Policy Brief

MIX AND MATCH: WHAT PRINCIPALS REALLY LOOK FOR WHEN HIRING TEACHERS

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Abstract

The vast majority of research and policy related to teacher quality focuses on the supply of teachers and ignores teacher demand. In particular, the important role of school principals in hiring teachers is rarely considered. Using interviews of school principals in a midsized Florida school district, we provide an exploratory mixed methods analysis of the teacher characteristics principals prefer. Our findings contradict the conventional wisdom that principals undervalue content knowledge and intelligence. Principals in our study ranked content knowledge third among a list of twelve characteristics. Intelligence does appear less important at first glance, but this is apparently because principals believe all applicants who meet certification requirements meet a minimum threshold on intelligence and because some intelligent teachers have difficulty connecting with students. More generally, we find that principals prefer an "individual mix" of personal and professional qualities. They also create an "organizational mix," hiring teachers who differ from those already in the school in terms of race, gender, experience, and skills, and an "organizational match," in which teachers have similar work habits and a high propensity to remain with the school over time. Because of tenure rules, many principals also prefer less experienced (untenured) teachers, even though research suggests that they are less effective.

1. INTRODUCTION

The widespread efforts to improve the quality of the nation's teaching force are premised on the idea that there is an insufficient supply. Among researchers, interest in the topic has centered on evidence of teacher shortages (Darling-Hammond 1997), high turnover rates (Harris and Adams 2007; Ingersoll 2001), and inadequacies in teacher preparation (Clotfelter, Ladd, and Vigdor 2006; Harris and Sass 2007). Policy makers, for their part, have responded with policies such as alternative routes to certification to attract more teachers, mentoring programs to improve retention, and reforms in colleges of education.

While there are good reasons to focus on the supply side, developing more quality teachers will do little for teacher quality if the best teachers are not hired. If district administrators and principals make poor hiring decisions, as some have argued (e.g., Ballou 1996; DeArmond and Goldhaber 2005), potentially strong teachers will be dissuaded from entering the occupation's pipeline, perhaps compounding the well-known problems of uncompetitive salaries, low prestige, and often undesirable working conditions. In short, increasing teacher quality requires action on both the supply and the demand sides of the market.

The conventional wisdom is that the school leaders who are substantially responsible for the demand side and hiring teachers focus too much on teacher personality and too little on professional skills and abilities. There is some evidence to support this. For example, Ballou (1996) finds that, compared with other types of organizations, school systems are less likely to hire applicants with strong academic credentials. Interpreting this result, he writes that "public school officials undervalue cognitive skills and subject matter knowledge when screening applicants" (p. 130). This is a potentially significant problem because research also suggests that these same professional skills, as well as teacher experience, are associated with teacher effectiveness (Darling-Hammond 2000; Harris and Rutledge 2010; Monk 1994).

Our results clarify and in many ways contradict the conventional wisdom. We provide an exploratory mixed methods analysis of interviews with thirty school principals focused on the characteristics principals look for in teacher applicants. Below, we briefly discuss past literature, followed by data and methods, analysis, and discussion. A more extensive discussion of the methods, data, and results is available from the authors upon request.

2. CONVENTIONAL WISDOM: PREVIOUS RESEARCH ON PREFERRED TEACHER CHARACTERISTICS

We identified seven studies that provide evidence about the characteristics principals prefer in teacher applicants by asking principals to rank a list of characteristics (Abernathy, Forsyth, and Mitchell 2001; Braun et al. 1987; Broberg 1987; Cain-Caston 1999; Dunton 2001; Ralph et al. 1998; Theel and Tallerico 2004). Principals consistently report preferences for teachers who display strong communication skills (Braun et al. 1987; Broberg 1987; Cain-Caston 1999; Dunton 2001; Ralph et al. 1998) and enthusiasm (Broberg 1987; Dunton 2001). Principals also report, although less consistently, preferences for teachers with certain teaching skills ("establishing positive classroom climate"), philosophies ("student-centered"), types of knowledge ("knowledge of teaching skills" and "understanding special populations"), and an ability to work well with others ("ability to work with students"). Other teacher characteristics are not commonly considered in studies of hiring. One of these—caring—is frequently mentioned in some branches of research on teachers (Stronge and Hindman 2003) and turns out to be an important factor for principals in our new analysis.

