

PRINCIPAL AS HUMAN CAPITAL MANAGER: EVIDENCE FROM TWO LARGE DISTRICTS

By

Steven M. Kimball, Ph.D., Anthony Milanowski, Ph.D. and Herbert G. Heneman, III, Ph.D.

Consortium for Policy Research in Education, Strategic Management of Human Capital Project,
University of Wisconsin-Madison

March 20, 2010

DRAFT: Not for citation or distribution without permission of the authors.

Paper presented at the annual meeting of the American Education Finance Association, Richmond, VA. The work described in this paper was supported by the Ford Foundation. The opinions expressed are those of the authors and do not necessarily reflect the view of the Ford Foundation, the institutional partners of the Consortium for Policy Research in Education, or the Wisconsin Center for Education Research. This is a preliminary summary of a work in progress.

PRINCIPAL AS HUMAN CAPITAL MANAGER: EVIDENCE FROM TWO LARGE DISTRICTS

One of the key strategic challenges for providing high poverty schools in US urban districts with the capacity to improve student achievement is recruiting, developing, and retaining faculty with the talent needed in these schools. This human capital challenge has increasingly been recognized by researchers and policy advocates (National Commission on Teaching and America's Future, 2003; Heneman & Milanowski, 2004; Smylie & Wenzel, 2006; Odden and Kelley, 2008; DeArmond et al., 2009; Hess, 2009). It has also prompted policy makers at the Federal level to provide incentives for states and districts to change teacher evaluation and compensation practices (e.g., the Bush administration's Teacher Incentive Fund program, the Obama administration's Race to the Top initiative). School districts from across the US such as Chicago, Philadelphia, New York City, and Washoe County, Nevada, have begun "human capital" initiatives to improve teacher and principal quality.

While it is generally recognized that human capital management (HCM) in US public education is a multi-level affair, involving state, district, and school components (Strategic Management of Human Capital, 2009), most attention tends to be paid to the district level (e.g., DeArmond, Shaw, & Wright, 2009). We believe that it is also important to study the school level, where many of the basic HCM functions are actually carried out (Milanowski & Kimball, 2010). School leaders are often the ones who deliver or coordinate human resource management programs at the school level. They are the "face" of district HCM that teachers see the most after initial recruitment and screening. In most districts, school leaders help to recruit, hire, orient, and socialize new staff, evaluate performance, help individual teachers plan for professional development and make decisions on school-level professional development activities.

School leaders' influence on teacher retention has long been recognized by researchers (Brown & Wynn, 2009; Guarino, Santibañez, Daley, & Brewer, 2004; Boyd et al., 2009). Recent work also suggests principals can influence attraction (Milanowski et al., 2009; Goldhaber, DeArmond, & DeBurgomaster, 2007). In many states and districts, they are also likely to have a key role in tenure decisions for new teachers, a critical point with major consequences for shaping faculties and teaching staff within districts for years to come. Even though few principals have a direct influence on teacher compensation, they may have a more subtle but no less important influence on teacher motivation through their influence on working conditions, instructional vision, and school culture (Hallinger & Heck, 1998; Leithwood et al., 2004; Marzano, Waters, & McNulty, 2005). It seems likely that the effectiveness of school leaders in carrying out their functions as "human capital managers" (Milanowski & Kimball, 2010) will influence the effectiveness of a school's faculty.

With the exception of a few studies (e.g., Smylie & Wenzel, 2007; DeArmond, Gross, & Goldhaber, 2008) there has been relatively little research explicitly focusing on HCM at the school level. In particular, there is not much research on if or how school leaders use human resource management practices *systematically* to build or maintain an effective faculty, how their efforts mesh with district HCM programs and strategies, and whether differences in practices matter to school performance. With funding from the Ford Foundation, we decided to extend HCM research to the school level by exploring three research questions:

1. Are school-level human capital management practices related to school performance?
2. How is human capital management enacted in schools?
3. Do school leaders consciously use human capital management practices to influence the composition of their faculty?

Our focus was on HCM practices involving the acquisition, development and retention of teachers. We did not begin with a list of human resource management activities and then try to inventory how school leaders engaged in them, but rather tried to find out how school leaders (primarily principals) behaved as human capital managers and whether their behaviors and actions were strategic. By strategic, we wanted to examine how these behaviors and actions were related to school instructional improvement priorities and the capacities teachers needed to successfully implement the priorities. We did not look at administrative functions such as scheduling, timekeeping, or payroll input that, while important, are not typically part of a HCM strategy. Our premise was that school leaders have an opportunity to define their role as human capital managers and we wanted to find out how they did so.

METHODS

District Selection

For this exploratory study, we selected two US school districts that had large numbers of schools, had schools with a substantial population of poor students and students of color, and had a reputation for making progress on improving student achievement. We also wanted to work in districts in which the district-level human resource department had a reputation for competence, since we expected that poor district-level human resource management was likely to inhibit school-level efforts. The two participating districts met these criteria. One potential drawback to this selection criterion, however, is that there may be less variance in school-level HCM practices because of higher levels of district support for school-based efforts.

District A is located on the east coast. At the time of our study, it served over 140,000 students in about 200 schools. The district employed over 11,000 teachers. The student population was 60% students of color, and 30% of the students were eligible for free or reduced

price lunch. The superintendent had been with the district for almost 10 years. This district encompassed a set of communities of highly varied socio-economic status, including small to medium-sized cities, suburbs, and some rural areas.

District B is located in the Midwest. At the time of our study, it served 410,000 students in 600 schools. The student population was 48.6% African-American, 37.6% Latino, 8.1% white, and 5.7% other. Over 85% of the student population comes from low-income families, and about 14% are limited English proficient. At the time of our study, a new superintendent had just taken over the reins from the prior district leader, who served for about 8 years. This district was coextensive with the boundaries of a large city.

School Selection

Within each district, we selected eight schools in a purposive sample. High schools, middle schools, and elementary schools were included in order to examine potential differences in HCM at these different school levels. In our sample, we wanted to concentrate on schools serving a high proportion of lower socio-economic status students and contrast those that were more and less successful based on learning outcomes. After developing a list of schools using these factors, we contacted each school principal to ask for their participation. Each school was offered an incentive of \$500 to participate. The process for each district is described further below.

In district A, we first defined two types of schools at each school level: those which had a consistent upward trend in student achievement (percent proficient or above),¹ as measured by state tests, and schools that had a flat or highly variable trend. We looked at test results for the four latest school years (2005-2008) for which such data were available. Successful schools were

¹ We used trend in attainment because this district did not have school value-added estimates available and was not willing to provide us with the data to construct such estimates.

defined as those with a consistent upward trend over the four years of available data. This definition was straightforward to apply to elementary and middle schools, but less applicable to high schools because state tests were not given at all grade levels. Thus, for high schools we developed a composite success measure based on applicable district performance targets.² We then identified schools with upward trends and schools with flat or variable trends that also had student populations in which either 60% or more (elementary or middle schools) or 55% or more (for high schools) of the student population was eligible for free or reduced price lunch. A list of 18 schools was shared with staff of the district's research department for review. Based on discussions with research department staff, we initially invited 2 high schools, 2 middle schools, and four elementary schools to participate. If a school declined to participate, we invited another upward or flat trend schools from our list, until we achieved the desired sample size. We achieved a sample of schools willing to participate that included three upward trend and one flat trend elementary school, one upward trend and one flat trend middle school, and one upward trend and one flat trend high school. Interestingly, in this district there were relatively few flat trend elementary and middle schools that fit our other selection criteria.

