

TEACHERS' ACADEMIC FOCUS ON LEARNING IN CHARTER AND NON-CHARTER SCHOOLS

Ellen Goldring and Xiu Cravens
Vanderbilt University

Prepared for the National Conference on Charter School Research
at Vanderbilt University on September 28, 2006

NATIONAL CENTER ON
School Choice

This working paper is supported by the National Center on School Choice, which is funded in part by the Department of Education's Institute of Education Sciences (R305A040043). For more information, please visit the National Center on School Choice's website at <http://www.vanderbilt.edu/schoolchoice/>.

Teachers' Academic Focus on Learning in Charter and Non-Charter Schools

Ellen Goldring
Xiu Cravens
Vanderbilt University

Research on school effectiveness continues to indicate that those aspects of schooling that are closest to the student, namely teaching, instruction, and curriculum, have the greatest impact on student learning (see Gamoran et al., 1995; Oakes et. al., 1992). Furthermore, the available evidence suggests that schools that cultivate particular in-school processes and conditions such as developing a shared vision and instructional norms, and taking collective responsibility for students' academic success are better able to meet the needs of all students (Bryk & Driscoll, 1985; Newmann & Wehlage, 1995; Purkey & Smith, 1983).

In contrast, much of the research on charter schools has focused on aspects of governance structures (Kirst, 2006; Levin, 2006), issues of access and equity (Schneider, Teske, & Marshall, 2000; Laciereno-Paquet, Holyoke, Moser & Henig, 2002) and parent preferences and choice processes (Schneider & Buckley, 2002).

The rationale behind charter schools is that increased levels of autonomy and flexibility, and market-like competition among schools, should propel them to operate more effectively. In other words, charter school supporters expect that schools of choice will be more able to develop the in-school processes, conditions, and characteristics of effective schools. However, we don't know that this is the case. From a policy perspective, as noted by Hess & Loveless (2005), "Choice-based reform is not a discrete treatment that can be expected to have consistent effects.... While some of the changes produced by choice-based reform are a consequence of choice qua choice, many others are only incidentally related to choice and may or may not be replicated in any future choice-based arrangement" (p. 97).

A recent consensus panel of prominent researchers on choice concluded that researchers should seek to distinguish among schools of choice in terms of effectiveness, and to distinguish the reasons for those differences (Betts & Hill et al., 2006, p. 24). Many researchers and policymakers advocate looking inside the black box of schools to better understand the conditions under which schools of choice have, or do not have, effects on achievement (Betts & Loveless, 2005; Gill et. al., 2001; Loveless, 2003; Zimmer et al., 2003).

More charter school research is needed on the important in-school conditions that are related to student learning and achievement. In this paper we ask, do charter school teachers indicate higher levels of academic focus on learning than non-charter school teachers (choice qua choice)? To what extent is the level of teacher academic focus on learning dependent upon in-school organizational conditions that are associated with effective schools, such as strong instructional leadership? And, are charter schools more likely than non-charter schools to implement the in-school organizational conditions that are associated with teachers' academic focus on learning? In other words, as noted by the Hess and Loveless, do in-school organizational conditions predict levels of teacher academic focus on learning, irrespective of school type—charter or non-charter? We posit that for charter schools to enable positive student outcomes and affect student achievement, they most implement the core components of schooling that are related to effective organizational conditions, curriculum, and instruction.

Market and Institutional Theories

There are two competing theories about the possible impact of charter schools on teaching and learning and in school organizational conditions—market theory and institutional

theory. Many reformers argue that market style mechanisms of consumer choice and competition between autonomous schools will encourage diverse and innovative approaches (e.g., Anderson, 1997; Bennett et al., 1998; Caudell, 1997; Finn & Gau, 1998; Leonardi, 1998; Nathan, 1996). The assumption is that with efforts intended to undercut bureaucratic political control of public education, educators in charter schools are given the opportunity and motivation to experiment with new instructional strategies for improving student achievement (Allen, 2001; Budde, 1988).

Chubb and Moe (1990) and others (e.g., Friedman, 1962; Kearns & Doyle, 1988) argue that allowing parents to choose their child's school will result in market-like competition and the decline of bureaucratic structures thus providing parents with greater opportunities for home-school interaction and a greater openness on the part of schools to parents' demands. Supporters of de-bureaucratization claim that parents, especially low-income and minority parents, will be less intimidated by the school and more willing to make their needs known to school personnel (e.g., Cookson, 1994; Rinehart & Lee 1991), resulting in school processes that will lead to higher achievement. Based on the supply-and-demand supposition of market theory, we can imagine a situation in which school administrators have almost complete control over the mix of services that they provide and the approaches they use; and a situation in which parents have many choices of schools available for their children (Betts, 2005).

Critics of the market model, however, raise questions about the empirical validity of its key assumptions about parent-consumers (demand-side), school (supply-side), and the products that a market in education would generate (Henig, 1999). An alternative theory about the consequences of school choice rests with institutional theory. Institutional theory predicts that choice will not result in innovation and the alteration of organizational conditions, curriculum

and pedagogy (Goldring and Sullivan, 1995). Institutional theory emphasizes the “powerful institutional rules” held by public opinion, important constituents, and the laws and regulations (Meyer and Rowan, 1977; Dimaggio and Powell, 1983) that contribute to conformity and congruency between schools of choice and regular public schools in terms of teaching and learning. From the institutional perspective, the structure of schools under recent reform movements is a response to institutional processes rather than a response to technical needs for efficiency and change (Goldring and Sullivan, 1995). The institutional process tends to be “ritually defined meanings and categories” (Scott, 1992, p.279) that may include the rhetoric and legislation surrounding the ideas such as teacher empowerment and school site management, but often do not involve the next steps—e.g., implementing changes in the classroom through new knowledge of teaching and learning.

Institutionalization is tied to legitimacy in that organizations facing uncertain environments and outcomes tend to adopt strategies and practices that others have used and are seen as legitimate (Meyer and Rowan, 1977; Scott, 2003). Thus, schools that face uncertain environments and outcomes tend to adopt practices that are seen as legitimate; wide scale innovation is thus rare. The result is that schools and schooling processes look much more alike than different (Elmore, 1996). Thus, institutionalism provides an explanation for maintenance of a status quo and would predict that charter schools would exhibit different in-school conditions from non-charter schools.

The limited empirical research on improved and differentiated instruction and in-school organizational conditions, curriculum content, and pedagogy in charter schools, elements central to increasing student achievement, is mixed, neither providing support for market theories nor institutional theories. Some research lends support to market theory. Research on improved

charter schooling has mostly studied mediating factors that are believed to be linked with student achievement rather than curriculum, pedagogy, and in-school conditions. One such mediating factor is teacher quality. Hoxby (2002) compared teachers in charter schools and other public and private schools using data from the Schools and Staffing Survey. Hoxby found that regular public schools and charter schools were tied and ranked first in two categories: the share of teachers who were fully credentialed and the share holding a master's degree. However, charter schools ranked at the top of a number of other important categories such as the share of teachers with a math or science major in college and the selectivity of the college from which teacher graduated. Hoxby concludes from the evidence that "choice puts more value on teachers' effort, teachers' independence, the quality of teachers' college education, and teachers' math and science skills" (p.846). Her claim echoes a similar conclusion made by Hanushek and Rivkin (2001). Their study examined how competition from the private sector, including charter schools, influences teacher quality by using within school variance in teacher quality, measured in terms of the student achievement distribution. Without making conclusive claims, the study found support for the notion that competition raises teacher quality, particularly for schools serving predominantly lower income students. Podgursky and Ballou (2001) in their survey of charter schools also found that charter schools had markedly different teachers than public schools and had implemented innovative personnel policies in the areas of recruitment, staffing and compensation.

One in-school organizational condition that has been researched in charter schools is teacher professional community. Teacher professional community is an aspect of school organization that supports instructional conditions that promote achievement. Research on teacher professional community suggests that the extent to which teachers cooperate, coordinate

and learn from each other to improve instruction and develop the curriculum is an important feature of any school embarking on the path of improvement (Louis, Marks, & Kruse, 1996; Marks & Louis, 1997). Some researchers believe professional community is linked with autonomy and participative decision-making (Bulkley & Fidler, 2002; Wohlstetter & Griffin, 1997), which are elements supported by market theory and school choice.

In their study of 17 charter schools, Wohlstetter and Griffin (1997) examined the goals and implementation issues in developing strong professional communities in charter schools. They found considerable variation amongst charter schools and found three enabling conditions that helped explain the charter schools' varying degrees of success in implementing core aspects of professional community: a high degree of autonomy and an effective decision-making structure; supportive networks or organizations, and high levels of parental support.

A recent case study of six charter schools operated by three Education Management Organizations (EMO) also found variability in elements of professional community (Bulkley, 2003) and found that EMO staff can influence professional community through the design of their programs, including the structures that they set up for the use of time and staffing, and their informal relationships with schools. Others report that charter schools are indeed centers of educational innovation. In California, for example, "78% of that state's charters were experimenting with new instructional practices, compared to 2 percent of comparison public schools" (Finn et. al, 200, pp. 90-91).