To put these previous results in a broader perspective, we draw on the distinction made by Broberg (1987) between "personal" and "professional" characteristics. We interpret the consistent preference for enthusiasm and communication skills as a preference for personal characteristics. In contrast, administrators showed weaker preferences for professional characteristics such as knowledge of teaching strategies and classroom management skills (Broberg 1987; Dunton 2001; Ralph et al. 1998). We can therefore reframe the conventional wisdom as a preference for personal over professional characteristics.

It is difficult to draw firm conclusions from the above studies due to inconsistencies in characteristics considered as well as methodologies used. Of the forty-nine characteristics that appeared in the studies we reviewed, only ten were included in two studies and only three (use of English, communication skills, and appearance) appeared in three or more studies. Also, the studies exclude potentially important characteristics such as caring and intelligence.

Another group of studies focuses exclusively on academic credentials and, rather than asking principals about their preferences, focuses on the characteristics of teachers who are actually hired. Ballou (1996) asks, "Do public schools hire the best applicants?" Using a nationally representative sample of recent college graduates, he finds that applicants from more selective undergraduate institutions were no more likely to be hired than graduates of other institutions, although applicants with higher grade point averages were given some preference. Ballou offers two possible explanations for this result. First, he notes that "teacher applicants with stronger academic backgrounds... are more likely to relocate after graduation" (p. 126). If this is true, it may make sense for principals to reject academically talented candidates even if principals would otherwise prefer them. The apparent lack

of preference for strong academic backgrounds therefore could be due to the supply constraint for which studies do not account—the cost to schools when teachers leave—rather than principal preferences.

These findings from studies of observed hiring decisions generally reinforce the results of the preference ranking studies and the conventional wisdom. Both sets of studies suggest that principals (or, in the case of the last three studies, the hiring personnel collectively) give somewhat lower preference to teacher candidates with strong professional characteristics and more to teachers with strong personal characteristics.

The above sets of studies also suffer from the exclusion of potentially important teacher characteristics, especially those that research suggests are associated with teacher performance. As we show below, researchers and policy makers have narrowed their attention in recent years to three professional characteristics: content knowledge, teacher experience, and intelligence. It is important to know how principals weigh these characteristics, but studies of hiring all omit at least one of them.

Teacher experience is a characteristic that plays a central role in determining teacher compensation, and recent studies suggest that experience does lead to improvement in teacher effectiveness over the first three to five years in the classroom (Harris and Rutledge 2010; Rice 2003; Wayne and Youngs 2003; Wilson and Floden 2003; Wilson, Floden, and Ferrini-Mundy 2001). Yet few previous studies involving rankings of teacher characteristics have considered principals' preferences for teacher experience.

Ballou's (1996) study is premised on the assumption that teacher intelligence is associated with teacher effectiveness, and there is evidence to support this (Harris and Rutledge 2010). The previous director of the U.S. Department of Education's Institute for Education Sciences, Grover Whitehurst, has argued that "the most robust finding in the research literature is the effect of teacher verbal and cognitive ability on student achievement" (Whitehurst 2002, p. 6). Like experience, intelligence is not considered in the preference ranking studies.¹

In addition to the gap between research on teacher quality and hiring, there is an important one between research on the characteristics principals prefer and the tools they use to identify them. Rutledge et al. (2008) find that the interview is given more weight than any of the other tools. Indeed, many studies focus only on the role and specific aspects of the interview in the hiring process. Braun et al. (1987) and Ralph et al. (1998) find that principals give the highest ranking to honesty of response or quality of performance during an interview.

The importance of content knowledge has received widespread attention (e. g., Darling-Hammond 2000; Monk 1994), so we do not discuss it further here.

Among screening criteria (used to determine who gets interviewed), recommendations from cooperating teachers and internship reports are given the greatest weight, followed by recommendations from administrators (Abernathy, Forsyth, and Mitchell 2001; Braun et al. 1987; Cain-Caston 1999; Ralph et al. 1998). Principals report that portfolios and lesson plans are not credible indicators of quality (Theel and Tallerico 2004).

Principals also rely on previous experience (Abernathy, Forsyth, and Mitchell 2001; Broberg 1987; Braun et al. 1987; Dunton 2001; Theel and Tallerico 2004). However, the evidence is mixed, and sometimes unclear, about whether more experience is better. This is an important topic that we explore. Overall, the studies we review find that the interview, experience, and letters of recommendation are more important than the résumé and college coursework (Abernathy, Forsyth, and Mitchell 2001; Braun et al. 1987; Ralph et al. 1998; Theel and Tallerico 2004). Not a single study finds that any aspect of the résumé or coursework is among the most important tools principals use.