District B has largely phased out middle schools in favor of K-8 elementary schools, so we began with a list of the K-8 elementary and high schools. Within each group, we identified two kinds of schools: those that had a consistent upward trend in student achievement, and schools that had a flat or highly variable trend. For the K-8 schools, we looked at the trend in the percent of students proficient or above on the state test in reading, math, and science for the four

² These included the percent of students successfully completing geometry by the end of grade 10, State High School Assessment algebra and English pass rates, the percentage of students taking the SAT, the average total SAT score relative to the national average, and the percent of Advanced Placement test scores of 3 or higher. These indicators were factor analyzed and a composite score based on the first principal component was developed. The trend in this score was used to select upward trend and flat trend high schools for inclusion in the study. Graduation rate was also considered, but schools did not vary much on this indicator so it was not used in the final selection of schools.

latest school years for which such data was available (2005-2008). We defined successful schools as those with a consistent upward trend in the percent of students proficient or above over the four years of available data. We defined flat trend schools as those in which the percentage of proficient students stayed relatively flat over the period, or fluctuated without a clear upward direction.³ From within these two groups, we further narrowed down our potential sample by considering only those schools with a substantial proportion of students (75% or more) receiving free or reduced price lunch. Based on these considerations, we developed a list of 8 upward trend and seven flat trend schools. We then dropped schools characterized as selective enrollment, and invited the remaining schools to participate until we had agreement from 3 upward trend and two flat trend schools.

For high schools, we initially looked at similar trends in state test data, but found that few schools had a consistent trend in the percent of students proficient and above. We were also concerned that high school performance would not be adequately represented by proficiency trends from a test aimed at just two subjects at one grade level (11th grade). We therefore developed a composite performance measure based on four indicators: percent proficient or above on the state tests, percent of freshman on track to graduate, the percent of students scoring at or above 20 on the ACT, and the graduation rate. These four indicators were taken from the district's published goals. The indicator data were factor analyzed and a composite score based on the first principal component was developed.⁴ We then looked at the trend in this score from 2005 to 2008. Again, we dropped schools that were characterized as selective enrollment and schools where less than 60% of the students received free or reduced price lunch. We were able

³ Again, we used trend in attainment rather than value-added because at the time of study the district did not have school value-added estimates available and was not in a position to provide us with the data to construct such estimates.

⁴ The first principal component captured 83% of the variance in the data. We judged that this component thus represented a good summary of the four underlying indicators.

to identify three upward trend schools. We then looked for flat or downward trend high schools of around the same size as comparisons. Four schools were identified as possible comparisons. The list was shared with district leaders to ensure that principals in the schools had at least two years experience in the schools and to confirm the groupings by achievement trend. Two of the upward trend schools agreed to participate, and one flat/downward trend school in the same area as one of the upward trend schools also agreed to participate. Our final sample in this district thus included three upward trend K-8 schools, two upward trend high schools, two flat trend K-8 schools, and one flat/downward trend high school.

Data Collection

In each district, we first conducted interviews with 2-3 district human resource leaders and leaders overseeing principals to learn about district human resource practices. Documents were collected during these meetings and from district Websites describing each district's human resource management practices and the collective bargaining agreements. We were interested in learning about how the HR functions of teacher recruitment, selection, induction, mentoring, professional development, performance evaluation, and compensation were carried out at the district level and which were delegated to school leaders. We did this so that we would understand the context in which HCM took place at the school level. We also wanted to find out how principals were supported and held accountable for their school human capital activities by the districts.

In each participating school, we interviewed the principal using a semi-structured interview protocol (included in Appendix A). We asked principals about their schools' strategies for improving student achievement, teacher recruitment and selection, teacher development and retention, and district and teacher association impacts on acquiring, developing, and retaining

effective teachers. In the interview, we tried to let principals describe school practices related to attraction, development, retention, and motivation in their own terms. In the survey (described below), we asked more specific questions about whether practices like recruitment or induction were targeted to the teacher competencies principals told us they were looking for during the interview.

In each participating school, we also interviewed four or five teachers selected at random using a semi-structured interview protocol (also included in Appendix A). We asked teachers about their perceptions of HCM practices, about what attracted them to their schools, and what influences them to stay.

We also collected a variety of documents, including school improvement plans, sample interview questions used in teacher selection, professional development plans, new teacher induction materials, and staff newsletters. Except for the school improvement plans obtained from the district B Website, the availability and willingness of principals to share these documents varied from school to school in each district.

Principal and teacher surveys. In order to get more specific information about the strategic alignment of school HCM practices with the teacher competencies principals identified as important to successful performance, we asked principals at each school to respond to a brief survey about recruitment, selection, mentoring, induction, professional development, and performance management practices applying to teachers. There were three to four items relevant to each practice area. The items attempted to capture the degree to which the practices were based on the teacher competencies needed for success at the school or other aspects of best practice. An example of a recruitment item was: *Do you go out and actively recruit teachers with the competencies teachers need to be effective at your school?* An example of a mentoring

item was: *Does the mentoring focus on the competencies teachers need to be effective at your school?* An example performance management item was: *Does the teacher evaluation process you use provide teachers with specific feedback on how well they exhibit the competencies?* The response scale was 1= Never or Rarely, 2= Sometimes, and 3 = Almost Always. The item responses were averaged across each area to form scales. Unfortunately, the internal consistency of some of the scales (as assessed by calculating Cronbach's alpha) was low because of minimal response variation across principals. The average alpha was .70 in District A but only .29 in District B, where inter-principal response variation was especially low, with most principals giving the exact same response to many items. The response rate was 100% in each district.

The teacher survey was aimed at assessing teachers' perceptions of human capital management practices in each school. We collected data from teachers based on the premise that human capital efforts directed at teachers would be effective if teachers actually experienced them, and also to triangulate with what we heard in interviews and what we found from the principal survey. We developed six multi-item scales representing: 1) communication of the school strategy to teachers (example item: *To what extent does your school have a set of well-defined strategies for improving student achievement?*); 2) recruitment (example item: *To what extent does your school actively recruit teachers with the knowledge and skills needed to succeed?*); 3) selection (example item: *To what extent does your school ask candidates for teaching positions to demonstrate the knowledge and skills needed to succeed at this school?*); 4) induction and mentoring (example item: *To what extent does your school provide induction activities for novice teachers in addition to those offered by the district?*); 5) professional development (example item: *To what extent does your school provide for professional development opportunities at the school that are directly related to the knowledge and skills*

teachers need to succeed?); and 6) performance management (*example item: To what extent does your school leadership team make expectations for teaching performance clear?*). The internal consistency of these scales, as represented by Cronbach's alpha ranged from .66 to .90 in District A and .78 to .92 in District B. The reliability of the school averages (based on intraclass correlations) averaged .79 for District A and .80 for District B. None were below .69. We did provide a "don't know" option in our scales to accommodate those respondents who might not have experienced a HCM practice. Generally, this response was not widely used.

