

From the beginning, one of the strongest arguments in favor of the charter school movement has been the idea that charter schools will be more innovative than traditional public schools. Charter school advocates argue that charter schools should be different from and better than traditional public schools, to the extent that they are freed from the rules and regulations that obstruct changes in the public school system. Insofar as this is true, we would expect to see charter schools making different choices about fundamental practices, including the selection of teachers. The quality of teaching is central to what every school does, traditional or charter, it makes sense to ask whether – and, if so, in what ways – charter school teachers differ from their colleagues in non-charter schools.

Using data from the National Center for Educational Statistics (NCES) for the 1999-2000 school year, we compared several characteristics of traditional and charter public school teachers. NCES is one of the most trustworthy sources of education data. Our analysis includes the responses of over 20,000 traditional and charter public school teachers and is weighted to be representative at the state level. Given the rapid changes occurring in the charter school movement, it would be ideal if more recent data were available but, as that is not the case, we have used the information from the 1999-2000 survey. Any changes that have taken place in the makeup of the charter and traditional public school teaching force since the 1999-2000 school year will probably affect the magnitude, rather than the direction, of our comparisons.

In this report, we examine teacher quality using several measures. These include certification, years of experience, and undergraduate college selectivity. Previous research has demonstrated a relationship between these variables and teacher quality. Furthermore, the NCLB definition of "highly qualified" teachers acknowledges the relationship between teacher quality, years of experience, and certification. We recognize that these measures are imperfect. Quality – in teaching as in any other field – resists quantification. Taken together though, these measures can provide a reasonably reliable picture of teacher quality.

Table 1 compares charter and traditional public school teachers in states that had at least five charter schools in operation during the 1999-2000 school year. The two groups look quite different on several measures of teacher quality. Teachers in charter schools have, on average, half the experience of traditional public school teachers. They are far less likely to be certified, or to have certification in their main teaching assignment. Charter school teachers are more likely to have attended selective colleges and are slightly less likely to have attended less selective colleges than traditional public school teachers.

Table 1: Qualifications of traditional and charter public school teachers				
	Traditional Charter Public Schools Schools			
Years of Experience	14.6	7.16		
Certified? <sup>1</sup>	93.8	73.7		
Main Certification <sup>2</sup>	92.0	68.0		
Graduate of More Selective College <sup>3</sup>	29.3 35.5			
Graduate of Less Selective College <sup>4</sup>	23.8	22.3		

Charter schools are often located in urban areas, and so teachers in charter schools generally teach a higher proportion of poor and minority students than their traditional school counterparts. Since these school characteristics are related to the distribution of qualified teachers, we used multiple regression techniques to control for school urbanicity, the percentage of the school's students eligible for free and reduced lunch (a measure of student poverty), and the percentage of minority students in the school. We again compared charter and traditional public school teachers in states that had at least five charter schools in operation during the 1999-2000 school year.

Even after controlling for these school characteristics, there are still striking differences between charter and traditional public school teachers (see table 2). Charter school teachers are 19 percent less likely to be certified in any field and 23 percent less likely to be certified in their main assignment field. In addition, charter school teachers still average seven fewer years of experience than traditional public school teachers – even after controlling for school characteristics.

Charter school teachers have generally attended more selective colleges than their traditional public school counterparts (5.5 percent more likely) and are slightly less likely to have attended less selective colleges (3 percent less likely). If the analysis is expanded to include schools in all states and not just those with at least five charter schools, the magnitude of differences changes slightly; still, charter school teachers on average are less likely to hold certification, are less experienced, and are more likely to have attended selective colleges than their traditional public school counterparts.6

<sup>&</sup>lt;sup>1</sup> This variable reflects the percentage of teachers who possess a regular, advanced, provisional, or

probational certificate in any field.

<sup>2</sup> This variable reflects the percentage of teachers who possess a regular, advanced, provisional, or

probational certificate in their main teaching assignment.

Percentage of teachers who graduated from very, highly, or most competitive colleges (as classified by Barron's Profiles of American Colleges)

<sup>&</sup>lt;sup>4</sup> Percentage of teachers who graduated from noncompetitive or less competitive colleges (as classified by Barron's Profiles of American Colleges)

<sup>&</sup>lt;sup>5</sup> Harris, D. and Ray, L. "No School Left Behind? The Distribution of Teacher Quality in Michigan's Public School," The Education Policy Center at Michigan State University, Policy Report 16, April 2003.

<sup>&</sup>lt;sup>6</sup> Data available upon request.