The question then is, what information are principals deriving from these tools? That is, what does the hiring process say about what principals are looking for? The conventional wisdom, again, is that personal characteristics such as enthusiasm, communication, and ability to work with others appear to be the most important teacher characteristics that principals look for. All of these are characteristics that can be identified in the interview, which appears to explain why principals give so much weight to the interview as a tool. In our analysis, we consider in greater detail the relationship between principals' preferred characteristics and preferred hiring tools.

There is one study we are aware of that might seem to contradict the conventional wisdom. Balter and Duncombe (2005) look at superintendents' hiring practices, focusing on the *topics* that are covered during the interview. Five of the ten characteristics in their pre-specified list—teaching philosophy, subject-related knowledge, curriculum, discipline, and learning styles—are mentioned as interview topics by more than 90 percent of the superintendents. Unfortunately, this excludes personal qualities such as communication skills and enthusiasm, two characteristics that other studies find to be most important to principals. While one might argue that these are observed directly in the interview rather than being topics of explicit discussion, it is difficult to test the relative weight educational administrators attach to personal and professional characteristics with this type of study design.²

^{2.} Topics less frequently mentioned by superintendents by Balter and Duncombe (2005) include diversity, willingness to serve on committees, professional/career goals, and willingness to be involved in extracurricular activities. Experience and teaching a sample lesson are also included in their list, but we consider these to be tools rather than characteristics and therefore do not consider them here.

Like Ballou, Balter and Duncombe and most of these studies focus on the district-level role even though hiring authority is distributed with school principals generally playing some role, and often a significant one (Balter and Duncombe 2005; Liu and Johnson 2006; Strauss et al. 1998). This suggests a need to understand the preferences of school principals and school-level teacher demand.

Given the significant limitations of previous research on this topic, an exploratory analysis of principal preferences is needed that incorporates the characteristics policy makers and researchers consider most important and the reasoning behind principals' preferences and decisions.

3. DATA AND METHODS

We conducted an exploratory, mixed methods study of thirty principals, drawn from a midsized Florida school district, who are responsible for screening and selection of teachers at their school, as well as interviews with three district officials involved in hiring. The principals had considerable discretion over the selection process, choosing their own processes, such as the extent to which they included existing teachers and other stakeholders in the screening and interviewing process, the number of interviews to conduct, and who was hired.³

We interviewed principals from seventeen elementary (or K–8) schools, six middle schools, four high schools, and three special population schools, representing more than half of the principals in the district.⁴ We conducted the primary interviews, lasting 1.5–2 hours each, during the summer of 2005. We also conducted a follow-up interview during the summer of 2006 in which twenty-one of the original thirty principals participated. Except where noted, the discussion refers only to the first interview. The sample of principals is almost identical to the national average on race and the proportion with at least a master's degree or higher.⁵

The district was chosen purposefully because the organization of hiring reflected the approximately 75 percent of districts where the principal is at the center of the hiring process—what Liu and Johnson (2006) call "decentralized or moderately decentralized hiring." It includes institutions of higher learning

Strictly speaking, principals only made recommendations to the school district, but our interviews with both principals and district officials suggest that these recommendations are nearly always accepted.

^{4.} A number of the schools in our sample are also designated magnet schools and programs.

^{5.} The national data on principals comes from the 2003–04 Schools and Staffing Survey (SASS) as reported in the Digest of Education Statistics (NCES 2006). Part of the reason that this sample of principals has higher levels of educational attainment is that Florida law makes it difficult to become a principal without a master's degree.