We also asked about turnover intentions and commitment to the school. The former were measured using a three item scale (*example item: To what extent would you say you are thinking about leaving your current school next year?*). The latter was measured by four items taken from the Consortium on Chicago School Research teacher survey (*example item: I would not want to work in any other school.*) We included these items to see if differences in perceived HCM practices might be related to retention or turnover. These items were averaged to form scales. The internal consistency of both scales, as represented by Cronbach's alpha, was above .80 for both districts. The reliability of the school averages (based in intraclass correlations) were above .80 as well.

The teacher survey response rates varied by school. In District A, school response rates ranged from 21% (in a large high school) to 100% (in an elementary school) and averaged 60%. In District B, response rates ranged from 33% to 86%, averaging 68% across the eight schools.

Data Analyses

Teacher interview responses and other school documents, including school improvement plans, teacher selection questions, principals' newsletters or other communication to staff and local teacher evaluation criteria (if available) were reviewed. The qualitative data sources were

analyzed by 2 researchers for each district. The analysts searched for patterns, themes, and categories related to school HCM practices, with focus on confirming and disconfirming evidence. Although the analysis of some qualitative sources is on-going, initial findings from each district were compared across the cases for common elements to inform this paper.

For the teacher and principal surveys, after constructing each scale by averaging the responses to the constituent items by respondent, we further averaged the scales within schools. We then conducted t-tests of the differences in average scale values across the two types of schools (upward and flat trend) for each district.

The multiple data from the schools (teachers, teacher leaders and principals), from district level human resource staff, and from the survey data, allow for triangulation of the initial findings on these schools. However, as an exploratory study, the findings do not generalize beyond the samples in each district. The approach provides an initial examination of principal HCM practices as perceived by teachers and administrators in a subset of schools which varied on student achievement trajectories. The findings can inform further research on school-level HCM. They can also inform practice by district and school leaders in the consideration of competencies principals need for school HCM. Extensions of this research can explore district policies and practices related to the strategic management of teacher human capital and the strategic management of principal human capital, including the screening of principal candidates, training required of principals, and performance management processes.

RESULTS

Are school-level human capital practices related to school performance?

Neither our interview nor survey data pointed to major differences in school-level HCM practices between the upward trend and flat trend schools. Table 1 includes the principal survey results and Table 2 summarizes results from teacher surveys for districts A and B respectively.

[insert Tables 1 & 2 about here]

From table 1, we note that there was only one statistically significant difference in either district. In district B, principal responses on recruitment differed at the .05 level. Although this finding could reflect a real difference in recruitment practices for the two sample groups in this district, given the small sample size and pattern of the other scale items for principals, this finding could also be due to chance. As indicated in table 2 on teacher survey responses, the scale means tended to be higher in the upward trend schools, but there were no statistically significant differences between the two groups in each district.

How do school leaders enact human capital management practices?

Overall, there was some variation of HCM practices across schools in each district, but more so in district B than in district A. Although we did find some notable examples of innovative practices in each district, HCM did not seem to be at the forefront of the principal's leadership practice. As suggested above, these findings were not substantially different between

principals in upward versus flat student achievement trend schools. This section reports on findings related to school leader practices on attraction (i.e., recruitment and selection), development (i.e., induction/mentoring, performance management), and retention of staff needed to carry out articulated school instructional strategies. Looking across these three areas, we also consider the extent to which the HCM activities described were strategically focused on the school's articulated instructional improvement goals.

Attraction. We asked principals and teachers in each district about how teachers with the competencies needed to succeed in the school were attracted to the school and selected. In addition to questions on recruitment and selection procedures, we also asked school leaders to provide written questions used in the selection process or to describe typical questions. Our findings indicated that school leaders did not structure the selection process to clearly focus on competencies they had articulated as important for their school. There was also considerable variation in practices.

As an illustration of the variation across schools and different interpretations within schools, Table 3 summarizes teacher and principal interview responses regarding teacher selection in district B. As evident from the table, there are a range of selection practices across the schools. Although all schools used job interviews, several could not produce a set of written interview questions and most did not apply a consistent set of questions or assessment practices for candidates. They did tend to look for "fit" between the teacher and the school. Most discussed providing an overview of both positive and challenging features of the school and its community, and the expectations for teachers. Screening for fit and providing a realistic preview are important practices to include in a selection process. In most schools, however, the overall selection process could be characterized as superficial. Selection assessment was also

inconsistently applied. With the exception of one school, formal scoring or evaluation systems for rating and ranking applicants was lacking as was a process for combining assessment information gathered into an overall judgment about each applicant.

[insert Table 3 about here]

While the recruitment and selection practices could not be characterized as strategic, in each district there were examples of some “promising” practices. For example, in district A, six of the eight principals mentioned or showed some specific, job related interview questions on instructional competencies. Teacher interview responses with respect to their own experience with the hiring process were less uniform, with about a quarter of the teachers indicating their interviews had been superficial or pro-forma. In addition, several applied the principle that past performance is a good predictor of future performance by asking questions about past accomplishments during interviews and careful checking of references. Almost all of the principals were cautious about relying on interview information alone in making hires, and emphasized the importance of checking on past performance.

Most principals in both districts also tried to make sure teacher candidates understood the challenge of the job and their particular school before accepting the job. In several cases, principals emphasized the need to inform job candidates fully about the challenges of working in a higher-poverty school, so that “they know what they are getting into” and are comfortable with the challenge. In essence, these principals were trying to provide a realistic job preview to candidates, allowing those who did not feel they would fit in opportunity to “self-select” out of the school.

Development. We asked principals how they develop, motivate and retain teachers with the competencies needed to be successful within their schools. Similar questions were asked of teachers. Responses fell broadly into the areas of induction and mentoring, professional development, evaluation, and recognition and rewards (though we were unable to explore each of these functions in depth). We also examined a sample of school improvement plans to identify professional development activities in relation to what principals and teachers reported.

Induction and mentoring

Each school had some form of teacher induction, in most cases based on a program designed by the district office.

In district A, the district administered the induction program. When asked how teachers were developed, most principals did mention the district induction and mentoring program and seemed satisfied that they were constructive programs.

In district B, there was also a district designed program structure. Most schools used internal mentors trained by the district. Two schools were part of a pilot that only used external mentors. Schools typically supplemented the district programs with before school- year orientations, and some schools provided additional induction activities. Interestingly, few principals spoke specifically about mentoring activities when asked about how teachers are developed. A review of school improvement plans in this district also showed that principals did not focus on mentoring, other than provide a few perfunctory references when discussing teacher capacity. In fact, while there is a section of the school improvement plan for teacher mentoring, each school's plan simply included district "boilerplate" descriptions of mentoring programs. Only three schools added other references, but these were limited to a sentence or two about school-specific induction and mentoring.

Professional development

In most of the schools in district A, a strong emphasis on team-based, job-embedded professional development was apparent. Several principals tried to make time for team-based professional development during the school day. At the elementary and middle school level, schools modified their schedules to allow for common planning and professional development time for teachers to work in teams. This allowed the schools to better deploy the professional development resources (i.e., staff development teachers and resource teachers) provided by the district.

In district B, there were a number of professional development activities mentioned at each site. Some of those were job-embedded, particularly in the up-trend schools. In flat trend schools, there appeared to be more reliance on district provided or other external professional development, although even in these schools there were some examples of internal professional development opportunities. The principals in these schools were satisfied with district professional development and stressed that they tried to accommodate teachers on their personal professional development requests.