In contrast, other research seems to lend support to the institutionalism framework. For example, using an institutionalism framework, Conley and Goldman (1998) looked into how educators process and react to state-level education reform policies in general (not specific to charter schools). Their findings were based on data gathered from six self-administered

questionnaires in a five-year longitudinal study that begun in 1992, focusing on educator reactions to Oregon's 1991 comprehensive educational reform legislation. The study found supporting evidence that "teachers seem to be demonstrating aspects of 'institutionalist' reactions to reform" (p. 20). The authors pointed out that teachers had not engaged either individually or collectively in a rethinking of schooling as reform was developing. It suggests that teacher attitudes toward reform can be characterized as ambivalent, while behaviors can be generalized as moving slowly to adapt reform requirements.

Similarly, charter school effects were not detected in a study that compared schools with strong state charter school laws and those of schools with weak state charter school as reported by principals in forty states (Garrison and Holifield, 2005). Measures of attention to quality of instruction, instructional focus and teacher behaviors did not reveal differences between charter schools in states with strong charter school laws with those from states with weaker charter school laws.

Few studies have looked specifically at curriculum and pedagogy in charter schools. Bruno et. al. (1998) examined elements of charter schools that might be "different" from regular public schools in a two-year study involving 43 charter schools in seven states (Arizona, California, Colorado, Massachusetts, Michigan, Minnesota, and Wisconsin). A descriptive study based on site visits to the schools, the study discussed eight design elements of charter schools ranging from classroom-related elements such as curriculum, instruction and assessment to administrative elements such as staffing and finance. The study found some approaches that are may be considered new in the specific context, but many of the approaches may be familiar from other school reform initiatives. It also mentioned some approaches that are believed to be more original, such as individualized learning, project-based and hands-on learning, and foreign

languages in the early years. Another California study of 17 charter schools in 10 school districts found that the majority of charter school teachers employed classroom organization, curriculum, and pedagogy “commonly found in non-charter public schools” (Wells, 1998, p.52).

Lubienski (2003) took a more comprehensive approach in examining evidence of innovation within charter schools (Lubienski, 2003). In his review of practices in charter schools from 56 selected studies, an analytical framework was used to gauge three dimensions of innovation in charter schools: (1) the level within the institution: administrative and/or classroom; (2) the distinctive nature of the practice: replications, modification or new; (3) the appearance of innovation in a given context: local, state or national (p.407-408). Pointing out that the pronounced policy goals for charter schools call for “new” and “innovative” approaches to education, the paper put the assumptions of market theory to test by sorting through the findings with the framework. The Lubienski review found that at the administrative level there was much evidence of both new and different practices in charter schools. However, it appeared that charter classroom practices tend to be “familiar or different from other practices only in specific local contexts” (p.416). The review indicates that much evidence shows the tendency toward “standardization of practice” – rather than innovation – in many of the charter schools (p.417). The findings undercut some of the critical assumptions of market-based school reform.

The summary of studies suggests that as charter schools implement innovations in governance, management, and other organizational practices, charter schools are embracing curricular and instructional approaches *already in use* in other public schools that are considered as traditional "basic" approaches to instruction. Explanations for why changes to curriculum and pedagogy are hard to detect are not limited to the theory of institutionalism, old or new. However, institutionalism seems to explain the “chicken and egg” dilemma faced by most

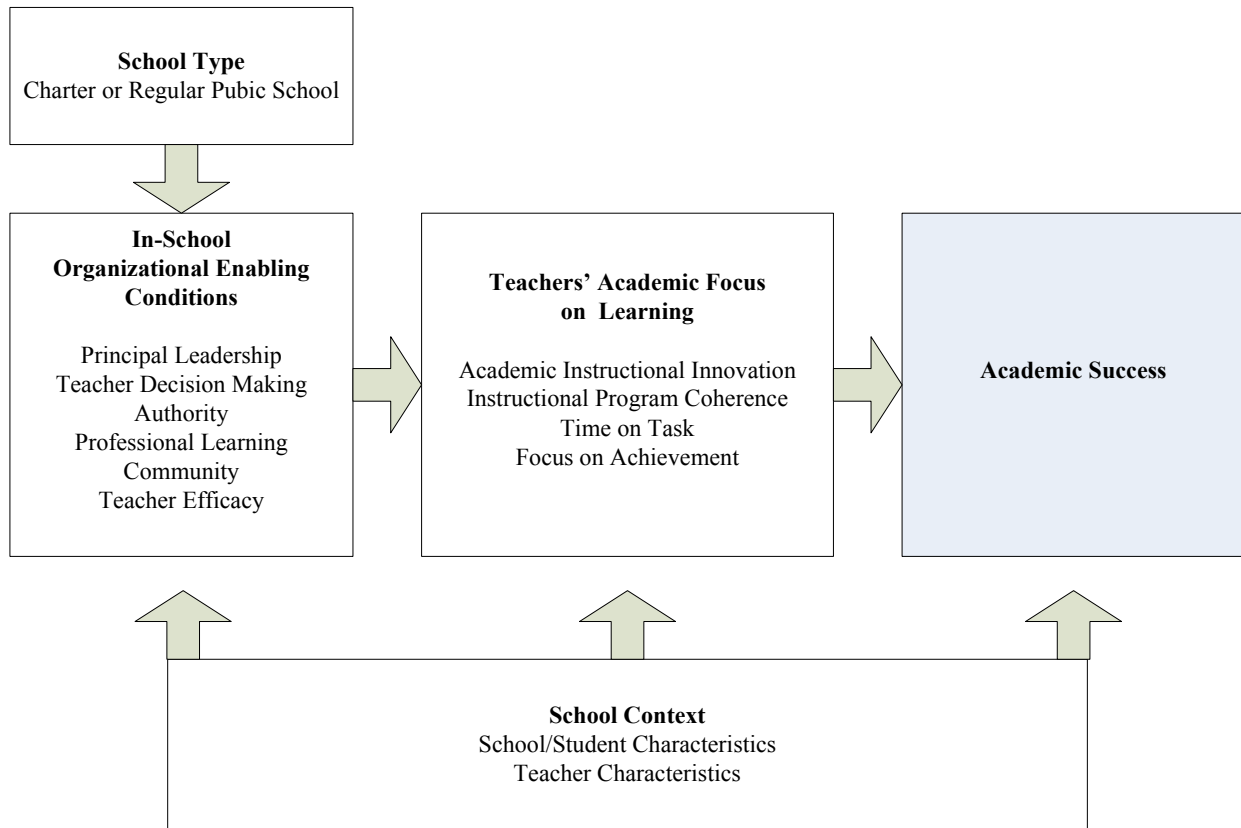
schools and their teachers that are challenged to change as a result of external pressure be it market competition or administrative mandate: should they seek to improve within the boundaries of accepted norms of schooling mostly by making “ritual” alterations with little substance in terms of classroom behavior, or do they look for new ways of doing things to improve results but risk losing the legitimacy that is given to the teaching profession and the school system by abandoning certain existing practices? We suggest that many of the effective schools correlates, such as strong instructional leadership and the development professional learning communities are part of the institutional, normative environments of many schools, regular-public or charter. Thus, we hypothesize that in-school organizational conditions associated with effective schools will have the greatest impact on teaching conditions in all schools and there will not be a charter school effect because of the institutional norms and environments facing schools today.

In-school Organizational Processes and Teachers’ Academic Focus

There is considerable support for the notion that academic press is an important aspect of school improvement. Lee and Smith (1999) suggest that press toward a common goal, focus and purpose serves to “set a normative environment that motivates its members to behave in desirable ways” (p. 912). Academic press is linked to the notion of high expectations for all students and is often considered an organizational property of schools. A school’s level of academic press is a measure of the extent to which teachers focus on academic excellence and the professional and academic standards in the school support learning. A school that is focused on student learning and achievement includes such aspects as a maximization of instructional time, high expectations for all, and a normative culture or climate focused on learning (Lee, Smith, Perry, & Smylie, 1999).

We test the conjecture that given market press and flexibility, charter schools should exhibit more academic press for learning and more of the in-school conditions that support teachers in their efforts to improve instruction, as noted in our conceptual model in Figure 1.

Figure 1:
Conceptual Model of the Relationships between In-School Organizational Enabling Conditions and Teachers' Academic Focus on Learning



In this study, we refer to teachers' academic focus on learning in terms of four specific concepts: Instructional Program Coherence, Time on Task, Focus on Achievement, and Academic Instructional Innovation. (Academic success will be analyzed in a subsequent paper.)

