text Box]
- Can you provide some examples of things your school has done to attempt to retain successful teachers? [Text Box]
- Can you provide some examples of things your school has done to ensure that unsuccessful teachers are not retained? [Text Box]
- Does your school have a tenure program?
    - No
    - Yes
        - If so, please describe.[Text Box]

- Do teachers receive variable pay (i.e. bonuses)?
  - No
  - Yes
    - If so, how is variable pay awarded (bonuses for additional duties, for high student performance, etc.) and how much? [Text Box]
- What is the maximum annual earnings potential for a classroom teacher at your school (with, say, a lot of experience and excellent results in a hard-to-staff subject)? [Text Box]
- Does your school offer any specific pathways for career advancement?
  - No
  - Yes
    - If so, please provide details on any career ladders, teacher leader positions, hybrid teacher leader roles, and other staffing or career advancement innovations [Text Box]
    - Is there anything else we should know about your teacher retention and compensation strategy?[Text Box]
- In your opinion, what human capital management strategy has been the most successful at your school? Is there anything you're doing that other schools should definitely try? [Text Box]
- Were there any human capital management innovations you attempted that were unsuccessful or that you would not recommend to other schools?[Text Box]
- Are there any new human capital management initiatives that you are planning to or would like to begin in the near future? If so, please describe. [Text Box]
- Is there anything else that we should know about the role of human capital management in Illinois charter schools or anything else that we should be sure to ask to other schools? [Text Box]

Appendix C: HR Practices by School Characteristics

Teacher Recruitment	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
recruitment strategy of using referrals	.40	.67	.60	.58	.53	.67	.52	.50	.86	.50
recruit using general job fairs/boards	**1.00**	**.57**	.53	.75	.60	.67	**.57**	**1.00**	.57	.65
recruit using charter job fairs/boards	.60	.62	.47	.75	.73	.42	.57	.75	.29	.70
recruitment strategy of using social media	.00	.24	.20	.17	.27	.08	.17	.25	.14	.20
recruit from other schools	.20	.19	.20	.17	.13	.25	.17	.25	.29	.12
promote from within	.00	.14	.20	.00	.07	.17	.13	.00	.14	.10
recruit from non-certified pools	.40	.00	.07	.08	.07	.08	.09	.00	.14	.05
recruitment strategy of using alt route/TFA	**.00**	**.76**	.60	.67	.80	.42	**.65**	**.50**	.57	.65
TFA corps	**.00**	**.48**	.47	.33	.60	.17	.39	.50	.14.	.50
TFA alum	**.00**	**.38**	.40	.17	.40	.17	.30	.25	.29	.30
other alt cert	.00	.05	.07	.00	.07	.00	.04	.00	.00	.05
recruitment strategy of using traditional teacher prep	1.00	.71	.80	.67	.80	.67	**.70**	**1.00**	.71	.75
specific teacher prep program	.80	.52	.67	.42	.47	.67	**.52**	**.75**	.71	.50
UTEP/University of Chicago	**.00**	**.33**	.33	.17	.27	.25	.26	.25	.43	.20
CSU	.00	.05	.07	.00	.00	.08	.04	.00	.14	.00
SIUE	.00	.00	.00	.08	.00	.08	.00	.25	.00	.05
UIC	.20	.10	.13	.00	.00	.17	.09	.00	.14	.05
NEIU	.00	.05	.07	.00	.00	.08	.04	.00	.00	.05
Northwestern	.00	.14	.13	.08	.13	.08	.09	.25	.14	.10
DePaul	.00	.10	.07	.08	.13	.00	.09	.00	.00	.10
Loyola	.00	.10	.07	.08	.13	.00	.09	.00	.00	.10
UIS	.40	.00	.13	.00	.00	.17	.04	.25	.14	.05
ISU	.40	.00	.07	.08	.07	.08	.04	.25	.00	.10
Illinois College	.20	.00	.07	.00	.00	.08	.04	.00	.14	.00
Lincoln Land	.20	.00	.07	.00	.00	.08	.04	.00	.14	.00
MacMurray	.20	.00	.07	.00	.00	.08	.04	.00	.14	.00
Concordia	.00	.05	.00	.08	.07	.00	.04	.00	.00	.05
Dominican	.00	.05	.00	.08	.07	.00	.04	.00	.00	.05
communicate with TFA	**.00**	**.62**	.53	.50	.73	.25	.52	.50	.14	.65
communicate with local colleges	.60	.57	.60	.50	.60	.50	**.48**	**1.00**	.43	.60
emphasize school mission	.60	.55	.64	.50	.40	.82	.59	.50	.83	.50
emphasize student population	.60	.29	.27	.42	.27	.42	.26	.75	.29	.35
emphasize teacher role	.20	.40	.36	.33	.33	.36	.27	.75	.33	.35
emphasize benefits and working conditions	**.00**	**.40**	.21	.42	.27	.36	**.36**	**.00**	.33	.30
direct applicants to website	.00	.15	.14	.17	.27	.00	.18	.00	.00	.20
do not emphasize pay	.00	.15	.14	.08	.20	.00	.14	.00	.00	.15
recruitment month	Early MAR	Early JAN	Mid-JAN	Late JAN	Late DEC	Early FEB	Mid-JAN	Mid-Jan	Late JAN	Mid-JAN
recruit before February	.25	.53	.50	.50	.67	.33	.48	.67	.29	.59