Evaluation

Evaluation was rarely mentioned as an integral component of teacher development and retention activities within the schools. In each district, there was a standard evaluation approach that was district designed. Most principals talked about informal ways of monitoring performance, such as school walkthroughs, informal interactions with teachers, and attending professional development with teachers. With a couple of exceptions, school leaders did not appear to use the formal evaluation process as an on-going performance management tool to identify, measure or develop key teaching competencies needed in the school.

Recognition and rewards

Almost all of the principals indicated that they used informal rewards and recognition such as notes, verbal compliments, and celebrating individual or group accomplishments at staff meetings to help motivate teacher to develop skills needed in the school. In district A, these were especially common in the elementary and middle schools. However, these were generally not a major influence according to the teachers we interviewed. Also, teacher survey responses suggest that teachers in some schools do not perceive that recognition is as salient as principals might describe.

In district B, there were also were numerous examples of how principals do “little things” to show teachers’ their appreciation, including providing lunches, small rewards, and staff announcements. Teachers in most schools gave examples of the school leadership fostering a family atmosphere and providing small, but appreciated, motivational rewards (e.g., lunch on a teacher in-service day) and acknowledging effort and successes individually, during faculty meetings or in school newsletters.

Retention. The teacher surveys probed turn-over intentions of teachers in the sampled schools. The findings are summarized in table 4.

[Insert table 4 about here]

As with the teacher survey responses related to perceptions of school human capital practices, there were also no statistically significant differences on turn-over intention responses between the schools of the different achievement trends in either district.

In response to interview questions about how they kept quality teachers at their schools, principals in both school trend categories and at different school levels talked about creating stable, productive working environments, and also reiterated the use of recognition and rewards to motivate staff.

In district A, almost all the principals mentioned the importance of working conditions in retaining teachers and avoiding de-motivation. They took various approaches to support teachers, including: flexibility in scheduling and providing choice in teaching assignments; keeping extra work required by some district initiatives off of teachers' "backs"; supporting teachers in parent and student interactions; involving teachers in the school via sharing information and participation in decisions; and trying to maximize teacher autonomy as long as results were achieved. Several principals were particularly concerned to alleviate teacher stress around student testing and NCLB AYP status by emphasizing past success, providing food and encouragement during testing, projecting confidence, or by allowing teachers to "blow off steam" during staff meetings. According to teacher survey responses, teachers in our sample schools are, on average, highly committed to their school, highly engaged, and not likely to leave. This was consistent with what we heard during interviews with teachers. There were very few negative comments made about school leadership or school working conditions. In one school, however, turnover intentions expressed on the survey were fairly high, on average, and some of the teachers interviewed at this school were concerned about the climate. While the school's principal was clearly working to "turn around" the school, some teachers expressed the desire to return to the "family atmosphere" the school used to have.

In district B, most principals also described practices related to people management and establishing constructive working conditions for educators, such as establishing trust, freeing

teachers to work together, fostering a family atmosphere, and encouraging collaboration and use of data to inform professional learning community work. Although the survey results suggested concerns among teachers about school leadership and support in one school (as noted above), during the interviews, very few teachers had anything negative to say about the principals or leadership team and many felt supported and involved in their schools, even in the low or flat achievement schools. These types of people management practices were appreciated by most teachers and helped build the school community. While they can improve perceptions of working conditions in schools, alone they may not be enough to influence teacher decisions to remain in the school or motivate changes to practice.

Lack of strategic focus

In the descriptions from principals, teachers, and through the review of documents, school leaders did not appear to approach HCM in strategic ways. There was no evident standard of practice that guided or reinforced school leader human capital practices within schools or across our sample. It was unclear how deeply HC management penetrated principal's use of time and the depth and rigor of their practice. Typically, HCM was not coherent across practices or well aligned to student achievement or instructional improvement goals, which we refer to as horizontal and vertical alignment of school HCM.

In district A, while we found that most of the schools used a number of human capital "best practices," there were two areas with potential for improvement. First, few if any schools seem to have systematically identified the specific teacher competencies needed to carry out the school's strategies for improving student achievement, and then aligned their HCM efforts around them. While most of the principals were able to articulate a set of competencies that were linked to their school's strategies, information provided by principals and teachers about the

teacher selection processes did not suggest a strong focus on these competencies. Further, many principals were quite general when asked to describe professional development related to these competencies. And only three principals mentioned aligning school professional development efforts with the school improvement plan. It is also notable that in most schools, the teachers we interviewed did not identify the same aspects of the school's strategy as the principals. Principals don't seem to have over-communicated on strategy to teachers.

Second, while the district has what has been referred to as a model teacher development and evaluation process, this does not seem to have much salience to teachers after their initial years. It would appear that this process is a minor influence on teacher development compared to team-based professional development. Interestingly, most teachers we interviewed stated that they have not done or no longer do individual professional development plans (which is a district requirement), and most principals indicated that they do not push any but new teachers to do such plans. Several principals and teachers mentioned emphasis on team plans instead. Teacher survey results are consistent with the interview data. At most schools, teachers reported on the average only a moderate degree of goal setting, observation of teaching, provision of useful feedback and coaching by school leaders, or help with PD plans. At one school, however, teachers reported substantially more of these performance management best practices.

In district B, it was difficult in many cases to discern how the school's improvement strategy was used to inform induction and mentoring, professional development and performance management. For example, many suggested professional development opportunities for teachers and encouraged participation, but few narrowed professional development to their school's instructional improvement strategy or evaluated its impact. A review of the school improvement plans showed that while most schools documented some professional development strategies,

there were only vague references to school improvement strategies and other HC management activities. Survey responses in 5 schools showed low responses related to performance management and in 4 schools most teachers did not feel the school's strategy was adequately explained. From the interviews, in several schools teachers varied in their descriptions of teaching competencies needed to succeed in the school and how the competencies were assessed in the selection process, developed in practice, or monitored for growth and accountability. Frequently, there was general discussion of reading and mathematics skills needed, and related professional development provided, but few examples that cut across human capital functions.

These findings were also indicated in our discussions with district leaders. For example, in district B, two leaders pointed to weaknesses they typically ran into with principals HC practices. Discussing induction practices and the relationship between district and school teacher induction activities, one district leader commented that the "weak link in induction is the principals. Often they don't see importance of induction and mentoring." Another commented about the "tangled web" of district activities relating to both teacher and principal HCM, which may inhibit communication of expectations for principals on HCM. One example was the lack of district clarity on what instructional excellence looked like and how it can be supported through mentoring or teacher evaluation. This leader also stated that, "we're not very deliberate about development of responsibilities or strategies" for school HC management.

It was clear from principals and teachers that professional development was emphasized in the schools in each district, and most created time for teachers to work in professional learning communities on various school-based professional development activities. The extent to which a driving instructional improvement strategy (including that emphasized in professional development) was integrated into efforts to recruit, develop, and retain teachers was less clear.

Do leaders consciously use human capital management practices to influence composition of faculty?

We also wanted to learn about how principals planned for and responded to staff turnover. In particular, we were interested in finding out whether principals considered seniority and staff experiences (e.g, literacy coaching, content area), when staffing their schools.