^{6.} In their study of hiring in four states, Liu and Johnson (2006) find that 45.9 percent of teachers are hired directly by the school principal, another 23.2 percent are hired directly by the district, and the rest are hired through a hybrid process in which the district oversees the organization of materials

that provide a larger than average supply of qualified teacher candidates. This means that principals generally have a substantial number of candidates to choose from and are therefore less likely to have their stated preferences influenced by compromises they would have to make if there were fewer candidates. This distinctive feature of the district is advantageous for separating the effects of supply and demand.⁷

School context may also influence hiring. The schools in the sample varied widely in the characteristics of students, teachers, and principals, making it a good location for studying principal hiring preferences. Another important aspect of the context is educational policy. Florida has long been an aggressive user of test-based accountability (Carnoy and Loeb 2003; Harris, Herrington, and Albee 2007), now a fixture around the country under No Child Left Behind (NCLB). Each school in Florida is assigned a grade—from a high of A to a low of F—based primarily on student scores on math, reading, and writing on the state's standardized test, the Florida Comprehensive Assessments Test (FCAT). In addition to providing information to parents and voters, the grades are used as the basis for a formal structure of punishments and rewards administered by the state government. While we cannot identify an effect of accountability in this type of study, the context is worth emphasizing because if there is a national trend in hiring, the rise of accountability may explain why.

4. RESULTS

Basic Results

We begin by discussing principals' responses to the open-ended prompt, "Please describe the characteristics of an applicant that you see as most important." As reported in table 1, the most common open-ended responses, without regard to the order of response, were strong teaching skills (21 responses of 138 possible), caring (17), and knows subject (12). These were followed by works well with others (10), experience (10), enthusiastic (9), and communication skills (7).

In the professional category, we included strong teaching skills, experience, knows subject, intelligent, certified, and education. (We consider experience,

and principals oversee the selection of teachers. While our sample district collected applicants' materials through a Web site, principals oversaw the screening and selection of teachers.

^{7.} While there is an ample supply of teachers in the sample district, this does not mean that individual schools are unconstrained. There are many opportunities for within-district transfers that affect the supply of teachers in individual schools. As one principal of a Title I school noted, "We see even our very, very most effective [teachers] pick up and go to one of those [high socioeconomic status] schools... and then they're there for a long time." Conversely, a principal of a high SES school noted that "I have none that transfer out of here to another area school. I am fortunate... it just happens to do with being a big, new beautiful school."

Table 1. Principals' Preferred Characteristics from Open-Ended Prompt

Characteristic	# of Principal Responses for Characteristic	# of Principals Focused on Characteristic Group
Personal characteristics		2
Caring	17	
Communication skills	7	
Cooperative	2	
Creative	0	
Enthusiastic	9	
Motivated	3	
Organized	1	
Thoughtful/reflective	3	
Works well with others	10	
Professional characteristics		6
Certification	3	
Education	6	
Experience	10	
Knows subject	12	
Intelligent	2	
Strong teaching skills	21	
Personal-professional mix		22
Total	138	30

certification, and education to be tools rather than characteristics, but we include them here because they arose from the open-ended prompt where principals were not bound by our categorization.) In the "personal" category we included caring, motivated, enthusiastic, works well with others, creative, cooperative, organized, thoughtful, and communication skills.

We identified patterns in the roughly one-third of the 138 responses that could not be coded into the pre-specified set. Many might be classified as "attitudes" or "philosophies of teaching." Regarding the former, five principals mentioned that they wanted teachers who are "positive" and "have the right attitude for teaching." Two principals reported a teaching philosophy focused on going beyond academic learning—such as "wants to teach the whole child" and "what other ways do they help kids besides the classroom"—and three other principals discussed teachers as "learners." The lack of discussion and general ambiguity in principals' educational philosophies is an important issue that we return to later.

For the ranking activity, the interviewer placed on separate index cards the twelve pre-specified characteristics discussed earlier (caring, etc.). Those that the principal placed in the most important category were coded as four, those in the next group as three, and so on. The results of the first ranking of each principal are summarized in table 2. Consistent with the above analysis of open-ended first responses, "caring" was the most important teacher characteristic (average ranking (\bar{r}) = 3.46), followed closely by "strong teaching skills" (\bar{r} = 3.42), "knows subject" (\bar{r} = 3.00), and "enthusiastic" (\bar{r} = 2.96). These four also ranked among the top answers in the openended responses earlier in table 1. Overall, this suggests that principals prefer a mix of personal and professional qualities, a topic we explore in further detail below.

None of the school characteristics stands out as being a better predictor of the rankings, though there are some patterns worth noting. The elementary school principals were less concerned about teacher intelligence and more concerned about their ability to work well with others. Consistent with the lower ranking of intelligence, the elementary principals also had a lower average ranking of knowledge of subject, but this difference is not statistically significant. School context does not seem to explain much of the variation in responses.

