

SETTING BOUNDARIES: MONITORING THE EFFECTS OF CLOSER-TO-HOME
SCHOOL REZONING ON STUDENT PARTICIPATION
& ENGAGEMENT IN SCHOOL

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CHAPTER I

INTRODUCTION

This dissertation addresses the role of community resources in the recent trend toward the establishment of neighborhood schools. Community resources tend to be geographically distributed; therefore, resources such as social, human, and economic capital are not equally present in all neighborhoods and subsequently, they are not equally present in all school attendance zones. A trend toward neighborhood schools could mark a perpetuation of inadequate and inequitable educational opportunities for students living in disadvantaged neighborhoods. This relationship between neighborhood resources and their effects on student outcomes is addressed within the context of the Greenville Metropolitan Public Schools (GMPS, or Metro), an urban, Southeastern school district recently declared unitary after decades of court-ordered desegregation.

A grant of “unitary status” is the legal term, and actually, a legal status of a school district that has, according to a federal court, achieved to the extent practicable the court’s requirements for desegregation. A unitary school system is one in which the segregative practices of the former dual system are no longer evident and no longer affect current operations. When a district is declared unitary, racial balancing and the associated cross-town busing practices are generally replaced with elaborate student re-assignment plans involving a return to neighborhood schools, or schools that are closer to students’ homes. This reorganization of urban schooling represents a significant shift in priorities—it introduces an era where past priorities of racial balancing are superceded by a renewed

emphasis on sending children to schools that are closer to their homes. This shift is prevalent across most urban school districts that have been declared unitary (Orfield, 2001).

Because most diverse, urban school districts are residentially segregated, a return to neighborhood schools often marks a return to segregated schools—schools segregated by both race and socioeconomic status (Frankenber, Lee, & Orfield, 2003; Frankenberg & Lee, 2002; Orfield & Eaton, 1996). As school districts move from court-ordered to court-ended desegregation, monitoring the tensions between the sense of place that neighborhood schools are intended to foster and the potential effects of the geographically-based distribution community resources, or lack thereof, becomes paramount.

In theory, a return to neighborhood schools offers the possibility for increased participation in schools for both parents and students, increased community attachment, and more time and opportunities for extra-curricular activities. When students and parents live close to their schools, participation may be less time consuming and may be less of a burden on families. Therefore, schools may be better able to act as centers for community life and address needs specific to the geographic area they serve. Some also argue that neighborhood schools offer possibilities for increased social capital, as schools can become a center for community life and interaction (Goldring & Crowson, 2002; Driscoll, 2001). In the case of high-poverty, re-segregated schools, this increase in social capital could most likely come from targeted social services, community outreach programs, additional school resources, and other compensatory education strategies designed to meet the needs of students living in particular neighborhoods. The

underlying assumption is that residents living in certain neighborhoods have specific needs in terms of education and schooling, and those needs can best be met within the context of a specific community. The work of James Comer (1980) provides support for this model of community-based educational interventions. His intervention program was implemented in two schools in New Haven, Connecticut and both schools demonstrate the power of community-based schools in providing the necessary resources for communities to invest in schools and in education, thereby enhancing the social capital of students, parents, and communities (Comer, 1980).

As early as 1966, Coleman's and his colleagues' research on educational resources and student achievement demonstrated no relationship between most school-level resources and student achievement on standardized tests. The variable that did have the greatest, positive relationship with student achievement was the composition of the school's student population. Students from low-income populations reached significantly higher achievement levels when they attended schools where a majority of students came from middle- or upper-income populations. When school composition was mostly low income, students did not perform as well. Recent work has confirmed Coleman's findings (see Sampson & Raudenbush, 1999; Furstenberg, Cook, Eccles, Elder, & Sameroff, 1999).

More recently, Catsambis and Beveridge (2001) found that characteristics of disadvantaged neighborhoods and schools impact student achievement both directly and indirectly. Specifically, neighborhoods characterized by concentrated disadvantage and schools characterized by student poverty and absenteeism tended to depress students' achievement in mathematics. There was also an indirect relationship between

neighborhood and school disadvantage and student achievement: disadvantaged neighborhoods were found to be related to the absence of parental practices (i.e., parents' ability to help with homework and other forms of parental involvement) that are associated with high mathematics achievement. "Place of residence," according to Catsambis and Beveridge (2001) "may have important consequences for the academic success and the resulting life chances of adolescents. Place of residence may affect minority students the most, because they are concentrated in inner-city, disadvantaged neighborhoods" (p. 24; also see Massey & Denton, 1993). Such studies provide evidence that disadvantaged neighborhoods lack resources that are important for determining the educational success of children, and as such, students attending neighborhood schools in disadvantaged neighborhoods do not perform as well as students who live in more advantaged neighborhoods.

In reaction to these findings and in an attempt to provide more equitable education in terms of peer effects, several school districts across the country have adopted intricate student assignment plans that consider a student's socioeconomic status as either a mechanism for drawing school zones (for example, Wake County North Carolina) or a tool for controlling school choice (such as, Charleston South Carolina and Boston Massachusetts). While well intended, these plans discount the possibility that neighborhood schools may offer students and parents—especially students and parents from low-income areas with limited access to transportation—greater opportunities for involvement and participation, thereby creating a more consistent and stable environment that may be important for students. Nevertheless, evaluations of these student assignment plans suggest that they result in higher student achievement (measured by performance

on standardized tests), particularly for students from lower socioeconomic backgrounds (Willie, 1990; Willie, Alves, & Hagerty, 1996; Willie, Alves, & Mitchell, 1998).

It is important to note, however, that most of the research documenting the negative effects of disadvantaged communities on student outcomes considers academic achievement as the only outcome of interest. Regardless, it is possible for neighborhood schools to act as a positive force in the lives of residents in disadvantaged neighborhoods in other ways. When using more community-based outcomes to evaluate school effectiveness—outcomes such as students’ social engagement and participation in schools—some suggest that neighborhood schools can contribute to an enhanced sense of community and sense of place for children. Driscoll (2001) writes that the rediscovered neighborhood school has a unique opportunity to help individuals reclaim a valuable sense of place in their lives—connecting home, neighborhood, school, and community institutions in an interactive web of sustained associations, common dreams, expectations, and shared human and social capital.

In response to the fact that a return to neighborhood schools often results in a return to racially segregated schools, Morris (2001) writes,

African American schools once served as the centers of close-knit communities, and in many instances, desegregation policies adversely affected African American students’ and families’ connections with their formerly all black schools. . . . Low-income, predominately black communities especially need stable institutions and for many urban communities, schools can serve this function. (p. 595; also see Kersten, 1999)

Such research supports the notion that neighborhood schools—regardless of the social, human, and economic capital of their surrounding geographic locations—foster a greater sense of community and improved avenues for social engagement and participation in schools.

But what if the organization of some neighborhoods is not conducive to participation and engagement in schools or in the larger community? What if “sense of place” is never actualized in certain types of communities? What if a return to neighborhood schools perpetuates the problems existent in disadvantaged neighborhoods? Social disorganization theory suggests that characteristics such as residential instability, ethnic diversity, family disruption, and poor socioeconomic conditions impede the development of sense of place in geographic areas where such conditions are systemic. As such, social disorganization theory questions the viability of “community” in certain types of neighborhoods—typically, inner-city, poverty stricken neighborhood. With neighborhood schooling, schools of concentrated poverty are usually inevitable, and so may be the adverse effects of growing up in a disadvantaged neighborhood. Regardless, parents and policy makers alike find value in schooling that is closer to home. Districts are currently seeking ways to use this kind of educational organization as a viable and favorable option for all children.

One method of facilitating the efficacy of neighborhood schools for all children is to equip schools located in disadvantaged neighborhoods with additional resources and support services. Full service schools, for example, have been designed with the hopes that better schools with better resources can mediate at least some of the negative effects of disadvantaged neighborhoods on student outcomes. However, the ability of these schools to mediate the negative effects of neighborhoods characterized by concentrated poverty is not well understood from an empirical standpoint. Such relationships between schools and neighborhoods have been understudied, though recent trends in closer-to-home schooling is on the upswing despite the risk of creating racially isolated schools

characterized by concentrated poverty. These trends suggest that such relationships between schools, school boundaries, and student outcomes should be explored more rigorously.

This paper analyzes neighborhood schools, the impacts of neighborhoods on school-related outcomes, and schools' ability to mediate these impacts. As such, the following three research questions are examined:

- Do student participation and student engagement in school improve as students are zoned to schools that are closer to home?
- How are the neighborhood characteristics of school attendance zones associated with student participation and engagement in school?
- Are neighborhood characteristics of school attendance zones mediated when students attend enhanced option schools (i.e., schools that provide additional social and academic programs and resources designed to supplement the social, human, and economic capital that is not provided in students' neighborhoods)?

This research contributes to the investigation of educational outcomes within the context of ever-changing social structures and their influences on communities, schools, and individuals. Research suggests that the environment in which children grow up affects their physical, psychological, intellectual, and social development, as well as their opportunities for successes in life. Most educational research, however, has focused narrowly on the effects of family and home environments on children's development and school performance. Neighborhoods are another important part of a child's environment, but have received comparatively less attention. Because this paper identifies school

attendance zones as neighborhoods, “neighborhood effects” on educational outcomes become a mechanism that can be influenced and improved by adopting informed public and education policies. In an era when “neighborhoods” and children’s patterns of interactions can be politically defined by school districts as they set social priorities through zoning patterns, an understanding of how these social boundaries affect students’ participation and engagement in school is imperative. This paper aims to inform such policies by monitoring the influences of closer-to-home schooling in one urban school district as their social priorities shift away from racial integration.

To study the effects of the social composition of school attendance zones on education outcomes for student, I first outline the literature on sense of place as well as social disorganization theory as they relate to public education and a return to neighborhood schools. Thereafter, a brief history of the return to neighborhood schools as it is related to the desegregation movement in the US is outlined. This history is then extended to include Metro Greenville’s progression toward unitary status. Key to this discussion is the context in which a return to neighborhood schools and enhanced option schools were included as a part of Greenville’s unitary status plan. A conceptual framework is then created from the historical context of neighborhood schools as well as the sense of place and social disorganization literature. Measures are derived from the literature that can be used in an analysis of neighborhood effects (and possible mediating effects) on school outcomes. Statistical analyses are also discussed as ways to empirically test the theories discussed in the review of literature and the relationships that are explicated in the conceptual model. Results are then discussed and conclusions are

drawn as the results are linked to the sense of place and social disorganization theory literatures as well as the policy dimensions that inform the goals of this research.

CHAPTER II

SENSE OF PLACE & SOCIAL DISORGANIZATION: A CONCEPTUAL FRAMEWORK

The structure of communities and neighborhoods and their influences on the outcomes for individuals address issues at the heart of sociology. Historically, few concepts in sociology have played a larger or more defining role in the birth and formation of the discipline than community. Works such as Durkheim's (1893) *The Division of Labor in Society*, Simmel's (1983) *The Metropolis and Mental Life*, and Toennies' (1983) *Gemeinschaft und Gesellschaft* represent a sample of timeless works of early sociologists who carved out the discipline with their concern about the consequences of the changing landscape of neighborhoods and communities and its effects on the lives of people that live within them. Nevertheless, more than a century later, we are left with many more questions and even fewer answers about how neighborhood and community conditions shape and influence individuals, their thoughts, their behaviors, and their patterns of interactions. More specific to the context of this study, several researchers have also attempted to outline the role of schools in communities. It is theorized that neighborhoods affect local schools and that local schools also help shape neighborhoods. These ideas have been theoretically and empirically developed, mostly through the avenues of social research.

From these sociological traditions, two competing theories emerge as useful lenses from which we can study the return to neighborhood schools. Research rooted in

community sociology identifies “sense of community,” or “sense of place,” as an essential outcome associated with viable communities and neighborhoods (Bell & Newby, 1972). As such, sense of place is strongly associated with social engagement and participation. Within the context of education, it is argued that sense of place is best obtained when schools are designed to serve the unique needs of the neighborhoods in which they are located—whichever kinds of neighborhoods they might be (rich, poor, White, African American, etc.) (see Driscoll, 2001; Morris, 2001).

However, social disorganization theory, a branch of the ecological model attributed to the Chicago School, accounts for the possibility that not all neighborhoods are created with the necessary capital (social, human, and economic) to sustain any kind of meaningful sense of place. Research has historically found that such neighborhoods are often located in low-income inner-cities (see Park & Burgess, 1925; Shaw & McKay, 1942; 1969). Such research suggests that neighborhood schools would be burdened by the same organizational challenges inherent in its surrounding community—challenges manifest mainly in the relative lack of stability and social control. However, few studies have addressed the issue of whether or not school characteristics (such as increased, targeted resources in high-poverty, neighborhood schools) can mediate the potentially devastating effects of socially disorganized neighborhoods on student outcomes.¹ This study attempts to address this issue.

¹ For a notable example, see Ainsworth, 2002, though this study is mainly interested in individual student motivation (and not school characteristics) as mediators of community environments.

The Sociology of Community & Sense of Place

Every place—regardless of its resources—embodies a unique configuration of shared feelings, interpretations, and meanings, all of which affect one’s sense of place (also referred to as sense of community) and one’s sense of belonging to that place. “All places, no matter what else they have, have a sense of shared experience. And, very often, that experience is NOT shared by other folk who do not inhabit that particular place” (Lewis, 1979, p. 41, emphasis in original). Regardless of the levels of social, human, and economic capital present in any given community, the experience—the sense of place—is meaningful to those who inhabit it. Place is “a piece of the whole environment which has been claimed by feelings” (Gussow, 1971, p.27). “Place is *where*, for me, community happens” (Hummon, 1990, p. 15). When schools are tied to neighborhoods by occupying a shared place, they are intrinsically bound to peoples’ perceptions of their community. Therefore, neighborhood schools carry the capacity to build community by providing avenues for social interaction and participation, social engagement, and socialization—through the mere sharing of a common space.

Some would argue that sense of place and its ties to education have been displaced by larger social agendas—court-ordered desegregation, for example. While racial balance has been a noble goal, some researchers argue that the process was very disruptive to parents’ and students’ way of life. Concerning this displacement of community, Morris (1999) states,

In many instances today, unfortunately, a fragile connection exists between schools and African American families and communities; this was not always the case. Historically, many segregated all-Black schools were embedded in the Black community. This embeddedness—exemplified by the ways in which these schools were closely connected and interdependent with the Black community—

is a major reason why many African Americans viewed their schools as “good.” (p. 585; also see Irvine & Irvine, 1984; Jones, 1981; Siddle-Walker, 1993; 1996)

Additionally, researchers have demonstrated that many segregated, all-Black schools—in spite of their typically high rates of poverty—took on unique characteristics during the segregation era. These characteristics were reflective of the community and people they served. They solidified the community by assisting them in the transference of similar values and “by serving as the core focus for individual and collective aspirations” (Irvine & Irvine, 1984, p. 416). Morris (1999) further argues that in today’s post-*Brown* era of education, African American families need stability. He suggests that schools—neighborhood schools, more specifically—can help build and sustain these same kinds of “strong communal bonds with African American families and [become] a stabilizing force for the community” (p. 586).

Leach (1999) agrees with the ideas addressed by Morris. He states:

A strong sense of place, along with the boundaries that shape it and give it meaning, not only fosters creativity but also helps to provide people—especially children—with an assurance that they will be protected and not abandoned . . . It is indisputable that children need a sense of place (along with an acceptance of boundaries that define and establish the safeness of place) in order to become self-reliant. (p. 179)

He continues by asserting that a boundaried sense of place is the basis for common bonding and character building. Driscoll (2001) furthers this view by addressing the physicality, or geography, of place. She suggests that reconnecting with a sense of place may offer insights in any movement intended to revitalize schools—particularly schools located in high poverty, deteriorating communities. Places have patterns—patterns of behavior, patterns of resources, patterns of ways of life. Attached to these patterns are values. When we are able to decipher these values that we express

openly in our public spaces (through the patterns of our behavior), we are awakened to the kind of respect these spaces convey for all who live and work in them. “Similarly, a careful study of the places we educate children should tell us if the messages we convey through them are consistent with the educational values we preach” (Driscoll, 2001, p. 25). Thus, revitalizing schooling by returning to neighborhood schools could be beneficial, even for the poorest of communities. However, as outlined by the research on sense of place, a mere neighborhood school will only be successful if it is coupled with a strong commitment to aligning educational values with the patterns of life existent within that community. That is, neighborhood schools must demonstrate a commitment and an understanding of the needs of the community and those who inhabit it. Schools must be established in these disadvantaged areas “as if a sense of place mattered” (Driscoll & Kerchner, 1999; also see Gruenewald, 2003).

Although there is relatively little research dealing specifically with the effects of neighborhoods on school-related outcomes, research using neighborhood composition to predict other social outcomes is more plentiful. In support of the sense of place literature, Berry, Portney, and Thomson (1991) find that poor, black residents living in neighborhoods of concentrated poverty differ little in their political involvement from poor, black residents living in middle-class communities. In fact, they find that “poor people from poor neighborhoods are actually more politically active than poor people living elsewhere” (p. 370). They found little support for the argument that concentrations of poor blacks lead to distinctive patterns of political disengagement (Wilson, 1987).² Although poor blacks living in disadvantaged neighborhoods tended to

² Berry, Portney, and Thomson’s (1991) research was based on four US cities: Birmingham, Dayton, Portland, and St. Paul. As they state in their research, the concentration of poor blacks are not as great in

be more cynical about their chances of influencing government than those in the appropriate comparison groups, these attitudes seemed to be of little importance when predicting political involvement. Berry, Portney, and Thompson (1991) attribute their findings to the strong sense of community existent in these poor, black communities. “Clearly, . . . neighborhoods with high concentrations of poor blacks are politically viable communities. Poor blacks have a strong sense of community, and this characteristic seems to help propel them into the political area” (p. 371). Thus, despite the racial and socioeconomic makeup of “community,” shared experiences and shared conditions are important in establishing a sense of place which is necessary for the formation of viable neighborhoods.

American communities differ considerably in the racial, social, and economic make-up of families living within them (Massey & Denton, 1993). It is often assumed that poor, inner-city families that are confined to problem-ridden neighborhoods are somehow culturally deficient. However, Furstenberg, Cook, Eccles, Elder, & Sameroff (1999) find that these poor neighborhoods—at least in the Philadelphia area—are occupied by families and parents whose “parenting skills, especially when measured by the standard scales that assess warmth, commitment, discipline, and control, varied in only trivial ways in relation to the quality of the neighborhood as measured by its resources and social climate. Inadequate parenting . . . was far more often the exception than the rule” (p. 217). The social and economic composition of neighborhoods made little difference in the adequacy of parenting practices. Even the poorest of

these four cities as in some of the nation’s largest urban areas. They state, “It may be that at some greater level of concentration of poverty in black neighborhoods, political attitudes and behavior do become distinct from what would be found for other poor people and other blacks. Consequently, our data cannot categorically refute Wilson’s thesis.”

neighborhoods are inhabited by parents who are competent caregivers—they are neither insensitive to their children’s need nor unskilled in meeting them. Thus, it cannot be assumed that poor parenting is more common in poor neighborhoods, nor can it be assumed that “community” and “sense of place” cannot be achieved in disadvantaged neighborhoods.

Furstenberg et al. (1991) did, however, find that neighborhoods affected parents’ management strategies. Parents with greater access to material and social resources within their communities were able to make use of collective and institutional ways of protecting their children from negative influences and promoting their achievement. Families living in impoverished areas, by contrast, were compelled to rely upon individual and in-home techniques of management unless they took special steps to find institutional resources outside their communities. Parents’ access to resources greatly affected the range of options available to them and their children. Such resources affect residents’ experience of community and how they interact with their environment.

Community & sense of place defined

But *what* is community? And *where* is it? The literature typically refers to sense of place as the quintessence of “community;” thus the terms are often used interchangeably.³ Indeed sense of place, also discussed as sense of belonging to a particular place, seems to be dependent upon place—however subjective one’s idea of “place” or “community” may be. In spite of its historical roots in the social sciences, “community” remains one of the most elusive concepts in sociology, and sociologists

³ As is consistent with much of the literature on “community” and “sense of place,” I also use these two terms interchangeably.

continue to fall short of achieving a universally accepted definition of it. It has been defined in objective terms, as a place which occupies both time and space (Rutman & Rutman, 1984). It has also been defined in subjective terms, as a feeling or attitude, a state of social being, an individually unique social experience, or the network of relationships with others regardless of place (Fischer, 1982). Some even describe community as possessing the ability to occupy “virtual” space, such as communities established on the internet (Rheingold, 1993; Harvard Business School, 2002). Whether community is a physical or a virtual place, a mental construct or an objectifiable reality, an individual experience or a collective experience, it appears that many aspects of the experience of community—many aspects of a sense of place—seem to be unique to the time and space in which they occupy.

In accordance with the view that any community and any experience of sense of place is very unique to time, to place, and even to individuals, Brown, Xu, Toth, & Nylander (1998) state that “community is a variable of personal experience in the lives of individuals which occurs in the context of both time and space. For this reason, community as a uniquely human condition, has been, and will continue to be difficult to objectify” (p. 187). In part due to these inherent subjective qualities, sociologists often seek opportunities to study communities and their influences under unique circumstances. Generally these studies take the form of “boomtown research”—such as studies of the changes in residents’ physical communities as well as changes in their sense of place as they relate to the building of large scale economic developments and the occurrences of natural disasters (see Erickson, 1976). In these conditions, the aspects of community that

may be taken-for-granted on a daily basis become manifest when people feel they are threatened.

As is evident by the lack of clear, universally accepted definitions for “community” and “sense of place,” any singular definition will fall short of describing reality. As Pelly-Effrat (1974) describes, “Trying to study community is like trying to scoop Jell-o up with your fingers. You can get hold of some, but there’s always more slipping away from you” (p. 1). But this has not stopped sociologists from attempting to define and measure community and sense of place. In one study comparing the vast array of definitions of “community,” three aspects were held in common across 94 definitions: geographic area, participation, and social engagement (Bell & Newby, 1972). Since there is no widely accepted definition of community (Etzioni, 2000), I use the three characteristics held in common across many definitions of community—geographic area, participation, and social engagement—as necessary attributes that must be present for “sense of place” to take hold in a community. The abstract nature of each of these concepts which are used throughout the remainder of this work requires further discussion.

Geographic area. Geographic area refers to bounded space. While much of the community literature focuses on the social benefits of the close-knit social relationships characterized by strong communities, it does not ignore the fact that communities are exclusive. The very nature of “sense of place” requires a firm grasp of where the place begins and ends, who belongs and who does not. Communities, by nature, draw lines separating member from outsiders. Cohen (1985) argues that community boundaries are marked by two distinctive characteristics: first, members of a

group must have something in common with each other, and second, the thing held in common distinguishes them in a significant way from the members of other groups. Community, thus, implies both similarity and difference. Cohen (1985) further argues that boundaries may be marked on a map (as administrative areas), or in law, or by physical features (such as a river or a road). Some may be religious or linguistic. However, not all boundaries are so obvious: “They may be though or, rather, as existing in the minds of the beholders” (p. 12). Suttles (1972) argues that local community is best thought of not as a single entity, but rather as a hierarchy of progressively more inclusive residential groupings. In this sense, neighborhoods can be thought of as ecological units nested within successively larger communities. However, “boundaries” are defined, members usually differ from outsiders in their patterns of interactions (Etzioni, 2000). These patterns establish the shape and style of the other aspects of community (participation and social engagement).

Where schools are concerned, boundaries are clearly defined, and they are usually defined on the basis of either demography or geography. During the desegregation era, demographic composition of schools was often the driving force behind school attendance zones; however, in an era of court-ended desegregation, school attendance zones are often defined by geographic area. This is an important distinction: assigning children to schools based on demographic characteristics focuses on their *differences*, while using the existing geographic boundaries to assign children to schools shifts the focus to students’ *similarities*. School zones (however they are drawn) determine the web of social interactions that children and parents experience on a day-to-day basis (Sampson, Morenoff, & Gannon-Rowley, 2002). Therefore, school attendance zones are

boundaried places; and therefore, setting these types of boundaries are vital in determining children's experience of community and development of sense of place. School attendance zones become boundaries of significant interest because—unlike “neighborhoods” defined as residential areas as they are in most of the neighborhood effects literatures—school zones can be manipulated. Re-drawing school zones has been used and may continue to be used to aid in the achievement of certain social and academic outcomes, as was the goal during the era of cross-town busing in the US.

School zones that are drawn to reflect geographic areas and residential patterns provide an avenue for these webs of relationships among groups of individuals to crisscross and reinforce one another. Not only are children and parents bound together by the common experience of schooling, but they are also linked by common living conditions, similarity in social and economic backgrounds, and, in theory, a set of shared values, norms, and meanings (Etzioni, 2000). Under these assumptions, a return to neighborhood schools provides increased support and continuity for children and parents, since social interactions are likely to be similar between home and school. In fact, Etzioni (2000) asserts that local communities demonstrate opposition to school busing because it weakens local community ties.

Social participation & engagement. In addition to geographic area, places and communities are distinguished by their patterns of social participation and engagement. Social participation and engagement refers to the patterns of interactions among residents of communities. The literature also refers to this concept as “social networks” (Allen, 1996; Bott, 1957; Wenger, 1984; 1995), as “encounters” (Buber, 1947), as “interaction” (Beem, 1999; Frazer, 2000), and as “social interaction” (Putnam, 2000). When people

are asked about what “community” means to them, it is social interactions (in the form of social networks, encounters, interaction, and participation) that are most commonly sited (Smith, 2001). It is through these social interactions that people are enabled to build communities, to commit themselves to each other, and to knit the social fabric into a sense of belonging (Beem, 1999). Putnam (2000) identifies lack of participation as a major contributor to the collapse of the American community. He also makes a strong case for the role of community⁴ in the development of children, asserting that children’s social interactions with their families, their schools, their peer groups, and their larger communities have far reaching effects on their opportunities, their choices, their behaviors, and their development.

Social participation and engagement also implies a dimension of community related to socialization and social control (Warren, 1963). Others refer to this aspect of community as norms, values, and habits, even “habits of the heart” (see de Tocqueville, 1994), that are held in common by community members. All of these terms refer to a shared expectation about the way people should behave, also indicative of consensus forming around issues of socialization and consequences for social deviance.

It has been argued that participation and engagement are most meaningful in institutions of socialization that operate at the core of society. In a critique of Putnam’s (2000) book, *Bowling Alone*, Etzioni (2000) states,

For these reasons, the mainstays of community cannot be bowling leagues, bird watching societies, and chess clubs. While these may provide some measure,

⁴ Putnam uses the term “social capital” instead of “community” throughout his work; however, the two terms are arguably the same thing (Etzioni, 2000; Smith, 2001). He defines “social capital” as “social bonds and norms of reciprocity” (Putnam, 2000, p. 19), which is similar to the way sociologists discuss “community.” As Etzioni (2000) states, “Putnam is uncomfortable with the term community and prefers the term ‘social capital’. . . . He hopes the term gives community a scientific gloss, one in line with what is considered the queen of social sciences, economics” (p. 223).

albeit rather thin, of social bonds, they are trivial as sources of new formations of shared moral values. (p. 224)

Schools, however, would not be considered “trivial sources of new formations of shared moral values.” Schools *are* “mainstays of community;” therefore, understanding participation and engagement in schools is an important piece of understanding community.

It is important to note that while “community” is typically tied to a place (often a specific geographic area), not all “places” are considered communities. Sometimes residents of would-be communities fail to interact with one another, which prohibits the formation of any common bonds. Or, sometimes the common bonds that are established differ vastly from those of the larger society. Some argue that these differences are systematically tied to the social conditions associated with certain geographic areas—conditions such as poverty and residential instability that are typical of inner-cities (Shaw & McKay, 1942; 1969). These conditions may have considerable consequences for children in terms of their education. Driscoll (2001) writes,

There are many good reasons that we have moved away from locally flavored schools to an education system that is influenced by policy at the national level . . . This effort is laudable. No fondness for the local community can allow us as a society to be tolerant of pernicious differences across state and local systems that systematically deprive students of opportunities as a result of a geographic accident of birth. (p. 22)

Social Disorganization Theory

While close-knit communities are ideal (however difficult they may be to define and measure), not all places are capable for fostering this sense of place, or sense of community. Some neighborhoods have residents who are attached to where they live and

are socially involved with nearby others. They participate in their community organizations; they are involved in local affairs; they know many of the people in their community; they feel a sense of place. But some neighborhoods do not; such patterns of human interaction are thwarted by what early sociologists trained in the Chicago School have termed “social disorganization.”

The concept of social disorganization was derived from the pronounced social changes following World War I and the Great Depression. Immigration, urbanization, and industrialization brought drastic changes to the geographic and social landscapes in the US. Places that once fostered participation, common bonding, and sense of place were changing so rapidly that these social goods seemed to vanish, leaving in their place a community of social isolation. Predictable patterns of life were slowly interrupted. Soon, the only predictable pattern became that of unpredictability and instability—unpredictable faces, unpredictable patterns, and unstable conditions. Such drastic changes led to the crowding of large cities, cultural diversity within those cities, urban development, and a general loss of “sense of place.”

To describe the impacts of these changes sociologically, Park and Burgess (1916; 1925) first introduced what later came to be known as “social disorganization theory” with their ecological model of crime, the “concentric zone theory.” They developed the idea of natural urban areas, which consisted of concentric zones, each with its own structure, organization, characteristics, and unique inhabitants. These zones extended out from downtown central business districts to the commuter zones at the fringes of the city.

Shaw and McKay (1942; 1969), also trained in the Chicago School of sociology, built upon Park and Burgess’ work by using the concentric zone theory to describe the

distribution of crime and delinquency in detail and explain why it was dispersed in urban, inner-city areas. Their work traced social disorganization to conditions endemic to urban areas. These urban centers were generally the only places newly arriving immigrants with very little money could afford to live. These places also experienced high rates of turnover in the population, and racial and ethnic tensions arose due to the mixes of people from different cultural backgrounds financially forced to occupy the same space. For Shaw and McKay, social disorganization was predictive of crime and delinquency. The lack of common bonds in such urban cities contributed to high rates of crime and delinquency (also see Shaw, 1952).

Though crime and delinquency are not the focus of this paper per se, Shaw and McKay's work is useful in identifying neighborhood characteristics that inhibit the development of sense of place. Many disorganization theorists assume that strong networks of social relationships prevent deviant behavior (see Kornhauser, 1978; Bursik & Grasmick, 1993; and Sampson & Groves, 1989). When most community or neighborhood members are acquainted and on good terms with one another, a substantial portion of the adult population has the potential to influence each child. The larger the network of acquaintances, the greater the community's capacity for informal surveillance (because residents are easily distinguished from outsiders), for supervision (because acquaintances are willing to intervene when children and juveniles behave unacceptably), and for shaping children's values and interests. Community characteristics such as residential stability, poverty, and ethnic diversity lead to higher delinquency rates because they interfere with community members' ability to work together (Kornhauser, 1978; Bursik & Grasmick, 1993; and Sampson & Groves, 1989).

In contrast to the abstract definitions of “sense of place” and community, social disorganization is more clearly articulated as “the inability of local communities to realize the common values of their resident or solve commonly experienced problems” (Bursik, 1988, p. 521). In other words, socially disorganized communities are those that, in general, are populated by residents who fail to develop a sense of place. Research using this theory consistently posits that four factors negatively influence a community’s capacity to develop and maintain strong systems of social relationships: residential stability, ethnic diversity, family disruption, and socioeconomic conditions. In other words, the more a geographic area is characterized by these four factors, the less evident sense of place, or “community,” becomes. These four factors are described below.

Residential stability is possibly the most influential factor in determining a community’s ability to be organized and for residents to experience a sense of place and belonging to that community (Taylor, 1996). In fact, McKenzie (1921) claims that neighborhood stability has the strongest influence on informal social control than any other aspects of a neighborhood’s context. When the population of an area is constantly changing, residents have few opportunities to develop strong, personal ties to one another and to participate in community organizations (Deutschberger, 1946; Bursik, 1988). This assumption has been central to research on social disorganization since its inception. Massive population change is also the essential independent variable underlying the boomtown research mentioned earlier (Freudenberg, 1986). Such changes expose the taken-for-granted nature of place—when the place changes, people’s sense of place must be reconciled. In this process of reconciliation, social disorganization and loss of sense of place may be inevitable. Indeed, such changes in population could lead to the kind of

isolation described by Simmel (1983): “Feelings of isolation are rarely as decisive and intense when one actually finds oneself alone as they are when one is a stranger among many physically close persons, at a party, on a train, or in a city.” Such feelings of isolation, social disorganization theorists argue, are often more prevalent in inner-cities characterized by high rates of residential instability.

Ethnic diversity is also attributive to social disorganization. According to Shaw and McKay (1942; 1969), ethnic diversity interferes with communication among adults. Effective communication is less likely in the face of ethnic diversity because of the differences in customs and a lack of shared experience. This lack of understanding, claims Sampson and Groves (1989), can breed fear and mistrust.

Nevertheless, other theorists argue that racial isolation is problematic and leads to social disorganization (see Wilson, 1987). In general, however, it is difficult to determine whether or not disorganized neighborhoods stem from the effects of concentrated poverty or from racial isolation, since the two conditions usually exist simultaneously. The issues of concentrated poverty and racial isolation are using confounding in that most areas of concentrated poverty are also racially isolated places. Therefore, it is unclear how ethnically diverse neighborhoods influence schools and students.

Social disorganization is also characterized by family disruption. Research in urban areas has found that delinquency rates are higher in communities with greater levels of family disruption. Sampson (1985) argues that single parenting strains parents’ resources of time, money, and energy, all of which interferes with parents’ ability to supervise their children and communicate with other adults in the neighborhood (also see

Sampson & Groves, 1989). Furthermore, the smaller the number of parents in a community relative to the number of children, the more limited the networks of adult supervision. The concentration of single parents is particularly devastating, as parents have fewer resources to who they can turn for assistance in caring for their children. Similar arguments are made for large families. The larger the family, the more difficult supervision becomes (Sampson, 2000).

Socioeconomic conditions are also predictive of social disorganization. The typical outcomes associated with disorganization—crime and delinquency—tend to be higher in urban areas with lower socioeconomic conditions. More specifically, Sampson (2000) refers to socioeconomic status as occupation, employment status, education levels, and income. One could also include housing conditions (i.e., home owners, renters, public housing dwellers, etc.) in this list of socioeconomic indicators. However, socioeconomic status is not an isolated characteristic. It is often highly correlated with the other neighborhood characteristics—population growth and residential instability, ethnic diversity, family disruption, and population density. In many major urban areas, growth leads to the physical, economic, and social decline of the residential areas closest to the central business district. These areas then become inhabited by the poor—as it is the only place they can afford to live. As a result, areas with the lowest average socioeconomic conditions will also have the greatest residential instability, ethnic diversity, and family disruption, which in turn creates social disorganization (Bursik & Grasmick, 1993).

Social Disorganization & Research on Neighborhood Effects

Most of the research-based conclusions concerning the effects of neighborhoods on student-related outcomes supports the social disorganization theory. For example, Crane (1991a; 1991b) finds sharp jumps in the probabilities of dropping out of high school for all blacks, black males, all whites, white males, and white females in the worst neighborhoods of the largest cities. He also found large jumps in childbearing probabilities for both black and white females in poor neighborhoods in these cities. He concludes that the desegregation of large, poor, segregated cities would have large net benefits. “It would reduce dropping out and childbearing among teenagers from the worst neighborhoods yet would increase these problems among those from other communities very little” (Crane, 1991a, p. 318).

Similarly, Hogan and Kitagawa (1985) find differences in pregnancy rates among black teenagers depending on the neighborhood in which they live. They find that poor, black teenagers living in the most disadvantaged census tracts in Chicago have higher pregnancy rates than black teenagers with the same family background who live in higher-SES census tracts.

Even though each of these previously mentioned works reach divergent conclusions when it comes to how neighborhoods affect students living in certain socioeconomic conditions, they all agree that neighborhood composition matters where student dropouts and childbearing is concerned. They all lend support to social disorganization theory inasmuch as each of the aforementioned research demonstrates that high-poverty neighborhoods tend to have negative influences on teenage behaviors and decisions.

Criticisms of Social Disorganization Theory

While social disorganization theory is a seemingly thorough explanation for the lack of development of sense of place existent in some inner-city communities, it is not without its criticisms. The most important concern for this study is that the theory is based entirely on the assumption that negative outcomes (such as lack of social bonding and social control which lead to delinquency and crime) are mainly the consequence of a collapse of institutional, community-based controls. The people who live in these situations are not personally disoriented; instead, they are viewed as agents that respond to their disorganized environmental conditions, and deviant behavior would be a “natural” reaction to those conditions of disorganization (Shoemaker, 1996). While classic social disorganization theory presupposes that community conditions *cause* individual behavior, it does not account for the possibility that individual behavior may also influence the conditions of a community. The theory presumes cause and effect, when in reality, such a supposition would be nearly impossible to test empirically.

As is implied in this unidirectional theory, the only way for individuals to triumph over their socially disorganized surroundings is to leave and relocate in a more socially organized area. In fact, Shaw and McKay (1969) strongly believed that overcoming social disorganization was manifested in the ability of immigrant groups to relocate to more desirable residential areas. Any type of community revitalization (as is advocated by sense of place theorists) or even considering factors that may mediate neighborhood effects requires the fundamental belief that individuals possess the ability to influence their surroundings—even when surroundings have profound effects upon individuals. It

is only recently that social disorganization theorists have considered factors that may mediate adverse neighborhood effects.

