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ABSTRACT

Magnet schools have recently been promoted as a school-improvement tool to liberate the poor from inferior schools. This paper presents findings of a study that assessed differences in organizational capacity for education reform between magnet and nonmagnet schools. Do families have a choice of better schools--schools with greater capacity to help students achieve higher standards? The paper utilizes the conceptual framework of O'Day, Goertz, and Floden (1995) to focus exclusively on differences in organizational capacity between magnet and nonmagnet schools. Data were obtained from a survey that compared 10 magnet schools and 10 nonmagnet schools in both Cincinnati, Ohio, and St. Louis, Missouri. The survey of a total of 988 teachers produced an overall response rate of 70 percent. The results of the study are mixed and lend themselves to multiple interpretations. Both critics and supporters of school choice can find evidence to bolster their claims. Although an overall difference in teachers' reports of organizational capacity was found in favor of magnet schools, the variance accounted for was a modest 7.07 percent. Moreover, only two of the five dimensions of organizational capacity--organizational structures and management, and resources--accounted for differences in organizational capacity between magnet and nonmagnet schools. Choice in and of itself appears to only go so far in terms of enhancing organizational capacity and schools for all children because resources are controlled at the district level. Most importantly, it appears that the dimension of organizational capacity on which no differences were found may have the most influence on student performance. In summary, it appears that choice enhanced the dimensions of organizational capacity that are the most directly altered and for which there is least evidence of possible impact on student performance. Three tables are included. (Contains 31 references.) (LMI)

Organizational Capacity for School Improvement: Teacher Reports in Magnet and Nonmagnet Schools

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Organizational Capacity for School Improvement: Teacher Reports in Magnet and Nonmagnet Schools

Introduction

In the 27th Annual Phi Delta Kappa/Gallup Poll, 69% of respondents favored allowing families to choose which public schools their children attend, regardless of residence (Elam and Rose, 1996). Magnet schools are the most prevalent instrument to provide such choice. During the 1991-92 academic year, districts operated 2,400 magnet schools and 3,200 individual magnet programs. Sixty-eight percent of urban students and 1.2 million students overall participated in magnet programs over this period. Between 1985 and 1993, the Magnet School Assistance Program provided in excess of $739 million to support magnet implementation (Steel and Levine, 1994).

Despite the popularity of magnet programs, advocates presently lack sufficient evidence to support many of their lofty claims. Magnet schools were initially created to achieve voluntary desegregation. However, they have recently been "repackaged" as a tool to attain equity and excellence (Henig, 1994). In a concurrent school improvement initiative, advocates of systemic reform are imploring educators to help *all* students meet higher standards (Fuhrman, 1994; Smith and O'Day, 1991). Researchers have identified *capacity building* as a prerequisite for successful achievement of these raised expectations. "Within the context of systemic reform, capacity is the ability of the education system to help all students meet more challenging standards" or the power to achieve reform (O'Day, Goertz, and Floden, 1995). Since magnets have been promoted as a school improvement tool to liberate the poor from inferior schools, the objective of this study is to assess

differences in organizational capacity for education reform between magnet and nonmagnet schools. In other words, simply given families choice of school may not be sufficient to improve educational outcomes. Do they have a choice of better schools, schools with greater capacity to help students achieve higher standards?

The conceptual framework for this research was developed by O'Day, Goertz and Floden (1995). They divide capacity for education reform into teacher capacity and organizational capacity, which interact with one another. Teacher capacity includes: (1) *knowledge* , (2) *skills*, (3) *dispositions*, and (4) *views of self.* Organizational capacity entails:

(1) *vision and leadership*--leader articulation of and garnered support for a shared mission focused on teaching and learning;

(2) *collective commitment and cultural norms*--shared responsibility for student learning and a culture of continual improvement;

(3) *knowledge or access to knowledge*--information to implement the vision of reform;

(4) *organizational structures and management*--structural and managerial changes to enhance success for all students; and

(5) *resources*--instructional materials and human resources that enable students to attain higher standards.

This study focuses exclusively on differences in organizational capacity between magnet and nonmagnet schools. It addresses the extent to which overall organizational capacity differs in magnet and nonmagnet schools. Moreover, if **overall differences** in organizational capacity exist, this study will address which of

the five domains of organizational capacity are accounting for the difference.[1]

Organizational Capacity and School Choice

Although this is a study of magnet schools specifically, the claims of school choice in general will be discussed in this section. Magnet schools are just one example of a school choice strategy and are typically highly controlled. Therefore, it is important to emphasize that magnet schools, as a result of their policy restrictions, may not unleash the market forces necessary to achieve the outcomes purported by choice supporters in general.