Instructional Program Coherence refers the degree to which the interventions and programs a school has adopted fit together in terms of their demands on teacher attention and other resources; the alignment of classroom content with external standards and assessments; the

consistency of the content taught among teachers of particular grades or courses; and the appropriate sequencing of content across grades (see Newmann, Smith, Allensworth, & Bryk, 2001a, 2001b; Berends et al., 2002). Newmann et. al. define *instructional program coherence* “as a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate that are pursued over a sustained period” (p. 297). Examining whether charter schools are able to foster greater program coherence may be critical for understanding achievement differences that occur among school types. Related is the notion that *instructional innovations* adopted by the school are focused on student learning, aligned with goals, and high expectation for academic learning. *Time on task* focuses on how engaged teachers are on the core activities of teaching and learning. This concept is one of the seven effective school correlates, which include instructional focus, high expectations, school climate, monitoring of student progress, and school-community relations (Garrison & Holifield 2005). *Focus on Student Achievement* refers to the extent to which teachers in the school strive for high levels of student learning; dedicate themselves to the quality of curriculum content, accuracy and precision in teaching practices and student performance; and emphasize an in-depth understanding of instructional practice and student achievement (see Newmann, 1996; 2002; Newmann & Wehlage, 1995). Although effective schools have a shared mission and goals focusing on student learning, the focus is not on any type of student learning. Rather, effective schools concentrate on achievement goals that are aimed at a shared understanding of and continuous commitment to challenging academic standards for what students should know. Specifically, principals’ influence on instruction is indirect through shaping the context within which teachers teach and work.

School effectiveness research indicates that particular in-school organizational processes or conditions both support and enable student achievement and teachers' efforts to improve instruction. In this study we explore the extent to which charter schools are more likely to implement the in-school organizational conditions that are associated with teachers' academic focus on learning. Specifically we focus on four in-school enabling organizational conditions. The importance of *principal leadership* for school reform and improvement has been well recognized in educational research. Several studies have shown the value of leadership in establishing effective school improvement efforts, both in terms of setting the school's vision and mission as well as providing instructional direction (Berends et al., 2002; Brookover et al., 1979; Edmonds, 1979; Louis, Marks, and Kruse, 1996; Purkey and Smith, 1983; Rosenholtz, 1989; Sheppard, 1996). The extent to which teachers cooperate, coordinate and learn from each other to improve instruction and develop the curriculum, *teacher professional community* is an important feature of any school embarking on the path of improvement (Louis, Kruse, & Marks, 1996; Marks & Louis, 1997). The importance of respectful, professional debate within professional learning communities is critical for continuous self-assessment—of one's own teaching practice, of one's own management of the school and classroom, of the school-wide commitment to and engagement in furthering professional development and alignment to challenging instruction, and of coherence of schooling activities with the school's mission and goals (Newmann, 2002). Moore Johnson (1990) for example, found that teachers discussed the importance of school-based collegiality and community to meet personal, instructional and organizational needs. Consistent with this premise, using the High School and Beyond data, Bryk and Driscoll (1988) found that teachers in communally organized schools, schools with close collegial relations among teachers, reported high levels of morale and satisfaction.

McLaughlin and Talbert (1993) in their studies found that “teachers’ responses to today’s students and notions of good teaching practice are heavily mediated by the character of the professional communities in which they work” (p. 8).

Teachers have a need for achievement, a sense of *efficacy*. In his seminal study, Lortie (1975) concluded that those teachers who perceive that they are achieving success with students report higher levels of commitment. "Conversely, teachers derive few rewards from teaching apathetic students" (Bryk, Lee, & Smith, 1990, p. 183). Efficacy refers to teachers’ perceptions that their teaching is worth the effort and can lead to success for students (Newmann et al, 1989). We suspect that teachers with a high sense of efficacy are more likely to feel committed to their schools because they are more likely to invest in their profession and their students. Research has found that high schools teachers that have greater control of classroom practices are more efficacious (Lee, Dedrick & Smith, 1991). Other studies report a positive relationship between teachers efficacy and student achievement (Rosenholtz, 1986; Ashton & Webb, 1986). Self-efficacy is consistently found to influence goal commitment and performance (Bandura, 1997).

An important hallmark of charter schooling and other reform efforts is to grant *teachers influence over school decisions*. The rationale for a high degree of teacher influence in school-wide decision making is twofold. First, it is argued that moving decisions closer to those with technical expertise will result in more informed decisions than those made by administrators who are further removed from students. Second, reformers claim that teachers who have a voice in decisions will take greater ownership over those decisions and therefore invest more in their implementation (Murphy, 1991). Similar to the argument for teacher influence in school-wide decisions, the logic for greater teacher autonomy is grounded in the conception of the teacher as expert. If teachers were only freed from bureaucratic schools, critics suggest, they would be

autonomous to innovate, diversify the curriculum, offer varied instructional strategies, and meet the needs of their students (Chubb & Moe, 1990). Empirical evidence from the 1990-91 Schools and Staffing Survey (SASS) indicates that teacher autonomy and influence are related to increased levels of teacher commitment (Ingersoll & Alsalam, 1997). Similarly, in a study comparing magnet and traditional schools in Milwaukee, Archbald (1988) concluded that magnet school teachers viewed their schools more favorably, in part due to greater autonomy from district regulations than did nonmagnet school teachers. Data from a survey of charter school teachers across ten states suggest that the large majority indicated that having more teaching authority and less bureaucracy were factors in their decision to teach in a charter school (Vanourek, Manno, Finn & Bierlein, 1998). Similar findings are reported from research comparing private and public school teachers. Godwin, Kmerer and Martinez (1998) in their study of San Antonio's private and public schools, with students from a privately funded voucher program, report that private school teachers "have greater autonomy and influence in their schools" (p. 289).

In this paper we explore whether teachers in charter schools are more likely than teachers in non-charter schools to indicate higher levels of academic focus on learning. We ask, are charter schools more likely to implement in-school processes associated with effective schools, or as noted by the Hess and Loveless, do in-school organizational conditions predict levels of teacher academic focus on learning, irrespective of school type—charter or non-charter?

Methodology

The research reported in this paper is based on survey data collected from teachers in a matched paired sample of charter and non-charter schools in four states in the spring of 2006 as

part of the ongoing research projects of the National Center on School Choice. Our selection of charter schools and matched public schools made use of the sample of schools tested by the Northwest Education Association (NWEA) during the 2004-2005 academic year. NWEA contracts with states, districts, and schools to provide computerized adaptive student assessments aligned to the academic standards of the state. Currently, NWEA tests students in over 1,200 districts in 40 states across the nation. We began our selection frame with NWEA because part of the ongoing research of the National Center on School Choice is to analyze student achievement in charter and non-charter schools.

We identified four states with the largest number of charter schools in NWEA's database as cluster states for analysis. The four states are Colorado, Idaho, Indiana, and Minnesota. Fourteen charter schools were tested by NWEA in Colorado, 16 charter schools were tested in Idaho, 18 were tested in Indiana, and 28 were tested in Minnesota. In total, the 76 charter schools tested by NWEA in these four states composed our sample of charter schools for the matching process. We used the sample of public schools tested by NWEA in the four cluster states to identify matches for each of the 76 charter schools.¹

We used school zip codes to identify a list of public schools tested by NWEA within a 5, 10, 15, or 20 mile radius of each charter school. If numerous public schools were located near a charter school at the 5 or 10 mile radius, additional radii were not examined. We used geographic proximity as our initial criteria for inclusion in the matching process so as to improve the overall match by garnering a list of potential comparison schools as similar as possible before matching (Shadish, Cook, & Campbell, 2002).

¹ According to the U.S. Charter Schools website (<http://www.uscharterschools.org/>) the total number of charter schools in the four states are as follows: Colorado: NWEA tests 14 of 113; Idaho: NWEA tests 16 of 24; Indiana: NWEA tests 18 of 21; Minnesota: NWEA tests 28 of 102

The matching began by sorting the public schools by the grade level configuration of the charter school. Charter schools with more than a basic elementary, middle, or high school grade configuration (e.g., K-8, 7-12) were matched on all grade spans in the school. For example, a K-8 school would be matched to schools deemed “early grades” that typically test students in grades 2-5 or 2-6, as well as with schools deemed “middle grades” with test spans of 6-8 or 7-8. Given a charter school’s specific grade configuration, the final match could be with one, two, or three public schools.

After the grade level configuration of the charter school was matched, we examined the total number of students tested and the percentage of the school tested to select public schools with large testing populations. NWEA tests students in grades 2 through 10. Additionally, there are some districts and schools that contract with NWEA to test only portions of the student body. In turn, it was important to look both at the total number of students tested and the percentage of the school to select public school with large portions of the student body tested by NWEA. We sorted public schools based on larger testing populations. Generally, schools with fewer than 40% of their student body tested were not included in further matching. Exceptions to this rule occurred when there were limited options for matching a charter school with a public school.

Once the testing population of schools was examined, we looked at school-level demographic data. NWEA collects student-level demographic data, including eligibility for free and reduced price lunch and race/ethnicity. However, given that many schools do not test 100% of the student body with the NWEA assessment due to their grade configurations or testing contract with NWEA, aggregating the student-level information may not have provided accurate school-level demographic data. Instead, we relied on the 2004-2005 Common Core of Data (CCD) for demographic information for the charter and public schools. We collected data on the

percentages of free and reduced price lunch and race/ethnicity. We used the demographic data to sort the public schools based on the closest data to the charter school, starting with free and reduced price lunch and then race/ethnicity.

With the public schools sorted by grade configuration, testing population, and school-level demographic information, we used the geographic proximity information as a tie breaker to select two to three public schools closest to the charter school for each grade configuration. If a charter school did not have a public school within the 5, 10, 15, or 20 mile radius, we looked at the list of public schools that had been identified as potential matches for other charter schools in the state and chose a match based on grade configuration, testing population, and school-level demographic data. For this non-geographic group of public school matches, preference was given to schools that shared a district we had already identified as having other schools to match. The match process resulted in a list of charter schools and comparison public schools to be contacted for participation in the study.