Schools as Mediators

Schools have more recently been a focus of social disorganization theorists as an asset to mediate lower-class neighborhoods' tendencies toward disorganization. Because schools are typically community-based institutions with compulsory attendance requirements, they have the ability to influence children for good and provide them with resources to which they would otherwise not gain access. Some disorganization theorists, however, are concerned that school is an arena in which lower-class youth are confronted with the failure to live up to the conventional standards for status (Cohen, 1955). It is there that they continually face the realities of their academic and social liabilities. The school experience, therefore, is often filled with failure and a propensity toward delinquent behavior (Cohen, 1955). Wilson (1996) builds on the work of Cohen by comparing lower-class students' attitudes of frustration and failure with their surrounding community environment. Neighborhood characteristics influence collective socialization processes by shaping the type of role models youth are exposed to outside the home. With fewer positive role models in their neighborhoods, children may be less likely to learn important behaviors and attitudes that lead to success in schools, both because of a lack of exposure to them and because they have no direct evidence that these attitudes and behaviors are useful or desirable. Empirical tests of these theories, however, have produced mixed results.

Because research has failed to systematically link schooling to the persistence of the development of negative attitudes and behaviors that limit school success, theorists have turned to the possibility that schools may act as mediators for socially disorganized areas in the outcomes of at least some students. That is, good schools may diminish the impacts of disadvantaged neighborhoods on student outcomes. While it has been clearly established that disadvantaged neighborhoods negatively influence student outcomes, some researchers agree that “among institutions, schools are the most likely to mediate educational outcomes” (Ainsworth, 2002, p. 129).

After determining that family management practices are affected by disadvantaged neighborhoods because of the limited resources available to parents and children, Furstenberg et al. (1999) suggest that schools are underutilized resources in urban areas that could be used to provide social, human, and economic capital to parents and children living in disadvantaged areas. One of the problems, however, is that schools are often physically and socially removed from their lower-class constituencies. They argue that full-service schools located in areas that facilitate parental and student involvement (i.e., areas that are close to students’ homes) can provide safe places for students and places where students and parents are able to engage in activities that will promote their life chances. Research suggests that school enhancements—including extracurricular programs that contribute to youth development, hubs for health and social systems, and providing parents with a place to find supportive networks of like-minded caregivers—can improve the opportunities and safety of children living in deprived neighborhoods (Ryan, Adams, Gullota, Weissberg, & Hampton, 1995; Schneider & Coleman, 1993).

While it is hypothesized that good schools with enhanced resources can, to an extent, improve the conditions of disadvantaged neighborhoods, the extent to which these schools can mediate the neighborhood effects is not clear. Some other aspects of schooling have been found to mediate the association between neighborhoods and academic achievement. When students—regardless of socioeconomic status and race—have high educational and occupational expectations, and a supportive peer network (i.e., friends who do not drop out of school), the effects of their individual neighborhood are partially mediated (Ainsworth, 2002). More specifically, Ainsworth (2002) found that the positive relationship between the proportion of “high-status residents in the neighborhood” and student achievement was mediated (or diminished) when accounting for students’ educational and occupational expectations for themselves.

Most of the mediation literature, similar to that which is outlined above, focuses on *student* aspirations and expectations for themselves as the main mediating variables associated with a decrease of the strength of the relationship between neighborhood effects and student outcomes (see Hirschi, 1969; Liska, 1971; Elliott, Huizinga, & Ageton, 1985; and Burton & Cullen, 1992). These studies do not, however, consider the role of *school* characteristics in the mediating processes. This is important to address because if it is possible for school characteristics to mediate neighborhood effects, such findings offer insight into education policies that could benefit students. By contrast, studies that assess the mediation effects of student attitudes on neighborhood effects offer policy makers and educators little to work with to improve schools and the quality of education available to all students. Student aspirations and expectations are not easily influenced through policy.

This study addresses the impact of school zone neighborhoods on student educational outcomes, and it also explores that possibility that *schools* can mediate the relationship between neighborhood effects and student outcomes—particularly when the schools are specifically designed to meet the needs of specific communities within the context of a return to neighborhood schooling.

Conceptual Model

The combined literature on community theory and sense of place as well as the social disorganization research is helpful in determining the constructs that should be considered when attempting to study the impacts of neighborhoods on students and schools' ability to mediate those impacts. The two theories are complimentary—the sense of place research portrays the value of emphasizing neighborhoods as key factors in the development of students' identities and opportunities and the ability of schools to embrace those ideals by aligning themselves with the collective goals and needs of residents within a given community. Similarly, social disorganization research embraces those same ideals as being valuable for thriving communities; however, disorganization theorists identify weaknesses in some communities' social structures that prohibit the formation of social bonds and sense of place. Both theories are useful in studying the return to neighborhood schools.

However, these two theories are generally in opposition with each other when it comes to seeking remedies for students living in high-poverty neighborhoods. The sense of place literature points to community revitalization efforts as the remedy for socially disorganized areas. More specifically, some researchers (for example, see Driscoll, 2001;

Morris, 2001) maintain that schools can be the means through which communities are revitalized. Such theories, as well as the desires of the parents of school-aged children, drive the movement toward a return to neighborhood schools. By contrast, early social disorganization theorists identify migration out of the inner-city as the only truly effective remedy for social disorganization. Such scholars would advocate the remedies sought during the desegregation era of cross-town busing. Then, even though students would live in disadvantaged areas, they would spend a large part of their day in more advantaged neighborhood with peers who hold higher educational and occupational aspirations. More recently, however, the effects of social disorganization on student outcomes have been shown to be mediated by factors such as student aspirations and expectations (Ainsworth, 2002).

Thus, both bodies of research eventually point to the hope that schools might act as mediating factors for student attending neighborhood schools in socioeconomically disadvantaged areas. However, when researching the efficacy of neighborhood schools, or schools' ability to mediate the potentially harmful effects of disorganized neighborhoods, researchers argue that academic achievement may not be the most appropriate outcome to study. Morris (1999), for example, claims that neighborhood schools in poverty-stricken, racially isolated communities can act as a stabilizing force for families and for the community; however, he also argues that finding the "goodness" in these types of schools calls for an "expansion of the definition of what constitutes a 'good' school" (p. 586). In other words, we must retreat from traditional indicators of school quality, such as performance on standardized tests.

As is sketched in Figure 1, the conceptual model for this study predicts student's participation and engagement in school by predicting student absenteeism and student engagement in events requiring disciplinary action. Student characteristics and most school characteristics are used as controls, and neighborhood context constructs are used to predict student outcomes. These neighborhood characteristics are derived directly from the social disorganization literature and include measures of residential stability, ethnic diversity, family disruption, and socioeconomic conditions. I hypothesized that residential stability will be positively associated with student participation and engagement in school. Social disorganization theory predicts that ethnic diversity will be negatively related to the participation and engagement; however, the predicted directionality of the effect of ethnic diversity on student outcomes is unclear in that racially isolated school zones in metropolitan areas are usually indicative of concentrated poverty. Thus, ethnic diversity may not be negatively related to participation and engagement in schools as social disorganization theory would suggest. Family disruption is predicted to have a negative affect on student engagement and participation. Two aspects of socioeconomic conditions are used to predict student participation and engagement—social advantage and economic deprivation. It is projected that social advantage will be a positive predictor of student participation and engagement in schools, and economic deprivation will negatively predict students' participation and engagement.

Two additional school characteristics used to predict students' lack of participation and engagement in school: the distance between students' homes and the school, and whether or not the school is an enhanced option school. Because geographic area is an important way to conceptualize "community," distance between

Conceptual Model for the Mediation of Neighborhood Effects

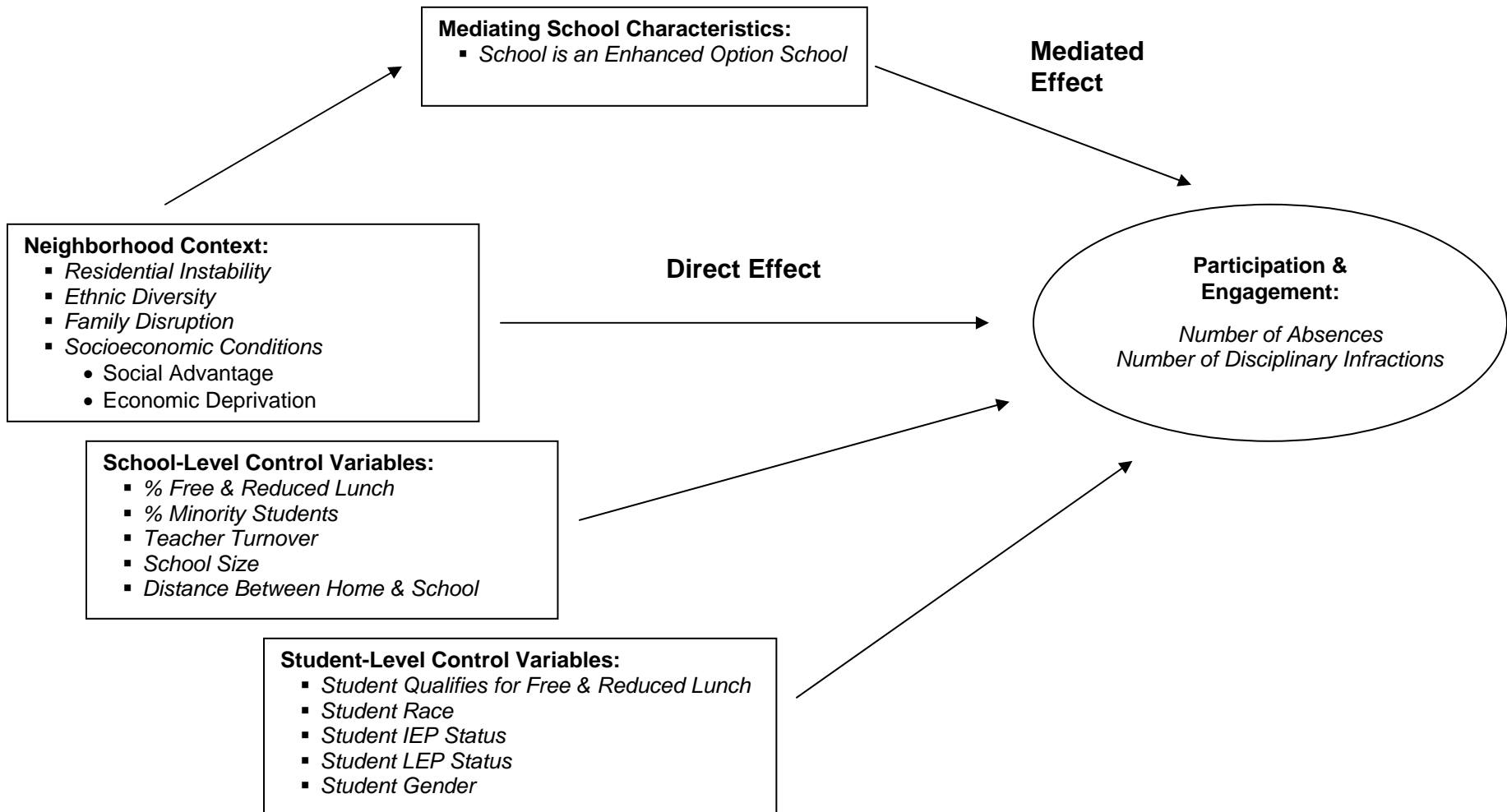


Figure 1

home and school is used to predict student participation and engagement in school. The sense of place literature suggests that as students attend schools that are closer to their homes, greater levels of participation and engagement should be more easily obtained. Therefore, it is hypothesized that closer-to-home school zones will be positively related to student participation and engagement in schools.

As students attend schools that are closer to their homes following a release from the desegregation court order, policy makers, parents, and educators are concerned about the concentration of poverty in certain school zones designed to serve inner-city neighborhoods. Therefore, full service schools are offered to mediate the effects of living in school zones with limited resources in terms of human, social, and economic capital. The relationship between full service schools and neighborhood contexts is anticipated to be one of mediation. As such, I hypothesize that attending a full service school will either eliminate the effects of the neighborhood measures (complete mediation) or reduce the effect of the neighborhood characteristics (partial mediation).

This conceptual model enables tests of the following relationships: First, do student participation and student engagement in schools improve as students are zoned to schools that are closer to home? Second, are the neighborhood characteristics of school attendance zones associated with student participation and engagement in schools? And finally, are the social contexts of school attendance zones mediated when students attend enhanced option schools (i.e., schools that provide additional social and academic programs and resources designed to supplement the social, human, and economic capital that is not provided in students' neighborhoods)?

Before empirically testing this conceptual model, it is important to outline the historical significance of neighborhood schools, and the historical conditions of education that has led to a return to neighborhood schools. Along with this nation-wide historical context, it is also important to address the progress of Metro Greenville toward unitary status. The history of these movements is outlined below.

CHAPTER III

THE RETURN TO NEIGHBORHOOD SCHOOLS & THE CASE OF METRO GREENSVILLE

***Brown* & The Legal History of Race in Education**

Brown v. Board of Education, the Court held that the intentional segregation of students on the basis of race in public schools violates the Fourteenth Amendment to the Constitution. The *Brown* case overturned the 1896 *Plessy v. Ferguson* ruling that had set legal precedence for six decades when Chief Justice Earl Warren delivered the unanimous decision of the Court, that “separate but equal is inherently unequal.” Anticipating that this ruling would be shocking to many Americans and may aggravate existing racial tensions, the Supreme Court did not outline a plan of action for desegregating schools when they handed down their ruling in *Brown II*. Instead, using assertive but vague language, the Court ordered immediate desegregation of public schools “with all deliberate speed.”

Undoubtedly, the *Brown* ruling marked the beginning of desegregation in the US. However, without prescribed methods for states and schools to begin implementing mechanisms of desegregation, and without specific, enforceable consequences for failure to desegregate, *Brown* did little to foster the immediate desegregation of schools (Frankenberg, Lee, & Orfield, 2003). The processes of desegregation were left up to individual states; however, states were not eager to embrace these new changes. Shortly thereafter, the federal government began enforcing sanctions (such as the withholding of

federal funding for education) for districts that failed to demonstrate efforts toward desegregation. Additionally, in response to the many petitions filed on behalf of the NAACP, courts placed districts under specific orders to desegregate and monitored their school improvement/desegregation plans (Frankenberg, Lee, & Orfield, 2003).

It wasn't until 1968 that the Supreme Court established specific desegregation guidelines. In *Green v. County School Board of New Kent County*, the Supreme Court ruled that desegregation must be achieved with respect to facilities, staff, faculty, extracurricular activities, and transportation. These five guides, known as "the *Green* factors," are now used in crafting desegregation plans, and, more importantly, they have become the standard by which courts determine whether school districts have achieved "unitary status," or a fully integrated school system, as defined by the courts (Orfield & Eaton, 1996).

The legal term, "unitary status," was first applied in the Supreme Court case of *Board of Education of Oklahoma v. Dowell* in 1991. The Oklahoma City school district was an illegally segregated district whose desegregation plan was under supervision of the courts. However, after demonstrating compliance to all five *Green* factors and after demonstrating a continued commitment to desegregation, the district was declared unitary by a federal court. The Court stated that "unitary status" legally releases integrated school districts from the supervision and oversight of the courts in terms of their desegregation plans. Since the *Oklahoma* case, many districts under court orders to desegregate began the process of applying for unitary status (Orfield, 1996).

While court-ordered desegregation has resulted in the highest levels of racial integration in the history of the US, the rising number of districts declared unitary by the

courts marks the trend toward resegregation, most notably in the South (Frankenberg, Lee, & Orfield, 2003). Part of this trend can be explained by the elimination of busing as a means to desegregate once school districts are declared unitary. The infamous 1971 Supreme Court case, *Swann v. Charlotte-Mecklenberg Board of Education*, struck down “racially neutral” student assignment plans that naturally produced segregation because of their reliance on geographically-based zoning patterns. These attendance zones fostered segregation because of the the segregated condition of existing residential patterns in the South. The Court further approved busing as a means for districts to achieve racial integration in each of its schools. However, while busing was an effective remedy for residential segregation, other problems ensued. Busing proved to be costly for school districts and burdensome for the students it was intended to benefit. Students were bused many miles from their homes, and African American students typically bore much of the burden of long bus rides.

As did the pre-*Brown* conditions of segregated schooling, cross town busing—the most effective remedy to residential segregation—also created large distances between home and school, thereby eliminating many students’ chances of attending a school close to their home. The distance between home and school limited parental involvement in their children’s education as well as the children’s ability to be involved in school activities (Mickelson, 2001). Naturally, once unitary status is granted, school districts revise their student assignment plans and do away with busing as a desegregation mechanism. Student assignment plans and school choice programs often become the dominating mechanism of achieving desegregation (Orfield & Lee, 2004). Neighborhood schools have also become a popular choice for student assignment—for school districts

and parents alike (Pride & May, 1999). Indeed, it may be that the end of court ordered desegregation marks the first time in history that many African American families have had the option of sending their children to a school that is close to their home. Nevertheless, the return to neighborhood schools tends toward subsequent resegregation—both in terms of race and socioeconomics.

Responses to Court-Ended Segregation

Even though the country is experiencing rapid resegregation (Frankenberg, Lee, & Orfield, 2003), the consequences are unclear. On one hand, neighborhood schools allow for greater involvement for both parents and students, which, in turn, could theoretically lead to an increase in positive outcomes for students (increased attendance, greater social control and oversight, fewer discipline problems, better relationships between home and school, etc.). Thus, even though school districts become more segregated under unitary status, it is arguable that they might be better able to meet the needs of students—even students in high poverty areas.

Theoretically, neighborhood schools in areas of concentrated poverty allow school districts to target those schools with additional resources designed specifically to meet the needs of the children. Metro Greenville did exactly this when they adopted the concept of “enhanced option schools” as a model of compensatory, full-service education. These schools (in Metro and elsewhere) offer additional physical, social, and educational resources. More specifically, these schools offer programs aimed at assisting students and parents with special needs, such as social services, after-school care, summer school programs, and other community need-based programs. These schools

strive to meet the needs of their student populations by securing additional educational resources such as smaller class sizes, additional school days, and other physical resources for classroom use. With such resources aimed at mediating the neighborhood and peer effects of concentrated poverty, it is unclear whether or not unitary status-related resegregation and concentrated poverty will have the same effects on students as were found during the pre-desegregation era—effects such as lower test score averages, fewer advanced courses, fewer teachers with equivalent credentials, and fewer students who attend college after high school (Orfield, 2001). However, one cannot ignore the fact that a return to neighborhood schools marks an increase in schools serving student populations experiencing conditions of extreme concentrations of poverty.

Segregation is typically thought of in racial and ethnic terms; nevertheless, as once-segregated school districts begin the process of resegregation, it is necessary to also consider the component of social class that generally accompanies racial and ethnic segregation. When minority students attend racially isolated, minority schools, they are likely to find themselves in schools where poverty is acutely concentrated (Orfield & Yun, 1999). Orfield and Yun (1999) contest that this is not the case for White students attending racially-isolated White schools. “Majority-white schools almost always enroll high proportions of students from the middle class” (p. 3). Thus, desegregation attempted to integrate students by race, and subsequently integrated them by socioeconomic status. A return to neighborhood schools in an era of court-ended desegregation marks not only the return to racially segregated school, but also the return to socioeconomically segregated schools. This is potentially devastating for students living in high poverty areas, as school-level poverty has been consistently related to several factors that affect a

school's overall chance at successfully educating students, including parent education levels, availability of advanced courses, teachers with credentials in the subject they are teaching, instability of enrollment, dropouts, untreated health problems, lower college-attendance rates, and other important factors (Orfield & Yun, 1999).

Nevertheless, districts that have been declared unitary are aware of the problems of concentrated poverty when returning to geographically-based student assignment plans. Often, when school districts dissolve their desegregation orders, they identify the schools that will be most severely affected by concentrated poverty and direct additional educational, social, and community services to the children who attend the schools. These compensatory programs usually assist at least some of the resegregated minority schools for at least a transition period (Frankenberg, Lee, & Orfield, 2003; Orfield & Yun, 1999).

The existence of such compensatory schools in resegregated, unitary school districts has often been a point of contention. For example, Gary Orfield and his colleagues at the Harvard Civil Rights Project argue that these compensatory programs are often similar to Title I programs. They further argue that the effectiveness of Title I programs have not been systematically proven to be successful; therefore, there is little evidence that compensatory education in unitary school districts would be any more effective. They also claim that there is no guarantee of long-term funding for these programs, and many of the compensatory programs are only offered to elementary students living in poverty. Such remedies fail to target older children (middle- and high-school aged children) living in a school zone concentrated in poverty (Orfield, 2001). Orfield and colleagues go as far as to say that “the idea that school officials now know

how to make segregated schools equal, that transferring dollars to schools will be as effective as desegregation, that whites will return to urban school districts if neighborhood schools are reinstated, and that parental participation will increase in neighborhood schools” are all “myths” (Frankenberg, Lee, & Orfield, 2003, p. 6). They claim that these supposed “advantages” of compensatory neighborhood schools remain to be seen (Frankenberg, Lee, & Orfield, 2003). As grounds for contesting the effectiveness of compensatory neighborhood schools, they look to the government’s largest compensatory program, Title I. Historically, Title I tends to be the least effective in school with concentrated poverty, which are often segregated minority schools (Frankenberg, Lee, & Orfield, 2003). Thus, it is probable that compensatory services and resources would be inadequate in dealing with schools drawing from populations of concentrated poverty; and therefore, neighborhood schools may thwart the academic growth of students living in such conditions.

Nevertheless, in spite of the many debates around the recent movement toward unitary status accompanied by the return to neighborhood schools, no empirical evidence exists to support the claims made on either side. To date, districts’ movements through unitary status have not been monitored; thus, conclusions about the effectiveness of neighborhood schools and whether or not compensatory education can mediate some of the problems associated with schools of concentrated poverty are not available—at least not within the context of unitary status and the resegregation of schools in the South. Because Metro is currently undergoing the adjustments associated with the attainment of unitary status, it offers the possibility to study and track such changes over time.

In spite of the many ethical, legal, and political debates surrounding unitary status, the truth of the matter is that districts *are* seeking releases from their court desegregation orders, and courts *are* granting unitary status to many districts. Metro Greensville was declared unitary in 1999, at about the same time when several other major school districts sought and were granted unitary status. All of these school districts are currently in the final stages of phasing out their desegregation plans. These districts include Buffalo, NY; Broward County (Fort Lauderdale), FL; Clark County (Las Vegas), NV; Duval County (Jacksonville), FL; Mobile, AL; Minneapolis, MN; Cleveland, OH; San Jose, CA; Seattle, WA; and Wilmington, DE (Orfield & Yun, 1999).

When considering all of these now-unitary school districts, Greensville offers the most unique case. Unlike all other unitary school districts to date, Metro Greensville is the *only* district that arrived at the decision peacefully and collaboratively. Many districts face harsh, adversarial opposition when petitioning for release from court-oversight in desegregation proceedings; contrarily, in Greensville concerned parents, NAACP members, and politicians all approached the movement together and assembled a unitary status plan that was eventually agreed upon unanimously by all parties. Thereafter, the courts were approached, and unitary status was granted. With this distinctive history, it is possible that Greensville represents a “best case scenario” of the potential outcomes associated with the end of court-ordered desegregation and the return to neighborhood schools.

The Case of Greenville: The Road to Unitary Status

In an effort to move toward unitary status in a fashion that would be agreeable to all parties, a 21-member *Advisory Committee on Excellence and Equity* was formed in 1993. The members of the committee were appointed in equal numbers by the mayor, the school board, and the plaintiffs. Eleven of the members were white and 10 were black. The Committee worked through a year-long series of deliberations focusing on fundamental concerns for equity, quality, and massive school district reorganization.

The issues around diversity principles and practices—specific versus flexible levels, and commitments to equity provisions for high poverty/racially isolated schools—proved particularly difficult. The Committee was concerned with the return to neighborhood schools, realizing that a reduction in busing would eventually end in resegregation (Greenville Metropolitan Board of Education Minutes, December 16, 1993).

Several discussions ensued about what a return to neighborhood schools would mean for racially isolated, inner-city communities. The chairman of Greenville’s board of education stated, “It is impossible to talk about community schools without having racially identifiable schools. I’m not convinced that the community is ready to put additional resources/programs in schools in deprived areas and this is key when you talk about community schools” (Greenville Metropolitan Board of Education Minutes, October 4, 1993). The board concluded that a true return to neighborhood schools would introduce too many racially isolated, inner-city schools—not all of which would received educational enhancements. Rather, a hybrid of different plans was decided on. The district decided to use choice options along side enhanced option schools to limit the

necessity of full-service schools (Greensville Metropolitan Board of Education Minutes, October 4, 1993).

The district also opted for rezoning options that were closer to students' homes but did not completely eliminate the need for busing. Throughout the devising of the new school improvement plan, the district was mindful of race and the effects of isolated schools. For example, one particular cluster of schools proved to be problematic in drawing contiguous school zones without eliminating racial diversity in those schools. As a result, the school zones in that particular cluster are non-contiguous. Thus, it is apparent that some schools in Metro experience a mild form of cross-town busing (Greensville Metropolitan Board of Education Minutes, September 9, 1997).

Upon considering the needs of different students and how to best meet those needs in a closer-to-home organization of schools, the Committee eventually agreed upon 12 recommendations, all of which were approved unanimously by members in December of 1993 (Goldring & Smrekar, 2002). The recommendations embodied themes of efficiency and excellence. Racial balance remained a central goal, but the Committee also saw flexibility in meeting this goal as of paramount interest. Increased school choice options (magnet schools and design centers) would provide parents with expanded choices to meet specific needs of children.

Continuity and stability were also issues considered by the Committee: these goals were reflected in new feeder patterns and attendance zones that reduced cross-town busing (Greensville Metropolitan Board of Education Minutes, December 16, 1993). These recommendations served as a blueprint for the school board's report released in 1996 known as the "Commitment to the Future." That same year, the school board asked

the plaintiffs to join them in a motion for unitary status. Discussions and modifications to the plan ensued, resulting in a new School Improvement Plan (SIP) agreed to by all parties in 1998 (Goldring & Smrekar, 2002).

Unitary Status

Upon the submission of the School Improvement Plan agreed upon by the Committee, the school board, and the plaintiffs, the Metropolitan Greenville School District was declared unitary on September 28, 1998. The plan, as approved by the court, emphasized the need for public schools to provide “a comprehensive, high quality education for every student and to bring a negotiated end to the desegregation action, *Kelley v. Metropolitan County Board of Education*” (Greenville Metropolitan Board of Education Minutes, June 23, 1998). The plan includes two “immutable factors” that emphasize continuity and stability for students and their families. The first is a three-tiered structure⁵ designed to limit the number of schools students attend during their entire time in the school district (to three); and second, consistent feeder patterns to ensure that children who start school together will stay together during their thirteen years of school (K-12) (Harrison, 1998; Metropolitan Board of Public Education of Greenville, June 23, 1998).

Today, under unitary status, student assignment in Metro Greenville is reorganized into eleven cluster feeder patterns designed to reduce the distance between students’ home and schools they attend. Each cluster includes a geographic area that is

⁵ The “three tiered structure” means that all elementary schools include grades K-4 (and sometimes Pre-K), all middle schools include grades 5-8, and all high schools include grades 9-12. One exception was made—Martin Luther King, Jr. Magnet High School for Health Sciences and Engineering, an academic selective magnet school, maintained its original 7-12 grade structure.

served by one comprehensive high school and the elementary and middle schools that feed into that high school (Harrison, 1998). As such, the plan seeks to decrease transportation time and distance between home and school to better facilitate parental involvement and improve access to participation in school-related activities (Harrison, 1998). The School Board demonstrated their commitment to diversity in creating the 11 clusters to facilitate diverse high schools, though many elementary and middle schools have become racially isolated. To “[ensure] that opportunities will continue to exist for all students to attend diverse schools,” school choice and voluntary enrollment remained a part of the plan, though no specific ratios are required in school choice options (Harrison, 1998). The basic options for school choice as specified in the plan include magnet schools as well as some design centers.⁶

Enhanced option schools are of considerable importance in this plan, as they embody the effort made by the district to consider the educational needs of at-risk students. They are designed to bring compensatory educational programs, services, and resources to elementary students and their families who live in high poverty areas. As discussed previously, the main features of these schools which are funded in the unitary status plan include smaller class sizes, an extended school year, increased social services, and more physical resources aimed at enhancing educational attainment. These schools, in theory, are linked closely to their neighborhoods and the surrounding communities to provide quality early education programs, after school care, social services, and homework help (Harrison, 1998). These resources, however, are not funded in the plan,

⁶ Cluster design centers are similar to magnet schools in that they have a specialized program and voluntary enrollment. However, they are designed to meet the needs of the students in a particular cluster—as opposed to the needs of individuals from throughout the Metro system. Thus, while students from areas outside of the cluster may voluntarily enroll, most students from within the cluster may be zoned to a specific design center.

and must be garnered through grants, philanthropy, and Title 1 money. The majority of students are assigned to these schools. The plan includes \$206 million for new schools to be built in the inner city and the suburbs. The implementation phase of unitary status began in the fall of 1999-02, and was completed by 2003-04 (Goldring & Smrekar, 2002). Along the road to unitary status, the school board reaffirmed its commitment to diversity in the unitary status agreement, stating that it “is an important educational tool, particularly in terms of developing mutual understanding, respect and knowledge.” The plan does not include any “specific ratios” for schools although new attendance zones reflect “a consideration given to demographic diversity” (Metropolitan Board of Public Education of Greenville, June 23, 1998).

While Greenville’s road to unitary status differs from most in that it was peaceful and collaborative, the repercussions of returning to resegregated, neighborhood schools—as was decided upon by plaintiffs, board members, and the designated committee—were largely unknown. The Committee anticipated the inevitable resegregation and the fact that schools with high concentrations of poverty would have to be dealt with; however, no research has been conducted on this type of transition into unitary status. As such, “unitary status” remains uncharted territory. Nevertheless, the social sciences offer an abundance of research on community theory, empirical verification of the efficacy of neighborhood effects, and theories of concentrated poverty. These theories are helpful in anticipating possible outcomes of Metro Greenville’s recent return to neighborhood schools.

CHAPTER IV

DATA & METHODS

The historical background of Metro Greenville and its return to neighborhood schools offers a unique context in which neighborhood effects on student outcomes and factors that may mediate that relationship can be studied. As these relationships are studied, the theories of community and social disorganization can be tested as they relate to school environments. The conceptual framework pieces together the relationships and constructs necessary to answer the following research questions:

1. Do student participation and student engagement in schools improve as students are zoned to schools that are closer to home?
2. How are the neighborhood characteristics of school attendance zones associated with student participation and engagement in schools?
3. Are the neighborhood characteristics of school attendance zones mediated when students attend enhanced option schools?

Researchers have been challenged to study outcomes other than student achievement when predicting schools' influence on student outcome; therefore, this study uses measures of student participation and engagement in school as outcomes of interest. These measures are used because they have been shown to be indicators associated with "sense of place." Thus, it is hypothesized that the neighborhood characteristics outlined in the social disorganization literature (residential stability, ethnic diversity, family disruption, and socioeconomic conditions) will be predictive of these student outcomes.

It is also hypothesized that schools offering educational and social enhancements will mediate the relationship between these neighborhood characteristics and student outcomes.

Data

To study Greensville's return to neighborhood schools and the effects of school neighborhoods on students' participation and engagement in school, several sources of data are used. First, six-year longitudinal student- and school-level data available from the GMPS is used to develop outcome measures as well as variables designated as background controls. Also, I use information about schools' neighborhoods available from the US Census Bureau via Geographic Information System (GIS) mapping software. And finally, more contextual school-level measures are available from a survey of teachers in selected schools.

District Data

GMPS has provided longitudinal data on students and schools from the 1998-1999 school year (one year prior to the implementation of the unitary status school improvement plan and the last year of cross-town busing) through the 2003-2004 school year (the last year of the implementation phase of unitary status). Students can be tracked from the base year through the implementation phase of the new school improvement plan (SIP). During those transitional years, the district underwent vast changes as it transitioned from court-ordered to court-ended desegregation. Corresponding

longitudinal data has been provided by the district in which students can be tracked as they move from school to school within the district.

Because of the nature of this study, all schools without specified attendance zones are dropped from all analyses. These schools include all magnet schools, all design centers, five zoned schools, and one enhanced option school. Magnet schools are schools of choice, and they often do not have zoned populations of students⁷ and are therefore not considered neighborhood schools. In fact, students travel from all over the school district to attend magnet schools; hence, students are probably not systematically influenced by the neighborhoods surrounding magnet schools. Design centers, similar to magnet schools, are also schools of choice. However, they almost always draw from a small geographic priority zone. Because of the choice component associated with design centers, I eliminate them from all analyses as well. There are also five schools that have traditionally been zoned schools; however, over the course of unitary status, they have become schools of choice. Though, unlike magnet schools and design centers, these schools have no particular educational theme or philosophy. There is also one enhanced option school in the district that became a school of choice in the last year of the study. From an historical standpoint, enhanced option schools were all proposed in the original SIP as schools of choice—offering inner-city parents the opportunity to send their children to schools closer to their homes or to choose a school that was not as racially isolated (Metropolitan Board of Public Education of Greenville, December 16, 1993). Nevertheless, all but one of the enhanced option schools are zoned schools designed to meet the needs of inner-city neighborhoods. Because this study deals explicitly with the

⁷ A few magnet schools do have geographic priority zones, but typically the population of a magnet school is made up of students who are selected into the school based on random lottery results and not student who live in the school's neighborhood.

social context of school attendance zones, all schools with choice components are dropped from all analyses. With the elimination of all choice schools, selection bias will not be an issue in any of the analyses presented in this work.

In addition to schools without specified attendance zones, I also omit all high schools from my analyses. The comprehensive high schools, as they are described in the SIP, are large and several elementary and middle schools feed into them. Thus, by high school, the majority of students do not experience neighborhood schooling. Also, the cluster feeder patterns are designed to create racially integrated high schools; therefore, the goal of high schools in terms of student assignment patterns is very different than the goal of elementary and middle schools. Elementary and middle schools focus more on community contexts and schooling that is closer to home, and high schools are designed to foster integration (Metropolitan Board of Public Education of Greenville, April 25, 1995).

In addition to the omission of high schools and high school students, I exclude students in pre-kindergarten through second grade be eliminated from all analyses. Particularly in the early years of this study, grades PreK-2 were often assigned to schools irregularly. PreK-2 students often attended schools with middle schoolers, or in other instances they attended elementary schools, and yet in other cases they were assigned to PreK-2 schools. Prior to the 1999-2000 school year (the first year of unitary status), it was not uncommon for Greenville schools to take on unusual grade configurations. The new SIP included measures to standardize grade configurations throughout the county. Now elementary schools include grades K-4 (and any Pre-Kindergarten programs that a school may have), middle schools include grades 5-8, and grades 9-12 make up high

schools. However, prior to unitary status, grade configurations were not as well defined. By 3rd grade, grade configurations were fairly stable; therefore, I include only students in grades 3-8 for all six years of the study.⁸

Missing data & sample size. Over the 6 years of the study, the district reports 399,675 student observations. Of these, 40,249 observations come from magnet schools and 8,215 observations come from design centers. Because these observations come from schools of choice, they are deleted from my analyses. An additional 98,317 observations come from students in grades K-2nd and are therefore deleted. Another 81,665 observations of students in 9th-12th grades are deleted. Finally, another 199 observations were omitted from analyses because they were either not included in the district's attendance files or the grade level or school from the student background file did not match the information in the attendance file for any given year. After the necessary deletions were made, over the six years of the study, the data include 171,030 observations for 67,833 students (see Table 1).

These deletions also affected the number of schools included in all analyses. After aggregating student data to the school level, 701 school observations are reported in the district data. Of those observations, 70 were magnet schools, 9 were design centers, 14 were elementary schools with only K-2nd graders, and 60 were high schools. After the necessary deletions were made, the sample of schools used in this study included 548 observations for 104 schools (see Table 1; for a complete list of number of students in the district by grade and by school type for every year of the study, see Appendix A).

⁸ Using 3rd-8th grades also aligns with the work others have done predicting student achievement on the same population of students (see Gamoran & An, 2005).

Table 1. Sample of Students & Schools Compared to District Totals for All Years

	# Student Observations	Remaining After Deletions	% of All Student Observations	# School Observations	Remaining After Deletions	% of All School Observations
<i>District Total</i>	399675	399675	100%	701	701	100%
<i>Magnet Schools</i>	40249	359426	90%	70	631	90%
<i>Design Centers</i>	8215	351211	88%	9	622	89%
<i>K-2nd Grades in Enhanced Option Schools</i>	5072	346139	87%	1	621	89%
<i>K-2nd Grades in Zoned Schools</i>	93245	252894	63%	13	608	87%
<i>9th-12th Grades in Zoned Schools</i>	81665	171229	43%	60	548	78%
<i>Missing or Mis-Matched Attendance Data</i>	199	171030	43%	0	548	78%
Sample N (# Observations over 6 years)		171,030			548	
Sample N (# Individual students & schools)		67,833			104	

Census Data

Neighborhood composition at the school zone level—namely, residential stability, ethnic diversity, family disruption, and socioeconomic status—are not, unfortunately, measured or monitored by the district. They are, however, tracked by the US Census Bureau. The Census Bureau does not collect data at the school zone level; therefore, I created a database using census data as it corresponds to school attendance zones. To do so, I used the 2000 demographic data collected at the census block-group level. A census block group (BG) is “a cluster of census blocks having the same first digit of their four-digit identifying numbers within a census tract” (US Census Bureau, 2000, p. A-8). In other words, a BG is the smallest geographic area for which economic information is available—that is, estimates from the Census long form. A typical BG is about 1,500 people and describes a small geographic area defined by main roads and streets.⁹ Census data is made available electronically at the block group level via Geographical Information Systems (GIS) mapping software.

