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Are Magnet School Teachers More Professionalized than Traditional School Teachers?
(Under the Direction of DR. J. C. HERMANOWICZ)

The separate paths of teacher professionalism, the influence of the organizational context on the teacher and magnet schools have been researched independently but the systematic study of the intersection of all three roads has not been undertaken. This study intends to fill the gap in the literature. Utilizing a national level data set, the 1993-94 Schools and Staffing Survey, I investigate the affects of the magnet school context on four elements of professionalism; autonomy – influence over school policy and classroom control, professional development, salary and credentialing – highest degree and type of teaching certification. The results indicate the magnet school context is indeed noteworthy in the areas of autonomy in school policy, professional development and salary but not significant in autonomy in the classroom and credentialing.

INDEX WORDS: Teacher professionalism, Autonomy, Professional development, Salary, Credentialing, School organization, School choice, Magnet schools,

ARE MAGNET SCHOOL TEACHERS MORE PROFESSIONALIZED THAN TRADITIONAL SCHOOL TEACHERS?

by

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CHAPTER 1

INTRODUCTION.

Both teacher professionalism and school choice are controversial issues in sociology and education, with the benefits and drawbacks of each topics of heated debate. Questions on the former range from how to define what a professional teacher is to why we need professional teachers while the debates on school choice center on class and racial stratification and student outcomes. This study examines teachers in the context of school choice. It does so by focusing on how school choice programs affect, if at all, teacher professionalism.

The separate paths of teacher professionalism, the influence of the organizational context on the teacher, and magnet schools have been researched independently, but the systematic study of the intersection of all three roads has not been undertaken. This paper intends to combine the research on teacher professionalism, the school organization and magnet schools using a national level data set. I hypothesize that the organizational and environmental context of magnet schools results in more professionalized teachers than the organizational context of traditional schools.

This paper has six main parts. Following the introduction that will briefly outline the topics under investigation, I will discuss the elements of a professional teacher; autonomy, professional development salary and credentialing. Secondly, I will outline school choice in the United States and zero in on the magnet school option. Thirdly, I

will present a review of the literature into magnet school organization. Next I will outline my research design and procedures. Following the introduction of the methods and variables, I will present the analysis with the descriptive data preceding the regression analysis. Finally I will conclude the paper with a discussion on the findings and implications including areas for further research.

The elements incorporated in the professional model that defines a professional teacher are those discussed by scholars in the sociology of work and occupations; autonomy, professional development support, high compensation levels, and credentialing and licensing requirements for entry (Ingersoll 2001). The benefits of increased professionalism ranges from reducing teacher turnover, reducing teacher burn-out, increasing the recruitment of high quality teachers, increasing teacher commitment to the work place and of course improving student outcomes (Baker & Smith 1997; Darling-Hammond 1997; Ingersoll 1997, 2001). Teachers however, do not work in a vacuum; they work within the framework of institutions, within the context of the organizational structure of their schools.

The organizational factors in schools are crucial in directing teachers' understandings of their work (Bascia 2000; Louis 1990; Rosenholz 1989*;* Squires 1999). Moreover, the organization can either facilitate or obstruct a teacher's professionalism (Wilensky 1964). Schools are traditionally bureaucracies with an institutional framework that is resistant to change. However, there is a demand for a change in the education system in the United States, and this has resulted in a move toward public school choice.

Public school choice can be understood to be the educational wave of the future and one form of school choice is magnet schools. Magnet schools are the most common type of school choice option in the United States with at least 8% of schools designated a magnet option (Blank et al. 1996). The benefits of school choice range from improving student outcomes, recognizing student diversity, increasing the accountability of teachers and the school, cultivating competition between schools, allowing an environment that permits structural change and, importantly, increasing the professionalism of teachers (Heid & Leak 1991; Chubb & Moe 1990).

For school reform to be successful there needs to be professional teachers who are involved in the origination and implementation of the policy (Chubb & Moe 1990; Heid & Leak 1991). Moreover, the sense of empowerment teachers have in this role leads to increased responsibility, which in turn stimulates greater professionalism (Heid & Leak 1991; Pyszkowski 1991; Sleegers & Wesselingh 1995). Indeed the teachers' role in school reform is becoming more visible and important as the trend toward school choice, as magnet schools are, becomes stronger and educational reform allows for new avenues of teacher professionalism (McClure 1999).

This paper explores one avenue that may prove helpful in discerning if school choice, as manifest in the magnet school, does indeed have an influence on teacher professionalism. I argue that the magnet school organizational context will be a positive factor in the professionalization of the teacher. If the data support this argument, then the organizational structure of the magnet schools can be used as a frame of reference for increasing teacher professionalization within the educational landscape.

CHAPTER 2

TEACHER PROFESSIONALIZATION

There is a distinctive difference between teacher professionalism and teacher professionalization. The former refers to attitudinal or psychological attributes of those who are, or aspire to be, considered professionals. Professionalization is related to the degree to which the occupation illustrates structural or sociological aspects of criteria identified by the professional model. The professional model is a series of occupational and organizational characteristics used to distinguish professional work from non-professional work (Ingersoll 2000). The elements of the professional model in teaching that I intend to explore are, autonomy, which in schools is composed of both classroom control and influence over school policy, professional development, salary, and credentialing requirements

Autonomy

According to Richard Hall (1968, 93) autonomy is the "part of the work setting wherein the professional is expected to utilize his judgment." The individuals must be able to feel themselves free to make their own decisions within their area of expertise. Indeed, for a professionalized environment to exist practitioners must have “the authority and freedom to regulate themselves and act within their spheres of influence” (Wilensky 1964).

Autonomy in the school has been shown to be critical for school outcomes as students perform better when the staff feel like they have the autonomy to set the path for the school to follow and feel they have some decision-making authority (Henig 1999). There are two forms of autonomy for teachers, one is the macro level of influence over school policy and the other is the micro level control in the classroom

Influence over school policy.

Chubb & Moe (1990) report that based on the student outcomes, the high-performing schools were schools in which the teachers felt they had more influence, and poorly performing schools were staffed with teachers who felt they had little or no influence at school level. Indeed the belief that they (the teachers) can affect a change is crucial to the success of schooling (Enderlin-Lampe 1997; Firestone 1991) and teacher morale, satisfaction and commitment (Blank 1990; Ingersoll 2001). Teacher participation in decision-making improves the collegiality of faculty, and promotes ownership while increasing professionalization (Owens 1987).

Control in the classroom.

Teachers have traditionally had control in their classrooms, allowing individual autonomy within the school environment, and this is something they expect (Darling-Hammond1997; Firestone 1991). It is the teachers who understand the students, their motivations and their interests. However, the increased reliance on standardized tests could result in less classroom control and a focus on teaching to the test. Overall however, the classroom is the domain of the teacher, and there is little to contest the authority of the teacher in the classroom.

Professional development

Professional development is often seen as a key element in teacher professionalism as it enables teachers to teach well (Lieberman & Miller 1999). This is a seemingly simple conclusion but one that is critical to a schools success. The assumption is, as professionals, teachers must continually update their skills to teach effectively (Ingersoll, 2000) and thus improve student learning (Darling-Hammond 1987; Lieberman 1988). Structural reforms, including those that result in changes for teachers' roles, are often accompanied by professional development courses, and learning opportunities will increase the possibility of improving skills and technical knowledge (Rosenholz & Simpson 1990).