[1] Galapagos excluded from location analysis because they have one school in Chicago and one school outside of Chicago.
[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
Note. The Benjamini-Hochberg (1995) false discovery rate correction for multiple comparisons was applied to these results.

Teacher Hiring	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
hiring month	**Early JUN**	**Early APR**	Mid-APR	Late MAR	Mid-MAR	Early MAY	Early APR	Mid-APR	Late APR	Early APR
hire before May	**.00**	**.53**	.45	.44	.60	.30	.44	.50	.33	.50
seek mission-vision fit	.20	.76	.67	.67	.60	.75	.70	.50	.86	.60
seek experience in specific instr methods	.20	.10	.20	.00	.07	.17	.09	.25	.14	.10
seek experience with specific student pop	.80	.43	.40	.58	.47	.50	.43	.75	.43	.50
seek content knowledge	.20	.48	.40	.42	.47	.33	.39	.50	.29	.45
seek evidence of student growth	.00	.29	.40	.08	.33	.17	**.30**	**.00**	.29	.25
seek ability to use data	.00	.14	.13	.08	.07	.17	.09	.25	.29	.05
seek extensive teaching experience	.00	.10	.00	.17	.07	.08	.09	.00	.14	.05
seek teachers who are open to feedback	**.00**	**.43**	.53	.17	.47	.25	.35	.50	.29	.40
seek good collaborators/team players	.20	.52	.53	.42	.33	.67	.48	.50	.71	.40
seek general pedagogical skills	.40	.38	.33	.42	.47	.25	.39	.25	.29	.40
seek work ethic	**.00**	**.33**	.33	.25	.27	.33	.30	.25	.29	.30
seek basic requirements	.20	.14	.13	.17	.13	.17	.13	.25	.00	.20
hiring involves resume/phone screening	1.00	.90	.93	.92	.87	1.00	.91	1.00	1.00	.90
hiring involves interviews	.80	.85	.93	.75	.87	.82	.82	1.00	.83	.85
hiring involves a demonstration lesson	.20	.95	.79	.83	1.00	.55	.86	.50	.83	.80
hiring involves reference checks	**.00**	**.40**	.43	.25	.33	.36	**.41**	**.00**	.50	.30
hiring involves other significant steps	.00	.25	.21	.25	.33	.09	.23	.25	.17	.25
administrators involved in hiring	1.00	.90	.86	1.00	.87	1.00	.95	.75	1.00	.90
teachers involved in hiring	.80	.75	.71	.83	.73	.82	.77	.75	.67	.80
social workers involved in hiring	.00	.10	.07	.08	.07	.09	.05	.25	.17	.05
parents involved in hiring	.40	.15	.29	.08	.00	.45	.14	.50	.50	.10
students involved in hiring	.20	.05	.00	.17	.07	.09	.09	.00	.00	.10
others involved in hiring	.40	.20	.36	.17	.27	.27	.18	.75	.17	.30
principal alone makes final hiring decision	**.00**	**.41**	.31	.38	.45	.20	.33	.33	.33	.33
principal makes final decision with others	.67	.47	.54	.38	.27	.70	.44	.67	.67	.40
principal + network make hiring decision	.33	.12	.15	.25	.27	.10	.22	.00	.00	.27
evidence of teacher academics collected	.25	.15	.14	.27	.13	.30	.14	.50	.33	.16
lesson plans are collected	.75	.45	.50	.55	.47	.60	.48	.75	.50	.53
enhanced reference checks	.00	.10	.00	.18	.07	.10	.10	.00	.17	.05
other evidence is collected	.00	.20	.21	.18	.27	.10	.19	.25	.17	.21