To create this database I used Metro’s zoning data which includes lists of street addresses and address combinations that are linked to a school and each grade in each year. With the use of these address lists, maps of school zones were created and overlaid on maps of census block groups. Because school zones change each year, six maps were created to represent each year of the study. For each year every address combination was matched to a block group (or several block groups, where applicable), enabling the aggregation of census data to the school zone level. Because school zones and BGs are not geographically equivalent, there was some overlap. Some BGs were part of more

⁹ BGs are significantly smaller in size than the area encompassed by zip codes, which are most commonly used in neighborhood effects research.

than one school zone. To coincide with previous research using BGs to measure the characteristics of school zones (see Goldring, Cohen-Vogel, & Smrekar, 2004), if any portion of the BG was located inside any given school zone, the data from that BG was used in creating constructs intended to measure neighborhood contexts.¹⁰ Also following a precedent set by the University of Wisconsin-Milwaukee Employment and Training Institute (2002), BGs with large institutionalized populations are excluded. BGs with no recorded populations are also excluded (these include rural farming areas and areas covered mostly by lakes). Of the 467 BGs in the county that makes up the school district, four included large institutionalized populations and five indicated a population size of 0; therefore, all nine BGs were omitted from all analyses. Unfortunately, this type of census data is only collected every 10 years; therefore, any data used from the US Census Bureau would represent neighborhood contexts as they were measured in the year 2000.

Teacher Survey Data

As part of a larger study on examining Greensville's progress through unitary status, survey instruments were developed in May of 2001, and data were collected at the end of the 2001-2002 school year and again at the end of the 2003-2004 school year (refer to Appendix B for a copy of the teacher survey used in 2003-2004) (see Goldring & Rowley, 2005). Not all teachers in the district participated in the survey—two clusters

¹⁰ In some cases, it was obvious that only one or two streets from a neighboring BG overlapped with a school zone. This is most likely a function of the district's goal of maximizing the efficiency of bus routes. When it was obvious that a school zone included only one or two small streets from a bordering BG that was otherwise not a part of the school zone, the BG was excluded from the school zone aggregated of neighborhood indicators. Surprisingly, school zones (particularly in later years of the study)—because both school zones and BG boundaries are based on major transportation routes (i.e., major streets and roads).

of schools (out of 11 total clusters) were purposively selected, as were all of the new enhanced option schools that were added as part of the SIP.

Several decisions were made in the sampling process. These decisions were based on two major factors. First, the selection of the two clusters was based upon the SIP's uneven implementation schedule. Given the protracted nature of the implementation plan, there was significant variability between clusters in terms of the extent to which they had already implemented the proposed SIP changes prior to the first year of data collection (the 2001-2002 school year). The two clusters selected had advanced the most in terms of their implementation of the plan when the first wave of data collection commenced. Between the two clusters, the complete spectrum of proposed changes that made up the SIP was encompassed (changes such as grade restructuring, zone changed, and new school types). The second major factor considered when deciding which schools and clusters to sample was the decision to sample only elementary and middle schools. As is addressed above, most of the changes prescribed in the new SIP affected elementary and middle schools. High schools were still large and, for the most part, integrated schools. High schools are also not necessarily intended to be "neighborhood schools," even though their attendance zones draw from geographic clusters.

Additionally, the SIP was intended to focus on early education, as the link between early stages of schooling and educational outcomes has been well documented.

In total, 25 schools participated in the teacher survey in both years. In the final year (2003-2004), 12 neighborhood schools, 5 magnet schools, 3 design centers, and 5 enhanced option schools were sampled. Eight of the neighborhood schools were elementary schools, and the remaining 4 were middle schools. Because of their choice

component, the magnet schools and design centers are dropped from analyses. Additionally, all remaining middle schools were dropped, leaving only enhanced option schools (all of which are elementary schools) and elementary neighborhood schools. A total of 8 neighborhood schools and 5 enhanced option schools are used in analyses using the teacher survey data. Participating schools encouraged teachers to participate by designating time for teacher to fill out the survey during school-wide faculty meetings. The average response rate across all participating schools was about 85%.

In this study students are not linked to teachers; therefore, all information provided by teachers about their schools is aggregated to the school level. Because not all schools in Metro were selected for participation in the teacher survey, the survey is used as a means of describing the differences between enhanced option schools and other zoned schools that have experienced the zoning changes associated with Metro's new SIP.

Measures

All of the datasets discussed above (with the exception of the teacher survey data) are linked (students to schools and schools to neighborhoods) and variables are created to address the research questions. Two outcome variables are derived from the district dataset, as well as student- and school-level background variables. Neighborhood contexts are measured using census data.

Outcome Variables

As discussed in the review of the community sociology literature, “sense of place” is generally tied to three concepts: geographic area, participation, and social engagement. This paper seeks to explore the impact of geographic area by studying neighborhood schools and the impact of a school’s neighborhood on student outcomes. The outcomes of interest in this study are indicators of student participation and engagement in school.

Participation. Student attendance is used as an indicator of participation. Although attendance does not speak to the *quality* of students’ interactions when they are present at school, the education literature provides some support for the use of attendance as a measure of participation: “Attendance is the most basic engagement behavior—if students are not present, they cannot learn, establish relationships with teachers and peers, or experience other forms of engagement at school and with learning” (Anderson, Christenson, Sinclair, & Lehr, 2004, p. 103). Anderson and colleagues’ (2004) study of student engagement indicated that students who improved in attendance were rated by their teachers as exhibiting better academic and social engagement with school. Other studies have also found student attendance to be associated with student achievement (Lamdin, 1996) and dropout rates (Alexander, Entwisle, & Horsey, 1997; Rumberger, 1995). Thus, attendance seems to be a reasonable measure of students’ participation in schools.

The district datasets include information on student attendance. The district records attendance on a daily basis, and for every required¹¹ school day each student receives an attendance code indicating if they were present, dismissed early, tardy, absent

¹¹ Extra school days and days included in extended school years are not recorded.

(unexcused), absent (excused), suspended (in-school suspension), and suspended (out-of-school suspension). Students who were absent (unexcused and excused) and suspended (in-school and out-of-school) were counted as “Absent” and given a score of 1.¹² Students who were present, dismissed early, and tardy were counted as “Present” and given a score of 0. These values of 1s and 0s were summed across all days in the school year, creating a count variable of absences across each school year (see Table 2 for a description of all variables).

Engagement. The second outcome variable of interest is student engagement. The community literature characterizes this concept as a process of socialization. In this study I use student discipline as a measure of how engagement is manifest within the context of attending neighborhood schools—assuming students who require disciplinary action demonstrate a lack of common bonding and a lack of engagement in the types of school activities that are considered to be “the norm.” Furthermore, a lack of social engagement—as is defined by disciplinary infractions—is directly linked to social disorganization theory. The theory uses the absence of common bonding to explain crime and delinquency; thus, disciplinary infractions is an appropriate measure of lack of social engagement.

Measuring disciplinary infractions as a dependent variable is complicated and difficult. Research suggests several ways to measure disciplinary events—all of which have certain drawbacks. To account for both the number of disciplinary events and the severity of them, Nichols (2004), created an innovative approach to measuring student discipline. He created a disciplinary scale based on the severity of the punishment.

¹² As is argued by Anderson et al. (2004), absences and suspensions (both in-school and out-of-school) are indicators of a lack of engagement that impede participation in school.

Table 2. Description of Variables

	<u>Mean</u>	<u>SD</u>	<u>Min</u>	<u>Max</u>
<u>Growth over Time</u>	2.48	1.69	0	5
Coded as: 1998-1999 School Year = 0 1999-2000 School Year = 1 2000-2001 School Year = 2 2001-2002 School Year = 3 2002-2003 School Year = 4 2003-2004 School Year = 5				
<u>Dependent Variables of Student Participation</u>				
<i>Student Absenteeism</i>	8.04	8.40	0	169
Total number of absences per year.				
<i>Student Disciplinary Events</i>	0.89	2.47	0	48
Total number of disciplinary events per year.				
<u>Mediating/Moderating Variable</u>				
<i>Enhanced Option School</i>	0.04	0.19	0	1
District specifies school as an Enhanced Option School. Coded as: Zoned School = 0 Enhanced Option School = 1				
<u>School Neighborhood Characteristics</u>				
<i>Residential Stability</i>	0.46	0.08	0.23	0.73
Proportion of residents who have lived at the same residence (either owned or rented/house or apartment) for at least five year.				
<i>Ethnic Diversity</i>	0.31	0.10	0.11	0.55
The sum of the squared proportions of Whites, African-Americans, Asians, Native Americans, and others subtracted from 1. This measure ranges from 0 to .8, 0 indicating a completely homogeneous neighborhood and .8 indicating a completely heterogeneous neighborhood.				
<i>Family Disruption</i>	0.39	0.11	0.14	0.85
Proportion of children age 18 and younger living in single-parent families.				
<i>Socioeconomic Conditions</i>				
Social Advantage (2 item composite mean; $\alpha = .972$)	0.28	0.11	0.12	0.57
Proportion of college graduates among adults age 25 and older & Proportion of employed persons with professional or managerial occupations.				
Economic Deprivation (2 item composite mean; $\alpha = .854$)	0.27	0.06	0.24	0.62
Proportion of residents over age 16 who are unemployed or not in the labor force & Proportion of individual with incomes below the poverty level.				

Table 2 (continued). Description of Variables

Time-Variant School Characteristics

<i>School Poverty</i>	0.57	0.22	0.03	0.99
Percent of students in the school who are eligible for the free and reduced lunch program.				
<i>Racial Mix of the School</i>	0.19	0.39	0	1
School is 75% African American or greater				
<i>School Size</i>	495.49	198.37	86	1311
Total number of students in the school for a given year.				
<i>Teacher Turnover Rate</i>	0.25	0.16	0	1
The rate at which teachers leave the school from one year to the				
<i>School Zone Distance</i>	4.53	2.39	0.61	11.84
Distance (in miles) from the school to the outermost perimeter of the school attendance zone.				

Time-Invariant Student Background Variables

<i>Student Race (White = reference group)</i>	0.46	—	0	1
Groups: African-American	0.44	—	0	1
Other	0.10	—	0	1
<i>Student Gender</i>				
Coded as: Male = 0	0.51	—	0	1
Female = 1	0.49	—	0	1
<i>Student Participates in Free & Reduced Lunch Program</i>				
Coded as: Non-Participant = 0	0.42	—	0	1
Participant = 1	0.58	—	0	1

Time-Variant Student Background Variables

<i>Student Grade</i>	3.34	1.72	1	6
Coded as: Third Grade = 1				
Fourth Grade = 2				
Fifth Grade = 3				
Sixth Grade = 4				
Seventh Grade = 5				
Eighth Grade = 6				
<i>Student has an Individualized Learning Plan (IEP)</i>				
Coded as: Non-IEP = 0	0.82	—	0	1
IEP = 1	0.18	—	0	1
<i>Student Demonstrates Limited English Proficiency (LEP)</i>				
Coded as: Non-LEP = 0	0.88	—	0	1
LEP = 1	0.12	—	0	1

N = 171,030 Observations of 67,833 Students & 548 Observations of 104 Schools (over a 6-year period).

Level 1 indicated a conference about the student's misbehavior; Level 2, intervention options (such as detention); Level 3, in-school alternatives (i.e., in-school suspension); Level 4, out-of-school suspension; Level 5, alternative programs; and Level 6, expulsion. Each level is assigned points based on severity (Level 1 = 1 point, etc.), and all infractions were summed for students with more than one offence. This method allows for gradation in types of punishments and weighs severe punishments more heavily than others (it is not a simple calculation of whether or not a student was suspended).

A similar method was used to compute disciplinary infractions for each year of data. A "Severity of Disciplinary Actions" index was created: 0 = No disciplinary actions; 1 = *Warnings and Calls to Parents*; 2 = *Corporal Punishment*; 3 = *In-School Suspension*; 4 = *Out-of-School Suspension*; and 5 = *Expulsion*. For every disciplinary action, a student received an associated severity score. Since many students experienced more than one disciplinary action in any given year, these scores were summed for every student in every year. In theory this measure takes into account both the number and the severity of disciplinary events. However, such a measure is difficult to interpret.

To aid in the interpretability of student discipline as an outcome measure, I also created a more general count of the number of times a student was disciplined in a certain year. Outcomes for the general count of disciplinary events were very similar when comparing them to the scaled sum of disciplinary events; therefore, I use the more general measure of the number of times a student was disciplined as an indicator of students' engagement in school because outcomes are more intuitive to describe and interpret.

Growth. Because the data used in this study are longitudinal, each of the previous measures are created independently for each year of the study and are time varying measures. Because this study is longitudinal, a growth parameter is also included as an indicator of growth over time. It is coded 0 for the *1998-1999 school year*, 1 for the *1999-2000 school year*, 2 for the *2000-2001 school year*, 3 for the *2001-2002 school year*, 4 for the *2002-2003 school year*, and 5 for the *2003-2004 school year*. This variable, when included in growth models identifies the average rate at which the dependent variable rises or falls over time.

Background Variables

In addition to the information necessary to construct the outcome measures used in this study, the district datasets also include background measures at the student-level. Even though this study is not expressly interested in determining the effects of students' characteristics on absenteeism and disciplinary events, these measures act as control variables in my analyses.

Student-level background measures. Student-level controls include measures of student poverty, race, IEP status, LEP status, and gender. Poverty is measured as a dichotomous variable indicating whether or not a student qualifies for free and reduced price lunch. Race is measured as a set of three dummy variables: *White*, *African American*, and *Other* (*White* is the reference group). IEP status is a dichotomous variable coded 1 if the *student has an individualized learning plan* and 0 if the *student does not*. Similarly, LEP status is coded 1 for *students who demonstrate limited English proficiency* and 0 for *those who do not*. Gender is also a dichotomous variable coded 1 for *female*

and 0 for *male*. Because student IEP and LEP status changes over time, these measures are treated as time-varying measures. However, student poverty, race, and gender are treated as time-invariant measures, because they are not expected to change over time. In the case that poverty, race, or student gender were not consistently identified in the district data for all six years of the study, the modal value for each measure was assigned to each student.

I also control for student grade. Because students change grades over time, this is designated as a time-varying indicator. Grade is controlled for with a continuous variable coded as 1 = *Third Grade*, 2 = *Fourth Grade*, 3 = *Fifth Grade*, 4 = *Sixth Grade*, 5 = *Seventh Grade*, and 6 = *Eighth Grade*. Because the growth indicator is designed to measure the rate of change in the dependent variables over time (and not necessarily from grade to grade), control measures for student grade must be included in the analysis.

School-level background measures. The district data does not include school-level measures, per se; however, such control variables can be created by aggregating the student data to the school level. These aggregates include the percentage of students who qualify for free and reduced priced lunch, whether or not the school has 75% or more African American students, and school size, as is determined by the total number of students in each school. To enhance these school-level background measures, supplemental district data was accessed to create a measure of the stability of each school's academic environment. As a measure of stability, I calculated the teacher turnover rate for each school in each year of the study by calculating the percentage of full-time classroom teachers who left a school in the previous year and were replaced in the current year.

One other school-level variable of urgent interest in studying the effects of schools' neighborhoods is the distance between home and school. By creating interactive census maps overlaid with school zones, the distance between a school and the outermost perimeter of the school zone could be measured. Such a measure is unique to this study and offers additional insight into what it means for students to attend a school closer to home. The radial distance between each school and the outermost perimeter of its attendance zone is measured in miles, to the nearest one hundredth of a mile. Such a measurement is included for every school in every year of the study.

Unlike student background characteristics, school characteristics are treated as time-varying, implying that these characteristics change over the course of this six-year study. Indeed, Greenville schools are very dynamic in terms of changes in composition as they move from an emphasis on desegregation toward a return to schools that are closer to students' homes. Therefore, one cannot assume that school characteristics are stable over time.

Neighborhood/School Zone Context Variables

Essential to this research are measures of the neighborhood context of each school zone. As discussed previously, I use aggregates of the 2000 census data to represent the social and demographic characteristics of each school zone in each year. These neighborhood context variables act as time-varying, school-level variables. Over the six years of the study, school attendance zones were quite dynamic in Greenville. While it is true that each cluster of schools was scheduled for a one-time rezoning and these rezoning changes were implemented unevenly across schools and clusters of schools over

the five years of unitary status, it is also true the rezoning one cluster (or even one school) sent ripple effects throughout the district that affected several school zones in smaller ways. Most schools experience a one-time large change in zoning patterns, but most schools also experience mild rezoning throughout the six years of the study; therefore, school attendance zones tend to change every year of the study, and these changes are captured in my census-based measures of schools' neighborhoods.

Disorganization theory identifies four important constructs to consider when measuring neighborhood effects: residential stability, ethnic diversity, family disruption, and socioeconomic conditions. All of these constructs are created from the variables available for each BG in the 2000 census data. The variable values for each BG are aggregated to the school zone level, thereby creating neighborhood context indicators that essentially become school-level variables.

Residential stability. Residential stability measures the proportion of residents who have lived in the same dwelling for at least five years. This is an important neighborhood characteristic to consider because the assimilation of newcomers into a neighborhood is a sequential process, and therefore residential mobility acts as a barrier to the development of friendships and networks (see Weicher, 1990). Residential stability, on the other hand, has a positive effect on social cohesion from increased friendship networks and decreased anonymity among neighbors. In fact, regardless of their own length of residence, residents who live in high-turnover neighborhoods have fewer opportunities to form friendships and organizational contacts. They tend to be less satisfied with their communities, and may be less motivated to form friendships (Sampson, 1991). I expect residential stability to enhance processes related to collective

socialization and social networks and, in turn, improve educational outcomes of students attending neighborhood schools.

Ethnic diversity. To capture the neighborhood's level of racial and ethnic diversity, I subtract from one the sum of the squared proportions of Whites, African Americans, Asians, Native Americans, and others (see Bellair, 1997; Sampson & Groves, 1989; and Warner & Rountree, 1997). This measure theoretically ranges from 0 to .8, with high scores indicating a neighborhood that is racially and ethnically heterogeneous and low scores indicating a neighborhood that is racially and ethnically homogeneous. Diversity is measured in such a way because of the theoretical expectation that racial/ethnic heterogeneity keeps inner-city residents from forming consensus about norms and values (Elliot, Wilson, Huizinga, Sampson, Elliot, & Rankin, 1996; Sampson & Groves, 1989; Shaw & McKay, 1942).

Family disruption. Sampson (1985) suggests that single parenthood strains resources of time, money, and energy—all of which interfere with parents' ability to supervise their children and communicate with other adults in the neighborhood. Family disruption is the proportion of children age 18 and younger living in single-parent families.

Socioeconomic conditions. The “socioeconomic conditions” concept is divided into two constructs: “social advantage” and “economic deprivation.” Social advantage is a mean composite of the proportion of college graduates among adults who are at least 25 years of age and the proportion of employed persons with professional or managerial occupations ($\alpha = .972$). This factor allows me to consider the spatial concentration of “advantage” in terms of the potential pool of positive role models in the neighborhood

(Morenoff & Tienda, 1997). Similarly, economic deprivation is also a mean composite of two items. It includes the proportion of residents over age 16 who are unemployed or not in the labor force as well as the proportion of individuals with incomes below the poverty level ($\alpha = .854$). I include the jobless rate because Wilson (1996) has emphasized its role in the creation of “the new urban poverty.” Joining measures of unemployment and poverty allows me to take into consideration an additional dimension of material deprivation (see Ainsworth, 2002).

Mediating Variable

The most common strategy in studying neighborhood effects is to estimate a direct effects model where several variables are entered as controls alongside certain neighborhood characteristics. However, Sampson, Morenoff, and Gannon-Rowley (2002) argue that this strategy confounds the importance of other community influences such as school climate, etc. “Static models that estimate the direct effect of current neighborhood context on a particular outcome (e.g., delinquency, level of academic achievement) may be partitioning out relevant variable in a host of mediating and developmental pathways of influence” (p. 469). This is a call for tests of indirect pathways that may mediate the effects of neighborhood contexts. As is discussed in the review of literature, it is hypothesized that schools may, at least partially, mediate the relationship between neighborhood characteristics and student outcomes (Ainsworth, 2002). This idea is fueled by the research indicating that place matters in educational environments and that schools can act as a stabilizing force in neighborhoods (Driscoll, 2001; Morris, 2001).

In response to the need to explore avenues of mediation when studying neighborhood contexts, I test whether or not neighborhood characteristics are mediated by enhanced option schools. The district data, however, offers very little data on the characteristics of enhanced option school. It does include a school type indicator. That is, we know which schools are zoned schools and which are specified as enhanced option schools in each year of the study. Enhanced option schools were designed to be “the most effective elementary program necessary for high risk student to have early and sustained success in school” (Greensville Metropolitan Public Schools, n.d., p. 1). “The purpose of Enhanced Options Schools is to provide education, health, social, and recreational services to students, families, and the community that ensures student success now and in the future” (Greensville Metropolitan Public Schools, n.d., p. 2). These schools were clearly established with the purpose of mediating the negative effects of living in impoverished communities on student outcomes. Enhanced option schools are placed in inner-city neighborhoods to “provide a neighborhood school option for parents of inner city young children—the group who had traditionally bore the burden of court ordered busing” (Greensville Metropolitan Public Schools, n.d., p. 1).

Given the purpose and history of enhanced option schools, a simple school type indicator (1 = *school is an enhanced option school*, and 0 = *school is a regular zoned school*) is sufficient to detect the possible mediating effect of schools. Thus, this dichotomous school type measure is used for two purposes: first, to test whether or not attending an enhanced option school influences students’ participation and engagement; and second, to test whether or not enhanced option schools are able to mediate the neighborhood effects that influence the same student outcomes.

This measure, however, is not without weaknesses. Should an enhanced option effect emerge, the reason for the effect would probably be less clear than would be desirable. To explore this further, I use the schools surveyed as part of the teacher survey to assess descriptively the differences between enhanced option schools and regular zoned schools.

School Characteristics Constructs from the Greenville Teacher Survey

The district-wide data does not contain contextual measures of school characteristics. This is somewhat problematic because if enhanced option schools are found to have an effect on student outcomes, the characteristics of enhanced option schools that are most influential on student outcomes will be unknown. The teacher surveys provide contextualized measures of school characteristics (teacher responses aggregated to the school level). The aggregate measures calculated from the teacher survey include composites of the following variables: within-school capital (such as adequacy of resources, shortage of resources, support services needed, and support services received); academic climate (academic press); environmental climate (professional climate, institutional challenges, and lack of student engagement); and social networks (such as school and community partnering, barriers to parent involvement, and communication with parents) (see Table 3).

Within-school capital. Four constructs are used to measure within-school capital: adequacy of resources (a 13-item mean composite; $\alpha = .860$); shortage of resources (a 6-item mean composite; $\alpha = .819$); support services needed (a 5-item mean composite; $\alpha = .935$); and support services received (a 5-item mean composite; $\alpha = .926$). To assess

Table 3. Description of Teacher Survey Variables

	<u>2003-2004</u> <u>Mean</u>	<u>2003-2004</u> <u>SD</u>
<u>Within-School Capital</u>		
<i>Adequacy of Resources</i> (13-item mean composite; $\alpha = .860$)	2.65	0.61
<p>"How adequately does your school provide you with each of the following resources for your classroom: (a) Basic supplies (paper, chalk, markers); (b) Current, adopted materials (texts); (c) Supplemental texts (e.g., workbooks); (d) Reference materials in my classroom (maps, science kits, math manipulatives); (e) Subject-specific supplemental materials; (f) TV/VCR Accessibility in my classroom; (g) Computers in my classroom; (h) Computer printer in my classroom; (i) Educational software in my classroom; (j) An Internet connection in my classroom; (k) Technical (computer) support; (l) Teacher educational assistant; (m) Calculators."</p> <p style="padding-left: 40px;">Coded as: 1 = Completely Inadequate 2 = Mostly Inadequate 3 = Mostly Adequate 4 = Completely Adequate</p>		
<i>Shortage of Resources</i> (6-item mean composite; $\alpha = .819$)	2.15	0.69
<p>"Which of the following limit you in how you teach your most typical class: (a) Amount of professional support staff; (b) Shortage of computer hardware; (c) Shortage of computer software; (d) Shortage of other instruction equipment for students' use; (e) Shortage of equipment for your use in demonstrations and other exercises; (f) Inadequate physical facilities?"</p> <p style="padding-left: 40px;">Coded as: 1 = Not at All 2 = A Small Extent 3 = A Moderate Extent 4 = A Great Extent</p>		
<i>Support Services Needed</i> (5-item mean composite; $\alpha = .935$)	2.46	1.19
<p>"About what percentage of your students in your most typical class need the following support services: (a) Academic tutoring; (b) Mentoring; (c) Health services; (d) Social services; (e) Testing for SPED?"</p> <p style="padding-left: 40px;">Coded as: 1 = Less than 25% 2 = Between 25% and 45% 3 = About 50% 4 = Between 55% and 75% 5 = More than 75%</p>		

Table 3 (continued). Description of Teacher Survey Variables

Within-School Capital (continued)

<p>Support Services Received (5-item mean composite; $\alpha = .926$)</p> <p>"About what percentage of your students in your most typical class who need the following support services actually receive them: (a) Academic tutoring; (b) Mentoring; (c) Health services; (d) Social services; (e) Testing for SPED?"</p> <p style="padding-left: 40px;">Coded as: 1 = Less than 25%</p> <p style="padding-left: 40px;">2 = Between 25% and 45%</p> <p style="padding-left: 40px;">3 = About 50%</p> <p style="padding-left: 40px;">4 = Between 55% and 75%</p> <p style="padding-left: 40px;">5 = More than 75%</p>	<p>2.25</p>	<p>1.31</p>
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Academic Climate

<p>Academic Press (7-item mean composite; $\alpha = .739$)</p> <p>"How many teachers at this school: (a) Feel responsible when students fail; (b) Feel responsible to help each other do their best; (c) Help maintain discipline in the entire school, not just their classroom; (d) Take responsibility for improving the school; (e) Feel responsible for helping students develop self-control; (f) Set high standards for their own performance; (g) Feel responsible that all students learn?"</p> <p style="padding-left: 40px;">Coded as: 1 = Almost None</p> <p style="padding-left: 40px;">2 = Some</p> <p style="padding-left: 40px;">3 = Most</p> <p style="padding-left: 40px;">4 = Nearly All</p>	<p>3.14</p>	<p>0.59</p>
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Environmental Climate

<p>Professional Climate (11-item mean composite; $\alpha = .888$)</p> <p>Teachers were asked to mark the extent to which they agreed or disagreed with each of the following statements about the teachers in their school: (a) Most teachers are continually learning and seeking new ideas; (b) Most teachers make a conscious effort to coordinate their teaching with instruction at other grade levels; (c) Most teachers are supported in their efforts to experiment and develop new programs and curricula; (d) When teachers are not doing a good job, the principal works with them to improve instruction; (e) Performance evaluation procedures in this school help teachers grow professionally; (f) My principal is available when I need to see him/her; (g) Other teachers encourage me to try out new ideas; (h) Teachers receive the help they need from the principal when problems arise; (i) The principal spends time in my classroom observing my teaching and provides feedback; (j) In-service training and staff development programs in this school help teachers grow professionally; (k) The staff is continually evaluating its programs and activities.</p> <p style="padding-left: 40px;">Coded as: 1 = Strongly Disagree</p> <p style="padding-left: 40px;">2 = Disagree</p> <p style="padding-left: 40px;">3 = Agree</p> <p style="padding-left: 40px;">4 = Strongly Agree</p>	<p>2.97</p>	<p>0.50</p>
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Table 3 (continued). Description of Teacher Survey Variables

<p><i>Institutional Challenges</i> (7-item mean composite; $\alpha = .753$)</p> <p>"Indicate how much each of the following limit you in how you teach your most typical class: (a) Low morale among fellow teachers/administrators; (b) Students who come from a wide range of backgrounds; (c) Threat(s) to personal safety or safety of students; (d) The noise level in the school building; (e) Students with special needs (e.g., hearing, vision, speech, impairment, physical disabilities, mental or emotional/psychological impairment); (f) High student/teacher ratio; (g) Students with different academic abilities."</p> <p>Coded as: 1 = Not at All 2 = A Small Extent 3 = A Moderate Extent 4 = A Great Extent</p>	2.12	0.61
<p><i>Lack of Student Engagement</i> (4-item mean composite; $\alpha = .829$)</p> <p>"Which of the following limit you in how you teach your most typical class: (a) Uninterested students; (b) Disruptive students; (c) Parents uninterested in their children's learning progress; (d) Low morale among students."</p> <p>Coded as: 1 = Not at All 2 = A Small Extent 3 = A Moderate Extent 4 = A Great Extent</p>	2.53	0.78
Social Networks		
<p><i>School & Community Partnering</i> (7-item mean composite; $\alpha = .739$)</p> <p>"This school year, how often have you: (a) Brought in a guest speaker from the school's community; (b) Talked with students about people and/or events in the community; (c) Consulted with members of the community to better understand your students; (d) Taken students on a field trip to a local site or organization; (e) Talked with students about their cultures; (f) Talked with students about their lives at home?"</p> <p>Coded as: 0 = Never 1 = A Few Time a Year 2 = Once or Twice a Month 3 = Once or Twice a Week 4 = Almost Daily</p>	1.50	0.62
<p><i>Barriers to Parent Involvement</i> (5-item mean composite; $\alpha = .663$)</p> <p>"How often do each of the following affect parent involvement at this school: (a) The distance parents have to travel from their home to the school is too far; (b) Parents do not feel welcome at this school; (c) Parents' work schedules conflict with meeting and conference times at the school; (d) Lack of transportation for children; (e) Lack of childcare?"</p> <p>Coded as: 1 = Never 2 = Rarely 3 = Sometimes 4 = Often</p>	2.28	0.57

Table 3 (continued). Description of Teacher Survey Variables

Social Networks (continued)

Teacher Communication with Parents (5-item mean composite; $\alpha = .847$) 3.05 0.68

"Teachers may communicate many different types of information to their students' families. How often do you communicate the following information to parents of your students? (a) Inform parents about learning objectives in core academic subjects; (b) Contact parents when their child is encountering academic problems; (c) Provide parents with examples of excellent student work; (d) Provide parents with specific activities for children and parents to do to improve students' grades; (e) Assign homework that requires children to interact with parents?"

- Coded as: 1 = Never
2 = Sometimes
3 = Usually
4 = Always
-

N = 164 Teacher in 5 Enhanced Option Schools & 325 Teachers in 12 Zoned Schools.

Means and Standard Deviations are reported for Zoned Schools and Enhanced Option Schools combined for the 2003-2004 school year.

teachers perceptions of the adequacy of school resources, teachers were asked to respond to the following question: “How adequately does your school provide you with each of the following resources for your classroom: (a) Basic supplies (paper, chalk, markers); (b) Current, adopted materials (texts); (c) Supplemental texts (e.g., workbooks); (d) Reference materials in my classroom (maps, science kits, math manipulatives); (e) Subject-specific supplemental materials; (f) TV/VCR Accessibility in my classroom; (g) Computers in my classroom; (h) Computer printer in my classroom; (i) Educational software in my classroom; (j) An Internet connection in my classroom; (k) Technical (computer) support; (l) Teacher educational assistant; (m) Calculators.” Teachers rated the adequacy of each resources as 1 = *Completely inadequate*, 2 = *Mostly inadequate*, 3 = *Mostly adequate*, or 4 = *Completely adequate*.

Teachers were also asked to assess the extent to which they experienced shortages of resources in their classrooms. They were asked: “Which of the following limit you in how you reach your most typical class: (a) Amount of professional staff; (b) Shortage of computer hardware; (c) Shortage of computer software; (d) Shortage of other instruction equipment for students’ use; (e) Shortage of equipment for your use in demonstrations and other exercises; and (f) Inadequate physical facilities.” Response categories were 1 = *Not at all*, 2 = *A small extent*, 3 = *A moderate extent*, and 4 = *A great extent*.

The support services needed composite was created from the following question: “About what percentage of your students in your most typical class need the following support services: (a) Academic tutoring; (b) Mentoring; (c) Health services; (d) Social services; (e) Testing for SPED? 1 = *Less than 25%*, 2 = *25% to 45%*, 3 = *About 50%*, 4 = *55% to 75%*, or 5 = *More than 75%*.”

Similarly, the support services received composite measures teachers responses to the following questions: “About what percentage of your students in your most typical class who need the following support services actually receive them: (a) Academic tutoring; (b) Mentoring; (c) Health services; (d) Social services; (e) Testing for SPED? 1 = Less than 25%, 2 = 25% to 45%, 3 = About 50%, 4 = 55% to 75%, or 5 = More than 75%.”

Academic climate. Academic climate is measured with one composite aimed at assessing the school’s academic press. Teachers were asked, “How many teachers at this school: (a) Feel responsible when students fail; (b) Feel responsible to help each other do their best; (c) Help maintain discipline in the entire school, not just their classroom; (d) Take responsibility for improving the school; (e) Feel responsible for helping students develop self-control; (f) Set high standards for their own performance; (g) Feel responsible that all students learn? 1 = Almost none, 2 = Some, 3 = Most, or 4 = Nearly all.” The 7-item mean composite has an alpha reliability of $\alpha = .739$.

Environmental climate. Professional climate, institutional challenges, and student engagement are all considered part of a school’s environmental climate and may be important school characteristics that could mediate the effects of neighborhoods on student outcomes. Professional climate, an 11-item mean composite with an alpha reliability of $\alpha = .888$, assess how teachers feel about other teachers and professionals in their school. Teachers were asked to mark the extent to which they agreed or disagreed with each of the following statements about the teachers in their school: “(a) Most teachers are continually learning and seeking new ideas; (b) Most teachers make a conscious effort to coordinate their teaching with instruction at other grade levels; (c)

Most teachers are supported in their efforts to experiment and develop new programs and curricula; (d) When teachers are not doing a good job, the principal works with them to improve instruction; (e) Performance evaluation procedures in this school help teachers grow professionally; (f) My principal is available when I need to see him/her; (g) Other teachers encourage me to try out new ideas; (h) Teachers receive the help they need from the principal when problems arise; (i) The principal spends time in my classroom observing my teaching and provides feedback; (j) In-service training and staff development programs in this school help teachers grow professionally; (k) The staff is continually evaluating its programs and activities.” The response options were 1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Agree*, and 4 = *Strongly agree*.

A composite assessing institutional challenges was also created from the following 7 items. Teachers were asked, indicate how much each of the following limit them in how they teach their most typical class: “(a) Low morale among fellow teachers/administrators; (b) Students who come from a wide range of backgrounds; (c) Threat(s) to personal safety or safety of students; (d) The noise level in the school building; (e) Students with special needs (e.g., hearing, vision, speech, impairment, physical disabilities, mental or emotional/psychological impairment); (f) High student/teacher ratio; (g) Students with different academic abilities.” Response categories were 1 = *Not at all*, 2 = *Small extent*, 3 = *Moderate extent*, or 4 = *Great extent*. The composite measure was reliable at the $\alpha = .753$ level.

Questions regarding student engagement (or a lack thereof) were also asked, from which a 4-item mean composite was formed. Teachers were asked, “Which of the following limit you in how you teach your most typical class: (a) Uninterested students;

(b) Disruptive students; (c) Parents uninterested in their children's learning progress; (d) Low morale among students." Responses include: 1 = *Not at all*, 2 = *Small extent*, 3 = *Moderate extent*, and 4 = *Great extent* ($\alpha = .829$).

Social networks. The final concept measured in the teacher survey, social networks, is assessed through three composite measures: school and community partnering, barriers to parent involvement, and communication with parents. The school and community partnering composite ($\alpha = .739$) was created from 7 items. Teachers were asked, "This school year, how often have you: (a) Brought in a guest speaker from the school's community; (b) Talked with students about people and/or events in the community; (c) Consulted with members of the community to better understand your students; (d) Taken students on a field trip to a local site or organization; (e) Talked with students about their cultures; (f) Talked with students about their lives at home?" Teacher responses include 0 = *Never*, 1 = *A few times a year*, 2 = *Once or twice a month*, 3 = *Once or twice a week*, or 4 = *Almost daily*.

Barriers to parent involvement is another important measure, and one the district hoped limit as they moved to a system of neighborhood schools. In theory, barriers should be few in number. To assess this empirically, teachers responded to the following question: "How often do each of the following affect parent involvement at this school: (a) The distance parents have to travel from their home to the school is too far; (b) Parents do not feel welcome at this school; (c) Parents' work schedules conflict with meeting and conference times at the school; (d) Lack of transportation for children; (e) Lack of childcare?" Teachers answered with 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, or 4

= *Often*. Responses to these five items were averaged to create a composite measure of barriers to parent involvement ($\alpha = .663$).