In district A, school leaders did consciously try to retain teachers who were satisfactory performers and counsel out those that did not fit. However, there was minimal systematic effort evident to plan for teacher vacancies or ensure that faculties had a balance of new, mid-career, and end-career teachers. Most principals interviewed indicated that a balance of new, mid-career, and late career teachers was desirable, but only one mentioned specific steps taken to reach such a balance. The biggest concern was to avoid having a more than a few inexperienced teachers. Since principals appear to have had a sufficient supply of experienced teachers willing to transfer to their schools, they did not have to rely on hiring inexperienced teachers. In uptrend schools in particular, there was also no indication of a retention problem. Thus the principals may perceive that they do not need to put a lot of effort into planning for vacancies. We also got the sense that principals felt that planning is of limited use due to the unpredictability of teacher turnover and changing staffing authorizations caused by fluctuating enrollments in some schools. In high and middle schools where teachers are more specialized, planning is more difficult because the principal has less flexibility to move teachers around.

In district B, for most principals the dynamic was more reactive than proactive. Three principals spoke about how they planned or would like to plan for staffing changes. One asked teachers whether they intended to leave in April and, "...if they can be honest, we can plan." In

those cases she will advertise, go to job fairs, and talk with the Teaching Fellows about their prospective teachers. Another mentioned the he will “keep an eye open for talent and encourage teachers to do the same.” The other spoke of a basic staffing strategy for his school, which depended on the position being filled. He put more emphasis on making sure there were “superstar” teachers for 3rd grade, but also was careful with the other early grades (K, 1, 2 and 3 in increasing “order of importance”). The other principals reacted to staffing changes as they occurred. Several spoke of budget allocations and program cuts impinging on their ability to plan. When they became aware of a pending staff change, they would respond by contacting colleagues, posting openings on the district network or through NLNS postings, or attend job fairs.

Principals in district B were somewhat different in their consideration of the importance of staff balance and how they obtained a mix of staff needed for the school. Five principals actively sought a balance based on teaching experience. The three others put less emphasis on experience and instead mentioned a mix of factors, including knowledge of students and their developmental levels, personality, teacher demographics (e.g., racial composition) or best fit for the position. Interestingly, principals did not report difficulties obtaining teaching candidates to staff open positions. Many candidates were available in the pool for them to select from. Budget cutbacks also resulted in less openings and layoffs, which limited vacancies.

In the “flat trend” high school, for example, a combination of factors contributed to the sense that the school had enough candidates in the pool. About two to three emails came in every week from prospective teachers. The principal and/or assistant principals would regularly attend job fairs. Past job fairs yielded 80-100 resumes. In addition, each year there are a number of practicum students which provides a good lens on fit and the potential of candidates. Due to

budget cuts, however, the school is losing over 10 teachers. Through such combined sources, only in certain hard to staff positions (e.g., bilingual and special education) did schools have trouble identifying potential candidates to fill vacancies.

Other findings

Finally, we were interested in identifying whether district programs or issues related to union/management interactions had an impact on school-level HCM and about potential differences in HCM at the high school versus elementary level.

District support. In district A, programs and resources provided by the district central office, including the human resources department, provide a basic foundation for school HCM. The district recruitment and screening program reduces the recruitment burden on school leaders and helps assure that the teacher candidate pool is of acceptable quality. The induction program reduces the burden on school leaders to develop their own comprehensive programs, while allowing them to supplement if desired. Providing the resources to hire and support the staff development and resources teachers is the basic ingredient principals can use for school-level, team-based, job-embedded professional development. The district's competitive pay and benefits also help to attract a sufficient number of job candidates to allow the district and schools to be selective. The extra resources the district provides to Title 1 schools also help attract and retain experienced teachers willing to teach in higher-poverty schools.

An important effect of some of these supports is that even though these schools' student populations have a relatively high proportion of poor students and/or students of color, none of the principals we interviewed felt the need to hire minimally qualified candidates in order to fill vacancies. There seems to be a sufficient number of qualified candidates for most vacancies to

allow schools to be selective. This contradicts the stereotype that high poverty or high minority schools cannot hire any but the lowest quality or most inexperienced teachers. Principals (and teachers) attributed the adequacy of candidates to the district's relatively high compensation levels, to its reputation for better management and more orderly schools (compared to some of the neighboring districts), the additional resources provided to high poverty schools by the district, and that these schools are given first access to screened external candidates.

When we asked principals how the central office helped or hindered them in acquiring, developing, and retaining teacher human capital, no specific negatives that were mentioned by more than one principal, though a few mentioned that the district as a whole could be bureaucratic and that there was a constant stream of new initiatives that can put pressure on teachers unless the principal shielded them. Almost all of the principals recognized and appreciated the job the HR department did in recruiting and screening external job candidates.

In district B, most principals mentioned areas where they were supported in their HC management. Primary among these were the job fairs (though not all found them useful), other teacher recruitment and pipeline sources for new teachers (e.g., Teach for America, the district Teaching Fellows program, and a local urban teacher education program) the flexibility to manage school budgets, and the flexibility to easily non-renew probationary teachers who were under-performing or who were a poor fit for the school. Other supports mentioned were the assistance provided by the Office of Human Resources in helping with internal staff changes (e.g., re-categorizing positions). Some principals did express concerns about the timing of budget allocations based on school projections, the impact of budget cuts, and internal seniority bumping due to program cuts, which constrained their human capital leadership efforts.

Union-management relations. In district A, positive association-management relations at the district level appear to be reflected at the school level. No principal expressed the view that the association is a significant hindrance in acquiring, developing, or retaining teachers. Three felt that the association tried to hold onto low performing teachers despite its commitment to the district peer assistance and review (PAR) program. But two others said that the association was supportive in removing poor teachers through PAR. Most believed that the district's association-management relationship was cooperative and that the association was "on board" with most management initiatives. This is again a contrast to the stereotype that large district union-management relations are conflicted and that unions or contractual provisions are a major hindrance to school HCM. The positive relationship here likely helps support school HCM because the association supports the human capital initiatives originating at the district level, and principals do not have to worry about district-level association-management conflict spilling down into their schools.

In district B, there has been a history of union-management conflict, but in recent years relations have been more stable. Four of the 5 principals in the up-trend schools mentioned that the process for removing under-performing, tenured teachers was too long and restrictive. One also stated that the union inhibited his schools efforts to use expanded hours for professional development activities. None of the 3 principals in the flat trend schools expressed difficulties from the union.

High school HCM. Not surprisingly, HCM at high schools looks different than at elementary schools. Larger size, the departmentalized structure, and greater teacher specialization make it necessary for principals to share HCM functions with other school leaders, notably department heads. As we learned in our teacher interviews, a candidate for a job in a

large high school may not be interviewed by the principal, nor have much direct contact with her or him once hired. Many teachers also referred to department chairs or grade level teams with discussing activities such as teacher support and development. Teachers at the high school level were less connected with their principals in their daily work.

DISCUSSION AND IMPLICATIONS

Our findings suggest that in these two large districts that have obtained some notoriety for human capital innovations, HCM practices described at the school level are less developed. There were no major differences between upward trend and flat trend schools in school HC. We first consider potential study design issues that could explain this null finding. Following the discussion of potential limitations, we turn to the key findings on how school-leaders carried out HCM. The study finishes with a discussion on the lack of strategic focus on school HCM and the implications for district practice, principal preparation, and research.