Salary

The income of professionals is linked to the time needed to learn the skill, the training and the complexity of knowledge needed to recruit and retain practitioners (Ingersoll 2001). The issue of teacher salary has long been discussed as a barrier to teacher professionalization. Teaching has historically been viewed as somewhat of an unessential task, and for that reason teachers have always seemed to be on the lower end of income brackets (Lortie 1975). Compared to other occupations, the salaries of teachers *dropped* during the late 70s and mid-80s (Cohn & Kottkamp 1993). Ingersoll (2001) compared the average entrance salary for a number of occupations including sales, the military, business/management, computer science, engineering and teaching, all that required the same entrance requirements, and found teachers mean salary was more than 20% less than the mean of the total salaries. To further the comparison, the study of mean

salaries across occupations found teachers to earn less than all the other occupations (this included social workers, sales supervisors, accountants and writers).

Raising salaries was ranked by teachers in the survey completed by Cohn & Kottkamp (1993) as the main way to retain good teachers in the classrooms rather than lose them to administration or another occupation altogether. Professionalization, including higher salaries, is needed to attract motivated and committed teachers (Devaney & Sykes 1988). Present salary differences within teaching are based more on additional college credits or degrees than on seniority (Cohn & Kottkamp 1993). To recruit talented people into teaching the entrance salary must be higher and there needs to be opportunities to garner career long salaries without leaving teaching for administration (Devaney & Sykes 1988). The salaries of teachers in magnet schools has not been, as of yet, a topic of study.

Credentialing

Entry into a profession requires credentialing or licensing. This proves the person has acquired the sets of skills and knowledge necessary to practice the profession to which they desire entry. Additionally it is the legal aspect of licensing that prevents unlicensed peoples from practicing the job, strengthening the boundaries of the profession overall (Abbott 1988). Moreover, Wilensky, in 1964, posited an occupation must link skill and training to dominate an occupational field and maintain professional authority. The technical base can only be maintained through strict licensing regulations, and any deviation from the requirement will weaken the professionalization of the profession.

Credentialing, the type and level of degree earned, at least should reflect the extent of the teacher's knowledge (Darling-Hammond 1987; Ingersoll 2001).

Furthermore, for teachers there is state certification and Ingersoll (2001) reports that most states require a certificate in the subject to be taught. There is a connection between stricter credentialing levels and increased student outcomes (Darling-Hammond 1999). As the move toward teacher professionalization has gained momentum, there has been a corresponding increase in the increase of credentialing requirements for teachers (Darling-Hammond 2000).

Hall (1968, 94) states "The work situation may have an impact on the degree to which the profession can be self-regulating and autonomous." Indeed the research conducted by Ingersoll (1997, 2001) found the professionalization of public school teachers and private school teachers were different, as conventional wisdom supposes, but not in the direction anticipated. Overall, his national study comparing the public and private school domains found all fall short in the professionalization of teachers. Contrary to the expectations however, private schools had a greater amount of teacher turnover than pubic schools, mainly due to the lower salaries and were overall less professionalized than public schools. In this manner, the organization of the school directly affected the professionalization of teachers.

Public schools are heteronomous organizations in which the professionals employed are subject to an outside control system, such as the school board and parents, and therefore there can be variations within the system that will result in varying levels of teacher professionalism (Hall 1968). The introduction of school choice into the educational landscape has resulted in even greater variation among the public schools. It is how the public schools in the choice network, specifically magnet schools, affect the professionalization of teachers that is of interest in this study.

CHAPTER 3

SCHOOL CHOICE AND MAGNET SCHOOLS.

The common assumption that all schools are equal is unfounded. Indeed, all across the country parents and politicians recognize that all schools are not the same; some are more equal than others. This inequality has resulted in some parents and politicians asking for a change and more options in the education system; school choice. School choice is the option available to parents that allows them to enroll their child in a school that is outside of their geographic catchment area. In other words the child does not have to attend the neighborhood school.

The availability of school choice options in the United States has expanded over the past few decades. Just over 50% of public school districts offer some sort of school choice option with some offering more than one alternative according to the National Center for Educational Statistics (1996). This includes 13.8% of districts offering interdistrict choice, 28.6% offer intradistrict choice, and 7.8% of districts that have a magnet school option. Magnet schools, numerically, are the most common form of school choice implemented in the USA today (Blank et al. 1996; National Center for Education Statistics, 1996).

Henig and Sugarman (1999) reviewed the diverse options available, the school choice options within the public school system including intradistrict choice, interdistrict choice, charter schools, and school vouchers but begin with the obvious example of

residential choice. As they state, "Clearly, the residential choices made by a large number of families are very much driven by school choice" (pg 14). There are, however, a large number of families who cannot make a residential choice: poor families, families living in subsidized housing, those who have to move because of job layoffs, or divorce and rent changes or those families who cannot provide independent transportation to school for their children.

School choice has thus often been couched in terms of permitting the less well off, the minority and poor populations, an option in their children's education. While choice is often noted as an option in urban education, the spread of school options has spread beyond the city borders and into the countryside. Choice has become, to some, a tool to remedy the problems associated with education in America.

Of all school choice options by the most common is intradistrict choice with around 11% of all students in the USA participating in such a program (Henig and Sugarman 1999). The options within this bracket include alternative and specialty schools, and magnet schools.

Magnet Schools

Magnet schools as a form of school choice were introduced into the American educational landscape in the 1970s in attempts to promote desegregation and prevent ‘white flight’ from the urban areas. The schools have grown in rapidly grown in numbers ever since. The only official requirements for magnet schools is that they reduce racial segregation in the school district by 5% and the student body be a balanced mix of different races/ethnicities or reflect the racial make-up of the school district. Magnet schools as an educational choice have increased rapidly over the past decade. In 1991

230 school districts, four percent, had magnets schools, serving over 15% of the pool of students within the district (Blank et al. 1995). The US Department of Education in 1994 found nearly 8% of school districts offered a magnet school option – a hundred percent growth in less than four years.

Magnet schools, a popular tool for educational progress, are often introduced into urban districts as they can be incorporated into the existing educational structure with little controversy and upheaval to the current system, while simultaneously addressing policy issues of desegregation, school choice and educational quality (Blank 1990; Tannenbaum 1995). They are however, found in all communities including suburban and rural areas.

Interestingly, the region with the highest number of magnet schools is the West, 12.1%, followed by the South and Midwest who both have 7.7% and lastly the Northeast with 4.2% of all schools designated magnet. However, the dispersion of students does not follow the pattern of percentage of schools. While the overall percentage of students in a magnet school is 11%, the majority of students, 20.6%, are enrolled in the Northeast, 9.5% are in the Midwest, 4.8% in the South and 4.5% in the west. It can be noted that while the west has the most school choice options available, the Northeast has the highest student participation.

While the definition of a magnet school can vary somewhat between districts and regions, the most common criteria are schools that offer a special theme in curricular or instruction, and are an integral aspect of a voluntary desegregation plan. The magnet schools' special programs and foci, such as fine arts, computer technology or health science, often results in the schools receiving additional funding to explore the areas of

specialty (Chubb & Moe 1990). Moreover, the magnet school will be a school of choice by a student/parent that is unrestricted by traditional catchments boundaries, thereby breaking with traditional residential based systems (Blank 1990; Chubb & Moe 1990; Tannenbaum 1995). Overall, the schools are to provide a unique and distinctive education to diverse students based on their interests, and not their academic ability (Blank et al. 1996; Steel & Levine 1994).