The appendix presents the full list of charter schools and matched public schools included in this study, along with each of the variables used to match and select schools. Of the 43 matched public schools, 24 (56%) were schools matched based on our original matching criteria of grade configuration, testing population, demographic data, and geographic proximity. The additional 19 public school matches included in this study agreed to participate and completed the survey, but the charter school that they were originally matched to did not participate in the study. In turn, they were matched after the survey to a charter school that was missing a public school match, using the same criteria of grade configuration, testing population, demographic data, and geographic proximity. A total of 29 charter schools and 43 public school matches are included in the analyses. The average teacher response rate for the final sample of schools in this

analysis was 67.6%, with a range of 20% to 100%. The total number of teachers in the study is 851.

Variables

The survey scales and items of the constructs measured in this study are constructed from several well-established surveys with well-known psychometric properties and have been linked with student achievement in the literature (see Table 1).

Table 1 Here

Four core constructs are selected to gauge teachers' academic focus on learning based on research and theory of our understanding of school improvement processes. *Academic Instructional Innovation* is based on nine items ($\alpha = .92$) developed by the National Center on School Choice, measuring teachers' perception on the improvement efforts in school on a Likert scale from one to six. For example, teachers are asked if the school uses innovative strategies to improve student learning; if the instructional program is considered as unique; and if the instructional approaches used are based on research evidence. Our measure expands the concept to focus on innovates that are related to learning and fit the programs and practices already in place in the school.

Instructional Program Coherence is measured by eight survey items established by the Peer-Assisted Learning Strategies Research Program (Fuchs, 2005) ($\alpha = .81$) on a scale from one to six. This scale measures the degree to which the interventions a school has adopted fit together in terms of their demands on teacher attention and other resources; and, the alignment of classroom content with external standards and assessments; the consistency of the content taught among teachers of particular grades or courses; and the appropriate sequencing of content across grades.

Time on task is a six item scale ($\alpha = 0.73$) with responses on a six point Likert scale that measures how engaged students and teachers are on the core activities of teaching and learning. The particular concept was used by Garrison & Holifield (2005) as one of the seven effective school correlates, which include instructional focus, high expectations, school climate, monitoring of student progress, and school-community relations. Questionnaire items ask if the school use a multi-faceted approach to maintain a high level of student attendance; if teachers and administrators practice management and supervisory techniques that keep students on task and minimize disruptions; and if students are engaged during the vast majority of class time.

Focus on Achievement is based on surveys used by the National Institute of School Leadership study (NISL, 2004) with four 4 items ($\alpha = 0.86$) on a scale from one to six. Teachers are asked if they expect students to complete every assignment; if they encourage students to keep trying even when the work is challenging; and if they set high expectations for academic work.

Charter schools are coded as one; regular public schools are coded as zero.

School Characteristics are obtained from the 2004-2005 Common Core of Data (CCD) for demographic information for the charter and public schools. Included in the analyses are total number of students enrolled, percent of students on free and reduced lunch program, percent of black students and percent of Hispanic students. We also added a dummy variable for elementary school status, where if a school has at least one elementary grade from K-6, it is coded as “elementary”, otherwise it is coded as “non-elementary”.

Four constructs are used for In-School Organizational Enabling Conditions. *Principal Leadership* is based on surveys used by the National Institute of School Leadership study (NISL, 2004) with 12 items ($\alpha = 0.95$) on a scale from one to six. Some of these items were adapted from

the Consortium on Chicago School Research. Teachers are asked to think about the leadership the principal has provided at the school in terms of vision for academic success and instructional guidance. For example, the teachers are asked whether the principal carefully tracks student academic progress, encourages teachers to raise test scores, works directly with teachers who are struggling to improve their instruction, and monitors classroom instruction to see that it reflects the school's goals.

Teacher Decision Making Authority is based on surveys used by the National Institute of School Leadership study (NISL, 2004), The Schools and Staffing Survey and the Consortium on Chicago School Research with seven items ($\alpha = 0.86$) on a scale of one to five, measuring the influence that the teachers have over school policy in areas such as hiring professional staff, planning how discretionary school funds should be used, establishing the curriculum and instruction program, and determining the content of in-service programs.

Professional Learning Community is based on surveys used by the National Institute of School Leadership study (NISL, 2004) on 10 items ($\alpha = 0.87$) on a scale of one to six. This scale is adapted from the Consortium on Chicago School research and the Study of Instructional Improvement. Teachers are asked to what extent they agree that in their schools teachers respect other teachers who take the lead in school improvement efforts, may openly express their professional views at faculty meetings, are expected to continually learn and seek out new ideas in this school, and typically go beyond their classroom teaching to address the needs of students.

Teacher Efficacy is also based on surveys used by the National Institute of School Leadership study (NISL, 2004) with seven items ($\alpha = 0.74$) on a scale of one to six and adapted from the Study of Instructional Improvement. Teachers are asked to what extent they agree on statements such as "I am capable of making the kinds of changes expected in this school", "if I

try really hard, I can get through to even the most difficult and unmotivated students”, and “most of a student’s academic performance depends on the home environment, so I have limited influence on my students’ achievement”.

Analyses

The research presented here employed Ordinary Least Squares (OLS) regression

$$T_{ij} = \delta_1 C_j + \varepsilon_{ij} \tag{1}$$

$$T_{ij} = \delta_1 C_j + \delta_2 S_j + \varepsilon_{ij} \tag{2}$$

$$T_{ij} = \delta_1 C_j + \delta_2 S_j + \delta_3 O_{ij} + \varepsilon_{ij} \tag{3}$$

Where T_{ij} is the teachers’ academic focus on learning reported by teacher i in school j , C_j is the charter school status for school j , S_j is a vector of school characteristics for school j , O_{ij} is a vector of organizational enabling conditions reported by teacher i in school j , and ε_{ij} is the error term at the teacher level. The analyses focused on three sets of independent variables: school sector (charter school or regular public school), school and student background characteristics (i.e., percent black and Hispanic students, school size), and in-school organizational enabling conditions (i.e., principal instructional leadership, teacher efficacy). In addition, since we hypothesized that charter schools would exhibit more in-school organizational enabling conditions, that would influence levels of teachers academic focus on learning, we added interaction terms between school type and each of the four organizational enabling conditions. Separate regression analyses were conducted on each of the four indicators of teachers’ academic focus on learning.

Because teachers are clustered within schools, all estimates are adjusted with clustering at the school level, taking into account that observations within schools are non-independent, and accounting for possible commonalities shared by teachers in the same school.²

Results

We first present the descriptive results of comparing charter and non-charter schools (see Table 2). Descriptive statistics comparing charter and regular public schools (Table 2) show that charter schools are smaller than their public school matches on average, where public schools also have a much bigger range in sizes. We also notice that charter schools in the study enroll higher average percentages of black students and those that are on free or reduced lunch programs. As for Hispanic students, the averages are similar but public schools have a bigger range, where some schools have close to a 50% Hispanic student body. When comparing the means of teacher reported measures on teachers' academic focus on learning, our dependent variables, charter schools have slightly higher averages in all four indicators, that are statistically significant. However, the magnitude of the average mean differences is not very big, ranging from 0.20 for Academic Instructional Innovation to 0.11 for Time on Task on a scale of one to six. As for the four scale measures of the in-school organizational enabling conditions, charter schools have small but statistically significant higher averages on teacher reported Professional Learning Community and Teacher Efficacy. There are no significant differences on Principal Leadership and Teacher Decision Making Authority, noted governance structure indicators associated with theoretical aspects charter schooling.

² As the principal survey data becomes available for the schools that are included in this paper, we plan to use Hierarchical Linear Modeling (HLM) to capture the nested nature of schooling and to partition within and between school variations in the effects of charter school and other school conditions. The principal survey includes information about the type of charter school, length of charter, and additional information about school governance.

Table 2 Here

Findings from the regression analyses are summarized in Table 3. Column (1) contains coefficients of Charter from the simple model. With clustering at the school level (resulting in larger standard errors), charter status has no statistically significant coefficients on the dependent variables except for Focus on Achievement. Charter schools teachers report they are more likely to focus on achievement than their non-charter school counterparts. We do note however, when analyzing the data without clustering at the school level, charter status has positive coefficients on all four measures but the standard errors are smaller and probably imprecise without accounting for common features that teachers share within each school.

Table 3 Here

As shown in Model 2, we find that school and student background characteristics are associated with the level of academic focus (but the effect disappears when organizational enabling conditions are added to the model), although accounting for a small percent of the variance in the levels of teachers' academic focus on learning. Although the percent of black students in the school has a negative relationship to Academic Instructional Innovation, the percent of Hispanic students has a consistent negative association with all aspects of teachers' academic focus on learning. Schools with larger percentages of Hispanic students are less likely to indicate that their schools implement innovations focused on academics, are less likely to report there is instructional program coherence and similarly, less likely to focus on student achievement with high expectations for all students. It may be that limited language proficiency adds a layer of complexity to schooling that precludes a clear focus on academics and a coherent approach.