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[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
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Orientation & Mentoring	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
school has formal orientation process	.75	1.00	1.00	.91	.93	1.00	.94	1.00	1.00	.94
number of days of new teacher orientation	4.1	8.9	10.2	7.0	8.6	8.4	**10.0**	**2.4**	13.1	7.4
new teacher orientation 2 weeks or more	.25	.50	.60	.36	.46	.50	**.59**	**.00**	**1.00**	**.35**
new teacher orientation 3 days or less	.50	.38	.40	.36	.46	.25	.29	.75	.00	.47
# days of orientation for all teachers	2.8	8.0	10.5	5.4	7.6	8.1	8.7	1.0	11.3	6.7
orientation addresses logistics	.40	.47	.46	.50	.53	.40	.48	.50	.40	.50
orientation addresses evaluation	.20	.21	.23	.17	.20	.20	**.10**	**.75**	.20	.20
orientation addresses school culture	.40	.47	.38	.58	.53	.40	.43	.75	.40	.50
orientation addresses curricular planning	.20	.37	.46	.25	.33	.40	.38	.25	.40	.35
new teachers receive additional coaching	.20	.35	.21	.42	.27	.36	.27	.50	.33	.30
new teachers have reduced responsibilities	.00	.15	.21	.00	.13	.09	.14	.00	.17	.10
school makes some accomm for new teachers	.20	.50	.43	.42	.40	.45	.41	.50	.50	.40
school has a mentoring program	.80	.68	.77	.67	.73	.70	**.67**	**1.00**	.80	.70
school has formal mentoring program	.60	.26	.46	.25	.20	.60	.29	.75	.60	.30
school has informal mentoring program	.20	.42	.31	.42	.53	.10	.38	.25	.20	.40
experienced teachers serve as mentors	.60	.33	.42	.33	.21	.60	.30	.75	.60	.32
administrators serve as mentors	.00	.06	.08	.00	.07	.00	.05	.00	.00	.05
mentors paired by administrator	.40	.11	.25	.08	.07	.30	.10	.50	.20	.16
mentors paired by content area	.20	.22	.17	.25	.14	.30	.20	.25	.40	.16

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[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
Note. The Benjamini-Hochberg (1995) false discovery rate correction for multiple comparisons was applied to these results.

Professional Development	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
PD provided in weekly early release days	.20	.65	.57	.58	.60	.55	.64	.25	.67	.55
extra PD days built into school calendar	.40	.32	.38	.33	.33	.40	.33	.50	.20	.40
PD provided for data analysis days	.20	.16	.23	.17	.20	.20	.24	.00	.40	.15
Individual stipends for PD provided	.00	.11	.15	.00	.00	.20	.10	.00	.20	.05
PD provided by instructional coaches	.20	.32	.54	.08	.27	.40	.29	.50	.40	.30
PD provided through demo lessons	.00	.05	.08	.00	.00	.10	.05	.00	.20	.00
multi-day PD throughout year	.40	.32	.38	.33	.40	.30	.33	.50	.20	.40
schoolwide PD strategy	.40	.21	.15	.33	.20	.30	.24	.25	.20	.25
individualized PD strategy	.40	.16	.15	.25	.13	.30	.14	.50	.20	.20
individualized and schoolwide PD	.20	.63	.69	.42	.67	.40	.62	.25	.60	.55
PD based on observed need	.40	.26	.54	.08	.27	.40	.33	.25	.40	.30
PD based on teacher input	.40	.37	.38	.33	.20	.60	.33	.50	.40	.35
PD based on school goals	**.00**	**.37**	.46	.17	.40	.20	.33	.25	.20	.35
PD based on leadership team decision	.40	.58	.46	.58	.60	.40	.48	.75	.20	.60
PD based on data/assessments	.00	.32	.31	.25	.27	.30	**.33**	**.00**	.60	.20

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[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
Note. The Benjamini-Hochberg (1995) false discovery rate correction for multiple comparisons was applied to these results.