The research on magnet schools has found students achieve higher scholastic outcomes than students in non-magnet schools in the same district (Blank et al. 1983; Blank 1990: Chubb & Moe 1990; Davenport & Moore 1988; Esposito 1995; Gamoran 1996; Henig 1999; Steel & Levine 1994: Tannenbaum 1995). Gamoran (1996) found the positive effects of magnet schools compared to non-magnet schools equaled the achievement differences in students who dropped out at 10^{th} grade to those who graduate – a substantial difference. Blank, (1982) in a study of 12 different districts in as many states, concluded that the "average test scores in magnet schools are higher than scores for non-magnet schools" (pg 99).

However, the major issue discussed in magnet schools success is been one of stratification; the reason magnet schools do better is due to the self-selected, often affluent, student body. The issue of who chooses is an area of particular interest to sociology scholars in the field of stratification. According to some, magnet schools attract the best and the brightest students in the school district, “skimming” these students from the other public schools (Gamoran 1996; Lee 1995; Martinez et al. 1998).

Alternatively, there is support for the argument that it is not the selectivity of students that has resulted in the high performance of magnet schools, but the school

organization (Blank & Archbald 1992; Chubb & Moe 1990; Heid & Leak 1991; Metz 1990; Raywid 1989). The school organizations, the pedagogical and administrative features of the schools, have powerful effects on the student outcomes (Inger 91). Blank et al. (1995) conclude that the organizational aspect of magnet schools has been understudied, and this could be instrumental in the success of the magnet schools.

Magnet school organization.

Magnet schools as a form of school choice are unique in that they are opportunities for an innovative organizational environment and one that could result in a more effective organization. A more effective school organization has strong leadership, shared influence, clear goals, accord among the staff, and teacher professionalism (Chubb & Moe 1990). Moreover, the consequences of an effective school organization on student outcomes, according to Chubb & Moe (1990), are equal to an extra year of academic study. To achieve an effective school organization the staff and the school must be autonomous, as schools free from external control are shown to be more effective.

While the operative goal of a magnet school is to offer an innovative curriculum, some studies that indicate this is not always the case. The curriculum and instructional mode, that is primarily classroom-based organization, were found to be similar for both magnet choice schools and traditional schools (Archbald 1988; Sosniak & Ethington 1992). In contrast to these findings however, is the research that suggests the magnet organization does indeed encourage innovation and distinctiveness.

For the magnet school to be distinctive within the system it must develop a more autonomous organization, with teachers who are unfettered by bureaucratic chains

(Raywid 1989.) Teachers in magnet schools want to work in an innovative environment. Indeed, in her 1985 study of Texas school legislation, McNeil found the move to increased standardization in a magnet school context resulted in a drop in morale and performance of the teachers. They had chosen to work in magnet schools believing them to offer an opportunity for educational innovation. The increased bureaucratization had a negative impact on teacher and student performance.

To have an environment of educational innovation is the operative goal of magnet schools, and the experimental aspect of the magnet school is critical in keeping able teachers involved (McNeil 1987; Metz 1990). Indeed, magnet schools are, as Metz describes, "not only allowed, but expected, to offer different content or teach in a different way to traditional schools" (1990; 126). School choice should motivate aspirations for higher goals and school improvements, and usually result in schools that have less organizational bureaucracy (Henig 1997). Importantly, the school reforms will often fail if teachers are not included in policy-making issues (Johnson 1990).

The potential impact of the organization on teachers who work in magnet schools is significant (Raywid 1989). Schools of choice are opportunities to eliminate sources of teacher dissatisfaction such as powerlessness, professional isolation and fragmentation of the task to name but a few (Raywid 1989; Olson 1986). Instead of an environment that reiterates routinization as traditional schools emphasize, the magnet schools encourages innovation and invention so teachers in schools of choice often have more control in changing the class work as the situation demands (Heid & Leak 1991). In return for teacher innovation, parents and students show more interest in school (Heid & Leak 1991).

When teachers who work in magnet schools have been surveyed, as those in the Los Angeles were in 1985-86 and those in New York were in 1985, there is an overwhelmingly positive reaction for the magnet school option. The results found the teachers believed the magnet schools has increased academic achievement as well as improved the school climate. Moreover the teacher turnover was 50% lower than in the traditional schools (Magi 1985). A recent study by Hess et al. (2000) concluded teachers that had been exposed to the magnet system were more likely to support the implementation of a public school choice program, indicating the exposure had been a positive experience.

Teachers in magnet schools will be able to vary instruction practices and they must work collaboratively with other teachers in order to forward the school mission. Another positive affect of the better working conditions for teachers is the improved student teacher relations, which in turn leads to the higher levels of student success (Larson & Allen 1988; Raywid 1989). In this manner the teachers in magnet schools are more committed to the school than are teachers in traditional schools (Magi 1985). Indeed, teachers who working this creative atmosphere are less likely to leave the occupation (Metz 1990). Teaching in a school of choice provides the opportunity to provide a distinctive program, leading to greater classroom control and influence within the school (Raywid 1989; Heid & Leak 1991).

The discussion revolving around teaches in magnet schools has often been linked to ‘skimming’ too, as the better teachers could be drafted to teach in magnet schools and less able teachers left in traditional schools (Archbald 2000). However, Metz (1986) in her study of three urban magnet schools found the influence of the union and teacher

associations often impacted what teachers were in magnet schools, and teachers could not be culled from surrounding schools. Seniority and which school is physically involved in the startup are often more pressing issues in deciding what teachers will be involved initially.

Overall, “teachers are spurred to professionalized their operation.” (Raywid 1989; 20), and teachers in magnet schools will see their work as more professional than teachers in traditional schools. Teachers in magnet schools “felt more successful” (Metz 1990;129) While one or two aspects of teacher professionalization has been discussed among the researchers in relation to magnet school choice for the past decade or longer, there has been little empirical evidence investigating the overall professionalism of teachers within the magnet schools.

Archbald (1988) found teachers reported higher levels of professional autonomy than traditional school teachers and Blank (1990) concluded the teachers participation in hiring new faculty, scheduling and new educational program development, in other words when they were involved in magnet school planning, resulted in more effective schools.

Hausman et al., in 1997, compared 10 magnet and 10 traditional schools in Cincinnati, Ohio and St Louis, Missouri and found a difference in teacher reported organizational capacity between the two, specifically in organizational structures and resources. Smrekar and Goldring (1999) in their book *School Choice in Urban America* looked at magnet and traditional schools in Ohio and Missouri found that the school organizational differences between teachers in magnets and traditional schools explains more of the variance between schools than student enrollment and poverty levels measures used in the oft mentioned study by Chubb & Moe in 1990.

A recent study of a single urban district by Farmer and Farmer (2000) found there were indeed organizational differences between the 24 magnet schools and 24 traditional schools in a single large urban district. The magnet school staff shares an increased sense of control over their educational programs and increased influence over school policy issues. This increased sense of autonomy, coupled with the general support for professional development, led to an increased perception of professionalism among the magnet school teachers.

For school reform to be effective, teachers identified support to pursue an active professional development curriculum as key (Teberg 1999). Indeed, professional development is important in helping teachers make transitions into new educational zones and adopt views consistent with reform goals (Bascia 2000).

Research of magnet schools has, in one form or another, addressed the elements of teacher professionalism, autonomy, professional development, and credentialing, but not the salary of teachers. However, past research has not looked at the professionalism of magnet school teachers as a whole, but has taken only partial views with one or two elements discussed. Moreover, most of the research on magnet schools has focused on a single district, two or more districts or perhaps a region; none have looked at the issue on a national level.