In the full model, which contains both background characteristics and the estimates for in-school organizational processes, teachers' academic focus has strong associations with in-school processes. The coefficients for school racial-ethnic composition, namely the percent of Hispanic students only has a negative relationship with Time on Task. Among the four in-school organizational enabling conditions, Professional Learning Community and Teacher Efficacy have statistically significant and positive coefficients on all four measures of teacher academic focus. Schools where teachers feel that diverse opinions are supported, professional collegiality runs through the school, and there are shared values and understandings, are better able create the conditions where there is a focus on academic learning. The size of the impact of Professional Learning Community is the largest among all explanatory variables. Teacher efficacy is another important predictor of levels of academic focus. Those teachers who feel they have the knowledge and ability to impact student learning, are most likely to indicate their schools and colleagues are implementing programs pressing toward learning. Principal Leadership is also associated with Academic Instructional Innovation, Instructional Program Coherence and Time on Task, but not with Focus on Achievement.

It is interesting to note that Teacher Decision Making Authority is positively associated with Academic Instructional Innovation and Instructional Program Coherence, but not with Time on Task or Focus on Achievement; nor is it a very strong association. The governance notion most associated with charter schooling does not have a strong relationship on teachers' academic focus. In fact, Teacher Decisions Making Authority's associations with those measures of academic focus that are focused at the school level (innovation, adoption of programs), rather than those directed more specifically to the classroom level, time on task and focus on achievement.

As noted, we also analyzed the data interacting charter status with the four organizational enabling conditions to see if these variables have different relationships between charter and non-charter schools. All of the interaction coefficients are very small and not significant, suggesting that in-school conditions are more important in explaining levels of teacher academic focus; and charter schools are not more likely than non-charter schools to facilitate the in-school enabling conditions.

Discussion

This paper asks, do charter school teachers indicate higher levels of academic focus on learning than non-charter school teachers (choice qua choice)? To what extent is the level of teacher academic focus on learning dependent upon in-school organizational conditions that are associated with effective schools, such as strong instructional leadership? And, are charter schools more likely than non-charter schools to implement the in-school organizational conditions that are associated with teachers' academic focus on learning? We set forth two theoretical foundations that would predict opposite answers to these questions. Market theory suggests that charter schools would evidence stronger teacher academic focus on learning and more in-school conditions that are associated with effective schools. Institutional theory would predict that there would not be substantial differences between charter and non-charter schools. Institutional theory also suggests that in-school conditions in and of themselves would impact teachers' academic focus on learning because of the strong institutional press and normative culture that the effective school traditions may be asserting on all schools.

While our conclusions only pertain to schools tested by NWEA (and we do not know the nature of the selection bias for these schools), and noting the limitations of our sample and

surveys, our limited investigation suggests that on average, choice qua choice does not have consistent relationships to teachers' academic focus on learning. Charter school teachers do not indicate higher levels of academic focus on learning. What we did find, however, is that in-school organizational conditions, conditions often attributed to effective schools, such as professional community and principal leadership, are associated with higher levels of academic focus. Furthermore, charter schools were not more likely than regular public schools to exhibit these in-school organizational conditions, even those conditions such as teacher decision making authority, that are assumed to be associated with flexibility and non-bureaucratic forms of choice.

We interpret these findings to suggest there are strong institutional forces, or the scripting of schooling today, that are driving all schools to believe that strong leadership and professional cultures and communities are integral aspects of the school organization that can impact the extent to which teachers focus on learning. The designation of a school as a charter school does not seem to alter these institutional forces or these norms of practice. Charter schooling does not seem to directly challenge what a real school ought to be doing (Cuban & Tyack, 1997). And as noted by Hess and Loveless (2005) our findings suggest that in-school processes associated with effective schools seem to be unrelated to school choice and are not dependent on choice-based arrangements.

Our results support previous research about the importance of in-school conditions in maintaining teacher's academic focus on student learning. We would have thought that charter school teachers would have significantly higher levels of efficacy than non-charter school teachers because charter school teachers often self-select to teach in a particular school and because their schools are theoretically freed from constraining rules and regulations.

Furthermore, charter schools may be better able to attract and sustain principals who are instructional leaders. Rather, we found a significant effect of teacher efficacy on the level of academic focus on student learning in all schools in our study. Research suggests that teacher efficacy can improve with professional devolvement and the most efficacious teachers often gain the most from learning new methods of teaching (Guskey, 1988; Ross, 1994, see Moran et al, 1998 for a review). This line of research suggests that teacher efficacy is subject to change and may be an important mediating variable in understanding changes in teaching. “The development of a strong sense of efficacy can pay dividends of higher motivation, greater effort, persistence, and resilience across the span of teaching career” (Moran et. al, 1998, p. 238). Furthermore, as noted in previous research, instructional leadership does support teachers’ efforts to focus on academics, but this is no more prevalent in charter schools than in non-charter schools.

Similarly, our results suggest the importance of teacher professional community and its association with teachers’ academic focus on learning; charter schools were not more likely to exhibit this important in-school condition. Research has demonstrated that schools organized as communities, rather than bureaucracies, are more likely to exhibit academic success (Bryk & Discroll, 1988; Lee, Smith, & Croninger, 1995; Louis & Miles, 1990). Phillips (1997), for example, found that in schools where teachers are more concerned with affective relations than academic learning, test scores tend to be lower. She cautions that communities in schools must place academic learning at its center.

Given the possible support for the institutional perspective when interpreting our findings, we suggest that it is important to begin to look at charter schools in relation to the current policy context and the institutional environment of schooling. By and large, charter schooling began

before the *No Child Left Behind* legislation. However, we raise the hypothesis that the prevailing accountability mechanisms under *No Child Left Behind*, and the normative views of what is involved with helping schools meet adequate yearly progress, is creating an institutional environment where choice cannot lead to the types of innovations hoped for by their founders. While not directly addressed in this study, we believe the ‘grammar’ of schooling is now even more impervious and unreceptive to the forces of market-based reform efforts.

In the summary chapter in their book about charter schools, Zimmer and Guarino (2003) note, “one of the most significant conclusions of our analysis is there is no single charter school approach and therefore no single charter school effect” (pg. 175). Our study suggests that in-school conditions are central for school improvement and, there are some public schools that have in-school conditions that are similar to charter schools and some charter schools that have in-school conditions similar to those in public schools. Choice-based systems do not in and of themselves seem to lead to more of these in-school conditions.

Table 1: Descriptive Statistics of All Variables

Variables	Measures		
<i>School Type</i>		Charter	Public
Charter School/Public School		307	544
# of teachers (#of schools)		(29)	(43)
Elementary/Non-Elementary	Have at least one K-6 grade=1	Elementary	Non- Elementary
# of teachers (#of schools)	No K-6 grade=0	565(49)	286(23)
<i>School Characteristics</i>		Mean	Range
Total School Enrollment		407	39 -1549
Percent Receive Free/Reduced Lunch		35%	0% - 82%
Percent of Black Students		21%	0% - 99%
Percent of Hispanic Students		7%	0% - 56%
		α	SD
<i>Teachers' Academic Focus on Learning</i>			
Academic Instructional Innovation	9 items	0.919	4.54
Instructional Program Coherence	8 items	0.814	4.32
Time on Task	6 items	0.732	4.46
Focus on Achievement	4 items	0.864	5.09
<i>In-School Organizational Enabling Conditions</i>			
Principal Leadership	12 items	0.950	4.61
Teacher Decision Making Authority	7 items	0.863	3.54
Professional Learning Community	10 items	0.873	4.69
Teacher Efficacy	7 items	0.740	4.39

Table 2: Descriptive Statistics Comparing Variables between Charter and Regular Public Schools

Variables	Charter School		Public School		
	Elementary	Non-Elementary	Elementary	Non-Elementary	
Elementary/Non-Elementary # of teachers (#of schools)	248(22)	59(7)	317(27)	227(16)	
<i>School Characteristics</i>	Mean	Range	Mean	Range	
Total School Enrollment	185	39 - 696	566	96 - 1549	**
Percent Receive Free/Reduced Lunch	42%	0% - 75%	31%	3% - 82%	
Percent of Black Students	40%	0% - 99%	7%	0% - 49%	
Percent of Hispanic Students	6%	0% - 24%	8%	0% - 56%	
	Mean	SD	Mean	SD	
<i>Teachers' Academic Focus on Learning</i>					
Academic Instructional Innovation	4.67	0.81	4.46	0.80	**
Instructional Program Coherence	4.448	0.76	4.26	0.69	**
Time on Task	4.54	0.73	4.43	0.71	*
Focus on Achievement	5.21	0.72	5.01	0.74	*
<i>In-School Organizational Enabling Conditions</i>					
Principal Leadership	4.58	1.04	4.63	0.95	
Teacher Decision Making Authority	3.47	1.06	3.58	0.70	
Professional Learning Community	4.77	0.76	4.64	0.70	**
Teacher Efficacy	4.48	0.66	4.34	0.66	**

* $p < .05$, ** $p < .01$ (two-tailed test)