Teacher Evaluation	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
Danielson Framework for evaluation	.60	.53	.62	.42	.40	.70	**.43**	**1.00**	.60	.50
home-grown/combined standards for eval	.40	.42	.38	.50	.53	.30	**.52**	**.00**	.40	.45
other evaluation practice measure	.00	.05	.00	.08	.07	.00	.05	.00	.00	.05
observations conducted by administrator	.80	1.00	1.00	.91	.92	1.00	.95	1.00	1.00	.94
observations conducted by peer/teacher	.20	.41	.33	.36	.38	.30	.32	.50	.40	.33
number of observers for evaluation	1.0	1.8	1.4	1.8	1.8	1.3	1.7	1.3	1.0	1.8
multiple observers	**.00**	**.56**	.33	.50	.58	.20	.44	.25	.00	.53
evaluators are trained and calibrated	.33	.87	.89	.70	.83	.71	.75	1.00	.67	.81
number of observations for evaluation	**4.1**	**10+**	10+	10+	9.9	10+	10+	5.3	10+	9.3
5 or more observations	.25	.44	.55	.30	.33	.56	.44	.33	.60	.38
eval includes student growth measure	.50	.56	.62	.50	.79	.22	.53	.75	.20	.67
student growth is used, but not for eval	.25	.28	.31	.20	.07	.56	.32	.00	.80	.11
evaluation includes parent surveys	.20	.06	.08	.09	.07	.10	**.00**	**.50**	.00	.11
evaluation includes self-evaluation	.40	.33	.46	.18	.29	.40	**.40**	**.00**	.60	.26
evaluation includes student surveys	.20	.06	.00	.18	.07	.10	.10	.00	.20	.05
evaluations used to determine bonuses	.40	.53	.62	.42	.67	.30	.48	.75	.20	.60
evaluations used to direct PD	.60	.47	.54	.50	.40	.70	.57	.25	.60	.50
evaluations used for retention decisions	.20	.47	.38	.50	.47	.40	.48	.25	.40	.45
high performing teachers receive bonus	.20	.50	.43	.50	.67	.18	.45	.50	.17	.55
high performing tchrs get other rewards	**.00**	**.35**	.21	.33	.40	.09	.27	.25	.17	.30
low performing teachers receive coaching	.60	.50	.50	.50	.53	.45	.45	.75	.50	.50
low performing teachers counselled out	.25	.26	.23	.36	.33	.22	.30	.25	.20	.32

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[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
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Teacher Compensation	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
base salary ($1000s)	**$34,220**	**$43,882**	$42,550	$40,773	$40,458	$43,055	$41,842	$41,025	$45,917	$40,212
base salary above $45k	.00	.35	.33	.18	.08	.45	.32	.00	.67	.12
salary set by education and experience	.80	.67	.87	.42	.60	.75	**.61**	**1.00**	.86	.60
salary set by market	.40	.57	.53	.50	.60	.42	.52	.50	.29	.60
salary set by performance	.00	.14	.13	.08	.13	.08	.13	.00	.14	.10
hiring bonus	.00	.24	.20	.17	.27	.08	.13	.50	.14	.20
hard-to-staff bonus	.20	.19	.13	.25	.27	.08	**.09**	**.75**	.00	.25
school offers performance-based pay	.20	.53	.38	.50	.60	.20	.43	.50	.20	.50
school offers bonus for additional duties	.25	.26	.23	.27	.27	.22	.20	.50	.00	.32
max performance-based pay ($1000s)	$2,500	$5,563	$5,750	$4,800	$5,375	$4,000	$4,357	$8,250	--	$5,222
performance pay potentially $5000+	.00	.25	.25	.20	.25	.00	.14	.50	--	.22
maximum teacher earnings ($1000s)	$68,333	$74,643	$71,875	$75,000	$72,400	$75,143	$69,786	$91,000	$70,000	$75,000
maximum salary potentially $90k +	.33	.21	.25	.22	.20	.29	.14	.67	.20	.25
maximum salary less than $60k	.67	.14	.38	.11	.20	.29	.29	.00	.40	.17