Table 2: Diffe	erences between ch	narter and tradif	tional public sch	nool teachers after	controlling
for school ch	aracteristics		•		_

Years of	Certification	Main	Graduate of More	Graduate of Less
Experience		Certification	Selective College	Selective College
-7.32 (.224)	190 (.010)	229 (.011)	.055 (.013)	028(.011)

### Policy makes a difference

Because charter school laws vary widely from state to state, data analyzed at the national level are likely to be misleading. Differences in state charter school laws may affect the qualifications of charter school teachers. To account for these differences, we grouped states with similar charter school laws and compared charter and traditional public school teachers within each group of states.

# **Collective Bargaining**

In some states, charter school teachers are covered by the collective bargaining agreements negotiated by the public school districts in which the charter school is physically located. For example, Connecticut and Louisiana require charter schools to adhere to the collective bargaining agreements that govern the contracts of traditional public school teachers. Other states, such as Arizona and Michigan, allow charter school operators to negotiate teacher contracts independently. We compared traditional and charter public school teachers within each group, still controlling for the effects of urbanicity, poverty and race.

When charter school teachers are included in traditional collective bargaining agreements, their qualifications are more similar to those of their counterparts in traditional public schools than when contracts are negotiated separately (see table 3). While they are still less likely to be certified and are less experienced, the magnitude of the differences shrinks compared to charter school teachers whose contracts are negotiated separately. For example, charter school teachers in states that include charter school teachers in collective bargaining agreements are 16 percent less likely than their traditional public school counterparts to be certified in their main teaching assignment, while charter school teachers in states that provide more flexibility in contract negotiations are 23 percent less likely to be certified than traditional public school teachers in similar schools.

The data also reveal that the advantage charters generally have in hiring teachers from more selective universities may disappear when charter school teachers are included in collective bargaining contracts. The constraints imposed by collective bargaining contracts may limit the ability of charter school administrators to favor applicants from more selective universities. However, it may also reflect differences in the preferences of charter school administrators when compared to their traditional public school counterparts in those particular states. For example, charter and traditional school administrators in states that require charters to honor local collective bargaining contracts may have similar preferences with regard to teacher hiring, while the preferences of charter and traditional school administrators may differ in states where charters are not included in collective bargaining agreements. Since the college selectivity variables were not statistically significant for teachers in states that include charter schools in collective bargaining agreements, these differences should be interpreted with caution.

Table 3: The impact of contract negotiation restrictions				
	Included in Collective Bargaining	Contracts are Negotiated Separately		
Years of Experience	-5.762 (1.348) -7.394 (.22			
Certification	162 (.061)192 (.010			
Main Certification	164 (.063)	231 (.011)		
Graduate of More Selective College	N/S <sup>7</sup> 011 (.043)	.053 (.013)		
Graduate of Less Selective College	N/S .027 (.077)	021 (.011)		

#### **Charter School Authorizers**

Charter school laws also vary by the institutions allowed to authorize the creation of new or conversion charter schools. In some states, such as California and Florida, only local school districts may authorize charter schools. In others, such as Texas and Minnesota, multiple entities are empowered to authorize charters, including universities, local school districts, the state board of education and special state charter school boards. Not surprisingly, when local school districts are the only group allowed to authorize charters, charter schools tend to have teachers who are more similar to teachers in traditional public schools with similar demographics (see Table 4). However, these charter schools also seem to be less innovative in some of their hiring practices: they may not differ significantly from traditional public schools in the percentage of teachers coming from highly selective universities, while charter school teachers in states that allow multiple authorizers are eight percent more likely than their traditional public school counterparts to come from more selective colleges.

Table 4: The impact of authorizing authorities				
	Multiple Only L Authorizers School I can autl			
Years of Experience	-8.20 (.276)	-6.27 (.368)		
Certification	229 (.014)	144 (.016)		
Main Certification	279 (.014)	168 (.017)		
Graduate of More Selective College	.080 (.017)	N/S .031 (.020)		
Graduate of Less Selective College	068 (.015)	N/S .003 (.017)		

Note: Robust standard errors are indicated by parentheses.

 $<sup>^7</sup>$  When a coefficient was not significantly different from zero at the .10 level, it is considered insignificant throughout the analysis and labeled N/S

### **Charter School Funding**

A third policy variable that may affect the qualifications of teachers is how charter schools are funded. In some states, such as Georgia and North Carolina, most of the funding for charter school operations comes directly from the state. In others, such as New Jersey and Ohio, local school districts have greater discretion over the allocation of funding among traditional and public charter schools. When local school districts have a significant role in the funding of charter schools, it appears that these charters may have more difficulty competing with similar traditional public schools for experienced, certified teachers than when funding is controlled by the state (see Table 5). However, they are still more successful in attracting teachers from more selective colleges.