Table 3: Teachers' Academic Focus on Learning in Charter and Non-Charter Schools

Dependent Variables	Academic Instructional Innovation			Instructional Program Coherence			Time on Task			Focus on Achievement		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
<i>Sector</i>												
Charter School/Public School	0.20	0.19	0.15	0.18	0.13	0.11	0.11	-0.02	-0.03	0.20*	-0.08	-0.04
			0.08			0.07			-0.02			-0.03
<i>School Characteristics</i>												
Total School Enrollment		0.00	0.00		0.00**	0.00		0.00*	0.00		0.00*	0.00
			0.05			-0.06			-0.07			-0.14
Percent F/R Lunch		0.39	0.30		-0.09	-0.26		0.17	0.02		-0.35	-0.25
			0.08			-0.08			0.01			-0.07
Percent of Black		-0.64*	-0.27*		-0.30	0.00		-0.21	0.00		0.18	0.17
			-0.10*			0.00			0.00			0.07
Percent of Hispanic		-1.29**	-0.31		-1.09**	-0.37		-2.01**	-1.27**		-0.87*	-0.43
			-0.03			-0.05			-0.16**			-0.05
Elementary/Non-Elementary		0.15	0.09		-0.01	-0.03		-0.02	-0.09		0.13	-0.01
			0.06			-0.02			-0.06			0.00
<i>Org. Enabling Conditions</i>												
Principal Leadership			0.15**			0.21**			0.22**			0.06
			0.18**			0.28**			0.30**			0.08
Teacher Decision Making			0.12**			0.10**			0.05			-0.10
			0.13**			0.12**			0.06			-0.11
Prof. Learning Comm.			0.55**			0.30**			0.31**			0.46**
			0.48**			0.30**			0.31**			0.45**
Teacher Efficacy			0.23**			0.24**			0.17**			0.14**
			0.19**			0.23**			0.16**			0.13**
R ²	.014	.064	.591	.014	.073	.505	.005	.072	.456	.017	.063	.321

Standardized coefficients are in bold

**p<.05, ** p<.01 (two-tailed test)*

All estimates are adjusted with clustering at the school level.

Appendix

NWEA contracts with states, districts, and schools to assess students. NWEA used this relationship to contact districts and schools to participate in the study. NWEA first contacted the superintendent of each district to ask for permission. If the superintendent agreed to participate, NWEA contacted the principal of the school to explain the study and ask for permission. If the superintendent did not agree to participate, the schools in that district were not contacted.

As NWEA made contact with districts and schools, we continued the process of matching public schools with charter schools when public schools on the list declined. If a charter school declined to participate, we were unable to replace it with an additional charter school given that we were working with the entire sample of charter schools tested by NWEA in the four cluster states. We followed a set of decision rules for selecting replacement public school matches. First, we moved down the list of available public schools that matched with the charter school, but may not have been on the initial list given to NWEA since we only included two to three public schools for each charter school. Second, if a public school agreed to participate, but the charter school that it was initially matched to declined, we used that public school to match with other charter schools in the state. Finally, there were public schools that agreed to participate, but the charter school they were initially matched to already had one good match for each relevant grade span. In these cases, we used the public schools to match with other charter schools in the state.

In total, 76 charter schools and 99 public schools were contacted to participate in the study. The table below presents the number of charter and public schools by state. Of the total number of schools contacted, 40 charter schools (53%) and 53 public schools (70%) agreed to participate and completed teacher and principal surveys. In Colorado, 5 out of 14 charter schools

(36%) agreed to participate. We were able to match each of the five Colorado charter schools with public schools. In Idaho, 9 out of 16 charter schools (56%) agreed to participate. However, we were only able to match seven of the nine charter schools in Idaho with public schools given the number of public schools that agreed to participate in the study. The two unmatched charter schools are dropped from analyses in this current paper. In Indiana, 16 out of 18 charter schools (88%) agreed to participate. We were unable to match two of the charter schools considered for the study with a public school for the same reasons as the unmatched charter schools in Idaho. This left us with 14 charter schools matched in Indiana, dropping the two unmatched schools. And finally, in Minnesota, 10 out of 28 charter schools (36%) agreed to participate. We were unable to match one of the charter schools in Minnesota with a public school, leaving us with nine charter schools in the state. In total, five of the 40 charter schools that agreed to participate were dropped from the study because an insufficient number of public schools agreed to participate, leaving 35 charter schools (see Table below).

We dropped an additional set of schools with response rates on the teacher survey below 20%. Teacher response rates for this sample ranged from 8.3% to 100%. There were two charter schools and four public schools dropped for low response rates, leaving 33 charter schools and 49 public schools (see Table below). Our final count of schools is based on two additional decision rules. First, if a charter school was dropped for low response rates, its public school match was dropped as well. Second, if a charter school had more than one public school match because of its grade configuration and one or more of the public school matches was dropped for low response rates, the charter school and all of its public school matches were dropped to maintain matches for all grade spans.

Appendix I: Schools in the Study

	Schools Contacted for Study		Schools that Agreed to Participate in Study		Schools in Study with Match		Schools in Study with $\geq 20\%$ Response Rate		Schools in Study with $\geq 20\%$ Response Rate with Match	
	Charter	Public	Charter	Public	Charter	Public	Charter	Public	Charter	Public
Colorado	14	22	5	11	5	11	5	9	3	7
Idaho	16	23	9	11	7	11	7	9	5	8
Indiana	18	26	16	17	14	17	12	17	12	14
Minnesota	28	28	10	14	9	14	9	14	9	14
Total	76	99	40	53	35	53	33	49	29	43

Appendix II – Matching Charter and Non-Charter Schools

School	Grade Level	% Tested in School	CCD % FRL	CCD % White	CCD % Black	CCD % Hispanic	CCD % Other	Geographic Proximity (miles)	Teacher Response Rate
<i>Colorado</i>									
Charter School A	K-8	81.3	17.1	71.0	0.9	24.4	3.7		62.5
Public School 1	K-5	64.0	43.0	74.3	3.7	17.6	4.4	15	100
Public School 2	K-5	48.3	29.9	70.5	5.6	17.5	6.4	15	38.5
Public School 3	6-8	100	15.8	80.7	3.5	12.3	3.5	15	100
Charter School B	PreK-8	95.5	14.3	83.9	0.9	13.4	1.8		36.4
Public School 4	PreK-5	100	53.8	42.3	1.2	46.9	0.4	20+	83.3
Public School 5	PreK-6	37.8	17.2	88.5	0.0	11.5	0.0	20+	27.3
Public School 6	6-8	58.2	53.5	51.3	1.1	46.9	0.7	20+	83.3
Charter School C	9-12	25.3	51.3	45.6	0.0	17.1	37.3		88.9
Public School 7	9-12	2.8	28.6	67.6	0.4	12.3	19.7	5	25.0
<i>Idaho</i>									
Charter School D	K-5	91.7	60.0	90.0	0.0	5.0	5.0		80.0
Public School 8	1-5	71.8	54.7	82.3	5.5	10.5	6.6	5	100
Public School 9	5-6	92.3	52.2	80.3	3.3	17.1	2.3	5	100
Charter School E	K-6	74.1	0.0	92.9	3.6	2.7	0.9		100
Public School 10	4-6	79.9	38.1	88.7	1.5	3.1	6.7	5	41.2
Charter School F	K-8	79.5	0.0	95.5	0.0	0.8	3.8		100
Public School 11	PreK-5	64.6	3.3	94.0	0.8	1.1	4.1	5	35.9
Public School 12	6-8	98.3	14.9	94.4	0.5	3.6	1.5	5	61.1
Charter School G	7-9	100	0.0	98.4	0.0	0.8	0.8		100
Public School 13	7-12	67.7	82.3	94.8	2.1	1.0	2.1	5	83.3
Charter School H	K-7	78.0	NA	NA	NA	NA	NA		44.4
Public School 14	PreK-6	62.1	5.3	91.0	0.5	8.2	0.3	20+	28.6
Public School 15	6-8	100	43.6	96.6	0.4	1.1	1.9	10	24.2