The final composite measure of social networks is communication with parents. Teachers were asked the following question: “Teachers may communicate many different types of information to their students’ families. How often do you communicate the following information to parents of your students? (a) Inform parents about learning objectives in core academic subjects; (b) Contact parents when their child is encountering academic problems; (c) Provide parents with examples of excellent student work; (d) Provide parents with specific activities for children and parents to do to improve students’ grades; (e) Assign homework that requires children to interact with parents?” Teachers gave answers of 1 = *Never*, 2 = *Sometimes*, 3 = *Usually*, and 4 = *Always*. The measure is reliable at the $\alpha = .847$ level.

Analyses

Three sets of analyses are used to explore the context of this study and to address the research questions. First, I use descriptive analyses to track district-wide changes on the outcome measures, attendance and disciplinary events, as well as changes in schools and school zones over time. Second, to address the extent to which student outcomes are predicted by the characteristics of school neighborhoods and to determine whether or not these neighborhood effects can be mediated by schools with enhanced options, I apply cross-classified growth models (HCM) that include all six years of district-level data. The HCM analyses mark those which are most critical to this study and most instrumental in addressing the research questions outlined in this study. Third, to further

address the differences between enhanced option schools and regular zoned schools I use the teacher survey data to assess descriptive differences between enhanced option school characteristics and the characteristics of regular zoned schools. Results from these descriptive analyses are used to interpret the findings from the HCM analyses.

Cross-Classified Growth Models

The longitudinal nature of the data available from the district allows for the tracking of students and their experiences over time. This type of modeling permits the assessment of whether or not student- and school- level variables are more or less predictive of student attendance and discipline over time. Additionally, data are hierarchical, meaning that students are nested within schools over time. Because student observations are not truly independent of one another when dealing with nested hierarchies, students who share the same school are likely to experience some shared variance. Multilevel growth models adjust for this non-independence of observations. However, a traditional hierarchical linear model (HLM) model is insufficient in making use of this type of longitudinal data where students change schools over time. HLM growth modeling is a useful modeling approach when lower-level units are nested within one and only one higher-level unit. In these data, however, students do not belong to one and only one school; therefore, the nesting structure of the data is more complex in which individual, time-varying student observations are cross-classified by time-invariant student characteristics and schools. Cross-classified growth models (HCM) are ideal for such data structures (Raudenbush & Bryk, 2002). Another advantage to growth modeling using the HCM framework is that it is not necessary for each student in the analyses to

have the same number of waves of data. All cases can be used, even if a student is only observed at one point in time (Singer & Willett, 2003).

Level-1 of the HCMs used in this study includes all student-level time-variant measures and a growth trajectory. These student-level measures are the dependent variables as well as the series of dummy variables used to control for student grade. Time-varying student observations are cross-classified by Row-level indicators and Column-level indicators. Row-level indicators consist of the following student time-invariant measures: student race, gender, poverty status, IEP status, and LEP status (see Appendix C, Equations 1.1 and 1.2 for).

Column-level indicators refer to all school-level measures. The traditional HCM framework is somewhat problematic for this study in that it assumes that all Row- and Column-level measures are time-invariant. In this study, however, school-level measures are quite dynamic over the six years of the study. This problem is resolved by assigning each school a unique identification number of every year it appears in the study. This maintains the nesting structure of students within schools, but allows students to experience different school characteristics over the course of the study. Thus, student observations (at level-1) are nested within students which are nested within school observations, where students are nested within a different school observation in each year of the study.

I estimate three stepwise models for each dependent variable. The first step models the dependent variables as a function of neighborhood characteristics. In the second step, all other school- and student-level control variables are included in the model. And finally, the third step adds the mediating variable of whether or not a school

is an enhanced option school. This stepwise approach to estimating these models is functional in terms of addressing some of the methodological issues that are discussed below.

Methodological Considerations

Three methodological considerations are addressed at the outset. I first discuss the treatment of non-normal distributions of my dependent variables, after which I discuss the method I employ for detecting mediated relationships between variables, and finally, I discuss sources of bias inherent in this study and how they are dealt with.

Distribution of dependent variables. Traditional regression assumes a certain distribution for dependent variables. Dependent variables should be normally distributed with a symmetric distribution of errors and constant variance (Cohen, Cohen, West, & Aiken, 2003). Neither of my dependent variables—number of absences and number of disciplinary events—meet these assumptions. However, because both of my dependent variables are counts of the occurrence of rare events, they seem to follow the pattern of a Poisson distribution. The three main requirements for a Poisson distribution are (a) the distribution is skewed; (b) the distribution is non-negative; and (c) the variance increases as the mean increases (Gardner, Mulvey, & Shaw, 1995). Table 4 reports descriptive statistics for each of the dependent variables for each year of the study. These descriptive statistics include skewness and Kurtosis statistics. The positive skewness statistic for each of the dependent variables across all years of the study indicates a non-normal distribution with a long right tail. Similarly, the Kurtosis statistic indicates that the observations cluster more and have longer tails than those in a normal distribution. Both

Table 4. Distribution of Dependent Variables

Dependant Variables	<u>1998-1999</u>	<u>1999-2000</u>	<u>2000-2001</u>	<u>2001-2002</u>	<u>2002-2003</u>	<u>2003-2004</u>	<u>All Years</u>
<i>Number of Absences</i>							
Minimum	0	0	0	0	0	0	0
Maximum	134	136	169	136	140	137	169
Mean	8.25	8.02	7.86	7.74	8.13	8.15	8.02
Standard Deviation	8.80	8.87	8.65	7.88	8.04	7.80	8.38
Skewness	3.17	3.35	3.54	2.84	2.84	2.36	3.07
Kurtosis	17.84	20.38	26.60	16.51	16.84	10.78	18.92
N	28641	28752	29160	29587	28787	28859	173786
<i>Number of Disciplinary Events</i>							
Minimum	0	0	0	0	0	0	0
Maximum	37	45	37	44	48	32	48
Mean	0.83	0.82	0.79	0.84	0.94	1.05	0.88
Standard Deviation	2.44	2.39	2.10	2.33	2.65	2.78	2.46
Skewness	5.18	5.60	4.60	5.26	5.01	4.45	5.06
Kurtosis	36.06	45.19	29.28	40.80	35.72	25.47	35.85
N	29311	29459	29301	29623	28808	28890	175292

N = 171,030 Observations of 67,833 Students & 548 Observations of 104 Schools (over a 6-year period).

measures indicate that the dependent variables follow a Poisson distribution. Poisson regression is a generalized linear model that uses a log transformation to adjust for the skewness and prevents the model from producing negative predicted values. Poisson regression also models the variance as a function of the mean (Gardner, Mulvey, & Shaw, 1995). Additionally, the two outcome measures used in my analyses have unbounded positive ranges, and the sample variance for both measures exceeds the mean (see Table 4). In these cases, the observations are overdispersed with respect to a traditional Poisson distribution. Therefore, an overdispersed Poisson regression within the HCM framework is the modeling strategy employed to examine the effects of neighborhoods and schools on absenteeism and number of disciplinary events.

Determining mediation. The criteria for establishing mediation are nicely summarized by Howell (2002). First, the dependent variable(s) (absenteeism and discipline, in this study) must be correlated with the independent variable that may be mediated by some other variable. In this study, the independent variables of interest are the characteristics of schools' neighborhoods. Second, the independent variables must be correlated with the mediating variable (in this case, whether or not the school is an enhanced option school). Third, the mediating variable must be correlated with the dependent variable, holding constant any direct effect of the independent variable on the outcome variable(s). Complete mediation is established when the independent variable is no longer correlated with the dependent variable when the mediating variable is entered in the regression equation. Partial mediation occurs when the correlation between the independent variable on the dependent variable is reduced when the mediating variable is added.

Specific to the study at hand, all variables are entered into the HCM model with the exception of the mediating variable. After estimating a model without the mediating variable, the mediator is included in the model and the two sets of results for the independent variables of interest are compared (Baron & Kenny, 1986). In this case, if enhanced option schools completely mediate the effects of the schools' neighborhood, any significant findings in the model without the mediator will no longer be significant when the mediating variable is included. In the case of partial mediation, the effect of the neighborhood variables will be closer to zero, yet still significant when the mediating variable is added.

Sources of bias. I am primarily concerned with three possible sources of bias in my analyses, each of which represents a typical problem when studying the effects of neighborhoods on individuals. Measurement error contributes to two possible sources of bias. First, error is associated with the creation of the neighborhood context variables, and second, the lack of ideal measures at the student level could contribute to omitted variable bias. The third issue is that of highly correlated independent variables. Each of these issues is addressed more thoroughly in the following paragraphs.

Crane (1991) suggests that possibly the largest source of measurement error when measuring neighborhood effects is introduced when defining the neighborhoods themselves. Most studies use census data and census boundaries to define neighborhoods; however, these boundaries offer imperfect, and often overlapping operational definitions of neighborhoods. This aggravates the problem of measurement error. Crane (1991) states: "There is one saving grace, however. The bias that measurement error generates is unambiguously downward (i.e., toward zero), thus

making estimates of neighborhood effects conservative” (p. 1246). Because there are overlaps between true boundaries and operational boundaries, operationally defined neighborhoods are weighted averaged of actual separate neighborhoods. This adds an element of randomness to the measured association between neighborhood characteristics and the dependent variables. Thus, the fact that I define neighborhoods as school zones may introduce bias, but the bias is likely to underestimate the effects of neighborhoods.

Omitted variable bias is another problem inherent in my analyses. The literature on neighborhood effects has been criticized because of the absence of data combining information at the individual and neighborhood level (Brooks-Gunn, Duncan, Klebanov, & Sealand, 1993; Mayer & Jencks, 1989). Ideally, I would be able to control for the contexts of students’ residential neighborhoods while estimating the effects of those same neighborhood characteristics as they are aggregated to the school zone level.

Unfortunately, the Greenville school district data does not provide the necessary student identifiers such as address and zip codes.¹³ I am able to control for student race and eligibility for free and reduced lunch, which may be reasonable proxies for students’ home environments and neighborhoods. But it is possible that the social characteristics of the block group a student lives in is more important than the social characteristics of their school attendance zone. To the extent that this is true, the omission of student-level measures of neighborhood characteristics may bias my estimates of neighborhood effects

¹³ Much of the neighborhood effects research uses individuals’ zip codes to compute measures of neighborhood contexts using the census. However, zip codes are quite variable in terms of the geographic area they include. For example, in the county that makes up the Metro school district) there are 467 census block groups (which are used in this study to compute the neighborhood contexts of school attendance zones). However, there are only 48 5-digit zip codes in the county (excluding 8 zip codes that are assigned to universities and federal government agencies that have their own post offices and their own zip codes). It is likely that measures of a student’s home neighborhood (based on their zip code, if it were accessible in this dataset) would be much less precise than the measures used here to indicate the social contexts of their school zone, given that school attendance zones in all years of the study are significantly smaller than areas defined by zip codes.

upward. Nevertheless, correlations between my measures of the social context of school zones and the percent of students eligible for free and reduced lunch at the school were highly correlated (see Table 5); therefore, student-level measures of race and whether or not the student is eligible for free and reduced lunch may be an acceptable proxy for student's residential neighborhood. This assumption, however, is not testable with the available data.

Regardless, other researchers identify the common practice in neighborhood effects research of looking at the characteristics of individuals' place of residence as problematic (Sampson, Morenoff, & Gannon-Rowley, 2002). They argue that many behaviors of interest take place in spaces outside of residential neighborhoods and that many patterns of social interactions expand beyond residential neighborhoods. They further suggest that examining residential neighborhoods is limiting and that, when using neighborhood contexts to predict outcomes for children, neighborhood boundaries need to be redefined in ways that are more consonant with social interactions of children's experiences (Sampson, Morenoff, & Gannon-Rowley, 2002). By defining neighborhoods as school attendance zones, this study attempts to follow these recommendations. My study addresses the effects of school neighborhoods on school-related outcomes; therefore, it is possible that the most important unit of analysis—characteristics of school zones—is predicted in the best way possible, regardless of my inability to control for these same characteristics at the student level.

In addition to the measurement error inherent in this research, some of the variables originally intended for my analyses are highly correlated. This too is a common problem in the research on neighborhood effects (Mayer & Jencks, 1989). Specifically,

Table 5. Bivariate Correlations of School-Level Variables

	<i>Residential Stability</i>	<i>Ethnic Diversity</i>	<i>Family Disruption</i>	<i>Social Advantage</i>	<i>Economic Deprivation</i>	<i>% Free & Reduced Lunch</i>	<i>75% Free & Reduced Lunch</i>	<i>% African American</i>	<i>75% African American</i>	<i>School Size</i>	<i>Teacher Turnover</i>	<i>Distance</i>
<u>School Neighborhood Characteristics</u>												
<i>Residential Stability</i>	1.000											
<i>Ethnic Diversity of Neighborhood</i>	-0.253	1.000										
<i>Family Disruption</i>	0.065	0.082	1.000									
<u>Socioeconomic Conditions</u>												
<i>Social Advantage</i>	-0.155	-0.444	-0.674	1.000								
<i>Economic Deprivation</i>	0.009	-0.039	0.807	-0.566	1.000							
<u>School Characteristics</u>												
<i>% Free & Reduced Lunch</i>	0.050	0.375	0.660	-0.737	0.624	1.000						
<i>75% Free & Reduced Lunch or Greater (dichotomous)</i>	-0.031	0.241	0.577	-0.464	0.601	0.727	1.000					
<i>% African American</i>	0.088	0.417	0.601	-0.517	0.583	0.779	0.589	1.000				
<i>75% African American or Greater (dichotomous)</i>	0.196	0.076	0.472	-0.281	0.427	0.624	0.623	0.724	1.000			
<i>School Size</i>	-0.308	0.252	-0.252	0.134	-0.313	-0.275	-0.240	-0.133	-0.242	1.000		
<i>Teacher Turnover Rate</i>	-0.002	0.036	0.115	-0.108	0.090	0.201	0.154	0.233	0.222	-0.047	1.000	
<i>Distance Between Home & School</i>	0.145	-0.299	-0.450	0.427	-0.409	-0.452	-0.404	-0.280	-0.159	0.229	-0.032	1.000

N = 171,030 Observations of 67,833 Students & 548 Observations of 104 Schools (over a 6-year period).

the family disruption measure is highly correlated with the two indicators of socioeconomic conditions, social advantage (*Pearson's r* = -.674) and economic deprivation (*Pearson's r* = .807) (see Table 5). Because my measures of socioeconomic conditions seem to be measuring essentially the same characteristic as the family disruptions measure,¹⁴ family disruption is dropped from the HCM analyses.

Because schools of concentrated poverty are often racially isolated minority schools in the Metro school district after unitary status, my measures of poverty and racial composition of schools' student bodies are also highly correlated. To address this issue, I attempted to use a continuous poverty indicator and create a dichotomous measure for racial isolation (1 = 75% minority or more; 0 = Less than 75% minority). This, however, was unhelpful. The indicators are highly correlated regardless of how they are constructed. Each of these indicators is also correlated with my economic deprivation measure, which is expected given that "neighborhoods" in this study are school-level measures. Therefore, these two school characteristics—school poverty and racial mix—are omitted from HCM analyses. In this study, measures of school poverty and the racial composition seem to be reflective of the neighborhood contexts from which a school draws its population of students.

¹⁴ This is most likely due to the observance that single-parent families are likely to be living in poverty.

CHAPTER V

CHANGES IN SCHOOLS & SCHOOL ZONES OVER TIME

Before reporting the main results of this paper, it is first necessary to outline the trends of the district over time. Several analyses are used to describe the changes that took place in the district over the six-year span of time. First, I describe the average values for each school-level variable and how they change across the six years of the study. As part of my description of these changes over time, I run a basic 2-level HLM growth model to determine whether or not the distance between schools and the outermost perimeter of their attendance zones has changed significantly over time (see Appendix C, Equations 2.1 and 2.2). This basic model includes only two variables, one dependent variable (distance between home and school) and one independent variable (growth over time). I use the six-year growth trajectory to predict distance between home and school. The level-1 portion of the model includes 548 observations of schools nested within 104 schools in the level-2 portion of the model. After describing the six-year trends in the district, I run independent sample t-tests to assess the differences between zoned schools and enhanced option schools across all years of the study. And finally, I repeat these analyses comparing enhanced option schools to zoned schools with similar demographic characteristics.

Changes in School Characteristics Over Time

Over the six-year period of unitary status, Metro Greenville has experienced many changes in how education is organized and prioritized. Since the 1999 school year—the first year of this study—the most notable difference is that enhanced option schools have been implemented, and the number of them continues to grow (see Table 6). In 2000 the district opened 2 enhanced option schools, and by 2004 they had added four more. Regular zoned schools decreased in number from 93 in 1999 to 83 in 2004. This seeming decrease in zoned schools does not represent school closures, rather a transformation of zoned schools into other school types (such as magnet schools and enhanced option schools). The number of schools district wide remained relatively stable over the six-year course of this study—between 89 and 93 schools with student attendance zones.

Zoned School Trends

From 1999 to 2004 zoned schools experience an increase in student who are eligible for free and reduced lunch (see Table 6). In the base year of the study, an average of 54% of the students in zoned schools was eligible. By 2004 61% of the students in zoned schools, on average, were eligible. The district also experienced a decrease in the percentage of white students. In 1999 47% of the students attending zoned schools were white; however, by 2004 that percentage had dropped to 42%. Both of these trends can be explained by the tendency for middle-class and upper-middle class parents to consider other public school choice options, private schools, or leave the district rather than send their children to a neighborhood school in Greenville. The

Table 6. Description of School-Level Changes Over Time

Zoned Schools

	<u>1998-1999</u>	<u>1999-2000</u>	<u>2000-2001</u>	<u>2001-2002</u>	<u>2002-2003</u>	<u>2003-2004</u>
	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>
% Free & Reduced Lunch	53.75%	51.73%	53.74%	55.39%	58.88%	61.21%
% White	46.62%	46.63%	45.02%	44.09%	42.40%	41.98%
% African American	47.59%	46.03%	46.26%	45.25%	45.48%	44.57%
% Other Races	5.79%	7.34%	8.72%	10.66%	12.12%	13.44%
Teacher Turnover Rate	31.61%	18.07%	22.72%	27.25%	24.24%	29.06%
School Size	489.47	491.78	492.00	505.59	507.64	506.03
Number of Absences	7.66	7.32	7.12	7.06	7.46	7.27
Number of Disciplinary Events	0.66	0.58	0.57	0.58	0.60	0.61
Total N	93	91	91	87	85	83

Enhanced Option Schools

	<u>1998-1999</u>	<u>1999-2000</u>	<u>2000-2001</u>	<u>2001-2002</u>	<u>2002-2003</u>	<u>2003-2004</u>
	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>
% Free & Reduced Lunch	—	89.44%	91.32%	88.58%	86.52%	91.68%
% White	—	11.99%	5.17%	10.39%	8.91%	5.98%
% African American	—	87.12%	94.16%	86.56%	88.80%	92.24%
% Other Races	—	0.88%	0.68%	3.05%	2.29%	1.78%
Teacher Turnover Rate	—	34.90%	16.98%	40.71%	22.35%	44.49%
School Size	—	381.50	395.00	354.20	346.40	316.29
Number of Absences	—	7.38	5.28	6.72	6.42	6.32
Number of Disciplinary Events	—	0.30	0.67	0.23	0.44	0.48
Total N	0	2	3	5	5	6

All Schools*

	<u>1998-1999</u>	<u>1999-2000</u>	<u>2000-2001</u>	<u>2001-2002</u>	<u>2002-2003</u>	<u>2003-2004</u>
	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>
% Free & Reduced Lunch	53.75%	52.54%	54.94%	57.18%	60.40%	63.51%
% White	46.62%	45.88%	43.74%	42.28%	40.56%	39.27%
% African American	47.59%	46.92%	47.79%	47.47%	47.86%	48.16%
% Other Races	5.79%	7.20%	8.47%	10.25%	11.58%	12.57%
Teacher Turnover Rate	31.61%	18.43%	22.54%	27.97%	24.14%	30.22%
School Size	489.47	489.41	488.90	497.45	498.78	491.75
Number of Absences	7.66	7.32	7.06	7.04	7.40	7.19
Number of Disciplinary Events	0.66	0.57	0.57	0.56	0.59	0.60
Total N	93	93	94	92	90	89

* "All Schools" refers only to the schools with designated student attendance zones, which represents all schools used in this study.

percentage of African American students attending zoned schools also slight decreased over the six years of the study. In 1999 48% of the students in zoned schools were African American; however, by 2004 this percentage dropped by 2%. This trend can be explained by the overwhelming presence and growth in the number of African American students attending enhanced option schools, since the percentage of African Americans in the district is fairly stable over time (about 48%). By contrast, zoned schools experience an increase in the percentage of other races. In 1999 6% of zoned school students were of other races, and by 2004 this percentage grew to 13%.

Interestingly, the teacher turnover rate in zoned schools was highest in 1999 at 32%. In 2000, the first year of unitary status, teacher turnover dropped by 14% and steadily increased over the remaining years of the study. By 2004 teacher turnover had climbed to 29%. School size has slightly but steadily increased over the six years of the study. In 1999 an average of 489 students attended zoned schools. This number steadily rose to 506 in 2004. The student outcomes of interest in this study remained fairly stable over time; however, on average, both the number of absences and the number of disciplinary events in zoned schools were highest in 1999. On average, students in zoned schools were absent about 8 times in 1999 and were disciplined about .7 times in 1999. In 2004 zoned school students were absent about 7 times and disciplined about .6 times.

Enhanced Option School Trends

Enhanced option schools follow a somewhat different trend over time (see Table 6). First, there is no real base-line for enhanced option schools. Because they were introduced with the new SIP, enhanced option schools have always been neighborhood

schools. Between 2000 and 2004, the percentage of enhanced option students eligible for free and reduced lunch increased slightly, from 89% to 92%. When compared to zoned schools, enhanced option students are, on average, much more disadvantaged (by roughly 40% in every year of the study). In addition to the high concentrations of poverty, enhanced option schools are also racially isolated. 87% of the students in enhanced option schools in 2000 were African American, and by 2004 92% of enhanced option students were African American. White students represented 12% of enhanced option school student bodies in 2000, but this percentage decreased to 6% by 2004. Other races have increased from 1% to 2% in enhanced options from 2000 to 2004.

Teacher turnover has increased over time and is quite high relative to the turnover rate in zoned schools. In 2000, the teacher turnover rate for enhanced option schools was 35%. By 2004, this rate had climbed by 10%. In 2004, enhanced option schools experienced a teacher turnover rate of 45%, compared to 29% in zoned schools. Even though zoned schools in the district are becoming slightly larger, school size in enhanced option schools has decreased over time. In 2000, enhanced option schools, on average, served 382 students, and in 2004, the average school size was 316. Enhanced option schools, on average, are smaller than zoned schools in all years; however, this comparison is inappropriate given that all enhanced option schools are elementary schools by design, and all elementary schools in the district are smaller than middle schools. Similar to the trends in zoned schools, absenteeism in enhanced option schools decreases over time. In 2000, enhanced option school students were, on average, absent about 7 times per year. This number steadily declined to 6 times per year in 2004. As mentioned earlier, zoned schools follow a similar trend; however, absenteeism is lower in

enhanced option schools in all years. Student discipline follows a different trend. In 2000, enhanced option students were disciplined about .3 times per year. This number increased over the remaining five years, and in 2004, students were disciplined about .5 times per year. While the average number of disciplinary events is rising in enhanced option schools, it did not reach the number of disciplinary events in zoned schools (.6 in 2004).

Changes in School Neighborhoods & School Zones over Time

In this study the characteristics of a school neighborhood is defined by the geographic boundaries of the school attendance zone and how that attendance zone overlaps with census block groups. Additionally all neighborhood context variables are based on the 2000 census. Therefore, any changes in these measures represent changes in school zones, and not changes in the geographic area. Each block group is assigned to at least one school, and as such, district averages of these measures do not capture actual changes in school zones by year. Change in the neighborhood context variables must be assessed individually for each school (for an exhaustive list of changes in school zone contexts by school, see Appendix D1 & Appendix D2). To describe these changes, I report the range of changes experienced by school zones between 1999 and 2004 for each of the five neighborhood characteristics used in this study.

Residential Stability

The district average for the residential stability of a school zone is 46%, with a minimum of 23% and a maximum of 73%. This indicates that in the average school,

46% of the residents living within the school zone have lived at the same residence for at least 5 years. Between the baseline year and 2004, schools in Metro experienced an average change of -1.2% in residential stability (see Table 7). Twenty one school zones (20%) did not experience any changes in residential stability; 46 schools (45%) experienced a reduction in stability; and 37 schools (36%) experienced an increase in residential stability. Of the school zones that became less stable over time, the most dramatic change was a 14% decrease in stability, with an average change of -3%. Of the school zones that became more stable over time, the most dramatic change was a 15% increase in stability, with an average change of 4%. These changes indicate the type of “polarization” that can be expected when a formerly desegregated school district returns to closer-to-home schooling.

More school zones experience a decrease in residential stability over time; however, many school zones experience a positive change in stability. The question then becomes, which schools are changing the most? Are the schools that were most stable in 1999 becoming more or less stable? Figure 2 traces the changes in residential stability over the six years of the study for 10 Metro schools. Five of these schools experienced the greatest negative change in stability, and the other five experienced the greatest positive change in stability. As is expected, the district average remains constant over time at about 46%. Schools that experienced the highest rates of stability in 1999 tend to become more stable over time. Likewise, schools that experience the lowest rates of stability in 1999 tend to become less stable over time. Most of these schools are clustered around the district average for residential stability in 1999; however, they are more dispersed in 2004. Additionally, of these schools demonstrating the greatest

Table 7. Description of Change in the Contexts of School Zones over Time

	<u>Residential Stability</u>		<u>Ethnic Diversity</u>		<u>Family Disruption</u>		<u>Social Advantage</u>		<u>Economic Deprivation</u>	
<i>District Minimum</i>	23%		0.11		14%		12%		24%	
<i>District Maximum</i>	73%		0.55		85%		57%		62%	
<i>District Average</i>	46%		0.31		39%		28%		27%	
<i>Greatest Negative % Change</i>	-14%		-16%		-20%		-21%		-9%	
<i>Greatest Positive % Change</i>	15%		12%		32%		12%		16%	
<i>Average % Change</i>	-1.2%		1.4%		0.3%		0.0%		-1.0%	
<i>Average Negative % Change</i>	-3.27%		-3.97%		-7.21%		-3.40%		-4.18%	
<i>Average Positive % Change</i>	4.05%		3.59%		6.67%		3.25%		3.90%	
	<u>Number of</u>	<u>% of</u>	<u>Number of</u>	<u>% of</u>	<u>Number of</u>	<u>% of</u>	<u>Number of</u>	<u>% of</u>	<u>Number of</u>	<u>% of</u>
	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>	<u>Schools</u>
<i>-5% or Greater (negative)</i>	12	12%	11	11%	29	28%	7	7%	23	22%
<i>-1% to -4% Change</i>	34	33%	25	24%	18	17%	28	27%	26	25%
<i>0% Change</i>	21	20%	22	21%	18	17%	25	24%	24	23%
<i>1% to 4% Change</i>	25	24%	35	34%	22	21%	33	32%	22	21%
<i>5% or Greater (positive)</i>	12	12%	11	11%	17	16%	11	11%	9	9%
N	104	100%	104	100%	104	100%	104	100%	104	100%

Change is calculated by subtracting values from 2004 from the baseline values in 1999.

Trends in the Residential Stability of School Zones Experiencing the Largest Changes from 1999 to 2004

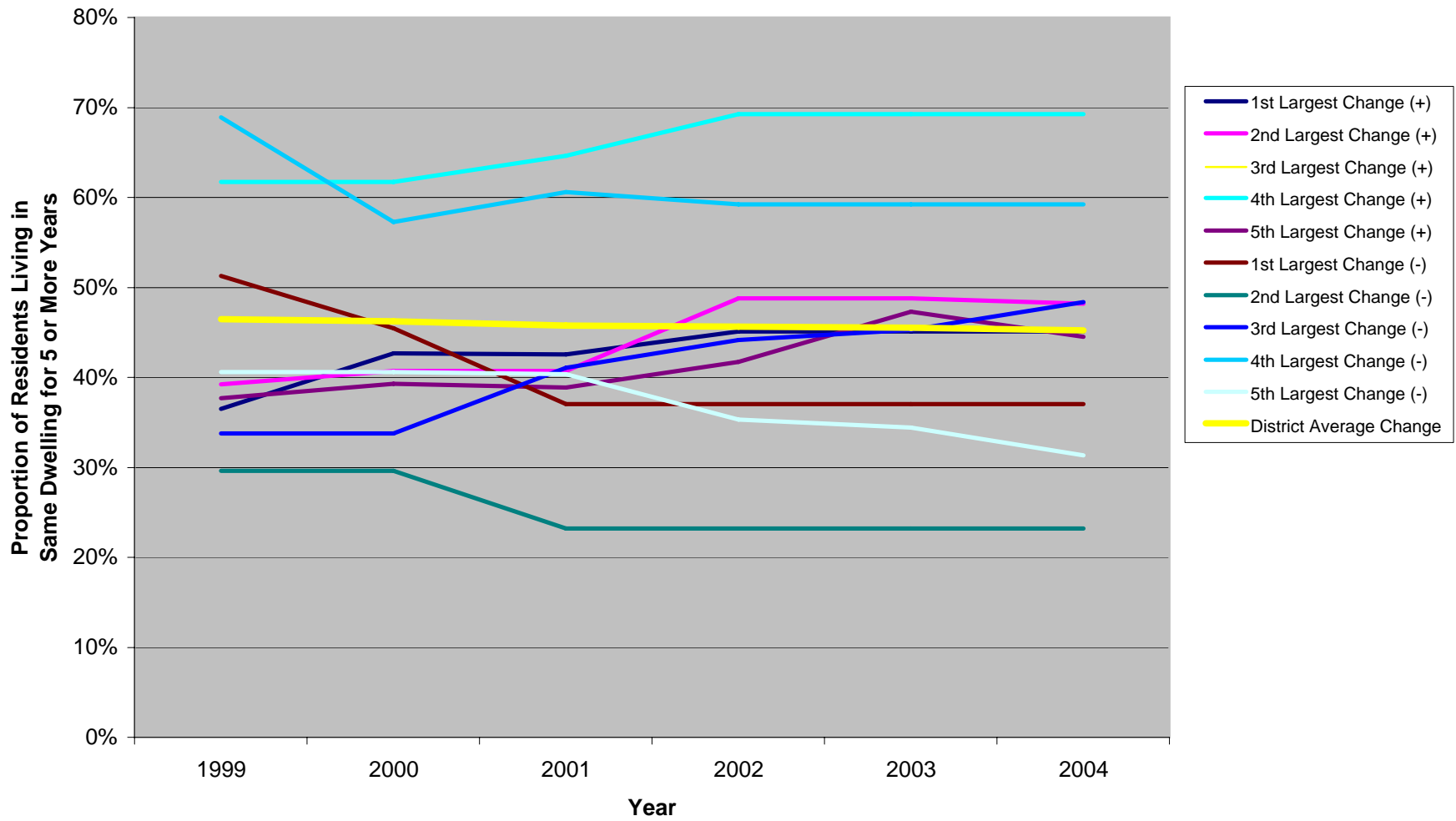


Figure 2

changes over time, most of them fell below the district average for residential stability in 1999. Therefore, the schools with the greatest amount of change (both positive and negative changes) tend to be schools that were lower than average in the base year.

Ethnic Diversity

Keeping in mind that ethnic diversity is measured on a 0 to .8 scale where 0 indicates complete homogeneity and .8 indicates complete heterogeneity, the district average for the diversity school zones is .31, with a minimum of .11 and a maximum of .55. Between the baseline year and 2004, schools in Metro experienced an average change of 1.4% in ethnic diversity (see Table 7). Twenty two school zones (21%) did not experience any changes in diversity; 36 schools (35%) experienced a reduction in diversity; and 46 schools (45%) experienced an increase in ethnic diversity. Of the school zones that became less diverse over time, the most dramatic change was a 16% decrease in stability, with an average change of -4%. Of the school zones that became more stable over time, the most dramatic change was a 12% increase in stability, with an average change of 4%.

More school zones experience an increase in ethnic diversity over time; however, the largest changes in ethnic diversity are negative. Figure 3 describes these changes over time among the 10 most dynamic schools. Five of these schools experienced the greatest negative change in diversity, and the other five experienced the greatest positive change in diversity. Again, the district average remains constant over time at about .31. Comparatively, four of these schools fall above the district average and six all below it in 1999. Unlike the trends for residential stability, these schools do not tend to be as tightly

*Trends in the Ethnic Diversity of School Zones with
the Largest Changes from 1999 to 2004*

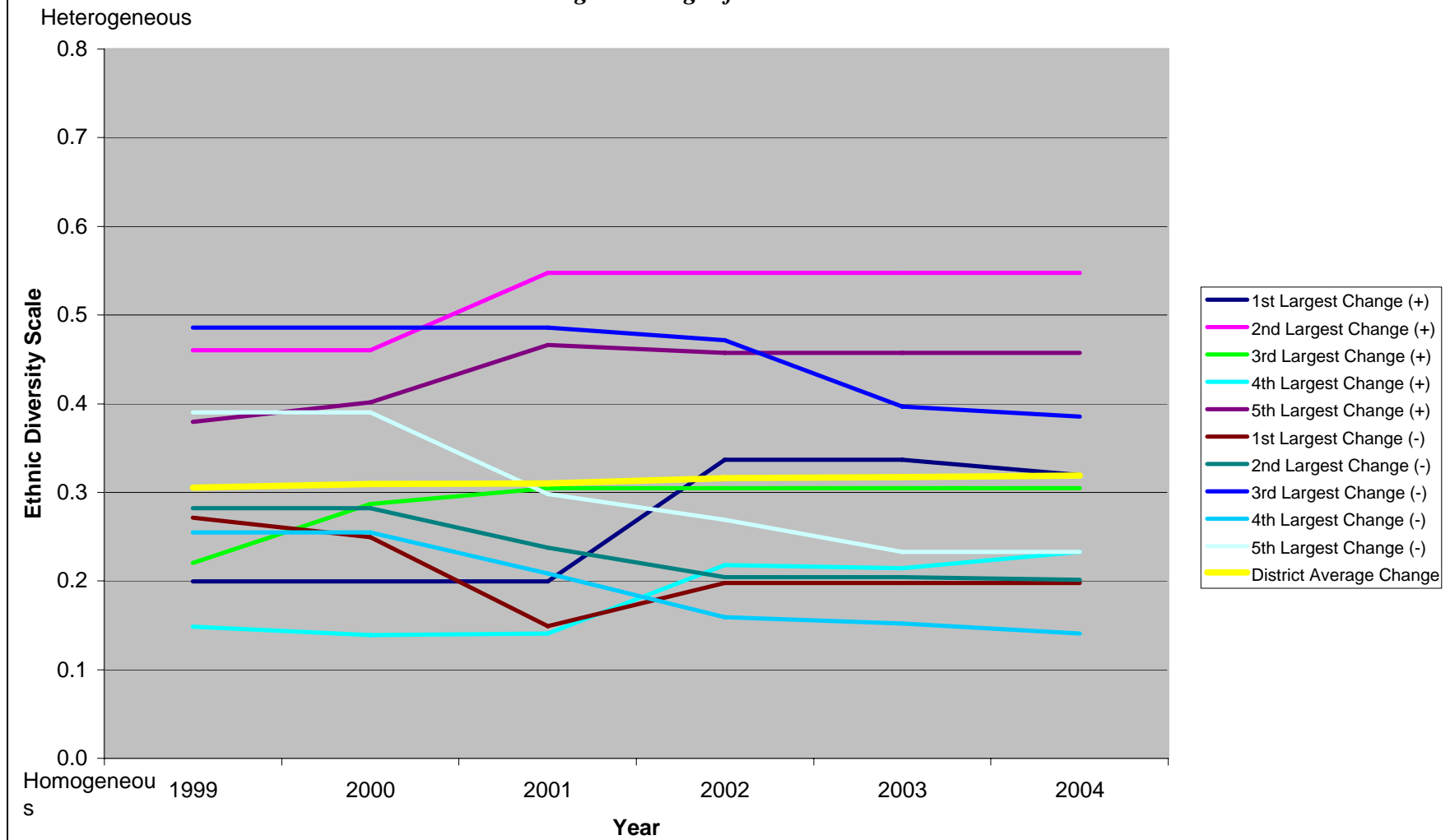


Figure 3

clustered around the district average in 1999. However, by 2004, diversity in these school zones tends to be more dispersed. Once again, this provides evidence of polarization as the district moves toward unitary status.

Family Disruption

The district average for the family disruption in a school zone is 39%, with a minimum of 14% and a maximum of 85%. This indicates that in the average school, 39% of the children living within the school zone come from a single-parent home. Between the baseline year and 2004, schools in Metro experienced an average change of 0.3% in family disruption (see Table 7). Eighteen school zones (17%) did not experience any changes in disruption; 47 schools (45%) experienced a reduction in disruption; and 39 schools (37%) experienced an increase in family disruption. Of the school zones that faced less family disruption over time, the most dramatic change was a 20% decrease in disruption, with an average change of -7%. Of the school zones that faced more disruption over time, the most dramatic change was a 32% increase in stability, with an average change of 7%.