With that caveat expressed, school choice advocates have not been shy with their claims. Despite their optimism, however, there has been limited empirical evidence to support many of their contentions regarding the positive outcomes attributable to school choice. In the following sections, the theoretical outcomes purported by choice advocates are discussed in relation to the five dimensions of organizational capacity. The limited empirical evidence that has been collected on the influence of school choice on these dimensions will be presented.

Vision and Leadership

In the context of organizational capacity, vision and leadership entails leader articulation of and garnered support for a shared mission focused on curriculum and instruction and improved achievement for all students. The importance of this collective sense of purpose and strong leadership to communicate and facilitate it have been consistently affirmed by school effectiveness research (Purkey and Smith,

[1] Subsequent research will assess differences in teacher capacity and its' interaction with organizational capacity in the context of school choice.

1983).

Several researchers have predicted that school choice will alter the nature of principal leadership (Crow, 1991; Kerchner, 1988). For example, there is a widely held assumption that principals in schools of choice will need to be more entrepreneurial than their peers in more traditional schools in order to attract and retain students. However, given the positive perception surrounding many magnet schools and the fact that they often have waiting lists of students wanting to enroll, they may actually "sell" themselves.

Finn (1990) cites "good leadership on the part of principals" (p. 4) as one of six reasons why school choice should be implemented. His rationale for this is simply that school choice is congruent with bottom-up reform, which is characterized by the empowerment of teachers and principals. These professionals will use this empowerment to transform their schools to respond to client preferences. Thus, greater influence at the site level and accountability to parents are the catalysts for effective leadership.

Although principals are expected to play a unique and pivotal role in choice contexts, empirical studies on principals in this setting are extremely rare. Are principals in schools of choice perceived differently or as more effective than their peers in more traditional, attendance zone settings? Blank (1986) provides the only direct evidence on this question. Relying on data collected from national surveys--one of comprehensive high schools, the other from magnet high schools--Blank concluded: "In general, more of the magnet school principals received high leadership ratings on more variables than did the principals of comprehensive high

schools" (p. 13). Specifically, a greater percentage of magnet principals received higher ratings on "planning with staff", "making core curriculum decisions", and "staff selection." On the contrary, more nonmagnet principals were perceived as a "change agent." No significant difference was found in the extent to which they encouraged instructional innovation.

In terms of their focus on teaching and learning, advocates argue that magnet schools have greater goal congruence in this area for two reasons. First, they contend that the specialized themes of these schools provide additional clarity on the school's core technology. Second, they maintain that families and teachers with similar values choose the same schools, thereby providing a more congruent mission.

Collective Commitment and Cultural Norms

The collective commitment and cultural norms dimension of organizational capacity is exemplified by a collective sense of responsibility for student learning and a school culture that emphasizes continual improvement. O' Day, Goertz, and Floden (1995) found that the "most actively reforming schools" (p. 3) in their study possessed these characteristics.

A shared commitment and cultural norms are crucial for school improvement when they include both teachers and parents. Research has identified several benefits of schools with such communal organizations. Bryk and Driscoll's (1988) analysis of High School and Beyond data indicates that a communal organization positively influences student academic performance and social interactions, and teacher absenteeism, efficacy, morale, and satisfaction. They

recognize school size, sector, student diversity, and student selectivity as mediating variables. The specific mission of Catholic and private schools, in conjunction with their smaller size and more homogenous student bodies, have been considered factors associated with their greater sense of community. The specific shared mission of magnet schools is also purported to lead to a greater sense of community.

Choice proponents posit that teachers who choose their schools will be more committed to them (Raywid, 1989). Moreover, such teachers will have similar educational philosophies and therefore work together more collaboratively to serve students. Similarly, choice supporters argue that families and students who have the opportunity to choose their schools will invest more in those schools to reinforce that they made a wise decision. When parents and teachers from different neighborhoods who have congruent educational philosophies work together toward a shared mission, the school becomes a value community (Coleman and Hoffer, 1987).

In a study utilizing NELS:88 data, Lee et al. (1996) found that school choice had no effect on student academic commitment. On the contrary, evidence is emerging on the relationship between school choice and community that suggests choice may enhance school culture. In an extensive study of magnet schools, Smrekar (1991) reported that organizational structures and processes embedded in these schools foster qualities of value communities among diverse groups of parents. Further, those communal qualities mediate the impact of differences in cultural capital that influence school-family interactions. In a separate study comparing a Catholic, magnet, and traditional public school, Smrekar concluded

(1993), "These case studies suggest that choice is a powerful engine for creating the constituent elements of community" (p. 21).