Revisiting the Conventional Wisdom: Packages, Proxies, and Thresholds

Consistent with the conventional wisdom, the principals in the study gave a relatively low ranking to the characteristic of intelligence. However, after further analysis of the interview transcripts, it appears that principals use applicants' academic background as a proxy for a package of professional abilities. One explained, "University transcripts are more important to me than most principals because I really want to see how they've done.... I still see it as a good indicator of the person's ability, work ethic and intelligence with those grades." For eight principals, having a bachelor's degree was a sufficient demonstration of intelligence. These principals indicated that it was important for teachers to meet a minimum threshold regarding intelligence, but going beyond that threshold seemed unimportant to them. One principal said, "So we need them to be bright, but we're assuming they come with that." Another stated, "You wouldn't be a teacher if you're not intelligent." Six principals expressed the view that intelligence was important but that it had to be

^{8.} The specific interview prompt was: "Now I'm going to give you note cards with twelve possible characteristics of teacher candidates. Please rank the characteristics by putting the cards into four groups of three with the first pile being the most important to you, the second pile the next most important to you to the fourth pile being the least important. Here are the note cards."

Table 2. Principal Rankings of Characteristics, Overall and by School Type (Means and Standard Errors)

Characteristics	Overall Mean $N=$ 27	School Level		Title I Status		School Grade from State Accountability System			
		Elem. $N = 17$	Middle N = 6		No N = 18	Yes N = 9	$egin{aligned} \mathbf{A} \\ N = 14 \end{aligned}$	B N = 9	C—F N = 4
Caring	3.46	3.59	3.40	3.00	3.47	3.44	3.62	3.11	3.75
	(.19)	(.19)	(.60)	(.71)	(.24)	(.34)	(.24)	(.42)	(.25)
Strong teaching skills	3.42	3.47	4.00	2.50	3.24	3.78	3.46	3.11	4.00
	(.21)	(.23)	(.00)	(.87)	(.29)	(.22)	(.27)	(.46)	(.00)
Knows subject	3.00	2.88	3.00	3.50	3.18	2.67	3.08	2.89	3.00
	(.22)	(.31)	(.32)	(.50)	(.25)	(.44)	(.29)	(.42)	(.71)
Enthusiastic	2.96	2.88	3.40	2.75	3.18	2.56	3.23	3.33	1.25
	(.20)	(.26)	(.25)	(.63)	(.21)	(.38)	(.23)	(.17)	(.25)
Motivated	2.65	2.71	3.00	2.00	2.53	2.89	2.54	2.78	2.75
	(.19)	(.25)	(.32)	(.41)	(.23)	(.35)	(.24)	(.32)	(.75)
Communication skills	2.64	2.53	2.50	3.25	2.38	3.11	2.33	2.89	3.00
	(.22)	(.26)	(.65)	(.48)	(.29)	(.26)	(.33)	(.35)	(.41)
Works well w/others	2.50	2.71	1.40	3.00	2.47	2.56	2.54	2.33	2.75
	(.17)	(.19)	(.25)	(.00)	(.21)	(.29)	(.27)	(.29)	(.25)
Creative	2.04	1.94	2.40	2.00	2.12	1.89	2.08	2.11	1.75
	(.19)	(.25)	(.40)	(.41)	(.26)	(.26)	(.31)	(.26)	(.48)
Intelligent	1.92	1.71	2.40	2.25	1.94	1.89	2.08	2.00	1.25
	(.21)	(.24)	(.51)	(.63)	(.25)	(.39)	(.29)	(.41)	(.25)
Thoughtful	1.88	1.94	2.00	1.50	2.00	1.67	1.92	1.67	2.25
	(.20)	(.25)	(.55)	(.29)	(.26)	(.29)	(.29)	(.33)	(.48)
Organized	1.81	1.88	1.20	2.25	1.76	1.89	1.54	1.89	2.50
	(.16)	(.19)	(.20)	(.48)	(.20)	(.26)	(.22)	(.26)	(.29)
Cooperative	1.69	1.76	1.20	2.00	1.71	1.67	1.54	1.89	1.75
	(.13)	(.11)	(.20)	(.71)	(.19)	(.17)	(.14)	(.31)	(.25)

Notes: The table reports simple mean rankings. Unadjusted standard errors are in parentheses. The total sample size of twenty-seven excludes the three "special schools" listed in table 1. "Important" characteristics are coded as four, while less important characteristics (from the perspective of the principals) are coded with lower numbers.

coupled with characteristics like communication skills and working well with students. These principals indicated that high grade point averages (GPAs) and graduation from selective universities demonstrated intelligence, but they also wanted candidates who had worked well with children and adolescents. They did not discount intelligence, but their experiences with more intelligent hires have caused them to be wary of this characteristic. As one principal explained:

Somebody can make great grades and are horrible teachers. Some people made average grades and are your best teachers. They might be a B student, you know, you take somebody with straight A's and they can't communicate. They can't engage. You can really get fooled on that.