More school zones experience an increase in disruption over time; however, the largest changes in disruption are negative. Figure 4 describes these changes over time among the 10 most dynamic schools. Five of these schools experienced the greatest negative change in disruption, and the other five experienced the greatest positive change in disruption. Again, the district average remains constant over time at about 39%. Five of these schools fall above the district average and five all below it in 1999. Unlike the trends for residential stability and diversity, the trends for these schools are more clear in

Trends in the Family Disruption of School Zones with the Largest Changes from 1999 to 2004

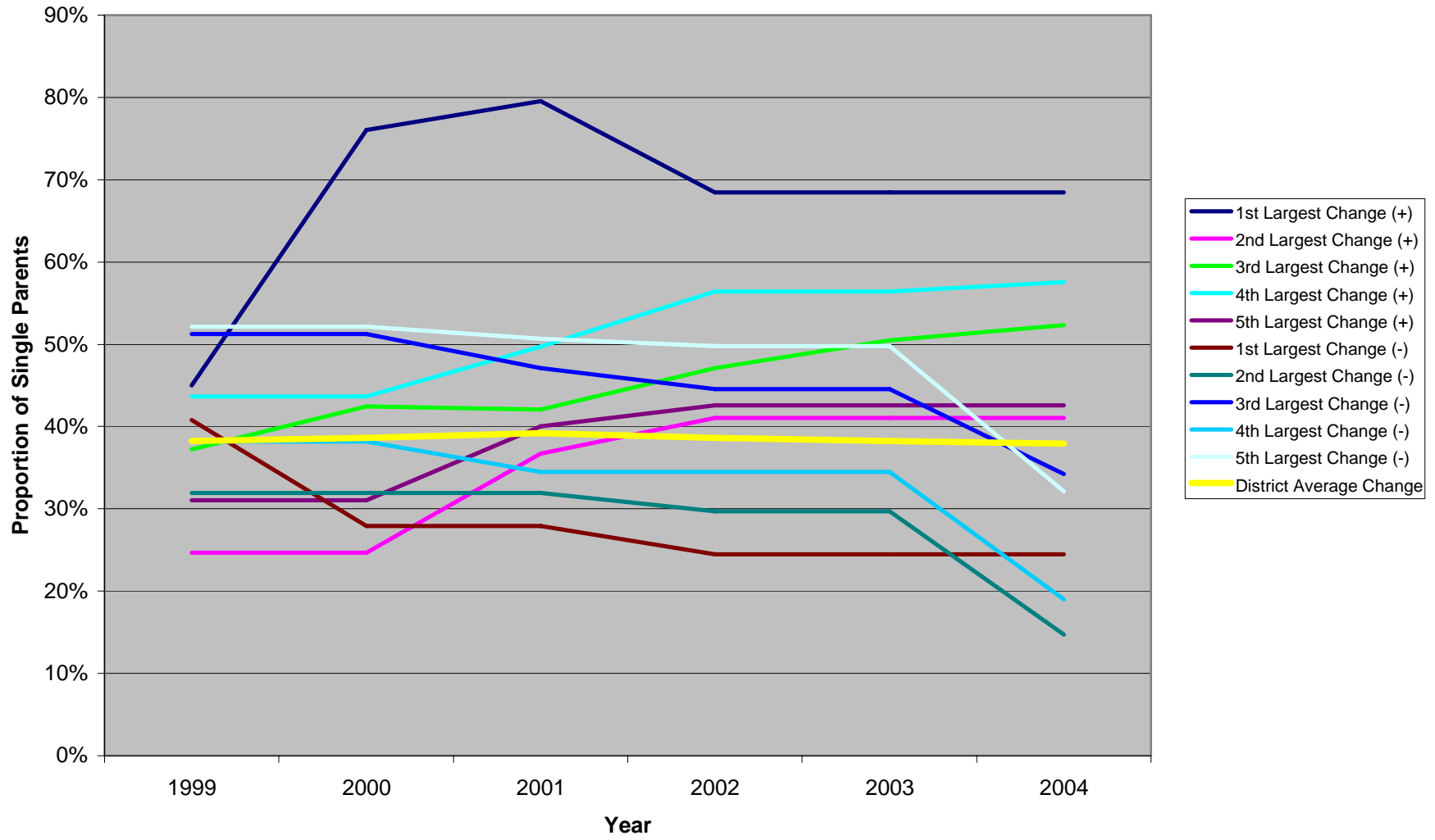


Figure 4

directionality. First, disruption in these school zones in 1999 tends to be more tightly clustered around the district average in 1999 and more dispersed in 2004. Additionally, most of the schools that fall above the district average in 1999 tend to experience a decline in disruption, and most of the schools that fall below the district average in 1999 tend to experience an incline in disruption. Again, such trends are indicative of closer-to-home schooling and the return to neighborhood schools.

Social Advantage

The district average for the social advantage in a school zone is 28%, with a minimum of 12% and a maximum of 57%. This indicates that in the average school, 28% of residents have college degrees and/or professional employment (or both). Between the baseline year and 2004, schools in Metro, on average, experienced a 0.1% change in social advantage of the six years of the study (see Table 7). Twenty five school zones (24%) did not experience any changes in social advantage; 35 schools (34%) experienced a reduction in social advantage; and 44 schools (43%) experienced an increase in social advantage. Of the school zones that faced less social advantage over time, the most dramatic change was a 21% decrease in advantage, with an average change of -3%. Of the school zones that experienced more social advantage over time, the most dramatic change was a 12% increase in advantage, with an average change of 3%.

More school zones experience an increase in social advantage over time; however, the largest changes are negative. Figure 5 illustrates these changes over time among the 10 most dynamic schools. Five of these schools experienced the greatest

*Trends in the Social Advantage of School Zones with
the Largest Changes from 1999 to 2004*

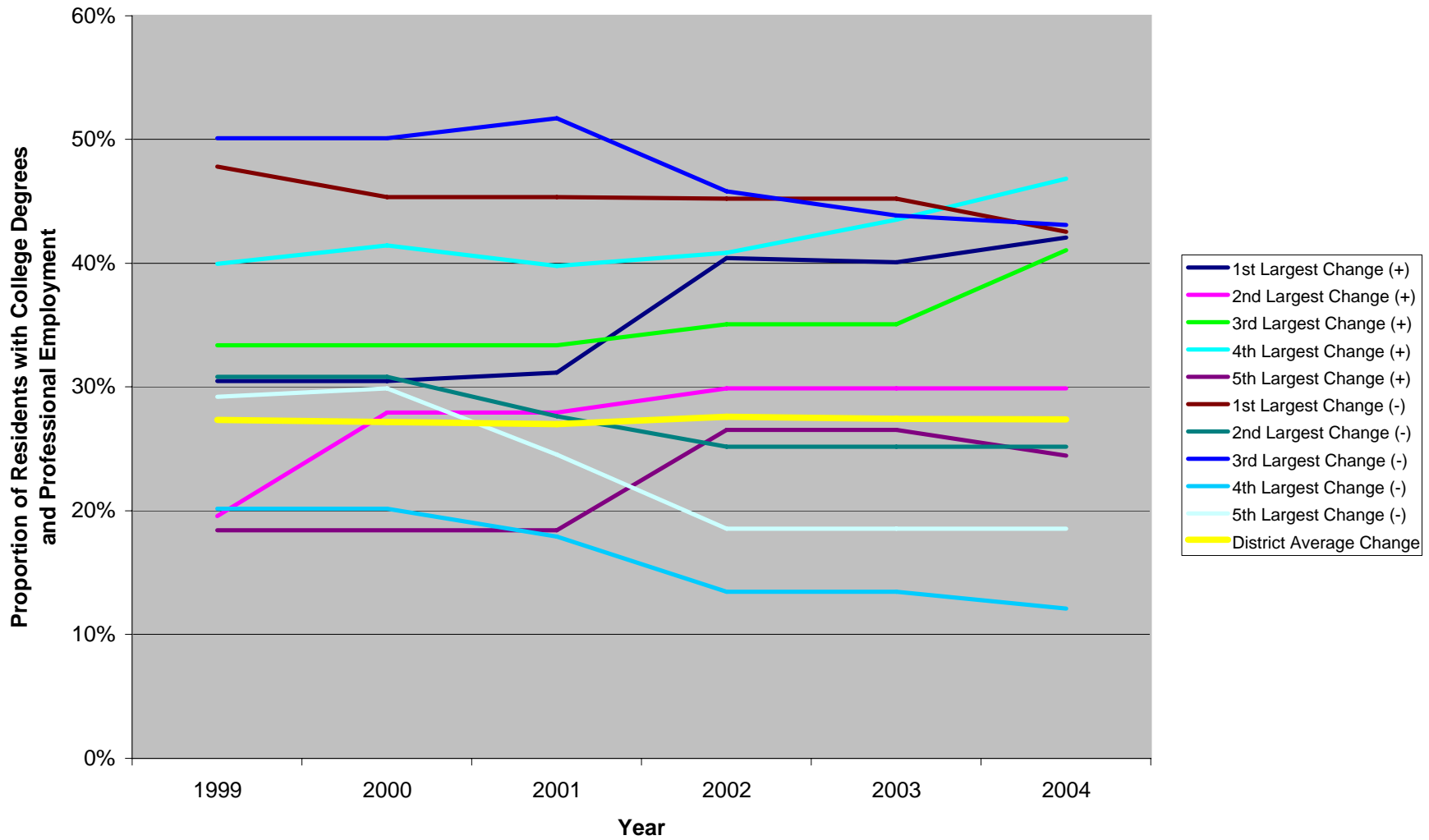


Figure 5

negative change in disruption, and the other five experienced the greatest positive change in disruption. Again, the district average remains constant over time at about 28%. Social advantage in these school zones in 1999 tends to be dispersed; however, in 2004 social advantage is more polarized. Five schools that were ranked above the district average in 1999 converged at a level of social advantage much higher than the district average (about 43%) in 2004. In other words, school zones that experienced higher levels of social advantage in 1999 tend to become more similar over time; however, they remain socially advantaged when compared to the district average. However, the five schools that were ranked closer to the district average or below the district average in 1999 tend to become less advantaged over time. The lowest ranking school on social advantage in 1999, however, experienced an increase in social advantage over time. These results are indicative of the district's efforts to organize some school zones with the intent of creating socioeconomic diversity among students.

Economic Deprivation

The district average for the economic deprivation in a school zone is 27%, with a minimum of 24% and a maximum of 62%. This indicates that in the average school, 27% of residents are unemployed and/or living below the poverty line (or both). Between the base year and 2004, schools in Metro, on average, experienced a -1% change in economic deprivation (see Table 7). Twenty four school zones (23%) did not experience any changes in deprivation; 49 schools (47%) experienced a reduction in deprivation; and 31 schools (30%) experienced an increase in economic deprivation. Of the school zones that faced less economic deprivation over time, the most dramatic

change was a 21% decrease in advantage, with an average change of -3%. Of the school zones that experienced more social advantage over time, the most dramatic change was a 12% increase in advantage, with an average change of 3%.

More school zones experience a decrease in economic deprivation over time; however, the largest changes are associated with increases in economic deprivation. Figure 6 illustrates these changes over time among the 10 most dynamic schools. Five of these schools experienced the greatest negative change in disruption, and the other five experienced the greatest positive change in disruption. Again, the district average remains constant over time at about 27%. As is expected in an era of cross-town busing, economic deprivation in these school zones in 1999 tends to be tightly clustered around the district average. However, by 2004 economic deprivation is quite dispersed. By 2004 the economic deprivation of four schools fall significantly below the district average, and the other six schools are ranked above the district average. Figure six illustrates the sweeping changes that took place in Metro as a result of unitary status. In 1999, school zones in Greenville acted as forces of economic equalization; however, with a return to neighborhood schools, school zones were revised to represent different priorities.

School Zone Distance

One of the major reasons for adopting a unitary status plan that emphasized neighborhood schools was to better facilitate the participation and engagement of students and parents. However, the degree to which this is possible depends on the degree to which schools are actually “closer to home.” To assess this, I use two

Trends in the Economic Deprivation of School Zones with the Largest Changes from 1999 to 2004

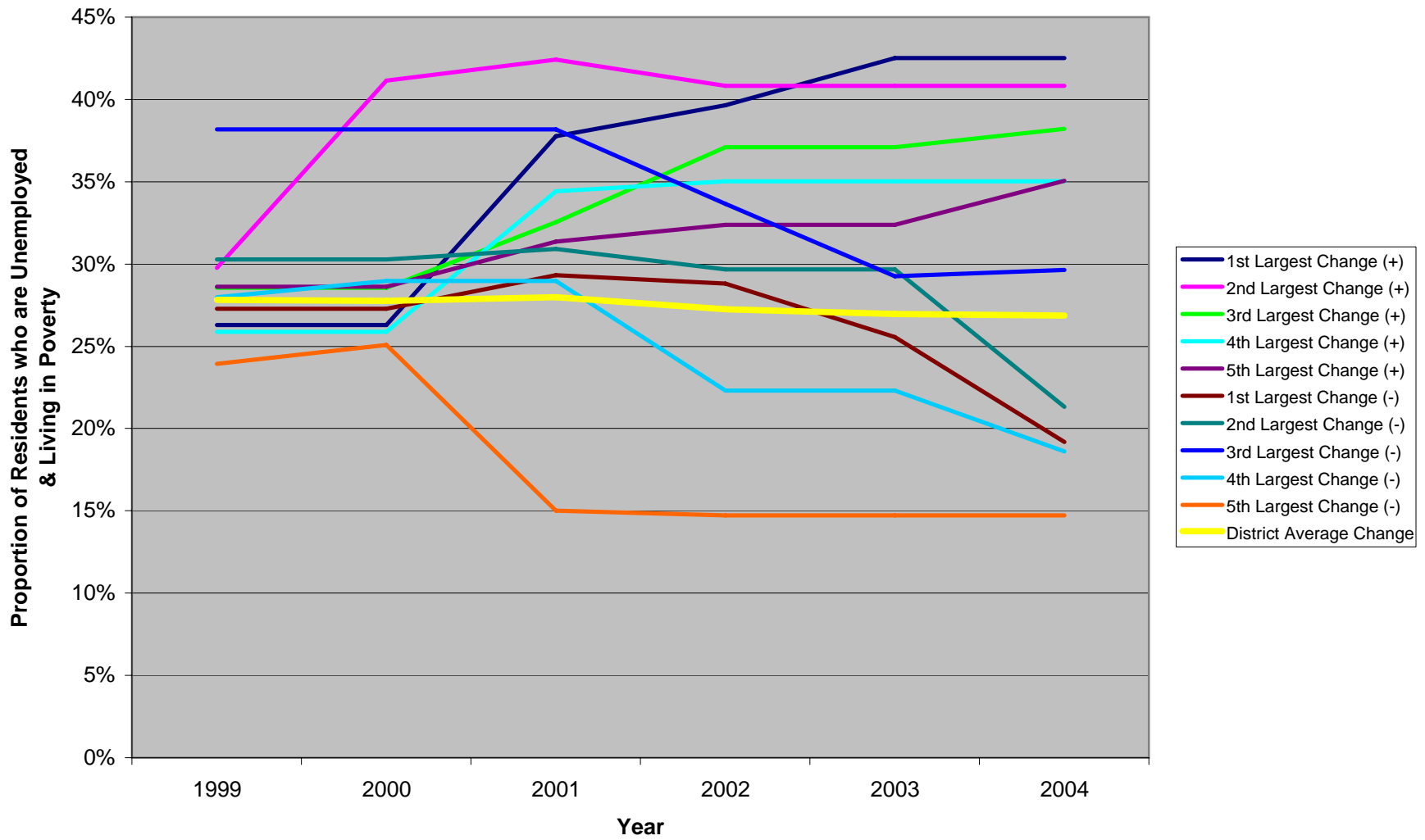


Figure 6

indicators of closer to home. First, as school zones change, they overlap with different census block groups. In theory, as school zones are drawn to facilitate closeness to home, the number of block groups a school zone comprises should be diminished. Secondly, the radial distance between the school and the outermost perimeter of the school zone should also be diminished.

The average school in Metro is made up of about 21 block groups, with a minimum of 4 block groups and a maximum of 96 block groups. Between 1999 and 2004, schools in Metro, on average, experienced a -4 change in the number of block groups in school zones (see Table 8). Thirteen schools (13%) did not experience any changes in the number of block groups included within the zone; 57 schools (54%) experienced a reduction in the number of block groups included in the zone; and 34 schools (33%) experienced an increase in the number of block groups included in within the zone. Of the school zones that took in fewer block groups over time, the most dramatic change was a decrease in the number of block groups by 30, with an average reduction of 8. Of the schools that experienced an increase in the number of block groups included within their zones, the most dramatic change was an increase in the number of block groups by 32, with an average increase of 7. On average, more school zones take in fewer block groups over time.

Another way to assess the change in “closeness to home” is to examine the changes in the distance from the school to the outermost perimeter of the school zone. The average school in Metro is 4.5 miles away from its outermost perimeter. The smallest distance between home and school is .6 miles, and the greatest distance is about 12 miles. Between 1999 and 2004, schools in Metro, on average, experienced a -.5 mile

Table 8. Description of Change in the Number of Block Groups Associated with a School Zone over Time

	<u>Number of BGs in School Zone</u>	
<i>District Minimum</i>		4
<i>District Maximum</i>		96
<i>District Average</i>		21.02
<i>Greatest Negative Change</i>		-30
<i>Greatest Positive Change</i>		32
<i>Average Change in Change</i>		-3.74
<i>Average Negative Change in Change</i>		-8.46
<i>Average Positive Change in Change</i>		7.18
	<u>Number of Schools</u>	<u>% of Schools</u>
<i>Change of -11 or Greater (negative)</i>	15	14%
<i>Change of -1 to -10</i>	42	40%
<i>0 Change</i>	13	13%
<i>Change of 1 to 10</i>	29	28%
<i>Change of 11 or Greater (positive)</i>	5	5%
N	104	100%

Change is calculated by subtracting values from 2004 from the baseline values in 1999.

change in the distance between home and school¹⁵ (see Table 9). Sixteen schools (15%) did not experience any changes in the distance between home and school; 53 schools (51%) experienced a reduction in the distance between home and school; and 35 schools (34%) experienced an increase in the distance between home and school. Of the school zones that experienced a decrease in the distance between home and school over time, the most dramatic change was a decrease in distance by 5.4 miles, with an average reduction of 1.2 miles. Of the schools that experienced an increase in the distance between home and school, the most dramatic change was an increase in distance by 2.8 miles, with an average increase of .7 miles. Over the six year period addressed in this study, some schools experienced an increase in the number of miles between home and school; however, most schools experienced a reduction in the number of miles between home and school. Thus, the distance between schools and the outermost perimeter of their attendance zones has, for most schools, decreased over the six years of the study.

In addition to the descriptive analyses provided above that address the issue of closer to home, I also use a multivariate approach to test whether or not the change in the distance between home and school are significant. As was discussed previously, a 2-level HLM growth model was used to assess this. Results indicate that indeed the district's rezoning efforts have resulted in school attendance zones that are significantly closer to student's homes (see Table 10). On average, the radial distance from schools to the outermost perimeter of their attendance zones decreases by .11 miles per year ($p < .001$). This represents a genuine shift in educational priorities. While some busing still

¹⁵ It is most appropriate to think of this measure as the radius of the school zone. It explicitly measures (in miles) the radial distance between a school and the outermost perimeter of its attendance zone. While this is a clear and accurate measure of the relative distance between home and school, it does not take into account conditions such as accessibility of roads and streets, traffic, and other such things that were thought to have influence the length and burden of bus rides during the desegregation era in Greenville.

Table 9. Description of Change in the Distance Between Home & School over Time

<u>Distance Between Home & School</u>		
<i>District Minimum</i>		0.61 Miles
<i>District Maximum</i>		11.84 Miles
<i>District Average</i>		4.53 Miles
<i>Greatest Negative Change in Miles</i>		-5.35
<i>Greatest Positive Change in Miles</i>		2.79
<i>Average Change in Miles</i>		-0.52
<i>Average Negative Change in Miles</i>		-1.23
<i>Average Positive Change in Miles</i>		0.73
	<u>Number of Schools</u>	<u>% of Schools</u>
<i>-1.1 Mile Change or Greater (negative)</i>	22	21%
<i>-.01 to -1 Mile Change</i>	31	30%
<i>0 Mile Change</i>	16	15%
<i>.01 to 1 Mile Change</i>	24	23%
<i>1.1 Mile Change or Greater (positive)</i>	11	11%
N	104	100%

Change is calculated by subtracting values from 2004 from the baseline values in 1999.

Table 10. Hierarchical Linear Growth Model Predicting Change in Size of School Attendance Zones Over Time

<u>Variable List</u>	<u>Model 1</u>	
Intercept	4.818	(.25) ***
Growth over Time	-0.114	(.03) ***
<u>Variance Components</u>		
<i>Level-1 & Level-2 Variance Components:</i>		
Intercept	2.511	(6.31) ***
Chi-square	3577.528	
df	99	
Growth Slope	0.307	(.09) ***
Chi-square	506.275	
df	99.000	
Level-1	0.550	(.30)
<u>Covariance Components</u>		
Deviance Statistic	1528.231	
df	4	

*** $p < .001$; ** $p < .01$; * $p < .05$

$N = 548$ Observations of 104 Schools (over a 6-year period).

takes place in Metro Greenville, of the schools with attendance zones, any busing that takes place has become much less burdensome than it was during the court-ordered desegregation era.

Differences Between Enhanced Options and Zoned Schools

Having established the degree to which real change was experienced throughout the district, exploring differences between zoned schools and enhanced option schools begins to portray the extent to which school type is influential in determining the pattern of change. From a policy standpoint, enhanced option schools were to be located in areas characterized by racial isolation and concentrated poverty. Thus, it is useful to compare these schools to zoned schools. To test the empirical differences between enhanced option schools and zoned schools, average measures across all enhanced option schools at all time points are compared to average measures of all zoned schools across all time points.

Enhanced Options vs. All Other Zoned Schools

T-tests were used to identify significant average differences between enhanced option schools and zoned schools (see Table 11). At first glance, enhanced option schools seem to be typical, high-poverty, racially isolated schools. They are characterized by higher rates of teacher turnover (enhanced options = 34% and zoned schools = 26%; $p < .05$), higher rates of students who are eligible for free and reduced lunch (enhanced options = 90% and zoned schools = 56%; $p < .001$), and higher rates of minority students (enhanced options = 90% and zoned schools = 45%; $p < .001$). The

Table 11. Independent Sample T-Tests Describing Mean Differences Between Enhanced Option Schools and Zoned Schools

	<u>Enhanced</u> <u>Option School</u>	<u>Zoned</u> <u>School</u>	<u>Mean</u> <u>Difference</u>
<u>Dependent Variables: Student Participation</u>			
Average Student Absenteeism	6.387	7.315	-0.929 *
Average Number of Disciplinary Events	0.424	0.598	-0.174 *
<u>School Neighborhood Characteristics</u>			
<i>Residential Stability</i>	0.462	0.461	0.001
<i>Ethnic Diversity of Neighborhood</i>	0.265	0.312	-0.048 *
<i>Family Disruption</i>	0.676	0.379	0.298 ***
<i>Socioeconomic Conditions of Neighborhood</i>			
Social Advantage	0.162	0.283	-0.121 ***
Economic Deprivation	0.413	0.265	0.148 ***
<u>School Characteristics</u>			
School Size	135.730	322.070	-186.340 ***
Teacher Turnover Rate	0.340	0.255	0.085 *
% Free & Reduced Lunch	0.896	0.557	0.339 ***
% Minority	0.900	0.459	0.441 ***
Distance Between Home & School	1.263	4.089	-2.826 ***

*** $p < .001$; ** $p < .01$; * $p < .05$

N = 21 Observations of 6 Enhanced Option Schools & 527 Observations of 98 Zoned Schools (over a 6-year period).

neighborhood contexts of enhanced option schools indicate that they encompass areas of greater economic deprivation (41% compared to 27% in zoned schools; $p < .001$), less social advantage (16% compared to 28% in zoned schools; $p < .001$), and more racial homogeneity (.27 compared to .31 in zoned schools; $p < .05$). Interestingly, there was no difference in residential stability between enhanced option school zones and those of regular zoned schools. Despite the conditions that are typically associated with dysfunctional schools, students, on average, who attend enhanced option schools experience a lower average number of absences (6.39 compared to 7.32 in zoned schools; $p < .05$) and a lower average number of disciplinary events (.42 compared to .46 in zoned schools; $p < .05$). The average distance between home and school is also significantly less for enhanced option schools (1.26 radial miles, compared to 4.09 radial miles in zoned schools; $p < .001$).

Enhanced Options vs. Similar Zoned Schools

All enhanced option schools across all years of the study were characterized by at least 78% poverty and 68% minority students. Additionally, all enhanced option schools in Metro are elementary schools. Partially because enhanced option schools are elementary schools, they also tend to be smaller than other schools, with the maximum enrollment at any enhanced option school over the six years of the study reaching 533 students. Because enhanced option schools vastly differ from the typical zoned school, it is useful to determine how zoned schools with similar demographics differ from enhanced option schools. In this analysis, zoned elementary schools characterized by at least 78% poverty, 68% minority, and 533 students were compared to enhanced option

schools. Independent sample t-tests were used to examine significant differences between the two types of schools (see Table 12).

Even though these two samples of schools were matched based on the percentage of minority students and the percentage of students who qualify for free and reduced lunch, enhanced option schools are still significantly more likely to be characterized by higher concentrations of minority students (enhanced options = 90% and similar zoned schools = 81%; $p < .001$) as well as higher concentrations of students in poverty (enhanced options = 93% and similar zoned schools = 84%; $p < .001$). Distance between home and school is also smaller for enhanced option schools (an average of 1.5 radial miles, compared to 2.4 radial miles for similar zoned schools; $p < .01$). School size, however, was not significantly different between the two school types and neither was the teacher turnover rate. Thus, even though there are some zoned schools with similar demographic characteristics as enhanced option schools, there are still demographic differences between the two types of schools. Most importantly, the racial and economic composition of enhanced option schools seems to be concentrated in relatively small geographic areas.

Even when compared to zoned schools with similar demographic characteristics, most of the neighborhood characteristics of the school zones differ significantly from enhanced option schools. Residential stability was not significantly different; however, enhanced option schools were more likely to be ethnically homogeneous (.25, compared to similar zoned schools = .38; $p < .001$). They are also more likely to experience higher rates of family disruption (68%, compared to similar zoned schools = 48%; $p < .001$). Not surprisingly, enhanced option school zones experience less social advantage (16%,

Table 12. Independent Sample T-Tests Describing Mean Differences Between Enhanced Option Schools and Demographically Similar Zoned Schools

	<u>Enhanced</u> <u>Option School</u>	<u>Zoned</u> <u>School</u>	<u>Mean</u> <u>Difference</u>
<u>Dependent Variables: Student Participation</u>			
Average Student Absenteeism	6.448	6.028	0.420
Average Number of Disciplinary Events	0.461	0.436	0.025
<u>School Neighborhood Characteristics</u>			
<i>Residential Stability</i>	0.461	0.436	0.025
<i>Ethnic Diversity of Neighborhood</i>	0.254	0.381	-0.127 ***
<i>Family Disruption</i>	0.677	0.480	0.197 ***
<i>Socioeconomic Conditions of Neighborhood</i>			
Social Advantage	0.163	0.238	-0.075 ***
Economic Deprivation	0.417	0.329	0.088 ***
<u>School Characteristics</u>			
School Size	350.050	369.580	-19.530
Teacher Turnover Rate	0.336	0.319	0.017
% Free & Reduced Lunch	0.897	0.876	0.021
% Minority	0.925	0.840	0.085 ***
Distance Between Home & School	1.483	2.447	-0.964 **

*** $p < .001$; ** $p < .01$; * $p < .05$

N = 21 Observations of 6 Enhanced Option Schools & 31 Observations of 9 Similar Zoned Schools (over a 6-year period).

compared to the average for similar zoned schools = 23%; $p < .001$) and greater economic deprivation (41%, compared to the average for similar zoned schools = 33%; $p < .001$). When comparing absenteeism and numbers of disciplinary events, mean differences for enhanced option schools are less than for similar zoned schools; however, these differences are not statistically significant.

This comparison of enhanced option schools and zoned schools with similar demographic characteristics indicates that enhanced option schools are unique in their small school zones, racial isolation, and concentration of poverty. When studying maps of district school zones, it becomes clear that in most cases, students living in areas throughout the district that are characterized by high concentrations of poverty and racial isolation but are not serviced by enhanced option schools are bused outside of their neighborhood to another school. Their bus rides are shorter than they once were during the cross-town busing era; however, the district still uses non-contiguous school zones and busing practices to alleviate the negative effects of concentrated poverty when enhanced option resources are not provided in neighborhood schools.

CHAPTER VI

RESULTS

As is evident in the previous chapter, schools in Metro Greenville experienced sweeping changes in the way education is prioritized as they moved away from an era of cross-town busing and into an era of unitary status. Here I address the extent to which these changes are predictive of student outcomes. I report results as they are related to the following questions:

- Do student participation and student engagement in school improve as students are zoned to schools that are closer to home?
- How are the neighborhood characteristics of school attendance zones associated with student participation and engagement in school?
- Are neighborhood characteristics of school attendance zones mediated when students attend enhanced option schools?

Upon reporting these results, subsequent descriptive analyses are used to further interpret the findings.

Results from Cross-Classified Growth Models

Three models were computed for each dependent variable. The first models use only the indicator of growth over time, grade indicators,¹⁶ and neighborhood characteristics to predict the two outcome measures (see Table 13, Model 1 and Table 14,

¹⁶ Models estimating the interaction between grade and the neighborhood context variables were calculated; however, the cross-level interactions were not significant. Therefore, it can be assumed that neighborhood characteristics of school zones affect all students similarly, regardless of student grade level.

Model 1). The second models add to the previous model by including all student- and school-level control variables. And finally, the third models include the mediating variable, an indicator of whether or not a school in an enhanced option school. This strategy of hierarchical analysis of variables is used to detect and limit relationships between independent variables and the dependent variable that may be confounding and spurious (Cohen, Cohen, West, & Aiken, 2003). I enter the neighborhood characteristics first because of their relevance to my research questions and their causal priority. I calculate the first model and then the second model with all student- and school-level controls to detect the possibility of a neighborhood effect on absenteeism and disciplinary events independent of student characteristics (see Table 13, Model 2 and Table 14, Model 2). Including student characteristics into the model does diminish the size of the neighborhood effects on student outcomes indicating a partially spurious relationship between students' backgrounds and neighborhood characteristics. However, some neighborhood effects in both the model predicting absenteeism and the model predicting disciplinary events remain statistically significant. Thus, a neighborhood effect exists above the effects of students' backgrounds.¹⁷

After calculating the second models, I estimate the third models by including the mediating variable (see Table 13, Model 3 and Table 14, Model 3). Evidence of partial mediation is found in both the student absenteeism model and the student disciplinary events model. Reporting the results from the third models (and their differences from the second models), I first discuss the results of the student absenteeism models (Table 13) and then discuss the results of the student discipline models (Table 14).

¹⁷ However, measurement error still may be a problem, since neighborhood measures cannot be included at the student level.

Because the outcome measures of student absences and student disciplinary events followed an overdispersed Poisson distribution, a log transformation was made to estimate the models. Therefore, all coefficients must be exponentiated and subtracted from 1 before they can be interpreted. After this transformation is made, the coefficient can be interpreted as an “event rate ratio,” or the percentage of change in the outcome that is associated with a given coefficient. With non-linear regression models such as those reported here, effect size is difficult to assess. Because my outcome measures are counts of rare events, the standard deviation is not meaningful in interpreting the size of the effect associated with any given coefficient. To present these results in a meaningful way, I calculate the predicted values for each coefficient. Effects for dichotomous variables are somewhat easier to report than for continuous variables, as there is only one expected value to consider. The expected values for dichotomous measures are calculated by multiplying the event rate ratio by the intercept for each of the dependent variables—number of absences and disciplinary events—which yields the percentage change in the dependent variables from the comparison group. This percent change is then added to the intercept, which represents the average number of student absences and disciplinary events for students during all years of the study. Thus, the effect on student outcomes of belonging to one group versus another.

Continuous independent variables, however, are more complicated to interpret, in that there are numerous plausible values for each independent variable. Because the school zones encompassed by enhanced option schools are thought to be more “disorganized” than other school zones, I use the average district-wide negative change in residential stability, ethnic diversity, and social advantage and the average district-wide

positive change in economic deprivation to benchmark the effects of these neighborhood characteristics.¹⁸ These predicted values are calculated by multiplying the event rate ratio by the intercept for each of the dependent variables—number of absences and disciplinary events—which yields the percentage change in the dependent variables from the average student. This percent change is then multiplied by the average district-wide changes discussed above to portray the percent change in the dependent variables that are associated with an average change in the independent variables. To examine the relative size of these effects, this number is then added to the intercept, which represents the average number of student absences and disciplinary events. Thus, the effects of an average change in the independent variables on student outcomes can be compared to the outcomes of students who did not experience a change in the independent variables.

Number of Student Absences

On average, students are absent about seven times per years ($p < .001$).¹⁹ The growth rate per year in student absenteeism is not statistically significant when controlling for students' grade in school. A one year increase in grade level is associated with an 8% increase in students' number of absences per year ($p < .001$). In other words, a one-year advancement in grade is associated with a change in the average student's absence rate from 7 to 7.56. African American students and students of other races are no more likely to be absent than white students. Students who are eligible for the free and reduced lunch experience a 1% increase per year in their number of absences when

¹⁸ District-wide average changes are not used to calculate predicted values because, as is discussed in an earlier section, district average changes for the neighborhood context variables are essentially zero due to the way these variables are calculated.

¹⁹ Results are interpreted and reported as an “event rate ratios,” which are calculated by exponentiating the coefficients listed in Tables 13 and 14.

Table 13. Cross-Classified Models Predicting Student Absenteeism

Variable List	Model 1		Model 2		Model 3	
Intercept	2.116	(.11) ***	1.976	(.11) ***	1.923	(.11) ***
Growth over Time	0.007	(.00)	0.008	(.00)	0.011	(.00)
<u>Mediating/Moderating Variables</u>						
School is an Enhanced Option School					-0.180	(.04) ***
<u>School Neighborhood Characteristics</u>						
<i>Residential Stability</i>	-0.305	(.09) **	-0.295	(.10) **	-0.294	(.10) **
<i>Ethnic Diversity of Neighborhood</i>	-0.468	(.09) ***	-0.480	(.09) ***	-0.522	(.09) ***
<i>Socioeconomic Conditions of Neighborhood</i>						
Social Advantage	-0.517	(.10) ***	-0.578	(.10) ***	-0.568	(.10) ***
Economic Deprivation	0.395	(.14) **	0.270	(.15) *	0.035	(.16)
<u>Time-Variant School Characteristics</u>						
75% African American (or greater)			-0.076	(.02) ***	-0.055	(.02) **
School Size			0.0002	(.00) ***	0.0002	(.00) ***
Teacher Turnover Rate			0.031	(.04) *	0.037	(.04) *
School Zone Distance			0.005	(.00) *	0.005	(.00) *
<u>Student Background Variables</u>						
<i>Student Race (ref = White)</i>						
African-American			-0.0002	(.01)	-0.0002	(.01)
Other			-0.018	(.01)	-0.018	(.01)
<i>Student Gender (ref = Female)</i>						
Female			-0.0004	(.01)	-0.0004	(.01)
Student Participates in Free Lunch Program			0.012	(.01) *	0.012	(.01) *
Student has an IEP			0.194	(.01) ***	0.194	(.01) ***
Student is LEP			-0.171	(.01) ***	-0.171	(.01) ***
Grade	0.085	(.00) ***	0.081	(.00) ***	0.080	(.00) ***
<u>Variance Components</u>						
<i>Row Level Variance Components:</i>						
Intercept	0.646	(.42) ***	0.637	(.41) ***	0.637	(.41) ***
Level-1	1.613	(2.60)	1.613	(2.60)	1.613	(2.60)
Chi-square	302102.53		294947.83		294983.61	
df	67827		67820		67819	
<i>Column Level Variance Components:</i>						
Intercept	0.137	(.02) ***	0.133	(.02) ***	0.130	(.02) ***
Chi-square	3511143.15		4642665.76		4595561.08	
df	538		529		528	

*** $p < .001$; ** $p < .01$; * $p < .05$

$N = 171,030$ Observations of 67,833 Students & 548 Observations of 104 Schools (over a 6-year period).

compared to students who do not qualify for free and reduced lunch ($p < .05$). That is, if a student who does not qualify for free and reduced lunch is absent, on average, 7 times per year, a student who does qualify for free and reduced lunch is absent about 7.07 times per year, holding all else constant. Students with IEPs also experience about 21% increase in their number of absences each year when compared to non-IEP students in each given year ($p < .001$). The average student is likely to be absent 7 times per year; however, an IEP student is likely to be absent about 8.47 times per year. However LEP students are about 16% less likely to be absent than students who are not ($p < .001$). That is, the number of absences experienced by LEP students is about .84 the number of absences experienced by non-LEP students in each year. If the average student is absent 7 times per year, an LEP student is absent about 5.88 times per year.