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[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
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Teacher Retention	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
leadership positions used for retention	.00	.50	.50	.36	.53	.30	.48	.25	.17	.53
PD opportunities used for retention	.00	.30	.29	.18	.20	.30	.24	.25	.33	.21
teacher voice used for retention	**1.00**	**.40**	.50	.55	.33	.80	.48	.75	.83	.42
compensation strategy used for retention	.75	.40	.57	.27	.47	.40	.43	.50	.33	.47
hiring strategy used as retention strategy	.00	.20	.14	.18	.27	.00	.14	.25	.00	.21
differentiated retention (for high vs. low)	.50	.20	.21	.27	.27	.20	.24	.25	.00	.32
low performers counselled out	.50	.37	.38	.45	.33	.56	.45	.25	.60	.37
low performers put on improvement plan	.25	.26	.23	.27	.33	.11	.15	.75	.00	.32

[1] Galapagos excluded from location analysis because they have one school in Chicago and one school outside of Chicago.
[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
Note. The Benjamini-Hochberg (1995) false discovery rate correction for multiple comparisons was applied to these results.

Career Advancement	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
school offers tenure program	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
school offers hybrid/teacher leader roles	**.00**	**.55**	.36	.55	.40	.50	**.52**	**.00**	.50	.42
school offers traditional leader roles	.50	.20	.07	.45	.27	.20	.19	.50	.00	.32
school has informal career adv. pathway	.25	.30	.43	.09	.20	.40	.24	.50	.33	.26

[1] Galapagos excluded from location analysis because they have one school in Chicago and one school outside of Chicago.
[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
Note. The Benjamini-Hochberg (1995) false discovery rate correction for multiple comparisons was applied to these results.

Reflection	Location[1]		Grade Level[2]		Affiliation		Unionized		School Maturity	
	Non	CPS	E/M	HS	Network	Stand - alone	No	Yes	<5 years old	5+ years old
	(n=5)	*(n=21)*	*(n=15)*	*(n=12)*	*(n=15)*	*(n=12)*	*(n=23)*	*(n=4)*	*(n=7)*	*(n=20)*
most success with recruitment/selection	.20	.25	.36	.17	.33	.18	.23	.50	.17	.30
most success with school culture/mission	.20	.25	.14	.33	.20	.27	.23	.25	.17	.25
most success with supporting teachers	.40	.25	.43	.08	.20	.36	**.32**	**.00**	.50	.20
most success with PD	.00	.20	.21	.17	.20	.18	.18	.25	.00	.25
most successful with pay and benefits	.25	.10	.14	.09	.13	.10	.14	.00	.17	.11
most challenge nothing in particular	.67	.38	.50	.38	.33	.67	.40	.67	.67	.40
most challenge with recruitment	.00	.43	.50	.13	.42	.17	.33	.33	.00	.40
most challenge with “typical” problems	.33	.14	.10	.25	.17	.17	.20	.00	.00	.20
most challenge with “charter” problems	.00	.29	.10	.38	.17	.33	.27	.00	.33	.20
plan to implement bonuses or increase pay	.50	.21	.31	.18	.13	.44	.25	.25	.40	.21
plan new recruitment strategies	.25	.47	.38	.45	.47	.33	.35	.75	.20	.47
plan evaluation improvements	.00	.16	.15	.09	.13	.11	.15	.00	.00	.16

[1] Galapagos excluded from location analysis because they have one school in Chicago and one school outside of Chicago.
[2] Grade level classifications based on preponderance of schools.

Bold: $p<.05$.
Note. The Benjamini-Hochberg (1995) false discovery rate correction for multiple comparisons was applied to these results.

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