Another principal provided an anecdote of interviewing an applicant who seemed quite strong on paper—working on a doctorate, articulate, and with a "super résumé." After meeting the applicant, the principal described her as having "no enthusiasm and no personal qualities that were exciting. It was all just very dry. And I thought how can this person teach in a classroom with children?"

One principal explicitly associated intelligence with a likelihood of turnover. "I'm not looking to hire somebody from Harvard," this principal explained. "The couple of people that I have hired from Harvard didn't stay with me; they had other aspirations." This illustrates Ballou's (1996) point regarding academically strong teachers leaving the profession. It is worth noting, however, that two of the thirty principals also responded in ways consistent with Ballou's contention that quality differences outweigh turnover considerations. These two principals explained that they hired teachers with strong academic backgrounds despite the high chance of departure after one or two years because of the strong, though brief, contribution they made to the school.

Intelligence appeared to be given little weight no matter how we looked at the data. While this is partly because principals see most teachers as meeting a minimum threshold, it is unclear why principals did not give the same type of responses when talking about other professional qualities; teaching skill and knowledge of subject were given much higher rankings, and the open-ended answers by principals did not suggest that they were looking for thresholds. If teachers with bachelor's degrees can be expected to reach a minimum level of intelligence, why would they not also have a minimum level of pedagogical skill and content knowledge, especially given that the overwhelming majority of applicants are graduates of colleges of education that are supposed to be providing these skills?

The answer would seem to be that principals genuinely do not value intelligence, but we argue that the conventional wisdom still needs to be revised. First, we find some evidence to support Ballou's idea that more intelligent teachers are more likely to leave and principals, aware of this, adjust their decisions accordingly. In addition, we find a new possible explanation: intelligent applicants may be more likely to have dull personalities and therefore, in the eyes of principals, fail to motivate students. This insight suggests that future research should use short biographies of teachers to examine the combinations of characteristics principals prefer.

This also has important implications for how researchers identify the characteristics of effective teachers. If principals hire only teachers who are intelligent *and* enthusiastic, only those teachers will show up in the sample. Further, if enthusiasm goes unmeasured, a positive relationship between intelligence

and teacher performance might not mean that principals should focus more on intelligence. The same problem may arise with other teacher characteristics.

Previous research showed that teacher experience is important to principals, but the results were inconsistent. Our results may help explain why: we find that principals value the insight and stability that more experienced teachers provide (reflected in the research that more experienced teachers are more effective in raising student achievement), but this is only true up to a point. Principals also reported that they like the enthusiasm and pliability of younger teachers—and the fact that they are untenured. Below, we also show that principals' preferences for experience are influenced by their desire to create an organizational mix of teachers.

Mix and Match

Twenty-two principals reported looking for a mix of personal and professional characteristics, according to table 1. Of the remaining eight, only two focused entirely on personal qualities, and six focused entirely on professional qualities. While there are more "professional-focused" principals, more than half of the twenty-two in the mixed group had at least 75 percent of their responses coded as personal qualities. Overall, this suggests a reasonably even balance between personal and professional characteristics.

The view that intelligence needs to be coupled with other characteristics also raises a larger point about principals' preferences for hiring based on a mixture of qualities. While we asked principals to identify specific characteristics of applicants they looked for when hiring a teacher for their school, eight expressed difficulty with the exercise and emphasized that they did not view qualities in isolation. One principal said she was looking for the perfect teacher: "You'll never find the ideal candidate. . . . So, you have to get as many of those attributes as you can in a bucket and compare the buckets."