There could be two reasons related to study design that help explain the failure to find a substantial difference in HC practices between upward and flat trend schools. The first involves potential error in identifying successful and less successful schools for our sample. The second relates to measurement error in the surveys and the interview data collection.

First, although we applied multiple measures and selected schools based on achievement trends, our measures may not have distinguished between truly high and lower performing schools. The data used to assess the trends could have error. Further, the trends were estimated from years before we collected data on school HCM practices. The responses we obtained from teachers and principals may not have represented the conditions in the schools during the prior years. Second, measurement error in the surveys could obscure true differences and the small sample size limits our ability to detect statistically significant differences. In addition, the

qualitative focus could have been too broad to get enough detail on specific school HCM to uncover key differences. As an exploratory study of the broad spectrum of school-level HCM, we did not go into great detail on different functions. For example, we did not observe the teacher selection process, professional development activities, or probe deeply on the personnel evaluation processes. Doing so could have led to different conclusions on principal HCM activities and their ties to instructional improvement priorities. Instead, we pursued a more open-ended qualitative approach to identify cross-cutting themes on HC management within and across the schools.

Despite these limitations, obtaining data from multiple sources did allow for a picture of the main efforts of school principals to recruit, develop and retrain teachers for the sampled high needs schools in these two districts. There were a number of instances where best practices were evident, such as providing prospective teachers with a realistic preview during the selection process or school-based professional development with teachers interacting in professional learning communities around the school's instructional priorities.

We found that school leaders did try to create positive working environments and to encourage effective teachers to stay with the school (e.g., by giving them leadership responsibilities). They did not systematically plan for staffing or focus on maintaining a balance of staff based on experience (i.e., novice, mid-career, veterans). Most were primarily concerned with having too many inexperienced teachers at one time. The principals also did not seem overly concerned about teacher turnover and had access to a pool of teachers needed to fill potential openings. By and large, however, we did not identify a common set of HC management strategies principals used within their schools or across the schools to attract, develop or retain faculty.

The finding on the lack of strategic focus or aligned practices is perhaps not surprising since principals are typically not selected, and most are not trained (in pre-service or in-service) or held accountable for HCM. As noted above for district B, district leaders confirmed that guidance to principals on HC practices and accountability for HC outcomes (e.g., teacher quality) was weak.

The lack of strategic focus does not seem to be due to collective bargaining. Some argue that the main problem with obtaining and retaining talented teachers is a result of recalcitrant unions and that school leader hands are tied when it comes to dismissing poor performing teachers. However, a review of the largest district's contracts found that more than half had labor agreements that "... are considerably ambiguous... and appear to grant leaders substantial leeway to manage assertively, should they so choose" (Hess & Loup, 2008, p. 9). Although there were complaints about cumbersome dismissal requirements, many principals in our sample did work through the process or identify teachers who they felt should not obtain tenure before it was too late. In our study, unions were not seen as a major inhibitor to school leader practices.

Similarly, it did not appear that overly restrictive district requirements were limiting principals' innovation in HC management. Studies have shown that human resources at the district level is often relegated to the "back office" as an enforcer of contractual obligations or a dysfunctional processing agent of employment records and benefits (Campbell, DeArmond & Schumwinger, 2004). In our districts, the HR offices had undergone transformations to update systems and streamline processes and supports to schools. While there were some complaints about the steady stream of district initiatives in each of our districts and some concerns about the inability to plan due to budget fluctuations, districts were not seen as a substantial obstacle to principals' practice.

The complexities of running schools may limit the principals' attention to systematic HC management. Principals, like managers in the private sector (Mintzberg, 2009), are stretched between multiple, competing tasks, and are confronted by the reality of brevity, variety and fragmentation in their daily work lives (Peterson, 1986). Given these realities of the job, the time principals are able to dedicate to strategic planning for staff, selection processes, and retention efforts may be taken by other pressing needs.

As our district respondents indicated and the school level findings suggest, there is considerable room for additional support for school leaders in HCM. One avenue of support is to expand process tools (e.g., interview procedures, HCM "planning templates,") and evaluation systems. A second avenue would be additional training of school leaders in the principles of HCM. Districts might also wish to emphasize providing service or consultation to school leaders as a valued role for human resource departments. Lastly, districts may want to consider changing principal performance expectations and evaluation systems to emphasize HC management activities and outcomes.

We also noted that investigating HCM at the high school level was more complex than at elementary and middle school levels. Our findings confirmed differing roles of principals in HCM between school levels. Within high schools, there were more personnel involved with HCM, and principals often have infrequent contact with teachers. This raises some important questions about HCM at the high school level: to what extent are department heads prepared to select, develop, and retain effective teachers? It is unlikely that most of these school leaders will have had any exposure to HCM principles or functions before becoming department heads. Unless the principal or other school leaders communicate an approach to HCM, it is possible that

the department head's approach may be unaligned with the human capital strategies the principal wants to pursue.

There is ample room for additional research on school and district HCM. The domain of HC management at the school level is vast. It was clear as we designed our study that we could not tap the multiple dimensions of HC management in depth. Therefore, we focused on exploring key strategies principals used to attract, develop and retain teachers. To get depth on these practices, longitudinal studies would be needed, perhaps on each functional area.

Some argue that giving principals large amounts of autonomy over budget and staff, will create conditions for principals and their schools to flourish (Ouchi, 2009). However, this presumes in many cases that principals are up to the task, or with professional development, they can be put up to the task. In these cases, there is little attention, if any to what knowledge, skills or tools are needed to build and retain effective faculty. Districts should consider, and research can help uncover questions about:

- What are the key HC competencies that the district wants principals to have?
- How and when will principals acquire these competencies? How will they be measured? And, how will they be held accountable for applying them in practice?
- Given the movement in many districts toward a portfolio approach to school performance management (e.g., autonomous schools, standard schools, intervention/turn-over schools), is there a preference for centralizing or decentralizing HCM functions?
- Related to the last question, which functions are best handled at scale by the district and which left to school leaders? And, in which cases should roles be delegated and how could the roles be supported through a district-school partnership?

Developing an effective school faculty requires attention to three basic HCM practices: attraction of talented teachers, their development, and their retention. While it is clear that both talent shortages and turnover are impediments to keeping high poverty urban schools staffed with quality teachers, it is not as clear what strategies districts and schools should be using to respond. It is not likely to be sufficient just to change recruitment sources to get better new teachers or to concentrate on retaining all teachers at any cost. Our study provides an initial, wide lens on school-leader HCM, with descriptive evidence of approaches principals use to attract, develop and retain teachers. The evidence suggests that these practices lack the coherence needed to strategically build the faculty to enact school instructional improvement priorities in high needs schools. Attention from district leaders, researchers, and principal preparation programs on human capital leadership competencies and related supporting structures will help expand our understanding of how school HCM can contribute to instructional quality.