Most school-level characteristics also significantly predict the number of student absences. Compared to schools that are composed of less than 75% African American students, racially segregated schools experienced a 5% increase in student absences per year ($p < .01$). If student attending a non-racially segregated school, on average, missed school 7 times per year, students attending a school with 75% African American students or more missed school about 7.35 times per year. School size was also a positive predictor of student absences ($p < .001$). For example, students attending a school of 500 students experience a 2% increase in their number of absences when compared to students attending a school with 400 students. That is, a 100 student increase in school size is associated with a 2% increase in the number of student absences ($p < .001$). Teach turnover is one of the more powerful predictors of student absenteeism. A 1% increase in the teacher turnover rate is associated with a 4% increase in the number of student

absences ($p < .01$). A student that attends a school that experiences a teacher turnover rate that is 5% higher than their previous school, their incidence of absenteeism is about 5 times greater than in their previous school.

Distance between home & school. From a policy perspective, determining the effect of the size of a school zone and subsequently, the distance between students' homes and their schools, is of paramount importance. Greenville's return to neighborhood schools was meant expressly as a means of increasing participation (Metropolitan Board of Public Education of Greenville, April 25, 1995). In as much as student absenteeism is a true indicator of lack of student participation, it would seem that closer-to-home schooling significantly increases participation in that student absences decrease when students encounter smaller school zones. All other factors held constant, a one mile increase in the radial distance between a school and the outermost perimeter of its attendance zone is associated with a 1% increase in the number of times a student is absent ($p < .001$). The district-wide average change in distance between home and school is -.5 miles (refer to Table 9) and the district-wide average for absences per year is about 7; therefore, a student who is exposed the average decrease in the distance between home and school is likely to be absent 0.5% less often than the average student. This translates into a decrease in absences from 7 to 6.83 each year (see Figure 7).

Neighborhood characteristics. After controlling for student and school characteristics, all four measures of the neighborhood characteristics of schools' attendance zones are significant predictors of the number of student absences. In Model 2 of Table 13, the direct effects of these predictors are calculated. In this model, when students encounter a school zone comprised of more stable residences, their number of

Direct Effects of School Zone Distance & Enhanced Option Schools on Student Attendance

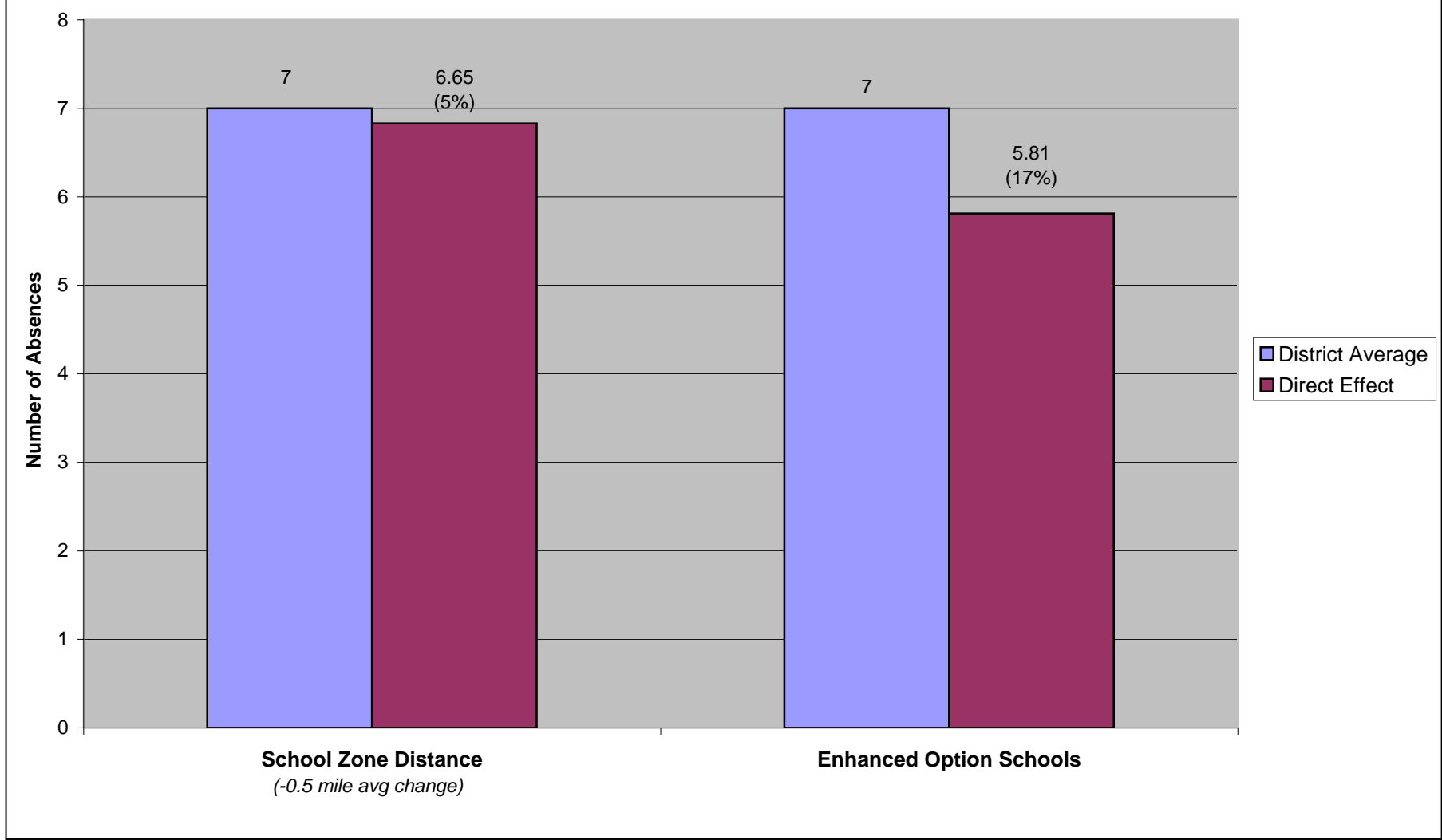


Figure 7

absences decreases by 26% ($p < .001$). Of the school zones in the district that experienced a decrease in residential stability, the average negative change was -3.27%; therefore, a student who is exposed the average decrease in residential stability is likely to be absent 26% more often than a student who did not experience a change in residential stability. This indicates a increase in the number of absences from 7 (the district average) to 12.95 (see Figure 8).

Ethnic diversity was also negatively related to student absenteeism. When students encounter a school attendance zone that is more homogeneous in terms of its ethnic diversity, their number of absences increases by about 38% ($p < .001$). This result contradicts Shaw and McKay's (1942; 1969) and Sampson and Groves' (1989) hypothesis that ethnic diversity increases social disorganization. However, as has been discussed previously, racially isolated communities in Greenville tends to be impoverished; therefore, any indicator of ethnic diversity is likely to be correlated with socioeconomic conditions. To further interpret the effect of living in a school zone that is ethnically diverse, of the school zones that became more homogeneous over the six years of the study, this negative change was, on average, about -3.97%. A student who is exposed to the average negative change in the ethnic diversity of a school zone is likely to be absent 38% more often than a student who did not experience a change in ethnic diversity ($p < .001$). If an average student is absent 7 times per year, a student attending a school zone that has experienced the average negative change in ethnic diversity is likely to be absent 17.57 times per year, all else held constant (see Figure 8).

The social advantage composite also yielded significant results. Encountering a school neighborhood with decreased social advantage increases student absenteeism by

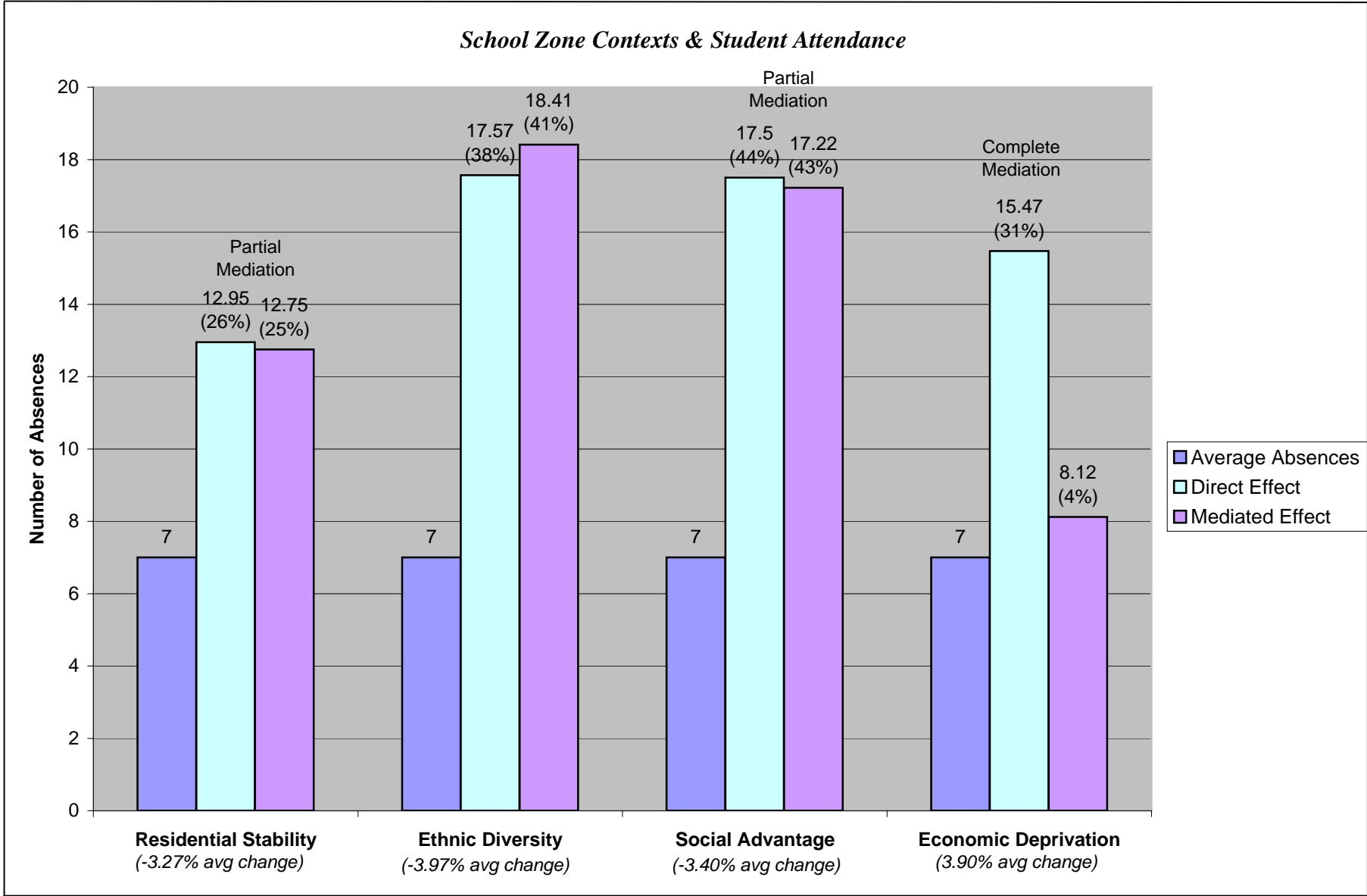


Figure 8

44% ($p < .001$). Of the school zones that experienced a negative change in social advantage over the six years of the study, these zones, on average, decreased in social advantage by -3.4%; therefore, a student who experienced the average negative change in the social advantage of their school zone is likely to be absent 44% more often than a student who did not experience a change in social advantage. This implies an increase in absences from 7 (the district average) to 17.5 (see Figure 8).

Economic deprivation was positively related to student absenteeism. Encountering a school zone with a one unit increase in economic deprivation is associated with a 31% ($p < .05$) increase in student absences. Of the school zones that experienced an increase in deprivation, the average positive change was 3.9%. Thus, students exposed to the average positive change in economic deprivation were likely to be absent 31% more often than students who did not experience a change in deprivation. This implies an increase in absences from 7 (the district average) to 15.47 (see Figure 8).

Enhanced option schools & mediated neighborhood effects. Attending an enhanced option school also affects student absenteeism. Attending an enhanced option school decreases students' number of absences by about 17% ($p < .001$). In other words, enhanced option students are likely to be absent 5.81 times, compared to the district average of 7 absences per student per year (see Figure 7). This effect is also responsible for the partial mediation of the effects of residential stability and social advantage and for the complete mediation of economic deprivation.

When including a measure of whether or not a school is an enhanced option school, the effect of residential stability on the number of student absences is decreased from 26% ($p < .01$) (in Table 13, Model 2) to 25% ($p < .01$) (in Table 13, Model 3).

Therefore, enhanced option schools partially mediate the effect of living in a residentially stable school zone by about 1 percentage point. When comparing the predicted values, the effect of residential stability decreases from 12.95 absences to 12.75 absences, when an indicator of enhanced option schools is included in the model. Therefore, enhanced option schools mediate the effect of residential stability by about .20 of an absence per year (see Figure 8).

Similarly, enhanced option schools mediate the relationship between social advantage and student absenteeism. The effect decreases from 44% ($p < .001$) to 43% ($p < .001$) when an indicator for enhanced option schools is entered into the model. Again, this represents an effect that is partially mediated by 1 percentage point. In predicted values, this is a decrease in absences from 17.50 to 17.22. Enhanced option schools are able to mediate the effect of social advantage by .28 of an absence per year (see Figure 8).

Finally, enhanced option schools mediate the relationship between economic deprivation and absenteeism. The effect of deprivation decreases from 31% ($p < .05$) to 4%. In terms of predicted values, the effect of economic deprivation on number of absences is decreased from 15.47 to 8.12. Thus, enhanced option schools mediate this effect by 7.35 absences (see Figure 8). However, the effect of economic deprivation in the mediation model is not significant, indicating that enhanced option schools are able to completely mediate the effect economic deprivation in any given school zone.

However, including an indicator for enhanced option schools in the model intensifies the effect of the ethnic diversity of a neighborhood. Being assigned to a school zone that is less diverse is associated with an increase in student absenteeism by

38% ($p < .001$) (Table 13, Model 2); however, this change in absenteeism is increased to 41% ($p < .001$) when accounting for enhanced option effects (Table 13, Model 3). This increase of 3 percentage points is associated with a .84 of an absence increase in terms of predicted values (see Figure 8). This change when introducing the mediating variable into the model is probably the result of the demographic composition of enhanced option schools. Although there are regular zoned schools in the district with the similar compositions of race and poverty, no other schools experience these conditions in such a concentrated form. Enhanced option schools are more geographically concentrated than any other school. This reflects the district's commitment to enhanced option programs, as they have placed enhanced option schools in the most deprived areas. Nevertheless, this confounds the problem of testing for mediated relationships because the “treatment” of an enhanced option school is only experienced by groups of students who differ from the other students in the study in important ways.

In summary, student participation in school—as is measured by student absences—does improve as students attend schools that are closer to their homes. Also, all four of the neighborhood characteristics of school attendance zones described above are predictors of student participation in school. As predicted, residential stability is associated with increased participation in school, as is social advantage. Economic deprivation was negatively associated with student participation in school, and ethnic diversity was positively associated with participation. Enhanced option schools are also predictive of student participation in school, even when controlling for the distance between home and school. Additionally, enhanced option schools are able to partially

mediate the effects of residential stability and social advantage as well as completely mediate the effect of economic deprivation.

Also of interest are the “effect sizes” of individual student characteristics compared to school zone context indicators. The social composition of school zones demonstrates stronger effects than individual student characteristics. While there is little research available to which one could directly compare these results, the work of Anderson, Christenson, Sinclair, & Lehr (2004) suggests that student attendance is an important indicator of the degree to which school intervention programs are functional. In their work, student-level indicators of whether or not the student is “at-risk” are stronger than the student background effects reported in my analyses of student absenteeism. However, none of their indicators are as strong as the school zone context measures used in my analyses. This indicates that residential stability, ethnic diversity, social advantage, and economic deprivation are powerful predictors of student absenteeism, even when compared to similar studies.

Number of Disciplinary Events

Results for the models predicting disciplinary events are similar to those presented above for the absenteeism models, with a few key differences in relation to the effects of schools’ neighborhoods (see Table 14). Because disciplinary events are rare occurrences, the intercept for the model is negative: students, on average, are disciplined -1 time per year. In addition, students are no more likely to engage in disciplinary events over the six years of the study, after controlling for grade level. Similar to the absenteeism models, a one-year increase in grade is associated with an 8% change in

Table 14. Cross-Classified Models Predicting Student Discipline

Variable List	Model 1	Model 2	Model 3
Intercept	-4.136 (.92) ***	-6.995 (.89) ***	-7.273 (.89) ***
Growth over Time	0.0778 (.03)	0.100 (.03)	0.110 (.03)
<u>Mediating/Moderating Variables</u>			
School is an Enhanced Option School			-0.954 (.30) ***
<u>School Neighborhood Characteristics</u>			
Residential Stability	-2.016 (.73) **	-2.236 (.72) ***	-2.127 (.72) ***
Ethnic Diversity of Neighborhood	-0.092 (.77)	0.791 (.74)	0.552 (.74)
<u>Socioeconomic Conditions of Neighborhood</u>			
Social Advantage	-0.490 (.85) *	-1.486 (.80) *	-1.439 (.79)
Economic Deprivation	2.222 (1.21) *	2.238 (1.10) ***	2.274 (1.22) ***
<u>Time-Variant School Characteristics</u>			
75% African American (or greater)		-0.127 (.15)	0.019 (.16)
School Size		0.0011 (.00) ***	0.0012 (.00) ***
Teacher Turnover Rate		1.350 (.32) ***	1.382 (.32) ***
School Zone Distance		0.207 (.03) ***	0.199 (.03) ***
<u>Time-Invariant Student Background Variables</u>			
<i>Student Race (ref = White)</i>			
African-American		0.060 (.02) ***	0.060 (.02) ***
Other		-0.033 (.03) ***	-0.033 (.03) ***
<i>Student Gender (ref = Female)</i>			
Female		-0.029 (.01) *	-0.029 (.01) *
Student Participates in Free Lunch Program		0.028 (.02) *	0.028 (.02) *
Student has an IEP		0.290 (.01) ***	0.290 (.01) ***
Student is LEP		-0.336 (.02) ***	-0.337 (.02) ***
Grade	0.089 (.00) ***	0.082 (.00) ***	0.082 (.00) ***
<u>Variance Components</u>			
<i>Row Level Variance Components:</i>			
Intercept	1.415 (2.00) ***	1.392 (1.94) ***	1.392 (1.94) ***
Level-1	0.902 (.81)	0.904 (.82)	0.905 (.82)
Chi-square	314314.08	304084.51	304078.00
df	67827	67820	67819
<i>Column Level Variance Components:</i>			
Intercept	1.263 (1.60) ***	1.149 (1.32) ***	1.141 (1.30) ***
Chi-square	4841084.38	4947261.00	4823305.18
df	538	529	528

*** $p < .001$; ** $p < .01$; * $p < .05$

$N = 171,030$ Observations of 67,833 Students & 548 Observations of 104 Schools (over a 6-year period).

students' number of disciplinary infractions ($p < .001$). An advancement from one grade to the next is associated with .08 increase in the odds that a student will be disciplined during the year. Therefore, if we assume that the average student is disciplined once per year,²⁰ advancing to the next grade indicates that the student is likely to be disciplined 1.08 times. African American students experience a 6% change in their number of disciplinary events compared to white students ($p < .001$). That is, if white students are disciplined once per year, African American students are likely to be disciplined 1.06 times per year. Students of other races are 3% less likely to be disciplined than white students ($p < .001$). Again, if white students are likely to be disciplined once per year, students of other races are likely to be disciplined .97 times per year. Female students are also less likely to be disciplined than male students by 3% ($p < .05$), reducing the predicted values for the number of times a student is disciplined from 1 for males to .97 for females for each year of the study.

Students who are eligible for the free and reduced lunch experience a 3% increase in their number of disciplinary events when compared to students who do not qualify for free and reduced lunch ($p < .05$). That is, if a non-free and reduced lunch student were on average disciplined once per year, a student who is eligible for free and reduced lunch will be disciplined about 1.03 times. Students with IEPs experience about a 34% change in their number of disciplinary events when compared to non-IEP students in a given year ($p < .001$). In other words, if non-IEP students are disciplined once per year, IEP students are likely to be disciplined 1.34 times per year. However, LEP students

²⁰ Over the six years of the study, students are, on average, disciplined -1 time per year; however, because the negative probability is difficult to interpret, I report the results as if the average student is disciplined once per year. While such an assumption does nothing in terms of over- or underestimating effect sizes, it does inflate the district average. This assumption is made solely for the purpose of clarity in interpreting results.

experience a 29% decrease in their number of disciplinary events when compared to non-LEP students in a given year ($p < .001$). In terms of predicted values, if a non-LEP student is disciplined once per year on average, an LEP student will be disciplined about .71 times per year.

Three of the four school-level background variables also significantly predict the number of student disciplinary events. Schools that are composed of 75% African American students or more have no more effect on the number of students' disciplinary events than schools that have less than 75% African American students. School size, however, was a positive predictor of student disciplinary events ($p < .001$). To use the same comparison used to describe the effect of school size on students absenteeism, students attending a school of 500 students experience a 12% increase in their number of disciplinary events when compared to students attending a school with 400 students. A 100 student increase in school size is associated with a 12% increase in the number of student disciplinary events ($p < .001$). A one percent increase in the teacher turnover rate is associated with an increase in the number of student disciplinary events by 4 times ($p < .001$).

Distance between home & school. Again, distance between home and school as it is measured by the radial distance between a school and the outermost perimeter of its attendance zone yielded significant results. When students encounter a school with a one mile increase in the radial distance between a school and the outermost perimeter of its attendance zone, they are likely to experience a 22% increase in the number of times they are disciplined ($p < .001$). To demonstrate effect size, the district-wide average change in distance between home and school is -.5 miles (refer to Table 9). Therefore, if we

assume that the average student is disciplined once per year, a student who is exposed the average decrease in the distance between home and school is likely to be disciplined 11% less often than the average student. This translates into a decrease in disciplinary events from 1 to .89.

Neighborhood characteristics. After controlling for student and school characteristics, three of the four measures of the neighborhood characteristics of schools' attendance zones are significant predictors of the number of student disciplinary events. Ethnic diversity is not significant in any of the three models (compare Models 1, 2, and 3 of Table 14). In Model 2 of Table 14, the direct effects of these three predictors are calculated. In this model, residential stability is associated with an 89% change in the number of student disciplinary events ($p < .001$). Of the school zones that experienced a decrease in residential stability, the average change was -3.27% (refer to Table 7); therefore, a student who is exposed the average decrease in residential stability is likely to be disciplined 2.91 times, compared to a student who is disciplined once per year (see Figure 10).

Social advantage was also a negative predictor of student disciplinary events. Encountering a school neighborhood with increased social advantage decreases student disciplinary events by 77% ($p < .001$). Of the school zones that were characterized by less social advantage over time, the average change was -3.4% over the six years of this study; therefore, a student who experienced the average negative change in social advantage of a school zone is likely to be disciplined 77% more often than a student who did not experience a change in social advantage. If we assume that a typical student is

disciplined once per year, this coefficient indicates an increase in disciplinary events from 1 to 3.06 (see Figure 10).

The economic deprivation composite also yielded significant results. Encountering a school neighborhood with increased economic deprivation increases the number of students' disciplinary events by 9.37 times ($p < .001$). Of the school zones that experienced more economic deprivation over time, the average change was 3.9%. Thus, students exposed to the average positive change in economic deprivation were likely to be disciplined 36.54 times, compared to the “average” student who is assumed to be discipline once per year (see Figure 10).

Enhanced option schools & mediated neighborhood effects. Metro anticipated that enhanced option schools would decrease discipline problems, due mostly to the decreased student/teacher ratio (Long, 2002). Results follow this logic in that attending an enhanced option school does influence the number of disciplinary events attributed to students. Attending an enhanced option school decreases students' number of disciplinary events by about 61% ($p < .001$). That is, if a non-enhanced option student is disciplined, on average, once per year, enhanced option students are likely to be disciplined only .39 times (see Figure 9). Enhanced option schools are also responsible for the partial mediation of the effect of residential stability as well as the complete mediation of social advantage.

When accounting for enhanced option schools, the effect of residential stability on the number of student disciplinary events decreases from 89% ($p < .001$) (Table 14, Model 2) to 88% ($p < .001$) (Table 14, Model 2). Enhanced option schools mediate the effect of living in a residentially stable area by about 1 percentage point. In terms of

Direct Effects of School Zone Distance & Enhanced Option Schools on Student Discipline

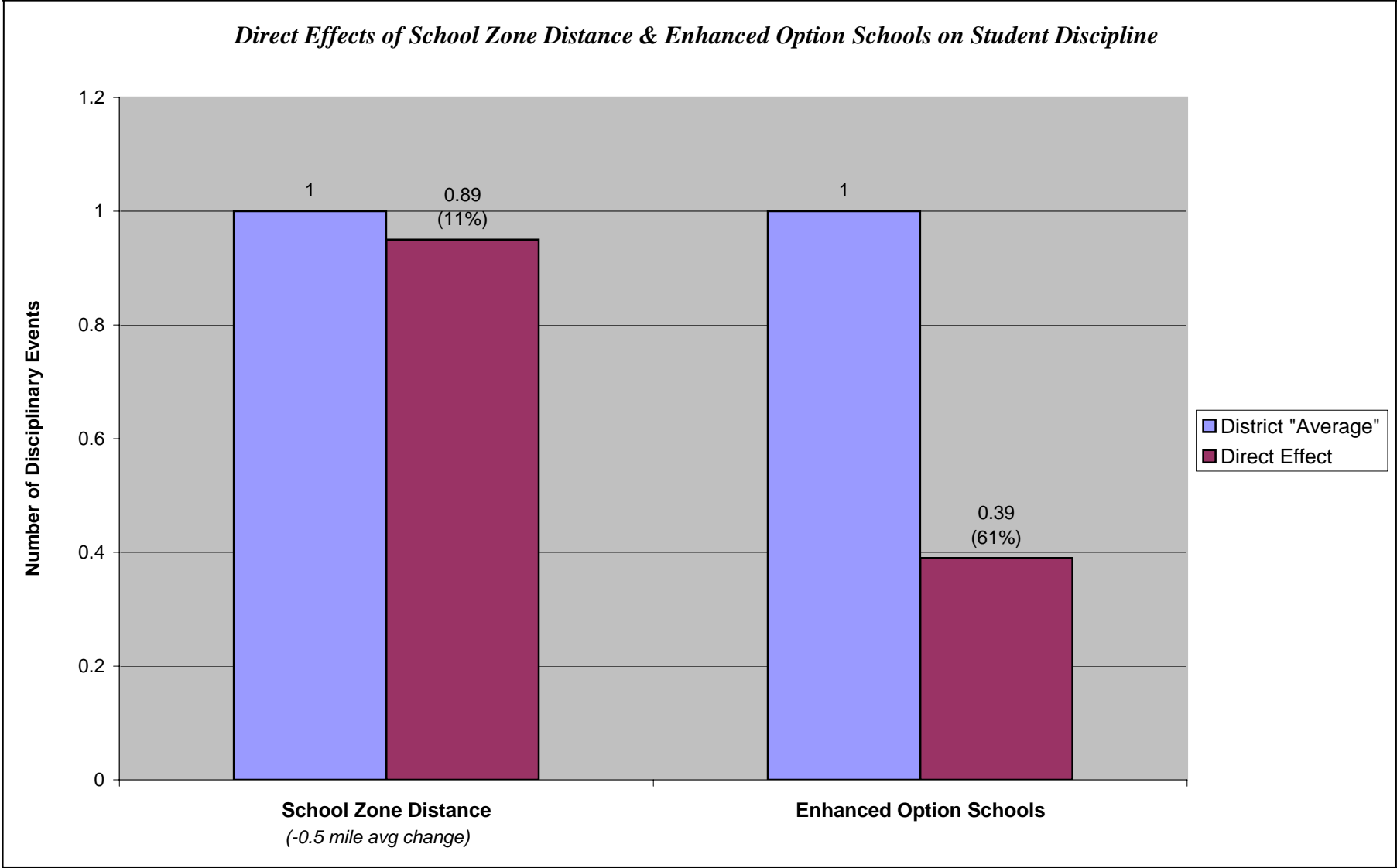


Figure 9

School Zone Contexts & Student Discipline

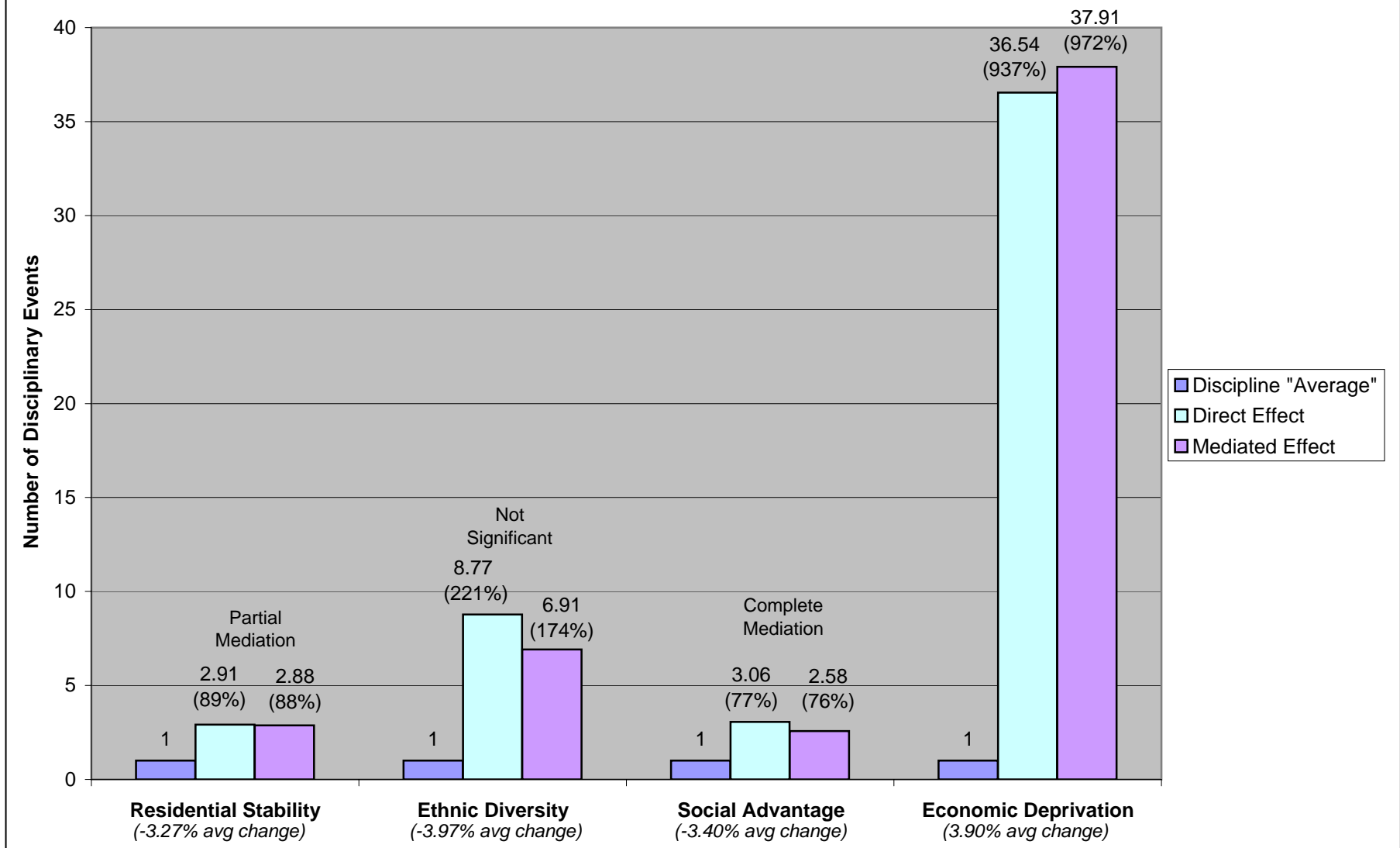


Figure 10

predicted values, this represents a decrease in disciplinary events from 2.91 to 2.88, a decrease of .03 of a disciplinary event (see Figure 10).

When including a measure of whether or not a school is an enhanced option school, the effect of social advantage on the number of student disciplinary events is decreased from 77% ($p < .05$) (Table 14, Model 2) to 76% (Table 14, Model 3). Again, this difference represents a 1 percentage point decrease in the effect of social advantage. When calculating the predicted values based on the average negative changes experienced by school zones over time, the effect of social advantage decreases from 3.06 disciplinary events to 2.58 disciplinary events in the mediation model (see Figure 10). Therefore, enhanced option schools mediate student disciplinary events by about .48 of a disciplinary event. However, the coefficient for social advantage in the mediation model is not statistically significant, indicating that the effect is completely mediated by enhanced option schools.

Nevertheless, similar to the absenteeism models, including an indicator of enhanced option schools in the model intensifies the effect of the economic deprivation of a neighborhood. When assigned to school zones that are economically deprived, the number of student disciplinary events is increased from 9.37 times to about 9.72 times, which indicates an increase in the effect size by 35%. In terms of predicted values, this increase is associated with a change from 36.54 disciplinary events to 37.91 disciplinary events for students who experience the average level of increase in economic deprivation over time (see Figure 10).

To summarize these findings, student engagement in school—as is measured by student disciplinary events—does improve as students attend schools that are closer to

their homes. Also, three of the four neighborhood characteristics of school attendance zones are predictors of student participation in school. As expected, residential stability and social advantage were associated with increased engagement in school. Economic deprivation was negatively associated with student engagement, and ethnic diversity was not predictive of student engagement in school. Enhanced option schools are also predictive of student engagement in school, even when controlling for the distance between home and school. Additionally, enhanced option schools are able to partially mediate the effects of residential stability and completely mediate the effect of social advantage. However, enhanced option schools do not mediate economic deprivation—the neighborhood indicator that is most characteristic of enhanced option neighborhoods, as well as the largest predictor of lack of student engagement. Part of this is most likely related to the fact that effects of enhanced option schools and economic deprivation are confounded by the fact that enhanced option school zones are the most economically deprived in the district.

Also evident in these models as well as the absenteeism models, student characteristics do not yield the largest “effect sizes.” Indeed, the social contexts and “organization” of school zones are the strongest predictors of both student discipline as well as student absenteeism. Interestingly, other researchers (see Myers, Milne, Baker, & Ginsburg, 1987) have predicted student discipline using better measures of student family background; however, these measures yielded much smaller coefficients than my analyses of school zone characteristics on student discipline. In fact, even though Myers and colleagues (1987) use improved measures of student background (such as parents’ educational attainment, family income, students’ educational goals, and number of

children in the student's household), the size of the coefficients are similar to those I report for my student background characteristics. This indicates that even though my measures of student background are not the most precise or contextual, they may be precise enough to estimate an individual student's contribution to their rate of disciplinary events. Additionally, comparing my results to those of others, it is evident that the contribution of school zone characteristics (such as residential stability, ethnic diversity, social advantage, and economic deprivation) are substantial.

Climate of Enhanced Option Schools

Because enhanced option schools partially and completely mediate the effects of some school neighborhood characteristics and because they significantly affect student outcomes associated with school participation and engagement, it is important to understand the differences between them and zoned elementary schools. To better understand this enhanced option effect, I use the 2004 wave of the Metro teacher survey data to compare enhanced option schools to zoned schools that have experienced the full range of changes associated with the new SIP on dimensions of within-school capital, academic climate, environmental climate, and social networks. I use the 2004 wave of data (as opposed to the 2002 wave) because it reflects the date at which the schools were most stable after the sweeping changes that had taken place in their clusters. Additionally, because all enhanced option schools are (for the most part) elementary schools, only zoned elementary schools are used as a comparison.

Climate of Enhanced Options vs. Zoned Schools

One of the most fundamental components of enhanced option schools is the additional resources allocated to the schools by the district. On a scale of 1-4 where 1 is *Completely Inadequate* and 4 is *Completely Adequate*, enhanced option teachers rate the adequacy of the physical resources in their schools as 2.84, compared to zoned elementary school teachers who rate the adequacy of their resources as 2.66 ($p < .01$) (see Table 15). Teachers were also asked about the shortage of resources in their school. On a scale of 1-4 where 1 = *Not at All* and 4 = *A Great Extent*, enhanced option teachers rate the shortage of resources as 2.05, and zoned school teachers rate shortages of their resources as 2.03; however, this difference is not statistically significant. Though, in terms of classroom resources and resources for instruction, enhanced option schools seem to fare better than zoned schools. In terms of support resources such as tutoring, health services, and other personnel resources enhanced option school teachers report that more of their students need these services (mean of 3.04 on a scale of 1-5 where 1 is *Less than 25%* and 5 is *More than 75%*) than zoned school students (mean of 1.87) ($p < .001$). However, the amount of social resources student receive in enhanced option schools is not significantly different than in zoned schools.