Appendix II, Continued

School	Grade Level	% Tested in School	CCD % FRL	CCD % White	CCD % Black	CCD % Hispanic	CCD % Other	Geographic Proximity (miles)	Teacher Response Rate
<i>Indiana</i>									
Charter School I	K-7	82.4	45.9	23.3	72.3	3.8	0.6		100
Public School 16	1-5	65.5	53.0	84.5	13.2	1.6	0.8	10	58.8
Public School 17	6-8	99.7	41.8	85.4	11.8	2.1	0.6	10	59.5
Charter School J	K-5	80.7	50.1	16.5	81.5	1.8	0.3		100
Public School 18	4-6	98.5	38.3	93.7	2.5	2.3	1.5	20+	82.6
Charter School K	8-9	93.5	NA	8.3	96.7	0.4	2.1		93.8
Public School 19	7-8	88.9	39.2	95.2	2.6	1.9	0.2	10	94.1
Charter School L	K-5	66.5	48.4	2.1	96.6	1.4	0.0		66.7
Public School 20	5-6	100	35.9	44.1	42.8	11.5	1.5	10	22.2
Charter School M	K-5	79.1	60.1	39.9	48.4	10.6	1.1		100
Public School 21	PreK-4	63.7	6.6	96.3	1.2	0.6	1.8	20+	64.3
Charter School N	K-5	81.2	74.2	0.6	99.4	0.0	0.0		100
Public School 22	K-4	58.2	5.2	94.4	1.3	2.4	1.9	20+	51.9
Charter School O	9	100	NA	34.1	55.7	4.5	5.7		66.7
Public School 23	9-12	23.5	25.6	76.1	18.4	2.8	2.8	5	26.3
Charter School P	9-12	100	NA	29.1	62.8	4.7	3.5		100
Public School 24	9-12	32.5	30.8	89.8	7.9	2.2	0.2	5	32.5
Charter School Q	5	97.6	NA	1.2	95.8	0.0	3.0		100
Public School 25	K-6	80.5	25.5	79.0	12.5	7.5	1.0	5	92.9
Charter School R	K-3	36.5	NA	73.0	10.7	3.9	12.4		100
Public School 26	PreK-4	59.8	27.6	86.2	1.9	10.3	1.6	20+	96.7
Charter School S	K-6	70.0	70.3	0.3	98.4	1.3	0.0		91.3
Public School 27	K-5	66.9	79.7	42.1	49.0	8.6	0.3	5	57.1
Public School 28	6-8	92.4	72.1	63.1	22.5	13.3	1.1	5	27.6
Charter School T	K-6	67.0	60.3	6.3	92.5	0.0	1.1		50.0
Public School 29	K-5	60.6	25.2	96.9	0.0	2.1	1.0	20+	24.1

Appendix II, Continued

School	Grade Level	% Tested in School	CCD % FRL	CCD % White	CCD % Black	CCD % Hispanic	CCD % Other	Geographic Proximity (miles)	Teacher Response Rate
<i>Minnesota</i>									
Charter School U	K-8	56.7	62.5	9.9	15.8	6.9	67.4		31.0
Public School 30	K-5	66.9	20.7	68.9	6.0	5.0	20.1	10	100
Public School 31	6-8	59.1	6.7	79.2	8.5	3.9	8.3	15	39.4
Charter School V	K-6	74.7	60.4	27.6	36.8	6.9	28.7		71.4
Public School 32	K-5	12.0	3.0	89.2	1.5	1.2	8.1	10	42.9
Charter School W	K-12	83.5	21.4	96.2	0.0	1.9	1.9		81.3
Public School 33	K-5	13.1	9.0	87.7	4.3	1.3	6.7	20+	34.6
Public School 34	6-8	16.2	12.3	84.0	6.1	1.8	8.0	20+	40.8
Public School 35	9-12	37.4	24.4	88.1	0.0	3.3	8.6	20	34.1
Charter School X	K-8	96.0	61.3	92.0	6.7	1.3	0.0		100
Public School 36	PreK-4	60.8	24.1	94.8	0.5	3.1	1.6	15	91.7
Charter School Y	PreK-8	18.6	24.3	80.0	7.1	7.1	5.7		53.8
Public School 37	K-6	58.9	6.5	79.3	7.7	3.6	9.4	10	58.1
Charter School Z	5-6	100	74.6	8.3	85.4	2.1	4.2		66.7
Public School 38	K-4	51.8	47.0	61.8	17.8	6.6	13.9	10	44.4
Public School 39	6-8	96.6	8.8	82.2	5.9	4.4	7.6	5	94.4
Charter School AA	7-12	81.3	15.9	93.2	1.7	1.7	3.4		85.7
Public School 40	5-8	1.1	28.7	73.8	12.3	3.2	10.7	20+	92.3
Public School 41	9-12	94.1	9.6	85.0	4.5	3.0	7.6	20+	50.0
Charter School BB	K-6	100	64.6	87.2	5.1	2.6	5.1		92.3
Public School 42	PreK-6	71.0	20.2	98.3	0.0	0.0	1.7	20	80.0
Charter School CC	K-6	66.8	47.8	1.7	76.8	20.3	1.2		58.8
Public School 43	K-6	6.4	48.6	21.3	28.2	11.4	39.1	5	29.6

References

- Allen, J. (2001). Education by charter: The new neighborhood schools. In J. C. Goodman, & F. F. Steiger (Eds.), *An education agenda: Let parents choose their children's school* (pp. 56- 64). Dallas, TX: National Center for Policy Analysis.
- Anderson, R. (1997, Spring). Boomers want choice. *NW Education*, 2(3). Retrieved July 11, 2006, from <http://www.nwrel.org/nwedu/spring97/article3.html>
- Archbald, D. A. (1988). *Magnet schools, voluntary desegregation, and public choice theory: Limits and possibilities in a big city school system*. Unpublished doctoral dissertation, University of Wisconsin, Madison.
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. White Plains, NY: Longman.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bennett, W.J., Fair, W., Finn, C. E., Flake, F. H., Hirsch, E. D., Marshall, W., & Ravitch, D. (1998). A nation still at risk. *Policy Review* (90), 23-29.
- Berends, M., Chun, J., Schuyler, G., Stockly, S., & Briggs, R.J. (2002). *Challenges of conflicting reforms: Effects of New American Schools in a high-poverty district*. Santa Monica, CA: RAND.
- Betts, J. R. (2005). The Economic Theory of School Choice in J. R. Betts & T. Loveless (Eds.), *Getting Choice Right*. Washington, DC: Bookings Institution Press
- Betts, J. R., & Hill, P. T. (2006). Charter School Achievement Consensus Panel. In *Key issues in studying charter schools and achievement: A review and suggestions for national guidelines* (pp. 24). Seattle, WA: National Charter School Research Project, Center on Reinventing Public Education.
- Betts, J. R., & Loveless, T. (Eds.). (2005). *Getting Choice Right*. Washington, DC: Bookings Institution Press
- Booker, K., Zimmer, R., & Buddin, R. (2005). The Effect of Charter Schools on School Peer Composition. *RAND Working Paper Series*
- Brookover, W. B. (1979). *School social systems and student achievement*. New York, NY: Praeger Press.
- Bruno, V. M., Chester, E. F., Jr., Louann, A. B., & Gregg, V. (1998). How charter schools are different: Lessons and implications from a national study. *Phi Delta Kappan*, 79(7), 488.

- Bryk, A. & Driscoll, M. (1988). *The school as community: Theoretical foundations, contextual influences, and consequences for students and teachers*. Madison, WI: National Center on Effective Secondary Schools, University of Wisconsin.
- Bryk, A., Lee, V., & Smith, J. (1990). High school organization and its effects on teachers and students. In W. Clune and J. Witte (Eds.), *Choice and control in American education*, Vol. 1: *The theory of choice and control in American education* (pp. 135-226). Bristol, PA: Falmer Press.
- Budde, R. (1988). *Education by charter: Restructuring school districts: key to long term continuing improvement in American education*. Andover, MA: Regional Laboratory for Educational Improvement of the Northeast & Islands.
- Bulkley, K. (2003). Educational Management Organizations and the Development of Professional Community in Charter Schools. *National Center for the Study of Privatization in Education, Teachers College, Columbia University Occasional paper No.69*.
- Bulkley, K., & Fidler, J. (2002). *A Review of the Research on Charter Schools*. CPRE Web Paper Series. Access ERIC: FullText (070 Information Analyses; 142 Reports--Evaluative No. CPRE-WP-01). Pennsylvania: Consortium for Policy Research in Education, Philadelphia, PA.
- Caudell, L. S. (1997, Spring). Charters for change. *NW Education*, 2. Retrieved July 11, 2006, from http://www.nwrel.org/nwedu/spring_97/article2.html
- Chubb, J. & Moe, T. (1990). *Politics, markets and American schools*. Washington, DC: Brookings Institute.
- Cookson, P. W. (1993). *School choice and the creation of community*. Paper presented at a workshop entitled, "theory and practice in school autonomy and choice: Brining the community and the school back in". Tel Aviv University, Israel.
- Conley, D. T., & Goldman, P. (1998). *How Educators Process and Respond to State-Level Education Reform Policies: The Case of Oregon*. Access ERIC: FullText (143 Reports--Research; 150 Speeches/Meeting Papers). Oregon.
- Cuban, L., & Tyack, D. (1995). *Tinkering Toward Utopia*. Cambridge: Harvard University Press.
- DiMaggio, P. D., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, Vol. 48,(2) , 147-160
- Edmonds, R. R. (1979). Effective schools for the urban poor. *Educational Leadership*, 37, 15-27.