Knowledge or Access to Knowledge

The ability of organizations to learn has recently become the topic of a vast amount of attention (Senge, 1990). As an aspect of organizational capacity, knowledge is the information necessary to implement the shared vision of reform. When this information does not presently exist within the organization, members of the organization must know how to access it.

Champions of magnet schools have suggested that magnet schools attract teachers with expertise in the specialized theme of their school. These teachers can serve as valuable resources to support the professional growth of other teachers in the school. On the contrary, opponents criticize magnets for "creaming" the most talented teachers away from other public schools who serve, on average, students from a lower socioeconomic status. Since these students are the ones who public schools have traditionally served with the least success, they need the most talented teachers.

Champions of school choice note a second explanation for magnet schools enhanced access to knowledge. Relative to traditional schools, magnet schools have more extensive networks with other specialized schools, which provides them easier access to a rich source of experiential information. Moreover, districts with well developed choice plans often have agencies to support their endeavors. For example, the Voluntary Interdistrict Coordinating Council (VICC) in St. Louis, one of two sites in this study, administers the student transfer and teacher exchange

components of the court ordered settlement agreement to integrate St. Louis schools. To support these efforts, they also provide staff development opportunities. Despite these two contentions of how magnet schools enhance access to knowledge, no studies to date have compared the 'learning abilities' of schools of choice to more traditional schools.

Organizational Structures and Management

There is limited agreement that structural changes actually influence what transpires in the classroom (Elmore, 1990). There is widespread agreement, however, that if structural changes are going to make a difference for students, they must be explicitly linked to teaching and learning (Murphy, 1991). Restructuring organizational structures and managerial practices so that they are more tightly coupled to student performance standards is believed to enhance this dimension of organizational capacity.

Advocates assert that choice results in schools with more efficient organizational structures and managerial practices. Specifically, they charge that choice dismantles the educational bureaucracy and enhances decentralization of decision-making. They further maintain that both outcomes enhance student performance. Lee and Bryk (1989) conducted an extensive study that provides some evidence that the organizational properties of schools can influence student performance. However, their study included very few schools of choice. Therefore, magnet school advocates often rely on a second study to give legitimacy to their claims. Magnet schools, they contend, are characterized by greater autonomy, a quality purported to positively influence student performance (Chubb and Moe,

1990). Moreover, because of their expertise in the school's specialized theme, magnet school teachers should have greater influence in school-wide decision-making. Tapping into these teachers' expertise, it is contended, will result in better decisions for students and greater teacher ownership.

Resources

In the context of organizational capacity, resources are those instructional materials and human resources that enable students to attain higher standards. Specific examples of such resources include time, personnel, professional development, and materials necessary to implement the curriculum so that the performance of all students is enhanced.

Magnet schools have been both lauded and criticized for their ability to garner a disproportionate share of resources. Critics charge that magnet schools receive additional resources to serve the best and brightest students. Their students are also from families of a higher general socioeconomic status. Such parents have additional capital to contribute to their children's schools. The capital could be in the form of fiscal contributions to fundraisers or human capital such as parental involvement at school. Advocates argue that additional resources are necessary to support the special instructional and curricular themes and to attract students of different races into schools in segregated neighborhoods. Moreover, they argue that their specialized themes enable magnet schools the opportunity to attract additional grant monies and resources stemming from partnerships with business and community agencies.

Purpose

This purpose of this study is twofold. First , this research examines the extent to which there are overall differences in organizational capacity between magnet and nonmagnet schools.. Second, if overall differences in organizational capacity are found, this study will address which of the five domains of organizational capacity are accounting for the difference.

Methodology

This research is part of an extensive study of the consequences of school choice conducted during the 1993-94 school year. The umbrella project was supported by the Spencer Foundation and includes data from five school systems--Cincinnati, Nashville, Parkway, Rockwood, and St. Louis. This study is limited to results from Cincinnati and St. Louis, the two urban districts with well-established magnet programs as integral components of their student assignment plans. These two districts have operated magnet plans for over ten years each. The districts have widespread systems of information regarding magnet options, parent information centers for community outreach and to assist with the application process, and provide transportation to choosers of alternative schools. Given these policies, these are positive settings in which to study the consequences of school choice.