REFERENCES

- Boyd, D.J., Grossman, P.L., Ing, M., Lankford, H., Loeb, S. and Wyckoff, J.H. (2009) The Influence of School Administrators on Teacher Retention Decisions. CALDER Working Paper 25. Washington, DC: Center for the Analysis of Longitudinal data in Education. Available at: http://www.urban.org/UploadedPDF/1001287_calderworkingpaper25.pdf
- Brown, K., & Wynn, S. (2009). Finding, supporting, and keeping: The role of the principal in teacher retention issues. *Leadership and Policy in Schools*, 8(1), 37-63.
- Campbell, C., DeArmond, M., & Schumwinger, A. (2004). From bystander to ally: Transforming the district human resources department. Center on Reinventing Public Education, University of Washington.
- DeArmond, M. M., Gross, B. & Goldhaber, D. (2008). Is it Better to be Good or Lucky? Decentralized Teacher Selection in 10 Elementary Schools. CRPE Working Paper #2008-Seattle WA. Center on Reinventing Public Education. Available at: http://www.crpe.org/cs/crpe/download/csr_files/wp_crpe3_joyce_may08.pdf
- DeArmond, M. M, Shaw, K. L., & Wright, P.M. (2009). Zooming in and zooming out: Rethinking school district human resource management. In *Creating a New Teaching Profession*. D. Goldhaber & J. Hannaway (eds.). Washington, DC: Urban Institute Press.
- Goldhaber, D., DeArmond, M.M., & DeBurgomaster, S. (2007). Teacher Attitudes About Compensation Reform: Implications for Reform Implementation. SFRP Working Paper 20. Seattle WA. Center on Reinventing Public Education. Available at: http://www.crpe.org/cs/crpe/download/csr_files/wp_sfrp20_goldhaber_aug07.pdf
- Guarino, C., L. Santibañez, G. Daley, and D. Brewer (2004). A review of research literature on teacher recruitment and retention. TR-164-EDU. Santa Monica, CA: RAND. Retrieved September 1, 2004, from www.rand.org/publications/TR/TR164/
- Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness. *School Effectiveness and School Improvement*, 9(2), 157–191.
- Hess, F. (2009). The human capital challenge: Toward a 21st century teaching profession. In *Creating a New Teaching Profession*. D. Goldhaber & J. Hannaway (eds.). Washington, DC: Urban Institute Press.
- Hess, F., & Loup, C. (2008). The leadership limbo: Teacher labor agreements in America's Fifty Largest School Districts. Washington, DC: The Fordham Institute.

- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *Review of research: How leadership influences student learning*. New York: The Wallace Foundation.
- Marzano, Waters, & McNulty (2005). *School leadership that works: From research to results*. Alexandria, VA: ASCD.
- Mintzberg (2009). *Managing*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Heneman, H.G. III, and Milanowski, A.T. (2004) Alignment of human resource practices and teacher performance competency. *Peabody Journal of Education*, 79:4, 108-125.
- Milanowski, A., & Kimball, S. (2010). The principal as human capital manager: Lessons from the private sector, in Re. Curtis & J. Wurtzel (Eds.). *Teaching talent: A visionary framework for human capital in education*. Cambridge, MA: Harvard Education Press.
- Milanowski, A.T., Longwell-Grice, H., Saffold, F., Jones, J., Schomisch, K., and Odden, A. (2009). Recruiting new teachers to urban school districts: what incentives will work? *International Journal of Educational Policy and Leadership*, 4:8. Available at: <http://journals.sfu.ca/ijepl/index.php/ijepl>
- National Commission on Teaching and America's Future (2003). *No Dream Denied: A Pledge to America's Children*. Author. Available at: http://www.nctaf.org/documents/no-dream-denied_summary_report.pdf
- Odden, A. & Kelley, J. A. (2008) *What is SMHC? Strategic Management of Human Capital* project of the Consortium for Policy Research in Education, Wisconsin Center for Education Research, University of Wisconsin-Madison. Available at: <http://www.smhc-cpre.org/resources/>
- Peterson, K.D. (1986). Principals' work, socialization and training: Developing more effective leaders. *Theory into Practice*, 24(3), 151-155.
- Smylie, M., & Wenzel, S.(2006). *Promoting Instructional Improvement: A Strategic Human Resource Management Perspective*. Chicago: *Consortium on Chicago School Research*.
- SMHC (2009). *Taking human capital seriously: Talented teachers in every classroom, talented principals in every school, Principles and recommendations for the strategic management of human capital in public education*. Consortium for Policy Research in Education, Strategic Management of Human Capital. Madison, WI: Author.

TABLES

Table 1: Principal Self-report Use of Strategic Human Capital Management Practices in Upward and Flat Trend Schools

District A

Scale	Upward Trend n=5		Flat Trend n=3	
	Scale Mean	Std. Error	Scale Mean	Std. Error
Recruitment	1.8	0.3	2.3	0.3
Selection	2.2	0.1	2.0	0.3
Induction	2.7	0.1	2.9	0.1
Mentoring	2.9	0.1	3.0	0.0
Professional Development	2.6	0.2	2.6	0.3
Performance Management	3.0	0.0	2.8	0.2

None of the differences are statistically significant at the.05 level.

District B

Scale	Upward Trend n=5		Flat Trend n=3	
	Scale Mean	Std. Error	Scale Mean	Std. Error
Recruitment*	2.7	0.1	2.2	0.1
Selection	2.5	0.2	2.4	0.2
Induction	2.8	0.1	2.9	0.1
Mentoring	2.7	0.1	2.4	0.2
Professional Development	2.7	0.2	2.8	0.1
Performance Management	2.7	0.1	3.0	0.0

* Difference statistically significant at the.05 level.

Table 2: Average Teacher Perceptions of Human Capital Management in Upward and Flat Trend Schools

District A

Scale	Upward Trend n=5		Flat Trend n=3	
	Scale Mean	Std. Error	Scale Mean	Std. Error
Clear School Strategy	3.2	0.1	2.8	0.1
Recruitment	3.3	0.1	3.0	0.2
Selection	3.1	0.2	2.8	0.2
Induction & Mentoring	2.9	0.2	2.7	0.3
Professional Development	3.4	0.2	3.0	0.2
Performance Management	2.8	0.2	2.5	0.1

None of the differences are statistically significant at the.05 level.

District B

Scale	Upward Trend n=5		Flat Trend n=3	
	Scale Mean	Std. Error	Scale Mean	Std. Error
Clear School Strategy	3.3	0.2	3.1	0.2
Recruitment	3.5	0.1	3.3	0.2
Selection	3.4	0.1	3.3	0.3
Induction & Mentoring	3.1	0.2	2.6	0.5
Professional Development	3.3	0.2	3.3	0.3
Performance Management	3.0	0.2	3.0	0.3

None of the differences are statistically significant at the.05 level.