The importance of mixture was even more evident at the school or organizational level. The key factors in the organizational mixture related to experience, race, and gender. Seventeen of the thirty principals discussed being aware of age and experience when hiring, saying they liked to "mix it up" and liked "the kids to have exposure to different ages and experienced teachers." Another

^{9.} Contrast Young and Voss (1986), who find that in simulated settings there is a preference for younger candidates, with Young and Pounder (1985), who find that age is not a major influence for decisions made on the basis of interviews. As a result, Pounder (1987) indicates that the results on the role of candidate age are inconsistent. In addition to the issue of organizational mixture, the inconsistent findings may be due to a conflating of age and experience. An older teacher may be pliable if she has relatively little teaching experience.

^{10.} For the analysis of overlapping codes, two of the thirty principals were dropped because they gave only one coded response, leaving a total of twenty-eight principals.

said, "I thought it was great because we created a mixture of very experienced teachers with young teachers... you get the best of both worlds."

Two principals mentioned all three elements of the mix—experience, race, and gender. One said:

I didn't want all middle-aged women who were going to retire at the same time like me. I wanted to make sure I had some young teachers and some middle-aged teachers and some older teachers with maturity and experience. I also look to make sure I had male and female.... And then I made sure that I had teachers that represented different ethnicities and make sure I have some Hispanic, white, black, whatever I could find that would represent the range of people in my school.

The second principal's comment was quite similar, although more explicit about mixture (or "balance") as being the motivation underlying this preference:

They need somebody in there about 45 years old who knows a little bit about living, and for that team I am truly looking for someone who is a little bit older. I don't need to put another recent college graduate with that team. They need some stability and majority and somebody who's taught a little bit. Now, on some of the other teams I've got that, and so I might want to hire a brand new enthusiastic energetic young student. . . . And I like to keep a balance. That's the other thing that I look for. . . . I looked to make sure I had a balance, but also with the age range. . . and whether you have a male or a female and whether you have black or white or Hispanic.

Seven principals, including the two above, discussed being aware of the racial makeup of their faculty when making a new hire. Of these, four explicitly stated that they would give preferential hiring to an equally qualified minority candidate. The other three said that they took race into consideration when making their hiring decisions. One principal indicated that "I've got [a number of] black kids in this school and they are grossly outnumbered. I've got to make sure that I have some people on this campus that they can go to."

We explored the issues of race and gender further through additional open-ended questions in the second interviews with the principals. A large majority of principals (twenty-three of thirty) indicated that they do consider

^{11.} In the second interview, we asked specifically, "In our earlier analysis, we find that principals took race and gender into consideration when hiring. How do you take these into consideration when hiring for a position?"

race when hiring, including three who indicated that race was more important than quality. One of these three principals echoed the "grossly outnumbered" quote above, saying that "I would hire a minority candidate because I know I need to—because right now the racial percentage of my school does not match my school population." A more typical response, however, was that "I just see a person, and if the candidate is hirable and happens to be minority, then that's just gravy." Consistent with this, sixteen of the thirty indicated that they weighed quality as more important than teacher demographics (race and gender). The remaining fourteen did not indicate whether they weighed race more heavily than quality. In short, demographics appear to be among the factors to which principals give serious consideration.

While the above discussion indicates how principals wanted variation in their teachers, there are also ways in which they want teachers to be similar—to achieve organizational match or fit. Work practices and beliefs represented some of the bases for a good match. For example, one principal said that "we all work after school every day until late, late, late by our own choice, and this person [candidate] says he's got to leave at 2:30. I don't think he'll fit too well." Another discussed a candidate who, when discussing his previous experiences, said that "if it's Monday, I've got to be on page ten... and I thought, 'you're not going to fit here.'" The match between candidates and schools also related to vague notions of personal chemistry and work ethic. Another principal indicated that the teachers in the school were "silly and goofy" and suggested that candidates should share these traits. While previous studies have also shown that administrators consider teacher demographics (e.g., Young and Oto 2007), this study shows that a possible explanation is the pursuit of organizational mixture.