District Contexts

Cincinnati

As a result of the NAACP's litigation against the Cincinnati Public School District, a consent decree entitled the *Bronson Settlement* was issued in 1984. The settlement delineated goals for the reduction of segregation by 1991. As an effort to

achieve these objectives, the school system expanded its' Alternative (i.e., magnet) School program. In 1992, the Federal District Court deemed supervision of the school system's racial/ethnic balance as no longer necessary. However, the school system remains committed to integration, which it accomplishes through Alternative and Open Enrollment plans.

Open Enrollment enables students from racially unbalanced schools to transfer to other schools in the district in which their enrollment would improve racial integration. The Open Enrollment and Alternative plans are limited to intradistrict choices. During the 1993-94 academic year, the district's Alternative plan (i.e., magnet schools) served approximately 20,000 students in 26 alternative programs at 44 sites. The entire school district included 86 schools: 61 elementary, eight middle/junior high, ten secondary, and seven special schools. The total enrollment was approximately 51,000 students, 66% of whom are African-American, 32% white, and 2% other. Forty-six percent of all students in the Cincinnati Public School District and 43% of African-American students were enrolled in magnet programs during the study period.

Cincinnati's alternative or magnet programs focus on thematic curricula (e.g., fine arts; foreign language and culture) or specialized instructional approaches (e.g., Paideia). These magnet programs are further differentiated as one of the following structures: full or dedicated magnets, mixed magnets, schools-within-schools, and mixed schools-within-schools.

Parents must formally apply for admission into the magnet schools. Acceptance is based on a first-come, first-served basis as long as racial/ethnic balance

is enhanced. Applications are accepted on an announced, predetermined date at a site which is concealed until that date. Although the majority of parents receive their first choice of school, there is a larger number of applications than seats available, especially in more popular programs. Applying early increases the likelihood of acceptance but does not guarantee it. To facilitate choice of alternative schools, the district provides transportation for all high school students and K-8 students who reside greater than one mile from their school of choice.

St. Louis

The St. Louis Public School System (SLPSS) is a classic example of an urban system confronted with typical yet devastating social and economic problems. Since 1950, the city population has decreased by over 50%. Since 1990, seven percent of the population relocated out of the city. This exit was predominantly middle class families. This has led to a median family income in the county ($38,500) which is almost double that in the city ($19,458) (Task Force on Desegregation of the St. Louis Public School System, 1995). The net result for the SLPSS is fewer students and students who require more resources to educate.

To exacerbate this challenge, the St. Louis City Public School System is presently under a 1983 Federal District Court order to integrate its schools. The case appeared in the courts in 1972. The court determined that the SLPSS and the State of Missouri were guilty of violating the Constitution of the United States. The consent decree, which ended desegregation suits, includes intradistrict enrollment options and an interdistrict voluntary transfer program to promote racial balance. Intradistrict choices include magnet, integrated nonmagnet, and non-integrated

nonmagnet schools (i.e., 98% or higher of one race). The racial composition of magnet schools is targeted to fall within plus or minus five percentage points of 55% African-American and 45% white.

The interdistrict choice option allows St. Louis City students to transfer to one of sixteen participating suburban school systems and county students to enroll in city magnets as long as racial balance is enhanced. The funding necessary to educate these students flows from the transfer district to the receiving district. Participating county schools must receive a minimum of 15% of their enrollments from St. Louis City or a number resulting in a student enrollment of 25% or greater African-American.

In the interdistrict and intradistrict cases, seats are filled by lottery with preferences given for educational continuity, racial/ethnic quotas, and families with siblings already in the same school. Regardless of the school selected, the district provides transportation for all students. Parent Information Centers disseminate information and assist families with the choice process. This study focuses exclusively on the intradistrict choice plan.

During the 1993-94 school year, the St. Louis City School System operated 104 schools--73 elementary, 21 middle, and 10 high schools. Twenty-six full-time and two part-time magnet programs were in operation. The total enrollment was 36,091--78% of whom are Black. Total magnet enrollment was 10,087--58% of whom are Black. Of all Black students in St. Louis City, 15% were enrolled in city magnets. Forty percent of all White students in the city schools attended magnets. During 1993-94, 13,934 participated in the interdistrict transfer program; 12,775 Black inner

city students transferred to suburban schools. One point two percent of the white county students opted to attend schools in the city.

Sample Frame

During the summer of 1993, the Cincinnati Public School District and the St. Louis City School System provided a directory of all public elementary schools in their districts. Schools containing a fourth and fifth grade, where the fourth grade was not the entry grade, were included in the original sample frame. These criteria resulted in schools with a substantial population of fifth grade students who had been enrolled in the school for one or more years prior to the 1993-94 school year and whose parents would be familiar with the school.