Teachers' and their organizational context in magnet schools have not been studied fully resulting in a large gap in the literature. This study is motivated by the question are teachers in magnet schools more professionalized than teachers in traditional schools? If they are, it would explain the attraction magnets have to other teachers, why many would want to work there rather than a regular or traditional school, while

simultaneously help to explain the success of magnet school programs as a form of school choice overall. In comparison to previous research this study has the advantage of a nationally representative sample. Thus, this study will bring together the three strands of teacher professionalism, magnet schools and school organization, and investigate the relationship of the magnet school organization on the professionalization of teachers.

CHAPTER 4

DESIGN AND PROCEDURES.

Method and variables.

To investigate the impact of magnet schools on teacher professionalism I shall use the 1993-1994 Schools and Staffing Survey (SASS) conducted by the National Center for Educational Statistics. This survey is intended to collect information for a complete picture of American education and the sampling frame is the Common Core of Data collected by the NCES from all state education agencies. There have been three waves of the survey, the first in 1987-88, next in 1990-91 and finally in 1993-94. I will use the last wave of the survey. The SASS surveys are nationally representative of public and private schools, principals and teachers in all levels of schools from elementary through high school. The questionnaires are sent to more than 5500 Local Education Districts, 9000 public schools and over 56,000 teachers. The response rates are high averaging 90% for public schools and between 80% and 90% for teachers. In the 1993-94 survey this resulted in 47,105 public school teachers from across the United States, and of these 3263 worked in magnet schools. Ordinary least squares regression will be used as the method of analysis.

Dependent Variables.

There are four dependent variable of interest that will serve to measure the degree of professionalization of teachers and they are autonomy, professional development, credentialing, and salary.

The first dependant variable of interest is autonomy, and to ensure the full range of micro and macro autonomy is covered it will be measured by two separate variables, one on the macro level of teacher influence over school policies and the other a micro level one of teacher control in the classroom. It is important to capture both elements of independence as they imply different levels and strengths of autonomy.

Influence over school policy is an important aspect to the professionalization of teachers as it indicates the degree of autonomy teachers have over there working conditions and the organization itself. To measure the level of influence teachers feel they have regarding school policy there are 6 questions in the SASS: 1) setting school discipline policy, 2) the content of in-service development policy, 3) hiring new teachers, 4) how the school budget will be spent, 5) evaluating teachers in the school and 6) establishing the school curriculum. The responses range from 0 to 5 for each question, with 0 being no influence and 5 being a great deal of influence. The six questions were combined to form a composite index of Influence, ranging from 0 – 30 with higher values indicating more influence. A factor analysis of the variable revealed a scale with strong reliability and an alpha of .76. The average level of teacher influence over school policy however was quite low at 10.94.

Classroom control was created with, 1) Selecting textbooks for the class, 2) selecting content, 3) teaching techniques, 4) evaluating and grading students, 5) discipline, and 6) amount of homework assigned. The SASS gives a response option of 0, no control, to 5, total control for each question within classroom control. The variable was created through a composite index of Control, ranging from 0 – 30, with higher values indicating more classroom control. A factor analysis concluded the scale had strong reliability and an alpha of .79. Most teachers report fairly high levels of classroom control with the average of 24.36.

Professional development is an integral component to professionalization and there are a number of learning opportunities available to teachers. This paper includes the participation in classes from five different types of professional development opportunities as presented in the SASS data; 1) school level, 2) district level, 3) continuing adult education, 4) college classes and 5) professional organization classes. This results in a variable that ranges from 0, no classes, to a maximum of 5-teacher participation in all types of professional development available. Participation in more classes indicates a teacher who is open to new avenues of development and new ideas while belonging to an organization that promotes teacher-learning opportunities. The average number of different types of classes taken by teachers was 2.78, or nearly three separate kinds.

Related to professionalization of teachers is the corresponding increase of salary. While teachers are traditionally at the lower end of the salary scales when compared to other occupations, variation within the system is noteworthy too. The teachers reported

earnings was the continuous variable used in this study, and it ranged from nothing (!) to $90,000 annually, with the average being $31,572.

To measure teacher credentialing two variables will be investigated; 1) the highest degree earned in college/university and 2) the type of teaching certification held by the teacher. The highest degree indicates the strength of the technical knowledge held by the teacher, and the variable is divided into four types, 0) no degree, 1) associates or bachelors degree, 2) masters degree and 3) a specialist of doctoral degree. Of the teachers in this survey, 54%, had a bachelor's degree and a full 40% had achieved a master's degree. The teaching certificate is awarded by the state, and again falls into four categories; 0) no certification, 1) a probationary/alternative certificate, 2) a regular certificate, and 3) a master teacher certificate. Most teachers in this survey, 96.6%, were certified to teach. Fourteen percent hold master teaching certificates but nearly 6% have probationary certificates.

Independent Variables.

Initially, the specification of magnet school designation and the geographical context of the school will be taken into consideration; both the type of community and the region of the country the school. Next, the school level variables are accounted for. The independent school level variables in this analysis are: 1) the school level, 2) the student teacher ratio in the school, 3) the percentage of the minority student enrollment, and 4) percentage of poor students in the school. To control for individual variation the number of years of teaching experience and union membership of the teacher will be added.

Magnet school designation is the major independent variable in this research and is a dichotomous variable. There were a total of 3263 teachers in this survey that report working in a magnet school.

The geographical context and community setting of the school - the environment in which the school is embedded - will be used in this study. The variable of region is a qualitative definition and thus was coded within a dichotomous framework; the Southern region was the reference category as is it had the highest number of respondents, and the Northeast, Midwest and West were all coded as one. The community in which the school is located is measured in the level of urbanity the school is situated in as designated by the census bureau, and this is coded into three groups. As the variable is also a qualitative distinction – urban or suburban or rural, the measure was coded into two dichotomous variables. The reference group was the rural area as this was the largest category.

The type of school is first introduced with the dichotomous school level variable, an elementary school (0) or a secondary school (1). Sixty-six percent of the teachers report working in a secondary school, 34% in an elementary school. Next the student teacher ratio is introduced. The ratio was calculated by dividing the total number of students by the total number of teachers. Magnet school success is sometimes attributed to extra resources put into the institution, and this can manifest itself in a smaller ratio. Additionally, previous research (Arum 1996; Sorenson & Hallinan 1977) contends that more teaching staff is the primary method of utilizing 'extra' funding. The overall average for the ratio was 14.47 pupils per teacher, with a standard deviation of 4.9.

To further define the school context details of the student body are added: The percentage of minority students in the school and the percentage of poor students in the school. The latter is a common measure of the socio-economic status of the school in education research (i.e. Saporito & Lareau 1999). The percentage of minority students in a school averaged 27%, and the poor student percentage mean is at 33%.

To allow for individual variation in the professionalism measures both total years experience of the teacher and union/teacher association membership will be used. The latter variable is a dichotomous variable with 1 indicating a union member. The average teacher tenure was nearly 15 years, and 77% of teachers were members of a teacher union or association.

Data analysis and results.