- Elmore, R. (1996). Getting to scale with good educational practice. *Harvard Education Review*, 66(1), 1-26.
- Finn, C. E., & Gau, R. L. (1998). New ways of education. *The Public Interest* (130), 79-92.
- Finn, C. E., Manno, B. V., & Vanourek, G. (2000). *Charter schools in action: Renewing public education*. Princeton, NJ: Princeton University Press.
- Friedman, M. (1962). *Capitalism and freedom*. Chicago: University of Chicago Press.
- Fuchs, D. (2005). *Scaling Up Peer Assisted Learning Strategies to Strengthen Reading Achievement*. Nashville: Kennedy Center, Vanderbilt University.
- Gamoran, A., Nystrand, M., Berends, M., & LePore, P. (1995). An organizational analysis of the effects of ability grouping. *American Educational Research Journal*, 32(4), 687-715.
- Garrison, L. F., & Holifield, M. (2005). Are Charter Schools Effective? *Planning and Changing* 36(1&2), 90-103.
- Gill, B. P., Timpane, P. M., Ross, K. E., & Brewer, D. J. (2001). *Rhetoric versus reality: What we know and what we need to know about vouchers and charter schools*. Santa Monica, CA: RAND.
- Goodwin, R. K., Kremerer, F. R., & Martinez, V. J. (1998). Comparing public school and private voucher programs in San Antonio. In P Peterson and B. Hassel (Eds). *Learning from school choice* (pp. 275-306). Washington, DC: Brookings Institute.
- Goldring, E. B., & Sullivan, A. S. (1995). Privatization: intergrating private services in pulic schools In P. Cooksone & B. Schneider (Eds.), *Transforming Schools* (pp. 533-556). New York: Garland.
- Guskey, T. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 4(1), 63-69.
- Hanushek, E. A., & Rivkin, S. G. (February 22-24, 2001). *Does Public School Competition Affect Teacher Quality?* Paper presented at the Economics of School Choice Conference, Islamorada, Florida.
- Henig, J. R. (1999). School choice outcomes. In S. Sugarman & F. Kemerer (Eds.), *School choice and social controversy* Washington, DC: Brookings Institute Press

- Hess, F. M., & Lovelace, T. (2005). How school choice affects student achievement. In J. Betts & T. Loveless (Eds.), *Getting choice right: Ensuring equity, and efficiency in education policy* (pp. 85-100). Washington, DC: Brookings Institution Press.
- Hoxby, C. M. (2002). Would school choice change the teaching profession? *The Journal of Human Resources*, 37(4), 846-891.
- Ingersoll, R. & Alsalam, N. (1997). *Teacher professionalization and teacher commitment: A multilevel analysis*, NCES 97-069. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Kearns, D. T., & Doyle, D. P. (1988). *Winning the brain race: A bold plan to make Our schools competitive*. San Francisco: ICS Press, Institute for Contemporary Studies.
- Kirst, M. W. (March, 2006). *Politics of Charter Schools: Competing National Advocacy Coalitions Meet Local Politics*. Paper presented at the Annual meeting of the American Education Finance Association, Denver, CO.
- Laciroeno-Paquet, N., Holyoke, T., Moser, M., & Henig, J. (2002). Creaming versus croppping: Charter school enrollment practices in response to market incentives. *Educational Evaluation and Policy Analysis*, 24(2), 145-158.
- Lee, V. E., & Smith, J. B. (1999). Social support and achievement for young adolescents in Chicago: The role of academic press. *American Educational Research Journal*, 36(4) 907-945.
- Lee, V. E., Dedrick, R. F., & Smith, J. B. (1991). The Effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education* 64(3), 190-208.
- Lee, V., Smith, J. B., Perry, T., & Smylie, M., (1999). *Social Support, Academic Press, and Student Achievement: A View from the Middle Grades in Chicago*. Chicago; Consortium on Chicago School Research.
- Lee, V. E., Smith, J. B., Croninger, R. G. (1995). *Another look at high school restructuring. More evidence that it improves student achievement and more insights into why*. Madison, WI: Center on Organization and Restructuring of Schools
- Leonardi, R. C. (1998). *Charter schools in Ohio: The rush to mend them should not end them* (Perspective on Current Issues). Dayton, OH: Buckeye Institute for Public Policy Solutions.

- Levin, H. M. (November 14, 2005). *Why Is Educational Entrepreneurship So Difficult?* Paper presented at the Conference on Educational Entrepreneurship at American Enterprise Institute, Washington, DC.
- Lortie, D. (1975). *Shoolteacher*. Chicago: University of Chicago Press.
- Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' Professional Community in Restructuring Schools. *American Educational Research Journal*, 33(4), 757-798.
- Louis, K. S., & Miles, M. B. (1990). *Improving the urban high school: What works and why*. NY: Teachers College Press.
- Loveless, T. (2003). *Charter schools: Brown Center Report on American Education*. Washington, DC: Brookings Institution Press.
- Lubienski, C. (2003). Innovation in education markets: Theory and evidence on the impact of competition and choice in charter schools. *American Educational Research Journal*, 40(2), 395-443.
- Marks, H.M., & Louis, K.S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for teachers' instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, 19(3).
- McLaughlin, M. W., & Talbert, J. E. (1993). *Contexts that matter for teaching and learning*. Palo Alto, CA: Stanford University, Center for Research on the Context of Secondary School Teaching.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology* 83, 340-363.
- Moore-Johnson, S. (1990). *Teachers at work: Achieving success in our schools*. New York: Basic Books.
- Moran, M. T., Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.
- Murphy, J. (1991). *Restructuring schools: Capturing and assessing the phenomena*. New York: Teachers College Press.
- Nathan, J. (1996). *Charter schools: Creating hope and opportunity for American education*. San Francisco: Jossey-Bass.
- Newmann, F. M. (2002). Achieving high-level outcomes for all students: The meaning of staff shared understanding and commitment. In W. D. Hawley (Ed.) *The keys to*

- effective schools: Educational reform as continuous improvement* (pp. 28-42). Thousand Oaks, CA: Corwin Press.
- Newmann, F. M., & Associates. (1996). *Authentic achievement: Restructuring school for intellectual quality*. San Francisco, CA: Jossey-Bass.
- Newmann, F. M., & Wehlage, G. H. (1995). *Successful school restructuring: A report to the public and educators by the Center on Organization and Restructuring of Schools*. Alexandria, VA: Association for Supervision and Curriculum Development; Reston, VA: National Association for Secondary School Principals.
- Newmann, F. M., Smith, B.A., Allensworth, E., & Bryk, A. S. (2001a). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational Evaluation and Policy Analysis*, 23(4), 297-321.
- Newmann, F. M., Smith, B.A., Allensworth, E., & Bryk, A. S. (2001b). *School instructional program coherence: Benefits and challenges*. Chicago, IL: Consortium on Chicago School Research.
- Newmann, F. M., Ruter, R. A., & Smith, M. S. (1989). Organizational factors that affect school sense of efficacy, community and expectations. *Sociology of Education*, 62(4), 221-238.
- National Institute for School Leadership (NISL) Proposal by the Consortium for Policy Research in Education. *Assessing the Impact of Principals' Professional Development: An evaluation of the National Institute for School Leadership*
- Oakes, J., Gamoran, A., & Page, R. N. (1992). Curriculum differentiation: Opportunities, outcomes, and meanings. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 570-608). New York: Macmillan.
- Philips, M. (1997). What makes schools effective? A comparison of the relationships of communitarian climate and academic climate to mathematics achievement and attendance during middle school. *American Educational Research Journal*, 34, 633-662.
- Podgursky, M., & Ballou, D. (2001). *Personnel Policy in Charter Schools*. Thomas B. Fordham Foundation.
- Purkey, S. C., & Smith, M. S. (1983). Effective schools: a review. *The Elementary School Journal*, 83(4) 427-452.
- Rinehart, J. R., & Lee, J. F. (1991). *American education and the dynamics of choice*. New York: Praeger.

- Rosenholtz, S. (1989). *Teachers' workplace: The social organization of schools*. White Plains, NY: Longman.
- Ross, J. A. (1994). The impact of an in-service to promote cooperation learning on the stability of teacher efficacy. *Teacher and Teacher Education*, 10(4), 381-394.
- Scott, W. R. (1992). *Organizations: Rational, Natural and Open Systems*. Englewood Cliffs: Prentice Hall.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin Company.
- Schneider, M., & Buckley, J. (2002). What do parents want fro schools? Evidence from the Internet. *Educational Evaluation and Policy Analysis*, 24(2), 133-144.
- Schneider, M., Teske, P., & Marshall, M. (2000). *Choosing schools: Consumer choice and the quality of American schools*. Princeton, HJ: Princeton University Press.
- Sheppard, B. (1996). Exploring the transformational nature of instructional leaderhip. *Alberta Journal of Educational Research*, 42(4), 325-344.
- Smylie, M. A., Lazarus, V., & Brownlee-Conyers, J. (1996). Instructional outcomes of school based participative decision making. *Educational Evaluation and Policy Analysis*, 18(3), 181-198.
- Vanourek, G., Manno, B. V., Finn, C. E., Jr., & Bierlein, L. A. (1998). Charter schools as seen by students, teachers, and parents. In p. Peterson, B. Hassel (Eds.), *Learning from school choice* (pp. 187-212). Washington DC: Brookings Institute.
- Wells, A. S. (1998). *Beyond the rhetoric of charter school reform: a study of 10 California school districts*. Los Angeles, CA: UCLA Charter School Study
- Wohlstetter, P., & Griffin, N. C. (1997). *Creating and Sustaining Learning Communities: Early Lessons from Charter Schools*. Access ERIC: FullText (143 Reports-- Research; 150 Speeches/Meeting Papers). California: Consortium for Policy Research in Education, Philadelphia, PA.
- Zimmer, R., Buddin, R., Chau, D., Gill, B., Guarino, C., Hamilton, L., et al. (2003). *Charter school operations and performance: Evidence from California*. Santa Monica, CA: RAND.