To reduce potential response bias due to transition, the initial sample frame was culled based on information provided by central office administrators. Schools were eliminated based on four additional criteria.

(1) Only full or dedicated magnet schools were included.

(2) If for any reason, such as redistricting or renovation, fourth and fifth grade classes assigned to the school were not actually attending the school in 1992-93 or 1993-94, the school was deleted.

(3) Receiving schools of relocated students were also eliminated.

(4) Schools which added or dropped a magnet program within the past two years were omitted from the study.

Site Selection

Cincinnati

The initial sample frame contained 32 magnet and 22 nonmagnet schools.

The 15 full or dedicated magnets were included in the adjusted sample frame. Eight schools-within-schools, five mixed magnets, and four mixed schools-within-schools were deleted. Of the remaining 15 magnets, five were deleted because of planned programmatic changes that had caused tension in the community. Ten of the 22 nonmagnets were chosen by pair-matching them on racial balance using percent African-American with the ten remaining magnets in the study sample.

St. Louis

The adjusted sample frame contained 57 of the 66 schools in the initial sample. Five schools were excluded because the 4th or 5th grades were not actually attending the school during or just prior to our study period. Four additional schools were the temporary recipients of transfer students and were therefore omitted. Of the remaining schools, 26 were selected for inclusion in the study. All ten elementary magnets were selected. Ten of the eleven integrated nonmagnets were chosen by pair-matching them on racial balance using percent African-American with the ten magnets in the study sample. After one principal of an integrated nonmagnet opted not to participate, the remaining integrated nonmagnet was added. Prior to data collection, two additional integrated nonmagnets dropped out of the study--one because of renovations resulting in student transfers, the other because its status changed to a non-integrated school. Therefore, eight integrated nonmagnets remained in the final sample. Eight of the 36 non-integrated schools were randomly selected for inclusion in the study.

Data Collection

During the 1993-94 school year, anonymous surveys were distributed to all

certified teachers in the sample schools. Members of the research team visited the schools and delivered the Teacher Surveys to a school contact person. The school contact person distributed the staff questionnaires in their mail boxes or at faculty meetings. Teachers returned the Teacher Survey in sealed envelopes directly to the school contact person, from whom they were picked up by members of the research team. In Cincinnati, 417 teachers out of 628 sampled completed surveys. This resulted in a 66.4% response rate. In St. Louis, of the 783 teachers who received questionnaires, 571 completed them. This produced a 72.9% response rate. Overall, 988 teachers completed surveys for a 70.0% response rate.[2]

Variables and Measures

The following variables were created from teacher surveys to operationalize organizational capacity. With the exception of the teacher influence component of the organizational structures and management dimension of organizational capacity, teachers were asked to rate their level of agreement with each survey item: (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree). In reference to teacher reports of their influence in decision-making areas, 1=none, 2=very little, 3=some, and 4=a great deal. The vast majority of survey items were borrowed from previously tested and validated instruments (e.g., High School and Beyond, National Educational Longitudinal Study).

- Vision and leadership--leader articulation of and garnered support for a shared mission focused on teaching and learning. This scale was created by combining two standardized constructs--overall effective principal

[2] The response rates for magnet and nonmagnet teachers were comparable in both sites.

leadership[3], e.g., "the principal is interested in innovative ideas" and instructional goal congruence "at this school, teachers agree on the objectives we're trying to achieve with students"[4]. The combined scale contains 13 items, α=.9016.

- Collective commitment and cultural norms--shared responsibility for student learning and a culture of continual improvement; e.g., "teachers in this school have high standards for all students"; "teachers in this school belong to a team which works well together"; (6 items, α=.6136).

- knowledge or access to knowledge--information to implement the vision of reform; e.g., "inservice training and staff development programs in this school help teachers grow professionally" (9 items, α=.8706).

- organizational structures and management--structural and managerial changes to enhance success for all students. This scale combines two standardized constructs--their level of influence in decision-making, e.g., "how the school budget is spent" and teacher autonomy "I know what is expected of me but I also have freedom to be creative." The combined scale includes 21 items, α=.8982.

- resources--instructional materials and human resources that enable students to attain higher standards; "my instructional materials are outdated or otherwise poor in quality;" (7 items, α=.7946).

Means and standard deviations for these variables are reported by school type in Table 1.

Insert Table One Here

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[3] The effective leadership scale used in this study was modified from a scale developed by Lee, Smith, and Cioci, M. (1993).

[4] The scale representing goal congruence around teaching and learning was modified from a scale created by Rosenholz (1989).