The initial foray into the data reveals the magnet school teachers represent about 8% (3263) of the total survey population. Looking at Table 1, it can be noted that most magnet schoolteachers (38%) and traditional schoolteachers (34%) are located in the South. Magnet schoolteachers are slightly underrepresented in the Midwest (18.5% compared to 24.7%) with very similar numbers in the West (26.6% compared to 28%) and on par in the Northeast (14.5% compared to 14.9%). However, when the community context is viewed it can be seen that magnet school teachers are overly represented in the urban areas (52.5%) compared to traditional teachers (20.6%). Conversely, traditional teachers are more prominent in the rural areas (55.3%) compared to the magnet teachers (17%).

Table 1. Distribution and school type.

		Traditional	Magnet
Region	Northeast	14.9% (5991)	15% (464)
	Midwest	24.7% (9922)	18.5% (583)
	South	33.8% (13581)	38.3% (1251)
	West	26.6% (10701)	28.2% (904)
Level of urbanity	Central city	20.6% (8274)	52.5% (1697)
	Urban fringe or large city/town	24.1% (9702)	30.5% (951)
	Rural or small town	55.3% (22219)	17.3% (554)
School level	Elementary	34.7% (14141)	23.7% (774)
	Secondary	65.3% (26637)	76.3% (2489)

In comparing the magnet and traditional schools on a school level context it can be noted immediately that more magnet school teachers work in secondary schools than do traditional schoolteachers (Table 1). Seventy-six percent of magnet teachers are in secondary schools compared to 65% of traditional schoolteachers. The majority of magnet school teachers in this survey, 76%, work in secondary schools compared to 65% of traditional teachers.

The student teacher ratio (Table 2) posits an interesting difference between the magnet and traditional schools in that magnet school have a higher ratio; 16:1 compared to 14:1 - two more children per teacher. The difference in size could be related to the greater number of magnet high schools, but the image of magnets is to have greater student teacher interaction and so the higher classroom numbers are intuitively off. The student composition of schools is as shown in Table 2 is somewhat expected in that the minority populations of magnet schools is greater than the traditional schools, 47% in magnets and 26% in traditional. As magnet schools were formulated to ease racial desegregation this is intuitively fitting. Interestingly, there is little variation between the numbers of poor students in magnet and traditional schools, 34% compared to 33%.

Table 2. School and teacher independent variables.

	Traditional		**Magnet**	
	Mean	Standard deviation	Mean	Standard deviation
Student teacher ratio	14.34	4.9	16.1	4.9
Percent minority students	25.89	29.66	47.31	34.15
Percent poor students	32.53	25.93	34.30	25.31
Teacher experience in years	14.76	9.14	15.58	9.32

The teachers in magnet schools appear to differ only slightly to those who work in traditional schools when looking at the descriptive statistics. Magnet schoolteachers average around 9 months more experience than traditional schoolteachers and this would constitute an academic year. The number of magnet schoolteachers who are members of unions or organizations is slightly higher than traditional schoolteachers, 80% compared to 76%.

A look at teacher credentialing shows that magnet school teachers are more likely to hold higher degrees than traditional teachers, 6% more have master's degrees and 2% more have specialist or doctoral degrees (Table 3). Additionally, 2% more have master level teaching certification. At the other end of the spectrum though, magnet school teachers are twice as likely not to have a degree at all (1.4% compared to .7%) and more magnet school teachers have either a probationary teaching certificate or none at all than traditional teachers (11% compared to 9%). This is somewhat of a dichotomous picture emerging with greater extremes at either end present in the magnet schoolteacher populations, whereas traditional schools seem to be more moderate and centered.

Table 3. Teacher credentialing in magnet and traditional schools

		Traditional	Magnet
Highest degree earned	No degree	0.7%	1.4%
	Associates/bachelors	54.6%	45.8%
	Masters	39.4%	45.3%
	SpD or PhD	5.2%	7.5%
Type of teaching certificate	No certificate	3.4%	4.1%
	Alternative/probationary	5.7%	6.8%
	Regular	76.6%	73.0%
	Advanced	14.3%	16.1%

When looking differences in professional development there is almost no variation between magnet and traditional teachers, 2.77 to 2.78, and magnet teachers seem to have slightly *less* classroom control and school influence than traditional teachers, (Table 4). What does seem to be a major difference between magnet school and traditional teachers however is their salary; the mean difference between the two is over $4000 in magnet schoolteacher's favor! As there has been little mention of the higher magnet school teacher salaries over traditional schoolteachers in previous research this is a little surprising.

Table 4. Professional teacher dependent variables.

	Traditional		Magnet	
	Mean	Standard deviation.	Mean	Standard deviation.
Influence over school policy	10.99	5.72	10.70	5.98
Control in the classroom	24.43	4.61	23.92	4.85
Professional development	2.78	1.22	2.77	1.26
Salary	$31,111	$10,249	$35,358	$10,287

Overall, when looking at the descriptive statistics of magnet and traditional schoolteachers on the professionalization variables there appears to be little difference, but when it does occur the balance leans on the side of traditional, and not the magnet

schoolteachers. The notable exception, however, is compensation, where magnet school teachers are significantly more highly paid than traditional schoolteachers.

Regression Analysis.

With the regression analyses however, a slightly different picture emerges. When holding the independent variables constant, the magnet school context is positively significant in three areas of professionalization; influence over school policy, professional development and salary. It is not significant in control in the classroom or the credentialing variables, both the highest degree earned or the type of teaching certification. Each of the professionalization dependent variables were investigated with the independent variables introduced in blocks to ascertain which part of the school context, if any, was the most important. Magnet school designation, along with the geographical placement of the school, was the initial mode. The second model introduces the school level data; school type, the student teacher ratio, the percentage of minority and poor students in the school. Model three adds individual teacher data; the number of years experience and if the teacher is a member of a union or teacher association.

Autonomy – influence over school policy

In the realm of teacher influence over school policy (Table 5), the magnet school context is as statistically significant at the $p<.01$ level in a positive direction. In other words, a teaching in a magnet school results in teachers exerting more influence over school policy. Overall, the model explains 3.7% of the variance of teacher influence over school policy; fairly good considering the issue of interest is the impact of the magnet school environment on the teachers' professional autonomy. The R^2 changes very

little with the inclusion of the individual data compared to the changes afforded by the school level data.

Table 5. Regression analysis of teacher influence.

	Model 1	Model 2	Model 3
Magnet school (1= yes)	-.001 (.110)	.309 (.110)**	.325 (.110)**
Community type [a]			
Urban	-.597***(.072)	-.241** (.077)	-.207** (.077)
Suburban	-.214** (.069)	-.061 (.072)	-.031 (0.072)
Region [b]			
Northeast	.878*** (.087)	.487*** (.090)	.577*** (.092)
Midwest	1.125*** (.074)	.759*** (.077)	.816*** (.079)
West	2.201*** (.073)	2.18*** (.073)	2.18*** (.074)
School level (1 = secondary)		-.982*** (.061)	-.958*** (.061)
Student teacher ratio		-.053*** (.006)	-.050*** (.006)
Percent minority students		-.012*** (.001)	-.017*** (.001)
Percent poor students		-.006*** (.001)	-.006*** (.001)
Years of teaching experience			-.032** (.003)
Union or association member			-.066 (.069)
Constant	10.14	12.07	12.53
R^2	.024	.035	.037
N = 44041			

(Standard error in parenthesis).
*= p<.05, ** = p<.01, *** = p<.001
a = reference group is the rural community.
b = reference group is the Southern region.

Whereas the strength of the magnet school variable increases positively with the addition of school and individual level data, the community context declines in strength and significance. Both urban and suburban areas are less influential as compared with the rural areas. The suburban areas are not statistically significant at all and the urban area is significant at the p<.01 level. In other words, the teacher influence over school policy declines significantly in the urban areas as compared to the rural areas.