The principals' responses are also notable for what is absent. Recall that only a few principals identified distinctive goals or needs of their schools or students that might call for a candidate with a specific philosophy of teaching. Dividing the entire group of schools according to average student socioeconomic status (SES), we asked principals how their rankings of teacher characteristics might vary if they were in a school in the opposite SES category. Twenty-four of thirty principals responded by saying that their rankings of the characteristics would not change at all.¹² Five of the twenty-four referred back to their earlier experiences in different types of schools. Another said that "I think children, no matter where they come from, pretty much need the same

^{12.} One of the six principals that we coded as not changing their views in another school did indicate that there would be a change when moving from an elementary to a high school, but this is not the relevant comparison here. The remaining principal who indicated a possible change in view was in a special school and indicated that content knowledge would become more important (in this case, we compared the special school with a traditional school).

quality of person [teacher]." One of the six principals who indicated that they would change their rankings was in a special school, but the other five were all in elementary schools. This may be because there is more variation in student populations across elementary schools than across secondary schools.¹³

Looking at the characteristics that principals typically look for can give a misleading picture, however. Principals look for an "organizational mix" of race, gender, and experience. The preference for a race and gender mix seems to reflect a belief that all students should have teachers whom they can relate to and see as role models. A mix of experience, in contrast, allows younger teachers to learn from older ones, and for older ones perhaps to feed off the youthful enthusiasm that seems to come with inexperience. In contrast, principals also try to identify candidates who match existing teachers in terms of work habits and some personality traits to ensure that teachers get along with one another.

This analysis of principals' responses suggests that they define the organizational context, for the purposes of hiring, primarily in terms of the demographic characteristics of the existing teachers, not the curricular or instructional direction of their school. The importance of having teachers with varying years of experiences seems to suggest a preferred mix of enthusiasm and pliability on the one hand and teaching skill on the other. (This may explain why previous studies have found contradictory results regarding administrator preferences for experience.) Gender and racial balance is apparently intended to provide sufficient role models for different groups of students and reflects a high value placed on diversity. In contrast, the characteristics for which principals prefer a match between candidates and existing teachers—personality and work habits—have less to do with teaching skill and more to do with getting along with one another. Put differently, principals need teachers to be similar in ways that will help them work well with one another but different in ways that reflect the diversity of their communities and provide role models for students.

5. REDEFINING THE CONVENTIONAL WISDOM

Our results suggest that the conventional wisdom that principals prefer personal over professional characteristics is probably imprecise and perhaps incorrect in today's schools. Principals in our exploratory study ranked content

^{13.} Elementary schools have fewer students, and these are from nearby neighborhoods that are fairly homogeneous. As students proceed into larger secondary schools, these different groups are mixed together so that secondary school populations look relatively similar across schools. There is some evidence of this in table 2, where the percentages of students who are minority or eligible for free or reduced price lunches display a wider range across elementary schools. This may explain why elementary principals' hiring preferences might also depend more on the specific school.

knowledge and teaching skills very highly among a group of personal and professional qualities. They did give low ranking to intelligence, but this appears to be because they believe that (1) all teacher applicants meet a minimum threshold on this characteristic and (2) more intelligent teachers tend to have other less desirable qualities (e.g., they are "dull"). Regarding (1), it is unclear why the same logic of the threshold is not applied to other professional qualities; it may be because intelligence is harder to identify.

The story with experience is more complicated. Our results are consistent with previous research in finding that experience is important but, in the eyes of principals, more experience is not necessarily better. This is partly because they want an organizational mix of characteristics, and enthusiasm and pliability appear to be elements of that mix. The desire for pliability in turn is related to teacher tenure rules that make it more difficult for principals to get rid of teachers they see as underperforming.

There are several possible reasons our results differ from previous research and conventional wisdom. First, previous studies have excluded characteristics that we find to be important, making the resulting rankings misleading. Second, times have changed. Accountability has been a primary theme of educational policy and discourse over the two decades. As a type of systemic reform, accountability is intended not to prescribe changes in processes or resource use but to change the entire incentive structure that governs school decisions. Hiring is one such decision. If accountability is effective in creating such pressures, and if content knowledge, teaching skill, experience, and intelligence are indeed important in driving student achievement, as researchers and policy makers seem to believe, we would expect the rankings of these qualities to increase. Likewise, considerable attention in research and policy discussions has been given to teacher quality, manifested in changes in certification and the federal "highly qualified" requirements. The messages underlying these policies and pervading the public discourse may be sinking in and changing how principals hire teachers and approach teacher quality.

With the results of this exploratory study, the results of which are only suggestive, better and more representative studies can now be conducted that appropriately account for supply constraints, that include the full menu of potentially important teacher characteristics, and that more accurately and fully capture what principals mean when they talk about what characteristics they look for. Hiring teachers is arguably the most important task of school leaders, and school principals are typically at the center of it. To design effective policies (e.g., certification and hiring processes), we need to know more about how principals make these decisions and to what degree the conventional wisdom reflects reality.

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