Table Two reports the correlations between the five dependent variables. Because the five dependent variables are significantly correlated, a MANCOVA, representing a more statistically sensitive means test, was used to test for significant differences in organizational capacity relative to school type (i.e., magnet versus nonmagnets). Since earlier studies indicated that the magnet schools in this sample are characterized by larger student enrollments[5] and enroll students of higher socioeconomic status[6] than their nonmagnet counterparts, enrollment and percentage of students qualifying for free/reduced lunch were included as covariates in the analysis (Goldring and Hausman, 1996; Hausman and Goldring, 1996). These covariates would influence organizational capacity on many levels, especially resources. For example, schools are allotted funding per pupil. Similarly, low SES students often receive additional entitlements. Therefore, schools with higher enrollments and more low income students would have larger budgets. Including these covariates removes from the unexplained variability and from the treatment effect any variability that is associated with the variability in the covariates.

Insert Table Two Here

[5] The mean enrollment for the magnet schools in this sample was 480. On average, 453 students attended each nonmagnet school.

[6] It is important to note the low overall socioeconomic of all schools in this study. However, the issue was more pronounced in nonmagnets which were characterized by an average of 89.6% of students qualifying for free/reduced lunch, while 64.8% of magnet students were eligible.

One assumption needed for hypothesis testing in MANCOVA is the assumption that the dependent variables have a multivariate normal distribution. To this end, stem-and-leaf plots for each variable were drawn and indicated that the distributions were normal. Normal probability plots provided further support of normal distributions.

A second assumption required for hypothesis testing in MANCOVA is the assumption of homogeneity of variance. The significance levels from Bartlett-Box F tests for each individual dependent variable indicated that there was no reason to reject the hypotheses that the variances in the two groups are equal. These univariate tests are only the starting point for examining the equality of the covariance matrices. A second test that simultaneously assesses the variances and covariances is necessary. Box's M test, which is based on the determinants of the variance-covariance matrices in each cell as well as the pooled variance-covariance matrix, provides a multivariate test for the homogeneity of the matrices. Box's M=18.01 based on a Chi-Square with 15 df, p=.267 indicates that there is no reason to suspect the homogeneity-of-dispersion-matrices assumption.

As a final issue in interpreting the MANCOVA, Elliot and Barcikowski (1990) caution against using univariate tests as follow-up procedures to identify variables that may be contributing to multivariate significance. They contend that multivariate significance may be caused by a variety of different relationships; therefore, discriminant function analysis, which takes into account the relationships between the dependent variables, and between the dependent and the independent

variables, will be utilized to determine the contributions of dependent variables to multivariate significance.

Results

As indicated by the means in Table One, there appear to be moderate levels of organizational capacity in both magnet and nonmagnet schools. In both school types, teachers described the *vision and leadership* and *collective commitment and cultural norms* as the most highly developed dimensions of organizational capacity, although the relative magnitude of these two aspects was reversed within the two types of schools. On the contrary, teachers in magnet and nonmagnet schools rated the other three dimensions of organizational capacity--knowledge or access to knowledge, organizational structures and management, and resources--less favorably. Not surprisingly, given the differential allocation of resources, nonmagnet teachers expressed the greatest displeasure with the availability of resources. Ironically, given their expertise around a specific theme, extensive networks with other similar magnet schools, and supporting coordinating agencies, the magnet teachers ranked their knowledge or access to knowledge as the weakest aspect of organizational capacity.

To test for differences in overall organizational capacity and the specific dimensions accounting for such differences between magnet and nonmagnet schools, a MANCOVA with school enrollment and percent free/reduced lunch as covariates was run. The multivariate tests of significance indicated that significant differences in organizational capacity exist between magnet and nonmagnet schools

(Pillai's=.07071, F=14.91, p<.000).[7] Reviewing one minus Wilk's lambda (.9293) or the canonical correlation (.2659) squared suggests that 7.07% of the variance between magnets and nonmagnets can be accounted for by the five dimensions of organizational capacity operationalized in the model. Although this percentage may appear low, it is actually larger than the 5.9% variance accounted for in student achievement gains by the often cited model used by Chubb and Moe (1990) in *Politics, Markets & America's Schools* .