The region is the other variable that has a positive influence over school policy, with the Southern teachers being less influential over policy than teachers in any other

region. The Northeast, the Midwest and the West are statistically significant ($p<.001$) but the impact of the West is notable. Teachers in the West are nearly 8% more likely to be influential over school policy than Southern teachers, whereas teachers in the Midwest are 4% more influential than Southern teachers and those in the Northeast only 2% more influential. The inclusion of school level data resulted in a slight decline in strength for all regions, particularly the Northeast that dropped by almost 50%, and the Northeast and the Midwest gained slightly with the inclusion of individual level data, suggesting the school level data has a stronger impact on teacher influence than either years of teaching experience or membership of a union or organization. The West remained stable after individual level data where included, resulting an area that has a strong teacher influence over policy.

The move from the elementary to the secondary school context reduces teacher influence, as does an increase in the student teacher ratio. This would mean larger schools with bigger classes, as high schools typically are, afford teachers less opportunity to participate in school level decision-making than the smaller elementary schools. The effect of the student composition is statistically significant too. The increase in the minority student percentage is only slightly stronger than the percentage of poor students in the school, but both are a substantively low amount.

An interesting aspect of the regression model is the decline of influence with an increase in teacher experience. This means a ten year veteran would feel less influential over school policy than a novice teacher! While the substantive amount is fairly small, it is nonetheless statistically significant. The literature on teacher burnout as tenure increases helps to explain the decline of influence with experience; however, belonging to

a union or teacher association has no statistical impact on teacher influence over school policy.

Autonomy - Control in the classroom.

On the micro context level of autonomy, control in the classroom, the magnet school context is not significant, however. Table 6 shows the regression with the dependent variable of control in the classroom on the independent variables. The only other non-significant variable is that of the percentage of poor students in the school, all others are statistically significant. Overall however, teachers feel a great deal of control in the classroom with the mean of around 24 out of 30, and the model explains about 5% of the total variance in classroom control.

There is little difference to the overall explanatory power of the model with the inclusion of individual level data (4.9% to 5%) whereas the school level factors result in a substantial growth (3.1% to 4.9%). As the study is intended to look at the impact of the magnet school context on the professionalization variables, the overall explanatory power of the model is relatively minor.

While both urban and suburban areas, as compared to rural areas, have lower levels of classroom control, the urban areas experience a slightly greater decline. Region is again statistically significant in a positive direction, with all non-Southern teachers experiencing greater classroom control than Southern teachers. Again, it is the teachers in the West that are the most autonomous in the classroom, closely followed by the Midwest, and then the Northeast. Interestingly, when the school level data are included in the analysis, the classroom control of Western teachers increases while the other areas decrease but addition of individual level data results in a slight increase for all regions.

On the whole, region has substantially the greatest effect on classroom control in this study

Table 6. Regression analysis of control in the classroom.

	Model 1	Model 2	Model 3
Magnet school (1= yes)	.022 (089)	.109 (.089)	.116 (.089)
Community type [a]			
Urban	1.22 (.058)***	-.838 (.062)***	-.817 (.062)***
Suburban	-.820 (.055)***	-.609 (.058)***	-.588 (.058)***
Region [b]			
Northeast	1.08 (.070)***	.743 (.072)***	.828 (.074)***
Midwest	1.53 (.060)***	1.20 (.062)***	1.26 (.063)***
West	1.27 (.059)***	1.41 (.059)***	1.44 (.060)***
School level (1 = secondary)		.898 (.049)***	.897 (.049)***
Student teacher ratio		-.078 (.005)***	-.077 (.005)***
Percent minority students		.009 (.001)***	-.009 (.001)***
Percent poor students		.000 (.001)	.000 (.001)
Years of teaching experience			-.006 (.002)**
Union or association member			-.229 (.055)***
Constant	23.96	24.70	24.91
R^2	.031	.049	.050
N = 44041			

(Standard error in parenthesis).
*= p<.05, ** = p<.01, *** = p<.001
a = reference group is the rural community.
b = reference group is the Southern region.

Moving from the elementary to the secondary school level results in a positive effect on classroom control; teachers of older students feel more in control in the classroom would be the initial interpretation. However, the variable includes not just student discipline but also selecting the topics to teach and as well as teaching techniques, the amount of homework and student evaluation. These factors would seem not to alter much with the increase age of the students. Perhaps the increased use of standardized tests to measure success results in more 'teaching to the test' in the elementary grades that is not as strictly operationalized in secondary schools. After all, the major measures of

success are in 3rd and 5th grades and the Iowa basic skills test, and high schools have only 8th grade and then the SATs that are more varied in content.

An increase in the student teacher ratio resulted in a decline of classroom control; perhaps maintaining discipline in a large class is more difficult than in a small one. What is interesting about the student body variables is that only the percentage of minority students are statistically significant, in a negative direction, in classroom control, not the percentage of poor children in the school.

The inclusion of the teacher level variables has virtually no impact on the other factors, and the minimal change in the R^2 reflects this. More teacher experience and union or teacher association membership is statistically significant but again in a negative direction.

The fact that working in a magnet school has little impact on teacher control in the classroom is not altogether surprising. After all, teachers have traditionally felt more autonomous in the micro setting of the classroom and the overall high mean of respondents suggests this is still so. It is interesting to note however, the school context is more powerful an indicator of classroom control than individual level data as is illustrated by the minute change in the R^2 with the inclusion of teacher information.

Professional development.

The magnet school context is statistically significant in the arena of professional development. Indeed, yet again, it is one of the few positive significant variables in the model. The magnet school context was not significant until the school level data were added however, and it changed little with the inclusion of individual level data.

Table 7. Regression model of professional development on independent variables.

School level (1 = secondary)	Model 1	Model 2	Model 3
Magnet school (1= yes)	.018 (.024)	.054 (.024)*	.053 (.024)*
Community type [a]			
Urban	-.036 (.016)*	-.002 (.017)	-.008 (.017)
Suburban	-.059 (.015)***	-.033 (.015)*	-.041 (.015)**
Region [b]			
Northeast	.003 (.019)	-.043 (.019)*	-.089 (.020)***
Midwest	.217 (.016)***	.180 (.017)***	.148 (.017)***
West	.315 (.016)***	.321 (.016)***	.288 (.016)***
		-.139 (.013)***	-.129 (.013)***
Student teacher ratio		-.010 (.001)***	-.011 (.001)***
		-.001 (.000)**	.001 (.000)**
Percent minority students		-.001 (.000)	.001 (.000*
Percent poor students			-.007 (.001)***
Years of teaching experience			
Union or association member			.203 (.015)***
Constant	2.669	2.945	2.925
R^2	.013	.017	.024
N = 44041			

(Standard error in parenthesis).
*= p<.05, ** = p<.01, *** = p<.001
a = reference group is the rural community.
b = reference group is the Southern region.

The community context in relation to professional development results in both urban and suburban areas losing ground to the rural areas; both are statistically significant in a negative direction. However, the inclusion of school level data results in a significant drop in significance, and urban areas lose significance altogether while suburban areas are weakened. The inclusion individual level data produces little change in the urban environment and minor change in suburban areas although both always remain negative. Thus, suburban schoolteachers have a smaller range of professional

development classes than either urban or rural teachers, and the difference between urban and rural is relatively small.