Academic press is also significantly different between enhanced option schools and zoned schools. On a scale of 1 to 4, where 1 = *Almost None* and 4 = *Nearly All*, teachers at enhanced option schools report that fewer teachers at their school foster a climate of academic press (3.12) than do zoned elementary school teachers (3.14) ($p < .01$). Mean differences in professional climate were not significant, however. Also indicative of the environmental climate, teachers at enhanced option schools report more

Table 15. Comparison of Enhanced Option Schools to a Sample of Zoned Schools in 2004

	<u>Enhanced</u> <u>Option School</u>	<u>Zoned</u> <u>School</u>	<u>Mean</u> <u>Difference</u>
<i>Within-School Capital</i>			
Adequacy of Resources	2.84	2.66	0.18 **
Shortage of Resources	2.05	2.03	0.02
Support Services Needed	3.04	1.87	1.17 ***
Support Services Received	2.32	2.44	-0.12
<i>Academic Climate</i>			
Academic Press	3.12	3.29	-0.17 **
<i>Environmental Climate</i>			
Professional Climate	3.00	3.06	-0.06
Institutional Challenges	2.13	1.96	0.17 **
Lack of Student Engagement	2.68	2.18	0.5 ***
<i>Social Networks</i>			
School & Community Partnering	1.62	1.39	0.23 ***
Barriers to Parent Involvement	2.15	2.22	-0.07
Teacher Communication with Parents	3.12	3.23	-0.11

*** $p < .001$; ** $p < .01$; * $p < .05$

N = 167 Teachers in 5 Enhanced Option Schools & 196 Teachers in 8 Zoned Schools (elementary schools only) in the 2004 School Year.

institutional challenges and more lack of student engagement when compared to other zoned elementary schools. Enhanced option teachers rate institutional challenges as 2.13 on a scale of 1 to 4 (1 = *Not at All* and 4 = *A Great Extent*), whereas zoned elementary school teachers rate institutional challenges as 2.12 ($p < .01$). Enhanced option teachers also rate the lack of student engagement in the classes they teach as more problematic than do zoned school teachers (enhanced option schools = 2.68 and zoned schools = 2.18 on a scale of 1-4 where 1 = *Not at All* and 4 = *A Great Extent*; $p < .001$). Concerning social networks, teachers at enhanced option schools are more likely to engage in school and community partnering (on a scale of 0-4 where 0 = *Never* and 4 = *Almost Daily*, enhanced options = 1.62 and zoned schools = 1.45; $p < .01$). Barriers to parental involvement and teacher communication with parents, however, were not significantly different for enhanced option teachers and zoned elementary teachers.

When compared to zoned schools that have experienced the full range of changes implemented as a result of unitary status, enhanced option schools seem to fare well in terms of resources, but not as well in terms of academic and environmental climate. Teachers in enhanced option schools are likely to report that the resources in their schools are adequate and that they are more likely to partner with the community. However, as is expected, enhanced option schools tend to be characterized by students who need many social resources (not all of whom receive them), and they also tend to be less engaged in school. Such conditions are likely to foster institutional challenges, as is reported by enhanced option school teachers in this study.

Stability of Enhanced Option School Climate

Since enhanced option schools differ from zoned schools in typically negative ways when considering their geographic and demographic characteristics, it is interesting that they seem to differ in unusually positive ways in some of their school climate characteristics. Thus, it is important to test the stability of the school climate in enhanced option schools. The Metro school district was excited about implementing enhanced option schools. When the first schools opened in the 1999-2000 school year, local newspapers praised the efforts of these new school types (Long, 2002). The excitement surrounding the schools was immense, and the district was dedicated to keeping their commitments to these schools in terms of the additional resources provided. However, the question remains: Is such a commitment to schools that are located in communities that have so little sustainable over time? To assess sustainability, the Metro teacher survey is used to compute independent sample t-tests²¹ on the responses of enhanced option school teachers during the 2001-2002 school year versus responses in 2003-2004.

On average, teachers of enhanced option schools report significant different results from 2002 to 2004 on three items: adequacy of resources, academic press, and professional climate (see Table 16).²² Teachers report and increase in the adequacy of resources available to them in their classrooms. On a scale of 1 to 4 where 1 = *Completely Inadequate* and 4 = *Completely Adequate*, enhanced option teachers in 2002 reported a mean of 2.66, and a mean of 2.84 in 2004 ($p < .05$) (see Figure 11). It seems

²¹ In the Metro Teacher Survey, respondents are not linked over time; therefore, paired sample t-tests cannot be computed.

²² These trends are unique to enhanced option schools. The same analyses were conducted on a sample of zoned schools over time, and different results emerged. Teachers at zoned schools indicated that their resources were becoming less adequate over time, they received more support services, and that there were fewer barriers to parental involvement (see Table 17).

Table 16. Longitudinal Comparison of Enhanced Option Schools from 2002 to 2004

	<u>2003-2004</u>	<u>2001-2002</u>	<u>Mean</u>
	<u>School Year</u>	<u>School Year</u>	<u>Difference</u>
<i>Within-School Capital</i>			
Adequacy of Resources	2.84	2.66	0.18 *
Shortage of Resources	2.05	2.07	-0.02
Support Services Needed	3.04	2.91	0.13
Support Services Received	2.32	2.53	-0.21
<i>Academic Climate</i>			
Academic Press	3.12	3.28	-0.16 *
<i>Environmental Climate</i>			
Professional Climate	3.00	3.13	-0.13 *
Institutional Challenges	2.13	2.05	0.08
Lack of Student Engagement	2.68	2.62	0.06
<i>Social Networks</i>			
School & Community Partnering	1.62	1.64	-0.02
Barriers to Parent Involvement	2.15	2.10	0.05
Teacher Communication with Parents	3.12	3.07	0.05

*** $p < .001$; ** $p < .01$; * $p < .05$

N = 186 Teachers in 5 Enhanced Option Schools in 2002 & 167 Teachers in 5 Enhanced Option Schools in 2004.

Comparison of Trends in Enhanced Option Schools & Zoned Schools over Time

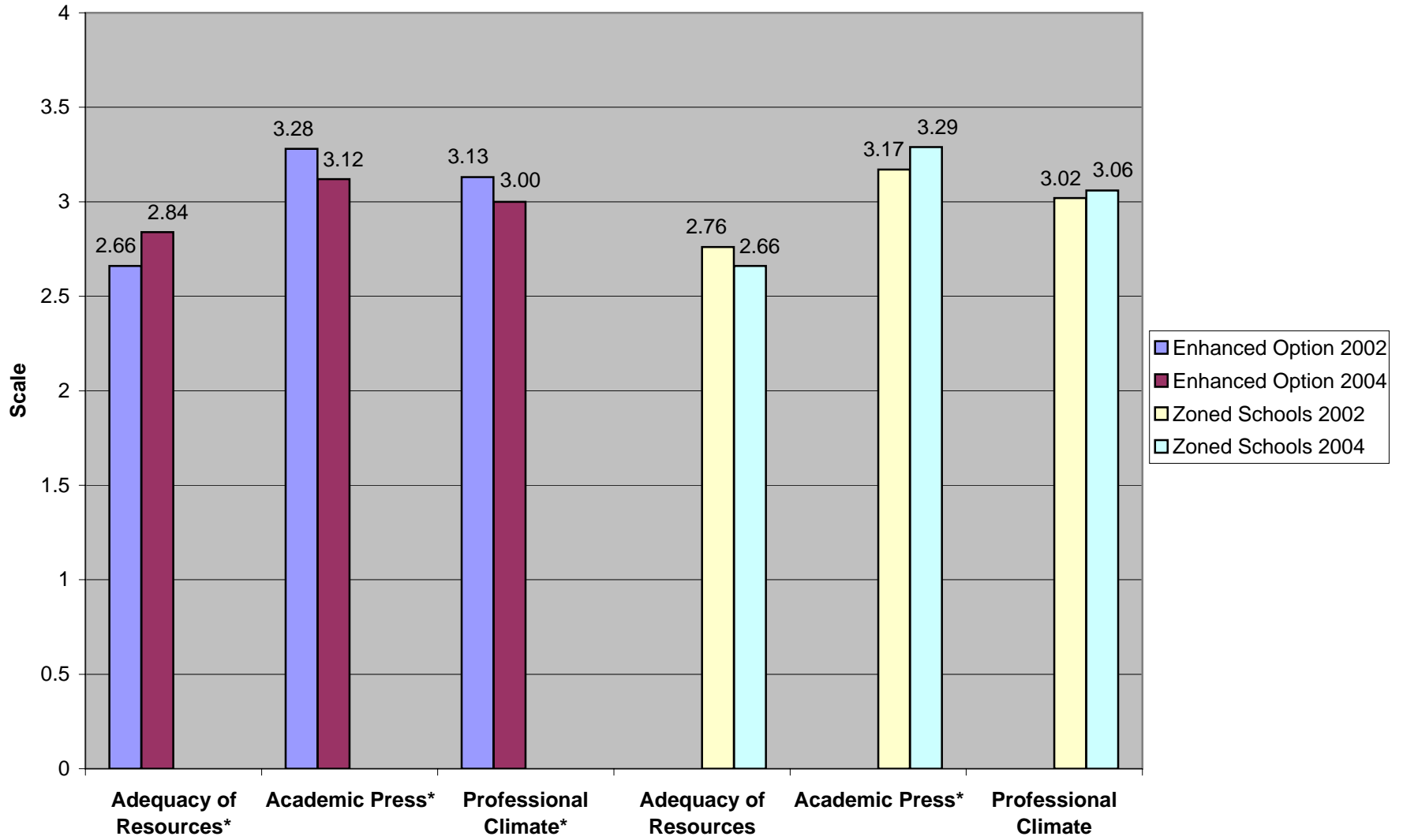


Figure 11

that the school district continues to support and invest in enhanced option schools and that these resources are noticed by teachers. Comparatively, zoned elementary schools experienced a downward shift in the adequacy of their resources during this time period (see Table 17 & Figure 11). However, teachers report significant downward shifts in academic press and professional climate. On a scale of 1 to 4, teachers in 2002 reported a mean of 3.28 on academic press and a mean of 3.12 in 2004 ($p < .05$). This difference indicates a decline in the extent to which teachers feel responsible for students' success and for improving their school. Teachers also report a decrease in professional climate. In 2002, enhanced option teachers reported a mean of 3.13 on a professional climate scale (scale of 1-4). However, in 2004, teachers reported a mean of 3.00 ($p < .05$). This decrease indicates that teachers collaborate less and are less likely to receive valuable feedback and training to assist them with instructional practices. Interestingly, zoned elementary schools experienced an increase in both academic press and professional climate during the same time period. While enhanced option schools seem to be receiving more adequate resources than zoned schools, the academic and professional climate in these schools is declining over time, which is inconsistent with other elementary schools in the district.

The only negative changes in enhanced option schools over time were the changes related to teachers' actions, attitudes, and morale. While the district has kept its financial commitment to enhanced option schools, it seems that they have somewhat less control of teachers' experiences, motivation, and fatigue over time. It is worth noting that previous analyses demonstrated that enhanced option schools experience the highest rates of teacher turnover in the district. It may be that one of the most valuable educational

Table 17. Longitudinal Comparison of Zoned Schools from 2002 to 2004

	<u>2003-2004</u>	<u>2001-2002</u>	<u>Mean</u>
	<u>School Year</u>	<u>School Year</u>	<u>Difference</u>
<i>Within-School Capital</i>			
Adequacy of Resources	2.66	2.76	-0.1
Shortage of Resources	2.03	2.08	-0.05
Support Services Needed	1.87	2.04	-0.17
Support Services Received	2.44	1.83	0.61 ***
<i>Academic Climate</i>			
Academic Press	3.29	3.17	0.12 *
<i>Environmental Climate</i>			
Professional Climate	3.06	3.02	0.04
Institutional Challenges	1.96	2.15	-0.19 ***
Lack of Student Engagement	2.18	2.39	-0.21 **
<i>Social Networks</i>			
School & Community Partnering	1.39	1.50	-0.11
Barriers to Parent Involvement	2.22	2.50	-0.28 ***
Teacher Communication with Parents	3.23	3.20	0.03

*** $p < .001$; ** $p < .01$; * $p < .05$

N = 261 Teachers in 8 Zoned Schools (elementary schools only) in 2002 & 196 Teachers in 8 Zoned Schools (elementary schools only) in 2004.

resources—teachers—wear down over time. However, these negative differences from 2002 to 2004 place enhanced options schools about equally with zoned schools in 2004. Continued monitoring of these changes in enhanced option schools is required to determine the extent to which these downward trends continue in enhanced option schools.

CHAPTER VII

CONCLUSIONS

This study offers a unique view of neighborhood contexts and their effects on student outcomes. It offers an opportunity to explore educational, social, and political relationships as one Southeastern school district shifts its priorities from cross-town busing to unitary status. This shift in priorities was accompanied with dynamic changes in the organization of education in Greenville. It is these dynamics that offer the context for a study of the importance of the size of school attendance zones, the impact of the social characteristics of a school's attendance zone, and whether or not these social characteristics can be mediated when students attend compensatory school. Findings related to each of these issues are described in more detail below. Thereafter I outline research-based implications of education policy as well as implications for social science research.

Main Findings

This study focuses on three issues as they relate to student participation and engagement in school: the importance of the size of school attendance zones, the impact of the social characteristics of a school's attendance zone, and whether or not these social characteristics can be mediated when students attend compensatory schools.

When Schools are Closer to Home

As Greenville moved from court-ordered to court-ended desegregation, they adopted a school improvement plan targeted at zoning children to schools that are closer to their homes. Some researchers suggest that neighborhood schools, or schools that are closer to students' homes, offer a greater sense of place for students (for example, see Driscoll, 2001; Morris, 2001). When a school is integrally a part of the larger community, it can more easily address the needs of individual students living in specific neighborhoods. Some also suggest that community schools offer avenues of increased social capital as schools become the center for community life and interaction (Goldring & Crowson, 2002; Driscoll, 2001). Therefore, schools that are closer to home should foster a sense of place for children that can be observed through their participation and engagement in school.

I find support for these hypotheses. School zones that are, on average, closer to students homes are associated with an increase in student participation and engagement which are observed through reduced absences and disciplinary events. When controlling for the social and economic conditions of a school's neighborhood, closer to home school zones seem to foster a greater sense of place for students.

Neighborhoods Matter

The social disorganization literature addresses neighborhood conditions that hinder the development of sense of place. Without a sense of place, neighborhoods become areas characterized by crime, deviance, and lack of engagement in pro-social behaviors. Undoubtedly, the characteristics of students' school attendance zones

significantly impacted student participation and engagement. In fact, after controlling for student and school characteristics, the social and economic context of schools' attendance zones accounted for much of the variation in students' participation and engagement in school. I find evidence for the social disorganization hypothesis in that students who encountered schools characterized by economic deprivation were less likely to participate and be engaged in school. Likewise students who encountered schools with attendance zones characterized by residential stability, ethnic diversity, and social advantage were more likely to be engaged and participate in school. Hence, the less social disorganization inherent in a neighborhood, the more likely students are to experience a sense of place through engagement and participation in schools.

This finding is meaningful in this particular study because a "neighborhood" is defined as a school zone—a political boundary which is set to accomplish certain goals. As such, these boundaries can be altered to reflect the social, educational, and political goals of the larger community. Setting these boundaries in Greensville was an eight-year community effort where collaboration and consensus building were the foci of attending to the issues of educational and social priorities. When these boundaries are set, they reflect the educational goals of a school district, and when these goals change, the boundaries can be changed as well.

Unlike most definitions of "neighborhood" in the neighborhood effects literature, identifying school zones provides an avenue through which neighborhood compositions can be changed. When a school zone is changed, children's patterns of interactions are also changed, thereby broadening (or narrowing) their idea of "community." Some schools and school districts have resorted to the designation of school attendance zones

as a mechanism for enhancing educational equity (for example, Wake County, North Carolina; Charleston, South Carolina; and Boston, Massachusetts), and preliminary analyses suggest positive outcomes for students (though the effects of these neighborhoods have not been measured directly as they are in this study) (Flinspach, Banks, & Khanna, 2003; Willie, 1990).

The Role of Enhanced Option Schools

Returning to neighborhood schools for any school district that has been under a court desegregation order involves significant shifts in the demographic composition of schools. Inevitably, some schools will service populations of students living in conditions of concentrated poverty. Underlying the idea of returning to high-poverty, racially isolated, neighborhood schools is the notion that residents living in certain neighborhood have specific needs in terms of educational and schooling and that those needs can best be met within the context of their residential community. As Greenville anticipated racially isolated, high-poverty schools when moving away from cross-town busing, they looked to the possibility of full service schools to provide the necessary resources to students who would begin school at an educational disadvantage based on their family and community backgrounds. The idea here is that schools are able to “level the playing field” when they provide disadvantaged children with the resources not available in their homes and neighborhoods.

I find that enhanced option schools—in spite of their higher than average teacher turnover rates, concentrations of poverty, and less desirable social conditions—have positive effects on the children attending them. When students encounter an enhanced

option school, they are more likely to participate and be engaged in their schools. Even though these schools are located in places one might describe as socially disorganized (i.e., “bad neighborhoods”), they seem to have a positive influence in the lives of the students attending them; however, this positive influence does not mediate the effects of school neighborhoods in important ways. While enhanced option schools have been found to mediate the effects of social advantage and residential stability, the degree to which these effects are mediated is mild. In other words, enhanced option schools are good schools with many resources (both academic and social); however, they are not good enough to mediate the neighborhood characteristics of a school zone. It is questionable that such schools would ever be able to mediate the devastating effects of poverty and the associated social conditions.

While it appears that the district has been stalwart in keeping their promises of additional physical and instructional resources in enhanced option schools, they seem to have much less control over teacher turnover and morale in these schools. Thus, the one thing that students do not receive when attending enhanced options schools is a stable school environment. It is arguable that this would be one of the more important “resources” a school could offer students—particularly when students attending these schools tend to come from unstable home and neighborhood environments.

Implications for Education Policy

Currently, there is little evidence about whether a return to neighborhood schools under unitary status provides benefits to students and whether those benefits are equally distributed among all students. Additionally, there are virtually no empirical analyses of

unitary status plans—despite their growing popularity. National and regional data sets have been used to track resegregation patterns after unitary status (see Orfield, 2001), yet little is known about the consequences of specific policies associated with unitary status. This study has attempted to do both—assess the benefits of neighborhood schools for all students and simultaneously provide some evidence concerning the consequences of widespread policies (i.e., the return to neighborhood schools) associated with unitary status.

First, returning to neighborhood schools seems to be beneficial for establishing social participation and engagement among students. However, the return to neighborhood schools has serious consequences for children living in disadvantaged school zones. While enhanced option schools alleviate some of these consequences, the effects of racial isolation coupled with concentrated poverty are overwhelming. Metro seems to represent the “best case scenario” in terms of the way unitary status was achieved. Through collaboration and consensus building, the community and school board worked together to derive a plan they thought they could all support. As such, Greenville seems to be committed to the agreements reached when they were released from their court order. As such, a grant of unitary status and a return to neighborhood schools in any other school district may not be quite as successful. Even in Greenville, the effects of unitary status are not yet clear. The next six to ten years will be equally important in examining neighborhood effects as the six years included in this study, as the excitement for the new SIP wanes and resources that are available now potentially become less available in the future. It is still unclear how well enhanced option schools

will fare as the fatigue of working in such an environment affects the teachers and staff at these schools.

When considering the adoption of enhanced option schools or any other types of school-wide compensatory education strategies, policy makers must consider the importance of social capital. While such schools in Greenville have received the physical and instructional resources they need, they do not necessarily have the capacity to support teachers and staff members in ways that are meaningful in their decision to continue teaching in these schools. As such, stability and morale in these schools may be lower than it could be. In other words, physical resources are not enough to maintain the viability of compensatory schools.

This study also implies that the way policy makers draw school attendance zones affects student outcomes because it defines the range of social interactions for children. While many agree that closer-to-home schooling is an important educational priority, this study also suggests the range of social interactions for students is also an important priority. And, as is somewhat demonstrated in the case of Greenville, school zones can be re-drawn in such ways that busing is limited (though not eliminated) and students attend schools that are closer to their homes yet somewhat diverse in terms of neighborhood composition. This however, does not mean necessarily that students would attend schools that are closest to their homes.

Eventually, such issues must be addressed contextually. That is, all districts facing similar problems must determine how they will address their educational priorities and how they will establish equity in their schools. In general, I find positive outcomes when children are sent to schools that are closer to their homes. I also find positive

outcomes for students attending enhanced options schools. However, neighborhood contexts need to be better distributed when possible. The challenge for policy makers is deciding on ways to address all three priorities: closer-to-home schooling, compensatory services, and the distribution of social and economic neighborhood context (as they are defined by school attendance zones). In reaching a balance among all three, it is important to note that findings from this study suggest that compensatory services alone do not mediate poor neighborhood conditions.

Implications for Social Science Research

This study also offers implications for social science research. Most importantly, this study examines the interchange between neighborhoods and policies. While much of the neighborhood effects research recommends changes in public policy as a result of finding significant neighborhood effects for certain populations of people, few researchers have examined the effects of these policies as mediator of neighborhood effects (for example, see Crane, 1991a; Crane, 1991b). As is suggested by Sampson, Morenoff, and Gannon-Rowley (2002), when studying neighborhood effects, indirect relationships should also be explored. Mediating and moderating relationships may be instrumental in determining how to best deal with the issues of concentrated poverty and disruptive environments on the experiences and life chances of residents. Even though this study detects mostly small mediated effects when considering the influence of policies aimed at alleviating the effects of poor neighborhood conditions, it addresses the issue of how difficult it might be to mediate these kinds of conditions without considering zoning plans intended to foster the integration of neighborhood conditions. It would be

interesting to see if other organizational policies are able to mediate some of these conditions in more significant ways.

Examining mediated relationships when determining the effects of neighborhood characteristics on student outcomes also contributes to the sense of place and social disorganization theories. As the theories are described in the literature, sense of place and social disorganization occupy opposite ends of a “spectrum of community.” However, this study has demonstrated that when resources and supports are made available within the contexts of disadvantaged neighborhoods, evidence of “sense of place” such as increased participation and engagement is likely to emerge. Therefore, it is possible for geographic areas to be both socially disorganized—as is evidenced by family disruption and economic deprivation, and well as the lack of residential stability and social advantage—and for the people living in these areas to experience a sense of place through their participation and engagement in public organizations. However, these organizations—public schools, in this case—must be well maintained with continued support. Otherwise, the duration through which these schools will be effective mediators of social disorganization is unclear. Indeed, it may be that the only “disorganized” communities are those with no infrastructure to facilitate participation and engagement. Also, the best remedy for resident living in such communities may not be to leave, as Park and Burgess (1925) have suggested. Rather, the best remedy may include social and economic investments in the public organizations available in such areas. In other words, a socially disorganized neighborhood may be an ignored neighborhood. And it is possible for residents of such a disorganized neighborhood to exhibit characteristics associated with sense of place. “All places, no matter what else they have,

have a sense of shared experience” (Lewis, 1979, p. 41), and, for children, those shared experiences begin with their participation and engagement in school. What researchers would identify as a “socially disorganized” neighborhood is an area that residents of those neighborhoods call “home” (see Furstenberg, et al., 1999). As such, one cannot instinctively assume that sense of place—evidenced in residents’ participation and social engagement—is absent in the presence of social disorganization.

In a time where “place” often has political boundaries—that is, people’s patterns of interactions are often influenced by boundaries that are politically defined rather than geographically defined (though the two types of boundaries tend to be related to one another), it is important that researchers seek to define “neighborhoods” more contextually. Using school attendance zones as neighborhood boundaries is an example of one way to define people’s range of social interactions (Sampson, Morenoff, & Gannon-Rowley, 2002). However, these boundaries are infinitely more difficult to identify and measure than are the typical “boundaries” used in neighborhood research (5-digit zip codes, for example). Nevertheless, using such boundaries in research offers implications for how these boundaries can be structured.

According to Wilson (1998), the challenge for social scientists is to develop new frameworks that consider the complex interrelationships between individual behaviors and social-structural characteristics. This study specifically identifies individual behaviors as a function of the social-structural characteristics of educational priorities and policies as well as neighborhoods as defined by school attendance zones. As such, it is clear that children’s environments affect school-related outcomes at very early ages. It is the responsibility of researchers and policy makers to consider more seriously the

consequences of how children's "places", and consequently their ranges of social interactions, are defined. Both closeness to home and diversity in school zones are noble goals; however, both extremes have been demonstrated to have negative consequences for children. To facilitate greater participation and engagement in schools as well as in the larger society, distance from home, social and economic diversity, and compensatory services must all be considered together as mechanisms for fostering stable and meaningful places for children.

Appendix A. Sample of Students by Year, Grade, and School Type

Year	Grade	Neighborhood Schools	Magnet Schools	Enhanced Option Schools	Design Centers	Total
1999						
	K	5682	210	0	0	5892
	1	6163	142	0	0	6305
	2	5871	119	0	0	5990
	3	5985	104	0	0	6089
	4	5654	95	0	0	5749
	5	4364	788	0	0	5152
	6	4153	743	0	0	4896
	7	4793	540	0	0	5333
	8	4362	488	0	0	4850
	9	4818	864	0	0	5682
	10	3327	639	0	0	3966
	11	2798	545	0	0	3343
	12	2490	501	0	0	2991
	Total	60460	5778	0	0	66238
	%	91%	9%	0%	0%	100%
2000						
	K	5308	365	212	71	5956
	1	5731	240	215	66	6252
	2	5361	170	313	38	5882
	3	5722	156	119	37	6034
	4	5652	139	111	45	5947
	5	4352	1034	94	48	5528
	6	4080	948	92	39	5159
	7	4636	655	0	0	5291
	8	4432	491	0	0	4923
	9	4720	972	0	0	5692
	10	3428	721	0	0	4149
	11	2737	550	0	0	3287
	12	2590	518	0	0	3108
	Total	58749	6959	1156	344	67208
	%	87%	10%	2%	1%	100%

Appendix A (continued). Sample of Students by Year, Grade, and School Type

Year	Grade	Neighborhood Schools	Magnet Schools	Enhanced Option Schools	Design Centers	Total
2001						
	K	5101	282	261	297	5941
	1	5192	192	266	259	5909
	2	5194	220	221	284	5919
	3	5099	154	212	245	5710
	4	5153	162	202	227	5744
	5	4780	748	17	33	5578
	6	4475	731	6	33	5245
	7	4476	624	0	0	5100
	8	4243	597	0	0	4840
	9	4663	996	0	0	5659
	10	3249	753	0	0	4002
	11	2785	612	0	0	3397
	12	2514	531	0	0	3045
	Total	56924	6602	1185	1378	66089
	%	86%	10%	2%	2%	100%
2002						
	K	4983	237	354	273	5847
	1	5056	219	376	338	5989
	2	4783	198	331	290	5602
	3	4983	220	317	287	5807
	4	4931	149	310	250	5640
	5	4850	699	36	0	5585
	6	4665	751	47	0	5463
	7	4683	656	0	0	5339
	8	4264	581	0	0	4845
	9	4754	932	0	0	5686
	10	3342	743	0	0	4085
	11	2730	638	0	0	3368
	12	2573	605	0	0	3178
	Total	56597	6628	1771	1438	66434
	%	85%	10%	3%	2%	100%

Appendix A (continued). Sample of Students by Year, Grade, and School Type

Year	Grade	Neighborhood Schools	Magnet Schools	Enhanced Option Schools	Design Centers	Total
2003						
	K	4852	292	387	344	5875
	1	4881	175	346	321	5723
	2	4807	211	362	366	5746
	3	4608	189	323	321	5441
	4	4824	210	314	311	5659
	5	4443	763	0	89	5295
	6	4605	742	0	88	5435
	7	4446	806	0	52	5304
	8	4383	711	0	1	5095
	9	4845	1021	0	0	5866
	10	3441	806	0	0	4247
	11	2885	672	0	0	3557
	12	2634	662	0	0	3296
	Total	55654	7260	1732	1893	66539
	%	84%	11%	3%	3%	100%
2004						
	K	5004	189	522	420	6135
	1	4667	185	477	412	5741
	2	4609	180	429	373	5591
	3	4660	201	423	407	5691
	4	4499	181	363	361	5404
	5	4288	712	0	399	5399
	6	4179	675	0	346	5200
	7	4254	743	0	361	5358
	8	4267	762	0	83	5112
	9	5082	978	0	0	6060
	10	3514	820	0	0	4334
	11	2994	725	0	0	3719
	12	2752	671	0	0	3423
	Total	54769	7022	2214	3162	67167
	%	82%	10%	3%	5%	100%

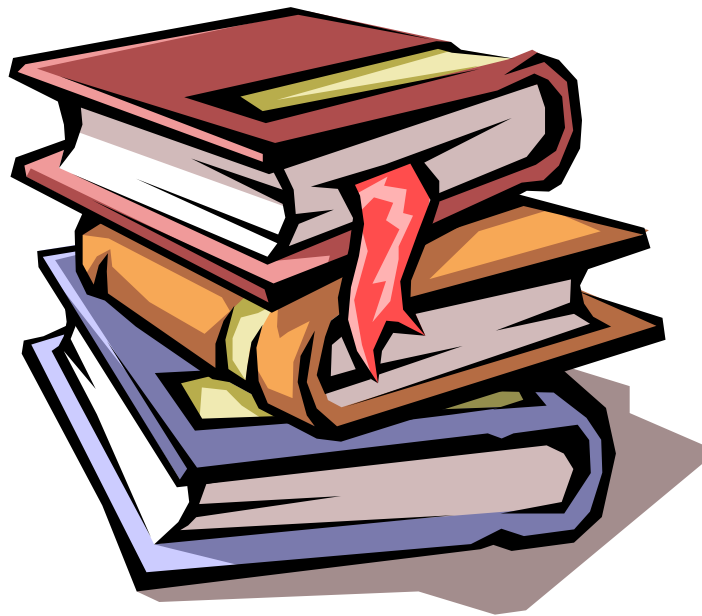
Appendix A (continued). Sample of Students by Year, Grade, and School Type

Year	Grade	Neighborhood Schools	Magnet Schools	Enhanced Option Schools	Design Centers	Total
All Years						
	K	30930	1575	1736	1405	35646
	1	31690	1153	1680	1396	35919
	2	30625	1098	1656	1351	34730
	3	31057	1024	1394	1297	34772
	4	30713	936	1300	1194	34143
	5	27077	4744	147	569	32537
	6	26157	4590	145	506	31398
	7	27288	4024	0	413	31725
	8	25951	3630	0	84	29665
	9	28882	5763	0	0	34645
	10	20301	4482	0	0	24783
	11	16929	3742	0	0	20671
	12	15553	3488	0	0	19041
	Total	343153	40249	8058	8215	399675
	%	86%	10%	2%	2%	100%
All Years, Grades 3-8						
	3	31057	1024	1394	1297	34772
	4	30713	936	1300	1194	34143
	5	27077	4744	147	569	32537
	6	26157	4590	145	506	31398
	7	27288	4024	0	413	31725
	8	25951	3630	0	84	29665
	Total	168243	18948	2986	4063	194240
	%	87%	10%	2%	2%	100%
	% of District					
	Total	42%	5%	1%	1%	49%
Working Sample: All Years, Grades 3-8, Neighborhood & Enhanced Option Schools Only						
	3	31057	0	1394	0	32451
	4	30713	0	1300	0	32013
	5	27077	0	147	0	27224
	6	26157	0	145	0	26302
	7	27288	0	0	0	27288
	8	25951	0	0	0	25951
	Total	168243	0	2986	0	171229
	%	98%	0%	2%	0%	100%
	% of District					
	Total	42%	0%	1%	0%	43%

Appendix B. Teacher Survey

REDEFINING COMMUNITIES: THE RE-ZONING OF METROPOLITAN NASHVILLE PUBLIC SCHOOLS

A SURVEY OF METRO NASHVILLE TEACHERS



2001-2002 School Year Survey

Conducted by the Department of Leadership & Organizations
Peabody College of Education, Vanderbilt University

CLASSROOM RESOURCES

We are interested in the instructional resources that are currently available to you as a classroom teacher during this academic year. Please check the box that best represents your answer.

Q.1 Do you have textbooks for every student in your classroom?

1-Yes 2-No 3- Not Applicable

Q.2 Do you have workbooks for every student in your classroom?

1-Yes 2-No 3-Not Applicable

Q.3 Other than text and reference books, does the school provide subject-specific curricular materials for your classroom (e.g. maps, lab equipment, calculators, scientific equipment, musical instruments, etc)

1-Yes – Please specify ___<--_Q.3spec_____

2-No

3- Not applicable

Q.4 How many functioning computers does your school provide for your classroom that are capable of running all the programs that you would like to use? _____

Q.5 Is there a computer room in your school?

1-Yes _____>

2-No

Q.5a If there is a computer room, do you have access to it for instructional purposes?

1-Yes 2-No

Q.6 Is there a curriculum/Instruction specialist (e.g. reading specialist, math support teacher, etc) at your school?

1-Yes _____>

2-No

Q.6a If your school has a curriculum specialist, do you utilize this person to help you with lesson planning, lesson development and other related activities?

1-Yes 2-No

Q.7 Is there a teacher workroom or area at your school?

1-Yes _____>

2-No

Q7a. If your school has a teacher workroom or area, do you utilize it for your class preparations?

1-Yes 2-No

Q.8 How adequately does your school provide you with each of the following resources for your classroom?

(Circle one number for each item)	Not Applicable	Completely Inadequate	Mostly Inadequate	Mostly Adequate	Completely Adequate
Q.8a Basic supplies (paper, chalk, markers)	1	2	3	4	5
Q.8b Current, adopted materials (texts)	1	2	3	4	5
Q.8c Supplemental texts (e.g. workbooks)	1	2	3	4	5
Q.8d Reference materials in my classroom (Maps, science kits, math manipulatives)	1	2	3	4	5
Q.8e Subject-specific supplemental materials	1	2	3	4	5
Q.8f TV/VCR Accessibility in my classroom	1	2	3	4	5
Q.8g Computers in my classroom	1	2	3	4	5
Q.8h Computer printer in my classroom	1	2	3	4	5
Q.8i Educational software in my classroom	1	2	3	4	5
Q.8j An Internet connection in my classroom	1	2	3	4	5
Q.8k Technical (computer) support	1	2	3	4	5
Q.8l Teacher educational assistant	1	2	3	4	5
Q.8m Calculators	1	2	3	4	5

Q.9 Are you working with any non-district programs in your classroom (e.g. School & university partnerships, test preparation programs, privately developed instructional or curricular materials, etc.)?

1-Yes →
 2-No

<p><i>Please Specify:</i></p> <p>Programs: <-- <u>Q.9prog</u> _____</p> <p>Curriculum and or Instructional Materials: <-- <u>Q.9curr</u> _____</p> <p>Partnerships: <-- <u>Q.9part</u> _____</p> <p>Other: <-- <u>Q.9othe</u> _____</p>
--

Q.10 What other resources, crucial to your instructional capacity, are you presently USING?

Q.11 What resources, crucial to your instructional capacity, are you presently LACKING?

Q.12 How often do your children use the following materials or resources in your typical class?

(Circle one number for each item)	Not available	Never	Once a month or less	Two or three times a month	Once or twice a week	Three or four times a week	Daily
Q.12a Textbooks	1	2	3	4	5	6	7
Q.12b Tradebooks	1	2	3	4	5	6	7
Q.12c Workbooks and practice sheets	1	2	3	4	5	6	7
Q.12d Manipulatives (e.g., blocks, puzzles)	1	2	3	4	5	6	7
Q.12e Audiovisual equipment (e.g., VCR, audio tapes)	1	2	3	4	5	6	7
Q.12f Computer equipment	1	2	3	4	5	6	7
Q.12g Musical recordings	1	2	3	4	5	6	7
Q.12h Paper and pencils	1	2	3	4	5	6	7
Q.12i Art materials (e.g. paints, clays, etc)	1	2	3	4	5	6	7
Q.12j Musical instruments	1	2	3	4	5	6	7
Q.12k Television	1	2	3	4	5	6	7
Q.12l Calculators	1	2	3	4	5	6	7

Q.13 About what percentage of your students need the following types of support services in your most typical class?

(Circle one number for each item)	Less than 25%	25% to 45%	About 50%	55% to 75%	More than 75%
Q.13a Academic Tutoring	1	2	3	4	5
Q.13b Mentoring	1	2	3	4	5
Q.13c Health Services	1	2	3	4	5
Q.13d Social Services	1	2	3	4	5
Q.13e Testing for SPED	1	2	3	4	5
Q.13f Other (specify) Q.13oth	1	2	3	4	5

Q.14 About what percentage of the students in your most typical class who need the following support services actually receive them?

(Circle one number for each item)		Less than 25%	25% to 45%	About 50%	55% to 75%	More than 75%
Q.14a	Academic Tutoring	1	2	3	4	5
Q.14b	Mentoring	1	2	3	4	5
Q.14c	Health Services	1	2	3	4	5
Q.14d	Social Services	1	2	3	4	5
Q.14e	Testing for Special ed.	1	2	3	4	5
Q.14f	Other (specify) _____	1	2	3	4	5

INSTRUCTION

In this section we are interested in instructional issues in your classroom. Please check the box that best represents your answer.