Given that an overall difference in organizational capacity was found between magnet and nonmagnet schools, the next step is to investigate which of the five domains in the model are accounting for the difference. The most common method for using the discriminant function for interpretation of group differences is inspection of the size of the discriminant weights.[8] Structure coefficients are the correlations between independent variables and the vector of composite scores obtained when regression equations are applied to respondents' scores on independent variables. Structure coefficients indicate proportion of variable variance accounted for by the produced discriminant functions. As reported in Table Three, structure function coefficients indicate that two of the five dimensions

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[7] Pillai's trace was interpreted because it is the most robust and conservative of the multivariate statistics. In other words, the significance level is the most accurate when assumptions are violated.

[8] Because they lack the shortcomings associated with both the raw and standardized coefficients, they represent a more useful interpretation of the nature of the function(s) or the dimension(s) on which groups are discriminated. As in factor analyses, they serve as loadings on functions. A structure function coefficient greater than or equal to + or -.3 is considered significant (Crocker & Algina, 1986).

of organizational capacity are discriminating between the two groups, magnet and nonmagnet schools. Specifically, in this model, organizational structures and management (-.370) and resources (-.554) are the two dimensions of organizational capacity that discriminate between magnet and nonmagnet schools. A review of the means for these two scales reported in Table One reveals that they are both higher in magnet schools. The structure function coefficients for vision and leadership (.248), collective commitment and cultural norms (-.166), and knowledge or access to knowledge (.114) indicate that they do not significantly discriminate between magnet and nonmagnet schools.

Insert Table 3 Here

In summary, based on teacher reports and controlling for school size and SES, an overall difference in organizational capacity was found between magnet and nonmagnet schools. Specifically, magnet school teachers reported higher levels of resources and more autonomy and influence as a result of the organizational structures and managerial practices at their schools. In term of resources, magnet school teachers reported greater access to professional support staff such as counselors and specialists, as well as additional clerical support. Magnet school teachers also described more abundant instructional materials, as well as more current materials in good condition. In reference to the organizational structures

and managerial practices at their schools, magnet teachers indicated more influence in school-wide decision-making such as how the budget is spent. They also described more freedom to be creative and less stifling rules and regulations. No differences were found between magnet and nonmagnet teachers' ratings of the vision and leadership, collective commitment and norms, or access to knowledge at their schools.

Conclusions

The results of this study are mixed and lend themselves to multiple interpretations. Both critics and supporters of school choice can find evidence to bolster their claims. Although an overall difference in teachers' reports of organizational capacity in magnet and nonmagnet schools was found in favor of magnet schools, the variance accounted for by the model was a modest 7.07%. Moreover, only two of the five dimensions--organizational structures and management, and resources--accounted for differences in organizational capacity between magnet and nonmagnet schools.

With those caveats expressed, choice advocates may interpret this information favorably. This study provides some evidence to support the claim that choice can begin to dismantle the bureaucratic nature of the education system. In this case, magnet teachers report more positive organizational structures and management (i.e., greater autonomy and influence in the decision-making process) than their nonmagnet colleagues. The precise cause of this increased report of teacher autonomy and influence has not been addressed by this project and should be dealt with in subsequent studies. For example, does this enhanced autonomy and

influence arise because magnet school teachers have specialized expertise around a specific theme, they are more committed as a result of choosing their schools, they are members of a more tightly knit school community, or for some other reason?

Magnet school supporters also have evidence that their schools are characterized by greater resources than traditional schools. This finding is both a blessing and a curse. Greater resources could be interpreted as having the **necessary** resources for all students to perform to their potential. On the other hand, choice critics can use this information to support the claim that magnet schools garner more than their fair share of resources. This accusation has received heightened attention in light of the evidence that magnet schools "cream" students of a higher SES. It is important to emphasize that the reports from the teachers in this study that magnet schools have more abundant resources appear founded and not simply based on perceptions. Data from St. Louis indicate that per pupil expenditures on St. Louis elementary students do vary, with magnet school students receiving more funding than students in traditional nonmagnet schools. Specifically, operating expenditures for magnet students is $4,337, while expenditures on students in integrated nonmagnets is $4,177. Since these schools have been in existence for over ten years, this discrepancy cannot be explained by additional start-up costs often necessary for magnet schools. Because the survey items do not specifically address funding but ask teachers to rate their instructional materials and support staff, it seems likely that this additional funding of magnet schools is being allocated for instructional materials and personnel.

Like many urban school systems, the resources in the two districts in this

study are generally of a poor quality. Consequently, choice advocates can say at least the magnet schools now have the minimal level of resources (e.g., up-to-date textbooks) that students need to be successful. Moreover, since some low SES students are choosers of magnet schools, at least they are being exposed to adequate resources, which is better than none of the poor having that opportunity.