The regional picture, however, is more complicated. Compared to the South, the Northeastern teachers experience fewer professional development classes whereas teachers in both the Mid-West and the West have more classes. The Northeast region was not significant in the first model, but the inclusion of school level data resulted in an increase of significance, and individual level data doubled that – but all in a negative direction. The West was again the strongest area for teachers, with the region having the single strongest impact of all the variables in the model. With this topic however, there could be regional issues such as state requirements that result in an increase of professional development classes taken by teachers.

The move from an elementary to a secondary level school resulted in a decline of professional development opportunities taken, as did a higher student teacher ratio. Again this suggests that larger schools are not as professionalized for teachers as are smaller schools. The student population has a positive effect on professional development, but while it is statistically significant it substantively small. Moreover, the percentage of poor students in the school was not significant until individual characteristics were introduced, and both then changed from negative to positive effects. That an increase in what would be considered 'an undesirable' student body would result in more professional development classes is unexpected.

In fact, more teaching experience also leads to a decline in professional development opportunities taken, which is also unexpected. However, it could be that newer teachers have more opportunity for professional development and more seasoned

teachers are disaffected with teaching overall and see no need for continued education. "Been there, seen that" could sum up the attitude. The drop in classes is quite small. Membership in a union or association however, leads to a positive and fairly robust increase in professional development, an effect second only to teaching in the West.

Teacher salaries.

The area in which there is the most difference between magnet and traditional schoolteachers is manifest in the area of compensation; magnet schoolteachers make more money than traditional schoolteachers (Table 8). The magnet school context is very significant ($p<.001$) and results in an average increase of $1,412 for the teacher. The overall R^2 for the model is a robust .475, so it would explain about 50% of the variance in teacher salaries. However, the inclusion of individual level data increased the R^2 of the model from .22 to .47, so the explanatory power of the model was greatly increased with the addition.

Both urban and suburban area teacher make more money than rural teachers, and both are statistically significant ($p<.001$). Interestingly, suburban teachers make the most, an increase of $3,395 over rural teachers, but as the more affluent living areas are usually the suburbs however, the higher salary ranges there are not too surprising under a system of local funding of schools. While the statistical significance did not alter with the inclusion of school level variables, the amount of difference dropped quite dramatically, for both it fell around $1,500. The addition of individual level data changed the salary amount difference in a comparatively minor fashion.

Table 8. Regression analysis of teacher salaries.

	Model 1	Model 2	Model 3
Magnet school (1= yes)	2,752***	1,705***	1,412***
	(178)	(177)	(145)
Community type [a]			
Urban	4,215***	2,692***	2,026***
	(117)	(123)	(101)
Suburban	5,342***	3,997***	3,395***
	(111)	(115)	(94)
Region [b]			
Northeast	10,274***	10,844***	8,902***
	(141)	(144)	(121)
Midwest	2,135***	3,049***	1,788***
	(120)	(124)	(103)
West	3,144***	2,675***	2,645***
	(118)	(117)	(97)
School level (1 = secondary)		696***	328***
		(98)	(80)
Student teacher ratio		143***	99***
		(10)	(8)
Percent minority students		66***	67***
		(2)	(2)
Percent poor students		-60***	-47***
		(2)	(2)
Years of teaching experience			546***
			(4)
Union or association member			2,396***
			(90)
Constant	25,948	24,137	15,542
R^2	.187	.220	.475
N = 44041			

(Standard error in parenthesis).
*= p<.05, ** = p<.01, *** = p<.001
a = reference group is the rural community.
b = reference group is the Southern region.

The region in which the schoolteacher taught has a significant effect on salary. Those in the Northeast make $8,902 more than teachers in the South, the Western teachers make $2,645 more than Southern teachers and Midwestern teachers make $1,788 more than Southern teachers. As with the community setting, the inclusion of school

level data reduced the amount of earnings somewhat. The inclusion of individual level data reduced it yet again, but more for those in the Northeast and Midwest than the West.

Teaching in a secondary school will increase a teacher's salary by $328 as compared to an elementary school, but before the inclusion of individual level data that figure was $696, so it dropped by 50%. The inclusion of individual level data also resulted in a decline in the amount of change in the student teacher ratio. The increase of class size, as manifest by a greater student teacher ratio, results in a gain of about $100 per extra student. Both however, still are gains in the overall salary of the teacher. Interestingly, the increase in the numbers of minority students also results in an increase of pay for teachers; for every percent of minority students there will be a gain of $67. However, for every percentage increase of poor students in the school the teacher will lose $47.

The individual level data adds to the overall robustness of the model, and indicates that for every year of experience a teacher makes an additional $546 per annum. In this manner, a 20-year veteran teacher will make about $11,000 more than a novice teacher. When the totality of a career is considered, this is not a huge amount. Belonging to an association or union will lead to a salary gain of $2,396.

Magnet schools, in regards to salary, are very significant. To make up the same amount of increase in salary, a teacher in a traditional school would have to have a class of 14 more students or be in a school with a minority population at least 30% greater than the magnet school (with no poor students) or have at least 3 years more experience. Quite a difference. Teachers in the Northeast make considerably more than do teachers in other regions, but the cost of living is higher there too. Southern teachers do seem to be the

least paid, but again the cost of living is less in the South. For teachers in the South, the pay difference for working in a magnet school would be more substantial than for teachers in the Northeast, but still fairly significant for Midwestern and Western teachers too.

Highest degree.

For the highest degree earned, the addition of the school level contextual variables results in the magnet school becoming non-significant; in the initial model it significant ($p<.01$). At this stage however, it is less powerful than the geographical context.

Rural areas are once more at the bottom of the pile; both urban and suburban areas have similar positive increases over the reference group. The addition of school level or individual level data has little impact on the strength of the community affect. The regions however, are spaced either side of the South. The Northeast has slightly more teachers with higher degrees than the South, but both the West and Midwest fall behind and to a similar level.

All the school level variables are significant, but the percentage of poor students in the school is the only factor that results in a decline in teacher degree level. This could be accounted for by poor schools will have fewer highly qualified teachers to choose from. The move to a secondary school is affected by the inclusion of individual level data but only slightly, and results in a higher degree change than does the student teacher ratio or the percentage of minority students in the school. Indeed, the percentage of minority students or percentage of poor students is statistically significant but their actual affect is very small.

Both the individual level data is positively significant. Indeed, the inclusion of individual level data increases the R^2 of the model from .03 to .109; the full model explains nearly 11% of the variance in the highest degree earned. Membership of a union or association increases the highest degree earned by a nominal amount too.

Table 9. Regression analysis of highest degree.

	Model 1	**Model 2**	**Model 3**
Magnet school (1= yes)	.039** (.012)	.021 (.012)	.012 (.011)
Community type [a]			
Urban	.137*** (.008)	.125*** (.008)	.104*** (.008)
Suburban	.150*** (.007)	.124*** (.008)	.105*** (007)
Region [b]			
Northeast	.104*** (.009)	.103*** (.010)	.045*** (.009)
Midwest	-.046*** (.008)	-.044*** (.008)	-.081*** (008)
West	-.062*** (.008)	-.073*** (.008)	-.071*** (008)
School level (1 = secondary)		.061*** (.007)	.048*** (006)
Student teacher ratio		.003*** (001)	.002** (001)
Percent minority students		.001*** (.000)	.001*** (.000)
Percent poor students		-.001*** (.000)	-.001*** (000)
Years of teaching experience			.018*** (.000)
Union or association member			.057*** (.007)
Constant	1.44	1.39	1.15
R^2	.024	.030	.109
N = 44041			

(Standard error in parenthesis).
*= p<.05, ** = p<.01, *** = p<.001
a = reference group is the rural community.
b = reference group is the Southern region.