Table 3: Teacher and principal descriptions of selection process in District B

Selection activity descriptions		
Elementary School	Principal responses	Teacher responses
ES 1 Up-trend	<ul style="list-style-type: none"> No set teacher selection questions Principal screens and invites promising candidate to school for a day Teachers talk to candidates about school; candidates can choose who to talk with; they are encouraged to ask about job, what they like about it and the school Principal asks candidate at end of day if they think they're a good fit Will observe candidates if possible 	<ul style="list-style-type: none"> Class observation during reading block Informal discussions with students and other teachers Interview with principal only
ES 2 Up-trend	<ul style="list-style-type: none"> Structured interview questions used with two rounds of interviews; first focuses on teacher beliefs, second on curriculum and instruction Teachers welcome to attend the interviews Looks for reflective practitioners Does not require demonstration lesson 	<ul style="list-style-type: none"> Principal conducts interview with probing questions on instructional approach and how students learn; described as "great questions" "Open invitation" for teachers to attend interviews
ES 3 Up-trend	<ul style="list-style-type: none"> No set interview questions May use scenarios to gauge thinking of candidate and vary questions based on response Will observe candidates if possible 	<ul style="list-style-type: none"> Informal process: principal stopped in while candidate was substitute teaching Interview with principal followed
ES 4 Flat-trend	<ul style="list-style-type: none"> Principal uses Haberman interview protocol to identify teachers likely to succeed in urban school setting Also probes their comfort level with school population, whether they will advocate for kids, & class management & discipline. Also looks for understanding of state learning standards 	<ul style="list-style-type: none"> Initial interview at job fair, then interview with principal and assistant principal at school Looked at portfolio and asked about content area (one on special education training, another on science teaching experience)
ES 5 Flat-trend	<ul style="list-style-type: none"> No set interview questions Principal asks about educational philosophy and school fit Will observe teachers in the classroom: this happens when teacher is hired on a "try out" basis when classroom has mid-year turnover; a fairly common occurrence 	<ul style="list-style-type: none"> Informal process: principal called and they spoke about the school's and the applicant's expectations, education philosophy, and applicants awareness of literacy testing tools Another teacher hired "in a pinch" at end of the summer, with minimal selection activities

Table 3, continued

High School	Selection activity descriptions	
	Principals	Teachers
HS A Up-trend	<ul style="list-style-type: none"> • No set interview questions • Screen candidates at job fairs • Assistant principal and department chair will interview at school • Sample lesson required, observed primarily by department chair and AP • Principal then interviews for “soft part” to gauge candidate’s intuitive sense 	<ul style="list-style-type: none"> • Observations during student teaching • Interviewed by department chair, assistant principal, and cooperating teacher
HS B Up-trend	<ul style="list-style-type: none"> • Start with resume screen then phone interview. If candidate fits philosophical probes, will bring in for interviews • Second round of interviews includes small group of candidates who role play various instructional and team-based scenarios assessed by school panel • Use set of school-specific criteria in the selection process 	<ul style="list-style-type: none"> • Initial interview with assistant principal • Formal interview and group simulation exercises with other candidates assessed by school panel
HS C Flat-trend	<ul style="list-style-type: none"> • Use interview questions to examine content background; include content specialist on interview team • If teacher brings portfolio will look at them • Ask for demonstration lesson • Probe candidates for hobbies or special skills that may help with student population • Look for social-emotional skills 	<ul style="list-style-type: none"> • One hired as group of special education teachers due to turnover • Interviewed with 5-6 people, questions about stamina and courage, job roles, and discipline

Table 4: Average Teacher Turnover Intentions and Commitment to School in Upward and Flat Trend Schools

District A

Scale	Upward Trend n=5		Flat Trend n=3	
	Scale Mean	Std. Error	Scale Mean	Std. Error
Turnover Intention	1.4	0.1	1.7	0.3
Commitment to School	3.6	0.2	3.5	0.4

None of the differences are statistically significant at the.05 level.

District B

Scale	Upward Trend n=5		Flat Trend n=3	
	Scale Mean	Std. Error	Scale Mean	Std. Error
Turnover Intention	1.7	0.2	1.5	0.2
Commitment to School	3.4	0.3	3.5	0.2

None of the differences are statistically significant at the.05 level.

Appendix A: Interview protocols

Revised Principal Interview Protocol

Introduction: This project is intended to learn about how school leaders manage the staff of their schools, focusing on school human resource management practices. In this interview, we are interested in learning how you and your school attract, retain, and develop teachers.

To start, I have a few questions about your background:

1. How long have you been principal of this school?
2. What was your position before you became principal here?
3. How many total years have you been an administrator?

Next I have a couple of questions on your school's strategy for improving student achievement.

4. What is your school's strategy for improving student achievement?
5. What knowledge, skills, and other characteristics (also called competencies) do teachers need to carry out your school's improvement strategy?
6. What are the most important things you do to motivate teachers to go the extra mile to achieve your school's goals?
7. Do you do anything to acquire, develop, or retain teachers with the desired knowledge, skills and other characteristics that sets you apart from or makes you more effective than other schools?

My next questions are about teacher recruitment and selection:

8. What knowledge, skills and other characteristics do you look for in prospective teachers?
9. What sources do you use to find teacher candidates with the desired knowledge, skills and other characteristics? (Probe for alternative training programs)
10. What are the most important things you do to attract teachers with the knowledge, skills and other characteristics needed for your school?
11. Are there features of your school that inhibit teacher recruitment? How do you handle these?
12. How do you assess whether teachers have these knowledge, skills and other characteristics during the hiring process?

Now, I have some questions about teacher development:

13. What are the most important things you do to develop teachers to improve the desired knowledge, skills and other characteristics?
14. How do you work with teachers to facilitate and support their development?
15. How do you monitor teacher's progress in their development?

Moving to teacher retention:

16. What are the most important things you do to retain teachers with the desired knowledge, skills and other characteristics?
17. Are there features of your school that inhibit teacher retention? How do you try to overcome these?
18. How do you plan for filling positions when teachers quit, move to another school, or retire?
19. Do you consider it important to get a balance of new teachers, mid-career teachers, and highly experienced veterans?
- 19a. If so, how do you go about getting the balance you want?

I now have two questions about district and union influence on attracting, developing, and retaining effective teachers at your school.

20. Does the district help or hinder your activities in recruiting, developing and retaining teachers with the desired knowledge, skills and other characteristics? Please explain.
21. Does the union help or hinder your activities in recruiting, developing and retaining teachers with the desired knowledge, skills and other characteristics? Please explain.

Could I get a copy of the following documents?

1. School improvement plan (if not available from web site).
2. School professional development plan or budget
3. Teacher candidate interview questions
4. Induction packet provided to teachers
5. School-specific teacher evaluation criteria
4. Newsletter or other communication to faculty

Finally, I would like to follow up with you to set up a time when we could do a brief survey with you about whether your school uses specific human resource management practices. This survey could be done over the phone or in person. It would take about 30 minutes. When might be a good time to work with you on this?

Teacher Interview Protocol

Introduction: This project is intended to learn about how schools build and maintain effective faculties. In this interview, we are interested in learning about your school improvement strategy and how you have experienced human resource practices in this school.

To start, I have a few questions about your background:

1. What grades/subjects do you teach?
2. How long have you worked at this school?
3. How many years have you been teaching?

Next I have a couple of questions on your school's strategy for improving student achievement.

4. What is your school's strategy for improving student achievement? (That is, what are the specific things you are doing as a school to improve achievement?)
5. How are teachers involved in this strategy?
6. What do you see as your role in this strategy?

Now I want to ask a few questions about why you work at this school.

7. What made you decide to come to this school rather than another school in the district <area>?
8. Why have you decided to stay at this school?
9. How does the principal or other school leaders influence your motivation to stay or leave?

I am also interested in how your school goes about trying to build and maintain a quality faculty.

10. What is the most important thing this school does to attract effective teachers?

10a. IF NEW TO SCHOOL IN LAST 3 YEARS: What did the hiring process involve when you were hired at this school? (probe for description of interview and other selection methods)

11. What is the most important thing this school does to develop effective teachers?

12. What is the most important thing this school does to retain effective teachers?

13. What is the most important thing this school does to motivate teachers to do what it takes to improve student achievement?

13a. How do school leaders recognize or reward teachers for doing a good job?