Table 5: The impact of funding source			
	Funding from State Funding is Lo		
Years of Experience	-6.76 (.273)	-8.13 (.423)	
Certification	175 (.012)	219 (.021)	
Main Certification	207 (.013)	267 (.022)	
Graduate of More Selective College	.043 (.015)	.077 (.026)	
Graduate of Less Selective College	N/S 012 (.013)	055 (.024)	

Note: Robust standard errors are indicated by parentheses.

## **Teacher Certification**

Charter school policies regarding teacher certification requirements vary widely across states. In some states, such as California and Wisconsin, charter school operators are required to hire only certified personnel. In other states, such as North Carolina and Pennsylvania, charter schools are allowed to hire a specified percentage of uncertified teachers. Not surprisingly, the certification status of charter school teachers is more similar to the certification status of their traditional public school counterparts in states that require all charter school teachers to be certified than in those states that completely or partially waive certification requirements (see table 6). However, even in places where charter schools are not required to hire any certified teachers (such as Washington D.C. and Arizona), they nevertheless continue to hire significant numbers of teachers with regular certification. This may indicate that *all* school administrators – in charters as well as in traditional public schools – value certified teachers. It may also reflect a substantial number of potential teachers who have completed the certification process and are seeking school employment.

The difference in years of teaching experience between charter and traditional public school teachers in states that require certification for all charter school teachers is smaller than the difference in states with less rigorous certification requirements. Charter school operators who are required to staff with only certified teachers may find that experienced, certified teachers are unwilling to move to charter schools unless they are rewarded for their experience. If charter school administrators are unwilling or unable to hire only novice teachers to fill vacancies, they may reward experience in order to obtain enough certified teachers.

Table 6: The impact of certification requirements				
	Certification Not 75% Certified Teacher		Require All Teachers to be Certified	
Years of Experience	-7.93 (.391)	-8.07 (.682)	-6.87 (.297)	
Certification	306 (.020)	217 (.037)	131 (.012)	
Main Certification	353 (.021)	291 (.039)	160 (.013)	
Graduate of More Selective College	.058 (.025)	.093 (.036)	.053 (.017)	
Graduate of Less Selective College	059 (.022)	061 (.039)	018 (.014)	

Ensuring the presence of qualified teachers in every classroom is a key component of NCLB. Under NCLB, traditional and charter public schools are required to staff their classrooms with only "highly qualified" teachers by 2006. In charter public schools, the definition of a "highly qualified" charter school teacher varies depending upon the charter school laws within each state. In order to be considered "highly qualified" under NCLB, charter school teachers are required to be certified in the academic subjects that they teach only if the state charter law requires certification. Given that charter school teachers are less likely to be certified than their traditional school counterparts even in those states that require certification, state legislators may face pressure from charter school proponents to relax certification requirements as the 2005-2006 school year deadline for highly qualified teachers approaches.

#### State Differences

Although the discussion above examines several aspects of state charter school laws, charter school legislation varies across states in a number of important ways. Further, local circumstances may influence the availability of charter schools and the demand for teachers by both charter and traditional public schools. For these reasons, differences in the teacher qualifications in charter and traditional public schools in individual states are worth considering.

Table 7 reports the impact that teaching in a charter school has on the qualifications of teachers in individual states. As with the previous tables, the analysis controls for the impact of urbanicity, poverty and race. While the magnitude of differences varies by state, the pattern of the differences generally reflects the national figures. Charter school teachers have fewer years of experience and are less likely to be certified than teachers in traditional public schools. In many states, differences in the percentage of teachers coming from more or less selective colleges were not statistically significant but, when the difference is significant, charter school teachers are often the graduates of more selective colleges.