The type of degree a teacher has earned is often directly related to the salary the teacher earns. It is because of this many teachers earn masters degrees; in this study 40% of the teachers had earned a masters degree. Although more magnet school teachers than traditional teachers had advanced degrees, this was not a statistically significant difference.

Type of certification.

The magnet school variable was not at all significant in the type of teaching certificate held by the teacher.

Table 10. Regression analysis for type of teaching certificate.

	Model 1	Model 2	Model 3
Magnet school (1= yes)	.000 (.0111)	.018 (.011)	.010 (.011)
Community type [a]			
Urban	-.025** (.007)	.008 (.008)	-.010 (.008)
Suburban	.036*** (.007)	.032*** (.007)	.015** (.007)
Region [b]			
Northeast	-.098*** (.009)	-.133*** (.009)	-.187*** (.009)
Midwest	-.033*** (.008)	-.071*** (.008)	-.105*** (.008)
West	-.103*** (.007)	-.116*** (.008)	-.115*** (.007)
School level (1 = secondary)		-.023*** (.006)	-.034*** (.006)
Student teacher ratio		.000 (.001)	-.001 (.001)
Percent minority students		-.001*** (.000)	-.001*** (.000)
Percent poor students		-.001*** (.000)	-.001*** (.000)
Years of teaching experience			.016*** (.000)
Union or association member			.061*** (.007)
Constant	2.06	2.16	1.90
R^2	.007	.016	.083
N = 44041			

(Standard error in parenthesis).
*= p<.05, ** = p<.01, *** = p<.001
a = reference group is the rural community.
b = reference group is the Southern region.

Compared to the rural areas, the urban teachers have lower levels of teaching certificates but were insignificant whereas the suburban areas have higher levels and are significant (p<.01). All the regions have lower certification levels than the South – a first. The Northeast has the greatest drop and it is indeed the biggest effect of the model.

On the school context, the level of school is significant, with a decline in the type of certificate with a move to a secondary school. The student body – the percentage of

minority students and percentage of poor students- have significant effects but again are small in actual numbers.

With this analysis the inclusion of the individual level data increases the overall the R^2 - .016 to .083 – and therefore the full model explains 8.3% of the variance in the type of teaching certificate held by the teacher. Both variables have a positive affect which means they lead to an increase in certification type and not a decrease as many of the other variables do.

Overall, most public schools require state certification of their teachers, so the magnet school context was not particularly different to the usual expectations. The dispersion of teachers with probationary and advanced degrees is more or less equal between the traditional and magnet schools.

CHAPTER 5

SUMMARY AND DISCUSSION.

Teacher professionalization and magnet schools have been researched separately but never concurrently even though the importance of both topics is considerable in this era of school reform. The lack of information concerning the organizational context of the magnet school on the professionalization of teaching is palpable and this study helps to fill this gap.

The findings provide evidence that support the hypothesis that the magnet school context is relevant to the professionalization of teachers. The following components are areas in which the magnet school context is significant:

- Autonomy – influence over school policy. The greatest impact resulted with the inclusion of the school level data while the addition of individual level data failed to exert any significant influence on the overall model.
- Professional development. Again the addition of the school level data resulted in the magnet school context becoming significant while the individual level data had little effect.
- Salary. The impact of the magnet school context on teacher earnings was obvious from the initial community-setting model and retained its highly significant impact through the addition of school and individual level data.

The professional model components of autonomy defined by control in classroom and credentialing are not statistically significant. The two elements however, have high

averages for both magnet and traditional schoolteachers, thus a degree of professionalization is already present. The elements that are significant in the analysis are central to the argument of teacher professionalism as they compile the crucial issues currently under debate by educators and researchers and are central in the dialogue on teacher recruitment, retention, commitment levels and superior student outcomes.

The magnet school as an organization is permitting a more professionalized environment for teachers that teachers by themselves cannot create. Without the structure for participation in school policy, teachers cannot have any influence. Without the support for teacher professional development, teachers cannot participate nor can they increase their own salary beyond the compensation structure decided by the district.

Discussion.

Public school choice is not the panacea for all problems in education, but it offers an option in an arena that needs attention. The magnet school is unique within school choice options available because it involves a 'different' organization that is still a part of the school district network. For instance, charter schools are usually separate from the school district in a manner that makes them somewhat semi-private and therefore exempt from the standard regulations of other schools in the area. Moreover the voucher system does not promote change in any public school organization within the system but instead allows the inclusion of private schools into the parental choice equation. Thus the magnet school organization is part of the public school framework with opportunity for institutional innovation and greater teacher participation.

There has been debate on the enthusiasm of teachers for increased participation in school policy and organization. This entails an increased level of responsibility for

teachers – greater accountability. The reaction of some teachers to many school reform initiatives has been lukewarm or even resistant, but the literature suggests this is due to the never-ending stream of reform measures that put teachers at the center of change without consulting them to see if it is plausible option. For instance, the recent move in Georgia to decrease class sizes and have only certified teachers in a class has resulted in old classes of 30 students with one teacher and one assistant (para-pro's) to classes of 22 with only a teacher. The teachers do not see this as progress. For school reform to be successful it must include teachers in the dialogue and it must recognize the knowledge teachers have as legitimate.

The focus on the professionalization of teachers within the framework of school choice is just one offshoot of the debate that is worthy of greater investigation. Studies indicate that greater teacher professionalization results in increases in the commitment, retention, motivation, and satisfaction of teachers, which in turn contributes to enhanced student learning (Baker & Smith 1997; Darling-Hammond 1997; Ingersoll 2001). If this basis of professionalism is accepted, then the magnet school model of increased teacher professionalism could help traditional schools increase the level of teacher professionalism, and this could lead to higher student outcomes.

There is research to substantiate the claim that magnet schools perform better in relation to student outcomes than traditional schools (e.g., Blank 1990; Gamoran 1996). But studies also indicate parents and teachers prefer the magnet school environment for a variety of other reasons too, including teacher and student commitment to education and the overall "learning atmosphere" of the school that such moral commitment generates (Smrekar & Goldring 1999). Many of the magnet schools report having a community of

teachers, one in which the teachers actively work together, and with administrators, toward the overall institutional goals. This professional culture is often an offshoot of increased professionalization, and leads to higher levels of teacher satisfaction and commitment. Moreover, it adds to the explanation of the attraction of the magnet school context to the teachers who work there. If teachers are more satisfied with their occupation they are more likely to perform better. Parents and administrators cannot fail to appreciate this.

There are some possible negatives associated with an increase in professionalism that must be addressed. Some recent criticisms of the medical profession exemplify the negatives, such as the domination over the market of health care and the imbalance of power in the client/doctor relationship. The investigation into teacher professionalization needs to address these issues too. However, teaching as an occupation has never achieved the status and prestige of medicine, and the policy makers in education dominate practitioners. From this perspective, teacher professionalization will lead not to a teacher centered education system, but to a system in which practitioners have, at the very least, a voice equal to that of administrators and policy makers in the organizational framework.

School choice is, according to many, the educational wave of the future, and magnet schools as a form of school choice illustrate how the participation and professionalization of teachers can increase the effectiveness of schools. As a reform policy, school choice will be ineffective without teacher participation, and teacher participation will rise with the increased professionalization of teachers.

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