As suggested earlier, magnet school detractors can also interpret these findings as supportive of their claims. In addition to portraying the differences in resources as inequitable, they can point to the lack of clear evidence that resources and spending actually make a difference in student performance. While magnet schools are getting additional resources to serve the best and brightest students who may already be doing well, there are insufficient resources to meet the needs of the disadvantaged students in traditional schools. Similarly, they can ask: so what if magnet school teachers report more autonomy and influence? Where is the evidence that those variables result in improved student performance? While some evidence exist (e.g., Chubb and Moe, 1990), the evidence is far from overwhelming. Although the framework for organizational capacity articulated in this paper presumes that each dimension enhances student performance, the amount of research supporting this assumption varies between the dimensions, with the organizational structures and management dimension receiving the least evidence to date.

Based on the results of this study, choice in and of itself appears to only go so far in terms of enhancing organizational capacity and schooling for all children. Resources are controlled at the district level. Therefore, the amount of district

resources going to any school can be directly controlled. In other words, resources could be increased or decreased to any school, regardless of whether it was a magnet or nonmagnet. According to this model of organizational capacity, you can increase organizational capacity by the direct input of additional resources. However, these supplementary inputs do not appear to enhance the other dimensions of organizational capacity, which are hypothesized to be interactive and independent. Additional resources and teacher autonomy and influence did not translate into greater vision and leadership, collective commitment and cultural norms, or access to knowledge (e.g., professional development). These domains are less likely to be altered by the direct input of resources at the district or a direct structural change at the district or school level (e.g., implementing site-based management and shared decision-making so that teachers perceive more autonomy and influence). In short, the domains that are most easily altered at the district level do not appear to be translating to those domains operating primarily at the school level.

More importantly, it appears that the dimensions of organizational capacity on which no differences were found (e.g., leadership and goal congruence focussed on teaching and learning, cultural norms, access to knowledge) may be the ones for which there is the most evidence of an influence on student performance. For example, there have been important studies that have provided frameworks for how and evidence that strong instructional leadership (e.g., Bossert et al., 1982), collective commitment and communal norms (e.g., Bryk and Driscoll, 1988), and access to knowledge (Darling-Hammond, 1996) lead to enhanced student performance. On the contrary, the influence of resources on student performance is

still being hotly debated. Moreover, despite a decade of research on restructuring, there is little evidence that it has lead to improved student performance. Therefore, in summary, in this study, it appears that choice enhanced the dimensions of organizational capacity that are the most directly altered and for which there is the least evidence of a positive impact on student performance.

Policymakers calling for capacity building posit that the present system of education has insufficient power or ability to achieve reform. This belief raises the question: "what power or ability is lacking?" (Floden, Goertz, and O'Day, 1995). Is it the capacity of organizations which is in short supply? Moreover, do specific school improvement strategies, such as school choice, possess differences in organizational capacity for reform? This research has attempted to begin addressing this void by assessing differences in organizational capacity between magnet and nonmagnet schools.

Notes

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Table One: Means and Standard Deviations for Dimensions of Organizational Capacity by School Type

School Type	Scale	Mean	Sd
Nonmagnet (N=543)	Vision and leadership	3.18	.51
	Collective commitment and cultural norms	3.07	.52
	Knowledge or access to knowledge	2.80	.57
	Organizational structures and management	2.80	.47
	Resources	2.66	.61
Magnet (N=445)	Vision and leadership	3.04	.54
	Collective commitment and cultural norms	3.10	.50
	Knowledge or access to knowledge	2.65	.59
	Organizational structures and management	2.91	.41
	Resources	2.84	.54

Table Two: Correlations Between Dimensions of Organizational Capacity (N=988)

	Vision & Leadership	Collective Commitment & Cultural Norms	Knowledge or Access to Knowledge	Organizational Structures & Management	Resources
Vision & Leadership	1.000	.651*	.781*	.522*	.462*
Collective Commitment & Cultural Norms	.651*	1.000	.573*	.508*	.368*
Knowledge or Access To Knowledge	.781*	.573*	1.000	.440*	.412*
Organizational Structures & Management	.522*	.508*	.440*	1.000	.363*
Resources	.462*	.368*	.412*	.363*	1.000

* Correlation is significant at the .01 level

Table 3: Structure Coefficients Derived from Discriminant Functional Analyses

Dimension of Organizational Capacity	Structure Coefficients
Vision and Leadership	.248
Collective Commitment and Cultural Norms	-.166
Knowledge or Access to Knowledge	.114
Organizational Structures and Management	-.370
Resources	-.554

Note: Loadings less than .30 are considered non-significant

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