Table 7: State by state differences					
	Years of Experience	Certification	Main Certification	Graduate of More Selective College	Graduate of Less Selective College
National <sup>8</sup>	-7.32 (.22)	190 (.010)	229 (.011)	.055 (.013)	028 (.011)
Alaska (10) 9	-7.36 (.16)	462 (.194)	410 (.178)	248 (.024)	N/S .306 (.229)
Arizona (173)	-7.14 (.52)	297 (.027)	346 (.028)	078 (.036)	.046 (.026)
California (113)	-4.40 (.68)	118 (.025)	134 (.027)	.098 (.033)	060 (.020)
Colorado (52)	-8.50 (.68)	220 (.036)	261 (.038)	N/S .015 (.045)	N/S .001 (.038)
Connecticut (13)	-11.81 (2.09)	N/S 064 (.062)	N/S 102 (.072)	N/S .098 (.118)	189 (.104)
Florida (59)	-9.96 (.88)	327 (.055)	379 (.057)	N/S 031 (.066)	N/S .038 (.050)
Georgia (22)	-1.94 (1.13)	.040 (.020)	N/S .030 (.024)	N/S 033 (.056)	N/S .048 (.056)
Illinois (10)	-12.89 (1.17)	302 (.094)	309 (.095)	N/S 118 (.107)	235 (.073)
Kansas (12)	N/S .039 (3.28)	N/S .012 (.038)	N/S .043 (.040)	120 (.025)	.202 (.088)
Louisiana (8)	-6.12 (1.86)	402 (.113)	433 (.113)	N/S .044 (.069)	N/S 062 (.118)
Massachusetts (27)	-12.31 (.74)	337 (.049)	404 (.051)	.153 (.059)	N/S 022 (.044)
Michigan (119)	-10.75 (.89)	157 (.035)	186 (.036)	N/S 003 (.046)	N/S .019 (.043)
Minnesota (29)	-7.48 (1.21)	112 (.042)	143 (.046)	N/S .025 (.074)	N/S 073 (.048)
New Jersey (24) <sup>10</sup>	-8.48 (1.22)	030 (.025)	060 (.034)	N/S .041 (.083)	095 (.047)
North Carolina (42)	-5.58 (1.07)	231 (.054)	317 (.057)	N/S .132 (.056)	N/S 008 (.053)
Ohio (10)	-11.74 (1.67)	N/S 091 (.065)	215 (.082)	334 (.066)	.364 (.010)
Pennsylvania (23)	-11.06 (1.47)	239 (.071)	312 (.074)	N/S 030 (078)	N/S .119 (.085)
Texas (71)	-5.441 (.93)	273 (.040)	308 (.043)	N/S .042 (.048)	N/S 056 (.052)
Washington, DC (16) <sup>11</sup>	-12.79 (1.48)	399 (.111)	494 (.107)	.509 (.122)	427 (.112)
Wisconsin (22)	N/S -2.38 (1.57)	.040 (.017)	N/S .007 (.031)	.339 (.072)	N/S 073 (.048)

<sup>&</sup>lt;sup>8</sup> Includes only those states with at least five charter schools in operation during the 1999-2000 school year.
<sup>9</sup> Numbers in parentheses after the names of states are the number of charter schools included in the data

set.  $^{10}$  The rural/small town urbanicity control was omitted since none of the schools in the state are classified as rural/small town.

11 Urbanicity controls were omitted since all of the schools in the district are considered urban.

#### Conclusion

Charter schools are expected to be innovative and to look different than traditional public schools. There is evidence that charter school administrators are taking advantage of opportunities to be innovative in their hiring practices and that teachers in charter schools look different than their colleagues in traditional public schools. It is not entirely clear whether this is a positive development since charter school teachers look stronger on some quality measures and weaker on others. Innovative charter school hiring practices provide us with an opportunity to evaluate the impact of various hiring practices in the public school setting. Other schools – traditional public, charter public, and private – can all learn from the experimentation currently occurring in the charter sector.

We know that teacher quality can make a substantial difference in student learning. Teachers in charter and traditional public schools differ on several measurable characteristics that may impact student learning, including teaching experience, certification status and the selectivity of the teacher's undergraduate institution. When making hiring decisions, charter schools appear to place more of an emphasis on the selectivity of a teacher's undergraduate institution and less on certification and experience. Alternatively, this difference may reflect different preferences among potential teachers themselves – charter school administrators may be selecting their teachers from a labor pool that looks quite different from the one available to traditional public school administrators. Charter schools may be hiring teachers who differ from traditional public school teachers in other respects as well – such as undergraduate GPA or familiarity with the local community – that are not measured by our data.

The hiring practices of charter schools appear to be particularly innovative when they are not bound by local collective bargaining agreements, when there are multiple authorizing entities, and when certification requirements are flexible. In addition, charter schools appear more able to compete with traditional public schools for experienced, certified teachers when their funding comes directly from the state.

Policymakers vary in the amount of flexibility in hiring they have given charter school operators. Arizona's policymakers were comfortable with no certification requirements, North Carolina's policymakers were more cautious, and California's policymakers required all charter school teachers to be certified. It is up to state policymakers to decide what qualifications they feel are important and then establish regulations that encourage charter school operators to select teachers with those qualifications without discouraging innovative hiring practices.