Q.15 Indicate about what percent of your time is spent in a typical week doing each of the following with your most typical class. (Reponses may not add up to exactly 100%)

		None	<10%	10-24%	25-49%	50-74%	75-100%
Q.15a	Providing instruction to the class as a whole	1	2	3	4	5	6
Q.15b	Providing instruction to small groups of students	1	2	3	4	5	6
Q.15c	Providing instruction to individual students	1	2	3	4	5	6
Q.15d	Maintaining order or disciplining students	1	2	3	4	5	6
Q.15e	Administering tests or quizzes	1	2	3	4	5	6
Q.15f	Performing routine administrative tasks (e.g. taking attendance, making announcements, etc.)	1	2	3	4	5	6
Q.15g	Conducting lab periods	1	2	3	4	5	6
Q.15h	Other non-instructional activities	1	2	3	4	5	6
Q.15i	Standardized test preparation	1	2	3	4	5	6

Q.16 To what extent do you use each of the following strategies when working with students of different achievement levels?

(Circle one number for each item)		Not at all	Small extent	Moderate extent	Great Extent
Q.16a	Homogenous grouping	1	2	3	4
Q.16b	Extra time with low-performers	1	2	3	4
Q.16c	Different instruction materials	1	2	3	4
Q.16d	One-on-one instruction	1	2	3	4
Q.16e	Frequent assessments of performance	1	2	3	4
Q.16f	Higher achieving students work with lower achieving students	1	2	3	4

PROFESSIONAL CLIMATE

We are interested in the climate among faculty at your school during this academic year. Please check the box that best represents your answer.

Q.17 How many professional leave days did you use last school year? _____

Q.18 How many CODE 10 days did you participate in last school year? _____

Q.19 How many summer workshops did you attend in 2001? _____

Q.20 How many hours did you spend in summer workshops in 2001? _____

Q.21 This school year (2001 – 2002), how often do you have scheduled meetings with other teachers in this school to discuss and plan curriculum or teaching approaches?

1- Never

2- Once or twice a year

3- Once every other month

4- Once a month

5- 2 – 3 times a month

6- Once a week

7- More than once a week

Q.22 Please mark the extent to which you agree or disagree with each of the following statements about the teachers in your school.

(Circle one number for each item)		Strongly disagree	Disagree	Agree	Strongly Agree
Q.22a	Most teachers are continually learning and seeking new ideas.	1	2	3	4
Q.22b	Most teachers make a conscious effort to coordinate their teaching with instruction at other grade levels.	1	2	3	4
Q.22c	Most teachers are supported in their efforts to experiment and develop new programs and curricula.	1	2	3	4
Q.22d	When teachers are not doing a good job, the principal works with them to improve instruction.	1	2	3	4
Q.22e	Performance evaluation procedures in this school help teachers grow professionally.	1	2	3	4
Q.22f	My principal is available when I need to see him/her.	1	2	3	4
Q.22g	Other teachers encourage me to try out new ideas.	1	2	3	4
Q.22h	Teachers receive the help they need from the principal when problems arise.	1	2	3	4
Q.22i	The principal spends time in my classroom observing my teaching and provides feedback.	1	2	3	4
Q.22j	In-service training and staff development programs in this school help teachers grow professionally.	1	2	3	4
Q.22k	The staff is continually evaluating its programs and activities.	1	2	3	4

Q.23 On average, how many hours per week, do you have for collaborative planning?

_____ hours.

Q.23a Percentage of your total planning time, in a typical week, is consumed by other school activities (e.g., tutoring, meetings, etc)? _____%

RACIAL CLIMATE IN SCHOOL

In this section we are interested in learning more about the racial climate in your classroom or school, during the present school year.

Q.24 Please mark the appropriate box that best describes the percentage of minority students in your most typical class. (Minority refers to African American, Hispanic, Asian, Pacific Islander, Native American and/or Alaskan Native.)

1-Less than 20% minority

2-Between 21 and 40% minority

3-Between 41 and 60% minority

4-Between 61 and 80% minority

5-Between 81 and 90% minority

6-Between 91% and greater → **Skip to question Q26.**

Q.25 Please indicate the extent to which each of the following statements applies to your most typical CLASS. (Minority refers to African American, Hispanic, Asian, Pacific Islander, Native American, or Alaskan native students.)

(Circle one number for each item)		Never	Rarely	Sometimes	Always
Q.25a	Minority and white students work together on group assignments.	1	2	3	4
Q.25b	Interracial conflicts are a problem in my class.	1	2	3	4
Q.25c	Minority and white students participate equally in class discussions.	1	2	3	4
Q.25d	Students make friends with students of other racial and/or ethnic groups in my class.	1	2	3	4
Q.25e	Minority students (who are not receiving ELL services) and white students achieve at about the same level.	1	2	3	4
Q.25f	I often overhear students making racist remarks.	1	2	3	4

Q.26 For this next question, we would like you to consider your school as a whole. Please indicate the extent to which each of the following statements applies to YOUR SCHOOL. (Minority refers to African American, Hispanic, Asian, Pacific Islander, Native American, or Alaskan native students.)

(Circle one number for each item)		Never	Rarely	Sometimes	Always
Q.26a	Minority students sit and/or converse with white students at lunchtime.	1	2	3	4
Q.26b	Interracial conflicts are a problem at this school.	1	2	3	4
Q.26c	Minority and white students play together at recess or free time.	1	2	3	4
Q.26d	Minority and white students achieve at about the same level.	1	2	3	4
Q.26e	Students make friends with students of other racial and ethnic groups.	1	2	3	4
Q.26f	Fights often occur between different racial or ethnic groups.	1	2	3	4
Q.26g	Students of different races form after school friendships.	1	2	3	4
Q.26h	Students of different races can be found in the same clubs and activities.	1	2	3	4
Q.26i	Racial and/or ethnic differences among staff members create tensions at this school.	1	2	3	4
Q.26j	I often overhear students making racist remarks.	1	2	3	4

ENVIRONMENTAL CLIMATE

In this next section we would like to ask you a series of questions regarding the present climate of your school during this school year.

Q.27 Which of the following limit you in how you teach your most typical class?

(Circle one number for each item)		Not at all	Small extent	Moderate extent	Great Extent
Q.27a	Low morale among fellow teachers/administrators	1	2	3	4
Q.27b	Students who come from a wide range of backgrounds	1	2	3	4
Q.27c	Threat(s) to personal safety or safety of students	1	2	3	4
Q.27d	The noise level in the school building	1	2	3	4
Q.27e	Amount of professional support staff (e.g., counselors, specialists)	1	2	3	4
Q.27f	Students with special needs (e.g., hearing, vision, speech impairment, physical disabilities, mental or emotional/psychological impairment)	1	2	3	4
Q.27g	Amount of time to prepare for class	1	2	3	4
Q.27h	High student/teacher ratio	1	2	3	4
Q.27i	Students with different academic abilities	1	2	3	4
Q.27j	Uninterested students	1	2	3	4
Q.27k	Disruptive students	1	2	3	4
Q.27l	Parents uninterested in their children's learning progress	1	2	3	4
Q.27m	Shortage of computer hardware	1	2	3	4
Q.27n	Shortage of computer software	1	2	3	4
Q.27o	Shortage of other instruction equipment for students' use	1	2	3	4
Q.27p	Shortage of equipment for your use in demonstrations and other exercises	1	2	3	4
Q.27q	Inadequate physical facilities	1	2	3	4
Q.27r	Low morale among students	1	2	3	4

SCHOOL AND CLASSROOM INFORMATION

In this section, we will ask you for some general school and classroom information.

Q.28 Which of the following best describes THIS school? (Check one)

- 1-Magnet school
- 2-Magnet within school program
- 3-Enhanced option school
- 4-Laboratory school
- 5-Design center school
- 6-Regular neighborhood/zone school
- 7-Title I neighborhood/zone school

Q.29 Which of the following best describes your MAIN assignment at this school during this school year? (Check one)

- 1-Full-time teacher
- 2-Part-time teacher or Job Share
- 3-Itinerant teacher (provide instruction at more than one school site)
- 4-Educational Assistant
- 5-Substitute
- 6-Administrator
- 7-Librarian/Media Specialist
- 8-Support Staff
- 9-Other professional staff, please specify <--Q.29oth_____

Q.30 Which of the following best describes most of your classes at YOUR CURRENT SCHOOL?

- 1-Self-contained Class – you teach multiple subjects to the same students
- 2-Team Teaching – you collaborate with one or more teachers in teaching multiple subjects to the same students
- 3-Pull Out Class – you teach certain students who are released from their regular classes (gifted, remedial, special education)
- 4-Departmentalized Classes – You teach one or more subject matter courses to several classes of different students all or most of the day

What Subject? <-- **Q.30sub**_____

Q.31 What is the total number of class periods that you are the primary instructor during a typical day? _____

Q.32 What type of certificate do you hold in you MAIN assignment field?

1-Regular of standard state certificate or advanced professional certificate

2-Probationary certificate [the initial certificate issued after satisfying all requirements except the completion of the probationary period

3-Provisional or other type given to persons who are still participating in what the state calls an "alternative certification program."

4-Temporary certificate (requires some additional college coursework and/or student teaching before regular certification can be obtained.

5-Emergency certificate or waiver (issued to persons with insufficient teacher preparation who must complete a regular certification program in order to continue teaching).

Q.33 Do you teach outside this main teaching assignment field?

1-Yes



2-No

Q.33a How many class periods? _____

Q.33b What subject? _____

ACADEMIC PRESS

In this next section we would like to ask you a series of questions regarding the extent to which your school emphasizes academic achievement.

Q.34 How many teachers at this school:

(Circle one number for each item)		Almost none	Some	Most	Nearly All
Q.34a	Feel responsible when students fail?	1	2	3	4
Q.34b	Feel responsible to help each other do their best?	1	2	3	4
Q.34c	Help maintain discipline in the entire school, not just their classroom?	1	2	3	4
Q.34d	Take responsibility for improving the school?	1	2	3	4
Q.34e	Feel responsible for helping students develop self-control?	1	2	3	4
Q.34f	Set high standards for their own performance?	1	2	3	4
Q.34g	Feel responsible that all students learn?	1	2	3	4

PARENT INVOLVEMENT

In this next section we would like to ask you a series of questions regarding the involvement of parents in your school.

Q.35 Please indicate how many of your students' parents do you contact in the following ways in a typical week:

Q.35a Phone call, written note, or e-mail exchanges with parents (excluding required forms)

Q.35b Face-to-face meetings with parents (excluding regularly scheduled parent-teacher conferences _____)

Q.35c Since September how many visits, if any, have you made to a student's home?

Q.36 How often do you interact with parents from this school in the following ways?

(Circle one number for each item)		Never	Rarely	Sometimes	Often
Q.36a	In church or at church activities	1	2	3	4
Q.36b	Through community sports programs or other non-school related activities.	1	2	3	4
Q.36c	By living in the same neighborhood.	1	2	3	4
Q.36d	Through contacts or chance meetings such as the supermarket.	1	2	3	4
Q.36e	Other (please specify) _____	1	2	3	4

Q.37 During this school year, how easy has it generally been to contact parents when you wanted to talk with them about their child?

1-Very easy 2-Easy 3-A little difficult 4-Difficult 5-Very difficult

Q.38 How often do each of the following affect parent involvement at this school?

(Circle one number for each item)		Never	Rarely	Sometimes	Often
Q.38a	The distance parents have to travel from their home to the school is too far.	1	2	3	4
Q.38b	Parents do not feel welcome at this school.	1	2	3	4
Q.38c	Parents' work schedules conflict with meeting and conference times at the school.	1	2	3	4
Q.38d	Parent apathy.	1	2	3	4
Q.38e	Lack of transportation for children	1	2	3	4
Q.38f	Lack of childcare	1	2	3	4
Q.38g	Other (please specify) _____	1	2	3	4

Q.39 How would you rate your school's neighborhood in terms of safety for your students?

1-Very Safe 2-Somewhat Safe 3-Somewhat Unsafe 4-Very Unsafe

Q.40 How would you rate your school's neighborhood in terms of safety for yourself?

1-Very Safe 2-Somewhat Safe 3-Somewhat Unsafe 4-Very Unsafe

Q.41 Teachers may communicate many different types of information to their students' families. How often do you communicate the following information to parents of your students?

(Circle one number for each item)		Never	Sometime: Usually	Always	
Q.41a	Inform parents about learning objectives in core academic subjects	1	2	3	4
Q.41b	Contact parents when their child is encountering academic problems	1	2	3	4
Q.41c	Provide parents with examples of excellent student work	1	2	3	4
Q.41d	Provide parents with specific activities for children and parents to do to improve students' grades	1	2	3	4
Q.41e	Assign homework that requires children to interact with parents	1	2	3	4
Q.41f	Other (please specify) Q.41oth _____	1	2	3	4

Q42. This school year, how often have you:

(Circle one number for each item)		Never	A few times a year	Once or twice a month	Once of twice a week	Almost daily
Q.42a	Brought in a guest speaker from the school's community	1	2	3	4	5
Q.42b	Talked with students about people and/or events in the community	1	2	3	4	5
Q.42c	Consulted with members of the community to better understand your students	1	2	3	4	5
Q.42d	Taken students on a field trip to a local site or organization	1	2	3	4	5
Q.42e	Talked with students about their cultures	1	2	3	4	5
Q.42f	Talked with students about their lives at home	1	2	3	4	5
Q.42g	Talked with students about issues and concern in the school's community	1	2	3	4	5

STUDENT CHARACTERISTICS

Q.43 Are all of the students in your MAIN ASSIGNMENT field classes in the same grade?

1-Yes 2-No

Q.43a How many total students do you teach in a typical day? _____.

Q.44 What are the grade levels of the majority of the students in your MAIN ASSIGNMENT field class(es)? Circle all that apply.

Grade: Pre K K 1 2 3 4 5 6 7 8

(1-if circled, 0-if not)

Q.45 Think about a typical class that you teach.

Q.45a How many students are enrolled? _____

Q.45b How many students receive services for exceptionalities other than gifted education or E.L.L.? _____

Q.45c How many students qualify for free and reduced price lunch? _____

Q.45d How many students receive services for gifted exceptionalities? _____

Q.45e How many students can be identified as English Language Learners? _____

Q.45f Of those receiving English Language Learner services, how many languages, other than English are spoken in you **most typical class**? _____

PERSONAL INFORMATION

In this section, we are interested in some background information about you.

Q.46 How many years have you served as a full-time public school teacher, including this year?

Q.47 Are you a Title I teacher? 1-Yes 2-No

Q.48 How many years have you served as a full-time public school teacher in Metro Nashville schools, including this year?

Q.49 How many years have you taught at **this** school, including this year, but excluding student teaching?

Q.50 What is your base salary this year?

1-Between \$25,000 and \$30,000	2-Between \$30,001 and \$35,000	3-Between \$35,001 and \$45,000	4-Between \$45,001 and \$55,000	5- \$55,001 and above
---------------------------------------	---------------------------------------	---------------------------------------	---------------------------------------	--------------------------

Q.51 What statement best describes how you got a position at this school?

1- I chose this school over positions at other schools because I wanted to teach here.

2- This was the only school with an opening I qualified for.

3- I was assigned to this school.

4- Other: Please specify _____

Q.52 What is the highest degree that you have earned?

1-Bachelors 2-Masters 3-Masters +30 hours 4-Professional Diploma 5-Doctorate

Q.53 Are you presently pursuing coursework related to the field of education?

1-Yes 2-No

Q.54 Please indicate the three most important reasons why you are teaching at this school, by ranking your selections from 1 to 3 (1 being the most important reason you chose to work at your present school).

Q.54.1 _____ I was assigned to this school.

Q.54.2 _____ I was attracted by the reputation of the students.

Q.54.3 _____ I was attracted by the reputation of the schools administration.

Q.54.4 _____ I was attracted by the school's instructional program.

Q.54.5 _____ I wanted to teach with this school's staff.

Q.54.6 _____ The school is in a good neighborhood.

Q.54.7 _____ I was unhappy with my former school.

Q.54.8 _____ This school was closer to my home.

Q.54.9 _____ I was attracted by the challenge of teaching at this school.

Q.54.10 _____ Other (please specify) _____

Q.55 What racial or ethnic group do you identify with? _____

Q.56 What is your gender? 1-male 2-female

In the space provide below, please feel free to provide any comments

		ScID
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	VU
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				ID
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			Date
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Appendix C. HLM & HCM Model Notation & Equations

HCM Growth Models (*full models*)

Level 1 Portion of Model (*time varying student model*):

$$\begin{aligned}
 E(\text{Student Absences } \pi) &= \lambda \\
 \text{Log}[\lambda] &= Y \\
 Y_{ij}(\text{Student Absences}) &= \pi_{0ij} + \pi_{1ij}(\text{Time})_{ti} + \pi_{2ij}(\text{Grade})_{ti} + \pi_{3ij}(\text{IEP})_{ti} + \pi_{4ij}(\text{LEP})_{ti} + e_{tij}, \\
 e_{tij} &\sim N(0, \sigma^2)
 \end{aligned} \tag{1.1}$$

Row & Column Portion of Model (*time invariant model*):

$$\begin{aligned}
 \pi_{0ij} &= \theta_0 + b_{00i} + c_{00j} \\
 &+ (\gamma_{01ij}) \text{ Free \& Reduced Lunch} + (\gamma_{02ij}) \text{ African American} + (\gamma_{03ij}) \text{ Other Races} \\
 &+ (\gamma_{04ij}) \text{ Female} + (\beta_{01j}) \text{ 75\% Black} + (\beta_{02j}) \text{ School Size} + (\beta_{03j}) \text{ Teacher Turnover} \\
 &+ (\beta_{04j}) \text{ School Zone Distance} + (\beta_{05j}) \text{ Residential Stability} + (\beta_{06j}) \text{ Ethnic Diversity} \\
 &+ (\beta_{0ij}) \text{ Social Advantage} + (\beta_{08j}) \text{ Economic Deprivation} + (\beta_{09j}) \text{ Enhanced Option School}
 \end{aligned} \tag{1.2}$$

$$\begin{aligned}
 \pi_{1ij} &= \theta_1 \\
 \pi_{2ij} &= \theta_2 \\
 \pi_{3ij} &= \theta_3 \\
 \pi_{4ij} &= \theta_4
 \end{aligned}$$

HLM Growth Model

Level 1 Portion of Model:

$$Y_{ij}(\text{School Zone Distance}) = \pi_{0j} + \pi_{1j}(\text{Time}) + e \tag{2.1}$$

Level 2 Portion of Model:

$$\begin{aligned}
 \pi_{0j} &= \beta_{00} + r_0 \\
 \pi_{1j} &= \beta_{10} + r_1
 \end{aligned} \tag{2.2}$$

Appendix D1. Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
1	1999	0.29	0.34	0.36	0.31	0.34	3.43	26	0
	2000	0.29	0.34	0.36	0.31	0.34	3.43	26	0
	2001	0.36	0.31	0.35	0.31	0.29	3.86	33	0
	2002	0.43	0.27	0.39	0.30	0.28	3.43	26	0
	Change*	0.15	-0.07	0.04	-0.01	-0.06	0.00	0	
2	1999	0.43	0.38	0.46	0.21	0.29	3.73	20	0
	2000	0.43	0.38	0.46	0.21	0.29	3.73	20	0
	2001	0.43	0.36	0.46	0.21	0.29	3.84	22	0
	2002	0.41	0.37	0.46	0.18	0.29	2.40	11	0
	2003	0.41	0.37	0.46	0.18	0.29	2.40	11	0
	2004	0.41	0.37	0.46	0.18	0.29	2.40	11	0
	Change*	-0.02	0.00	0.00	-0.03	-0.01	-1.33	-9	
3	2000	0.41	0.41	0.28	0.30	0.18	6.63	24	0
	2001	0.40	0.41	0.29	0.30	0.18	6.72	24	0
	2002	0.41	0.41	0.29	0.29	0.18	6.41	23	0
	2003	0.42	0.40	0.30	0.30	0.18	6.41	24	0
	2004	0.42	0.40	0.30	0.30	0.18	6.41	23	0
Change*	0.01	-0.01	0.02	0.00	0.00	-0.22	-1		
4	2002	0.42	0.40	0.45	0.23	0.34	2.58	27	0
	2003	0.42	0.39	0.43	0.25	0.33	2.58	24	0
	2004	0.42	0.39	0.43	0.25	0.33	2.58	24	0
Change*	0.01	-0.01	-0.02	0.02	-0.02	0.00	-3		
5	1999	0.43	0.34	0.44	0.20	0.29	6.38	37	0
	2000	0.43	0.34	0.44	0.20	0.29	6.38	37	0
	2001	0.48	0.35	0.50	0.18	0.31	5.40	36	0
	2002	0.51	0.37	0.56	0.13	0.32	2.40	15	0
	2003	0.51	0.37	0.56	0.13	0.32	2.40	15	0
	2004	0.51	0.35	0.58	0.12	0.35	2.68	18	0
	Change*	0.07	0.01	0.14	-0.08	0.06	-3.69	-19	
6	1999	0.36	0.40	0.34	0.30	0.24	7.29	21	0
	2000	0.43	0.37	0.33	0.28	0.25	5.93	18	0
	2001	0.43	0.45	0.25	0.35	0.15	4.85	12	0
	2002	0.45	0.44	0.23	0.35	0.15	4.46	11	0
	2003	0.45	0.44	0.23	0.35	0.15	4.46	11	0
	2004	0.45	0.44	0.23	0.35	0.15	4.46	11	0
Change*	0.09	0.03	-0.10	0.05	-0.09	-2.82	-10		

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
7	1999	0.48	0.20	0.29	0.42	0.24	10.56	46	0
	2000	0.48	0.20	0.29	0.42	0.24	10.56	46	0
	2001	0.44	0.21	0.35	0.41	0.24	8.56	24	0
	2002	0.44	0.21	0.35	0.41	0.24	8.56	24	0
	2003	0.45	0.19	0.43	0.38	0.27	8.60	28	0
	2004	0.45	0.18	0.40	0.41	0.25	8.64	26	0
	<i>Change*</i>	-0.03	-0.02	0.10	-0.01	0.01	-1.92	-20	
8	1999	0.52	0.34	0.51	0.26	0.31	4.68	9	0
	2000	0.52	0.34	0.51	0.26	0.31	4.68	9	0
	2001	0.53	0.40	0.39	0.31	0.25	4.66	7	0
	2002	0.52	0.38	0.38	0.31	0.24	4.85	8	0
	2003	0.52	0.38	0.38	0.31	0.24	4.85	8	0
	2004	0.52	0.38	0.38	0.31	0.24	4.85	8	0
	<i>Change*</i>	0.00	0.04	-0.13	0.05	-0.07	0.17	-1	
9	1999	0.49	0.30	0.36	0.32	0.26	2.63	16	0
	2000	0.49	0.30	0.36	0.32	0.26	2.63	16	0
	2001	0.49	0.30	0.36	0.32	0.26	2.63	16	0
	2002	0.50	0.30	0.39	0.31	0.27	2.72	17	0
	2003	0.49	0.31	0.41	0.31	0.27	2.95	21	0
	2004	0.50	0.31	0.39	0.32	0.25	2.90	20	0
	<i>Change*</i>	0.01	0.01	0.03	0.00	0.00	0.26	4	
10	1999	0.60	0.30	0.56	0.21	0.34	2.62	10	0
	2000	0.60	0.30	0.56	0.21	0.34	2.62	10	0
	2001	0.60	0.30	0.56	0.21	0.34	2.62	10	0
	2002	0.59	0.35	0.55	0.20	0.35	2.19	7	1
	2003	0.59	0.35	0.55	0.20	0.35	2.19	7	1
	2004	0.59	0.35	0.55	0.20	0.35	2.19	7	1
	<i>Change*</i>	-0.01	0.04	-0.01	-0.01	0.01	-0.43	-3	
11	1999	0.50	0.28	0.40	0.25	0.24	7.63	23	0
	2000	0.52	0.29	0.44	0.25	0.24	6.00	16	0
	2001	0.52	0.26	0.43	0.26	0.24	5.88	14	0
	2002	0.45	0.33	0.43	0.23	0.26	6.46	27	0
	2003	0.45	0.33	0.43	0.23	0.26	6.46	27	0
	2004	0.45	0.33	0.43	0.23	0.26	6.46	27	0
	<i>Change*</i>	-0.05	0.05	0.03	-0.02	0.02	-1.17	4	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
12	1999	0.55	0.29	0.37	0.26	0.25	10.97	35	0
	2000	0.55	0.31	0.42	0.26	0.26	9.18	31	0
	2001	0.55	0.31	0.42	0.26	0.26	8.41	28	0
	2002	0.57	0.32	0.47	0.26	0.29	6.23	21	0
	2003	0.54	0.31	0.50	0.24	0.29	6.23	21	0
	2004	0.55	0.32	0.52	0.22	0.30	5.96	20	0
	<i>Change*</i>	0.00	0.02	0.15	-0.04	0.05	-5.00	-15	
13	1999	0.50	0.19	0.35	0.35	0.28	5.75	18	0
	2000	0.50	0.19	0.35	0.35	0.28	5.75	18	0
	2001	0.50	0.19	0.35	0.35	0.28	5.75	18	0
	2002	0.53	0.18	0.31	0.42	0.27	6.10	23	0
	2003	0.53	0.18	0.31	0.42	0.27	6.10	23	0
	2004	0.51	0.20	0.38	0.40	0.29	6.23	26	0
	<i>Change*</i>	0.01	0.01	0.03	0.05	0.01	0.48	8	
14	2004	0.42	0.22	0.85	0.10	0.46	0.97	6	1
<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0		
15	1999	0.38	0.39	0.32	0.29	0.23	8.02	23	0
	2000	0.40	0.38	0.32	0.30	0.24	6.73	21	0
	2001	0.36	0.43	0.37	0.25	0.27	7.45	48	0
	2002	0.38	0.42	0.42	0.19	0.30	4.81	35	0
	2003	0.38	0.42	0.42	0.19	0.30	4.81	35	0
	2004	0.38	0.42	0.42	0.19	0.30	4.81	35	0
	<i>Change*</i>	0.00	0.03	0.11	-0.11	0.06	-3.21	12	
16	1999	0.38	0.39	0.28	0.29	0.26	5.88	24	0
<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0		
17	1999	0.43	0.33	0.48	0.18	0.32	3.40	20	0
	2000	0.43	0.33	0.48	0.18	0.32	3.40	20	0
	2001	0.48	0.36	0.47	0.18	0.30	3.42	20	0
	2002	0.49	0.40	0.40	0.21	0.27	3.21	16	0
	2003	0.49	0.40	0.40	0.21	0.27	3.21	16	0
	2004	0.49	0.40	0.40	0.21	0.27	3.21	16	0
	<i>Change*</i>	0.05	0.06	-0.09	0.03	-0.05	-0.20	-4	
18	1999	0.55	0.20	0.45	0.18	0.36	3.19	16	0
	2000	0.55	0.20	0.45	0.18	0.36	3.19	16	0
	2001	0.55	0.20	0.45	0.18	0.36	3.19	16	0
	2002	0.49	0.34	0.33	0.27	0.29	4.10	15	0
	2003	0.49	0.34	0.33	0.27	0.29	4.10	15	0
	2004	0.50	0.32	0.43	0.24	0.32	4.39	19	0
	<i>Change*</i>	-0.05	0.12	-0.02	0.06	-0.04	1.20	3	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
19	1999	0.48	0.28	0.41	0.13	0.29	1.45	9	0
	2000	0.48	0.28	0.41	0.13	0.29	1.45	9	0
	2001	0.44	0.24	0.47	0.13	0.33	1.56	11	0
	2002	0.50	0.20	0.49	0.14	0.37	3.25	21	0
	2003	0.50	0.20	0.49	0.14	0.37	3.25	21	0
	2004	0.47	0.20	0.53	0.16	0.38	3.36	26	0
	<i>Change*</i>	-0.01	-0.08	0.12	0.04	0.10	1.91	17	
20	1999	0.39	0.38	0.29	0.28	0.28	3.31	20	0
	2000	0.41	0.37	0.30	0.27	0.29	2.30	18	0
	2001	0.41	0.37	0.30	0.27	0.29	2.30	18	0
	2002	0.49	0.39	0.33	0.24	0.22	0.61	15	0
	2003	0.49	0.39	0.33	0.24	0.22	2.19	15	0
	2004	0.48	0.42	0.29	0.27	0.19	2.07	13	0
	<i>Change*</i>	0.09	0.04	0.00	-0.01	-0.09	-1.24	-7	
21	1999	0.51	0.46	0.48	0.16	0.36	1.25	8	0
	2000	0.51	0.46	0.48	0.16	0.36	1.25	8	0
	2001	0.53	0.47	0.50	0.15	0.34	1.50	10	0
	2002	0.52	0.41	0.44	0.18	0.31	2.37	17	0
	2003	0.52	0.41	0.44	0.18	0.31	2.37	17	0
	2004	0.52	0.41	0.44	0.18	0.31	2.37	17	0
	<i>Change*</i>	0.01	-0.04	-0.04	0.02	-0.06	1.12	9	
22	1999	0.55	0.23	0.31	0.39	0.22	2.85	15	0
	2000	0.55	0.23	0.31	0.39	0.22	2.85	15	0
	2001	0.55	0.23	0.31	0.39	0.22	2.85	15	0
	2002	0.55	0.23	0.31	0.39	0.22	2.85	15	0
	2003	0.54	0.26	0.33	0.39	0.22	2.95	17	0
	2004	0.53	0.26	0.37	0.36	0.26	3.62	21	0
	<i>Change*</i>	-0.01	0.03	0.07	-0.03	0.04	0.77	6	
23	1999	0.62	0.31	0.41	0.24	0.31	7.27	15	0
	2000	0.62	0.31	0.41	0.24	0.31	7.27	15	0
	2001	0.65	0.30	0.40	0.25	0.30	7.53	18	0
	2002	0.69	0.29	0.38	0.26	0.30	7.27	13	0
	2003	0.69	0.29	0.38	0.26	0.30	7.27	13	0
	2004	0.69	0.29	0.38	0.26	0.30	7.27	13	0
	<i>Change*</i>	0.08	-0.02	-0.03	0.01	-0.02	0.00	-2	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
24	1999	0.57	0.37	0.48	0.21	0.28	1.92	14	0
	2000	0.57	0.37	0.48	0.21	0.28	1.92	14	0
	2001	0.57	0.37	0.46	0.20	0.28	2.05	17	0
	2002	0.57	0.37	0.46	0.20	0.28	2.05	17	0
	2003	0.51	0.38	0.46	0.17	0.32	2.60	24	0
	2004	0.51	0.38	0.46	0.17	0.32	2.60	24	0
	<i>Change*</i>	-0.05	0.02	-0.02	-0.04	0.04	0.69	10	
25	1999	0.62	0.24	0.39	0.29	0.23	5.96	16	0
	2000	0.62	0.24	0.39	0.29	0.23	5.96	16	0
	2001	0.65	0.23	0.41	0.29	0.24	4.09	15	0
	2002	0.69	0.23	0.41	0.29	0.24	4.09	15	0
	2003	0.69	0.23	0.41	0.29	0.24	4.09	15	0
	2004	0.69	0.27	0.33	0.30	0.22	4.03	12	0
	<i>Change*</i>	0.08	0.03	-0.06	0.01	-0.02	-1.93	-4	
26	2001	0.40	0.25	0.43	0.28	0.32	4.37	20	0
	2002	0.39	0.26	0.43	0.27	0.31	4.48	22	0
	2003	0.39	0.26	0.43	0.27	0.31	4.48	22	0
	2004	0.39	0.26	0.43	0.27	0.31	4.48	22	0
	<i>Change*</i>	-0.01	0.01	0.00	-0.01	-0.01	0.11	2	
27	1999	0.45	0.23	0.45	0.17	0.32	3.92	20	0
	2000	0.44	0.24	0.31	0.21	0.27	3.80	14	0
	2001	0.44	0.24	0.31	0.21	0.27	3.80	14	0
	2002	0.44	0.24	0.31	0.21	0.26	3.70	13	0
	2003	0.44	0.24	0.31	0.21	0.26	3.70	13	0
	2004	0.44	0.24	0.31	0.21	0.26	3.70	13	0
	<i>Change*</i>	-0.01	0.01	-0.13	0.03	-0.05	-0.22	-7	
28	1999	0.42	0.29	0.41	0.20	0.30	4.59	25	0
	2000	0.40	0.27	0.28	0.28	0.27	5.12	29	0
	2001	0.40	0.27	0.28	0.28	0.27	5.12	29	0
	2002	0.42	0.23	0.24	0.30	0.25	4.98	24	0
	2003	0.42	0.23	0.24	0.30	0.25	4.98	24	0
	2004	0.42	0.23	0.24	0.30	0.25	4.98	24	0
	<i>Change*</i>	0.00	-0.06	-0.16	0.10	-0.05	0.38	-1	
29	1999	0.44	0.22	0.28	0.31	0.23	6.24	36	0
	2000	0.41	0.24	0.40	0.25	0.24	4.72	19	0
	2001	0.42	0.24	0.40	0.24	0.25	4.69	18	0
	2002	0.43	0.23	0.38	0.27	0.24	4.72	19	0
	2003	0.41	0.27	0.24	0.30	0.18	4.77	15	0
	2004	0.39	0.26	0.27	0.29	0.20	4.78	15	0
	<i>Change*</i>	-0.04	0.05	-0.01	-0.02	-0.03	-1.46	-21	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
30	1999	0.26	0.31	0.25	0.50	0.30	3.24	25	0
	2000	0.26	0.31	0.25	0.50	0.30	3.24	25	0
	2001	0.30	0.27	0.23	0.52	0.31	3.70	36	0
	2002	0.27	0.28	0.26	0.46	0.31	4.10	46	0
	2003	0.27	0.28	0.28	0.44	0.30	4.26	52	0
	2004	0.27	0.28	0.29	0.43	0.31	4.29	53	0
	<i>Change*</i>	0.01	-0.04	0.04	-0.07	0.01	1.05	28	
31	1999	0.48	0.18	0.35	0.36	0.27	7.32	26	0
	2000	0.48	0.18	0.35	0.36	0.27	7.32	26	0
	2001	0.52	0.11	0.68	0.16	0.44	1.97	10	0
	<i>Change*</i>	0.04	-0.06	0.32	-0.21	0.16	-5.35	-16	
32	1999	0.45	0.38	0.50	0.19	0.35	3.32	42	0
	2000	0.45	0.37	0.50	0.20	0.35	3.27	41	0
	2001	0.44	0.38	0.50	0.20	0.35	3.05	37	0
	2002	0.43	0.36	0.51	0.21	0.35	2.84	33	0
	<i>Change*</i>	-0.02	-0.02	0.01	0.01	0.01	-0.48	-9	
33	1999	0.39	0.49	0.53	0.17	0.38	2.04	10	0
	2000	0.39	0.49	0.53	0.17	0.38	2.04	10	0
	2001	0.39	0.49	0.53	0.17	0.38	2.04	10	0
	2002	0.47	0.47	0.66	0.13	0.34	1.67	8	1
	2003	0.45	0.40	0.56	0.15	0.29	2.41	13	1
	2004	0.45	0.39	0.55	0.12	0.30	2.34	12	1
	<i>Change*</i>	0.06	-0.10	0.02	-0.04	-0.09	0.30	2	
34	1999	0.35	0.39	0.28	0.32	0.22	6.06	14	0
	2000	0.35	0.39	0.28	0.32	0.22	6.06	14	0
	2001	0.36	0.41	0.23	0.34	0.18	6.06	13	0
	2002	0.39	0.39	0.23	0.33	0.20	3.91	8	0
	2003	0.39	0.39	0.23	0.33	0.20	3.91	8	0
	2004	0.39	0.39	0.23	0.33	0.20	3.91	8	0
	<i>Change*</i>	0.03	0.00	-0.05	0.02	-0.02	-2.15	-6	
35	1999	0.51	0.22	0.44	0.26	0.25	3.35	11	0
	2000	0.45	0.29	0.35	0.25	0.22	2.74	7	0
	2001	0.37	0.30	0.33	0.25	0.23	2.52	5	0
	2002	0.37	0.30	0.33	0.25	0.23	2.52	5	0
	2003	0.37	0.30	0.33	0.25	0.23	2.52	5	0
	2004	0.37	0.30	0.33	0.25	0.23	2.52	5	0
	<i>Change*</i>	-0.14	0.08	-0.10	0.00	-0.02	-0.83	-6	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
36	1999	0.43	0.31	0.32	0.25	0.22	3.01	25	0
	2000	0.43	0.31	0.32	0.25	0.22	3.01	25	0
	2001	0.43	0.31	0.32	0.25	0.22	3.01	25	0
	2002	0.43	0.31	0.32	0.26	0.22	2.98	24	0
	2003	0.41	0.29	0.28	0.25	0.22	2.54	18	0
	2004	0.41	0.29	0.28	0.25	0.22	2.54	18	0
	<i>Change*</i>	-0.02	-0.02	-0.03	0.00	0.00	-0.46	-7	
37	1999	0.50	0.23	0.21	0.48	0.19	6.35	26	0
	2000	0.50	0.23	0.22	0.45	0.19	8.14	29	0
	2001	0.50	0.23	0.22	0.45	0.19	8.14	29	0
	2002	0.49	0.24	0.24	0.45	0.19	1.46	32	0
	2003	0.49	0.24	0.24	0.45	0.19	8.27	32	0
	<i>Change*</i>	-0.01	0.01	0.03	-0.03	0.00	1.92	6	
	38	1999	0.42	0.42	0.38	0.21	0.29	3.07	8
2000		0.42	0.42	0.38	0.21	0.29	3.07	8	0
2001		0.39	0.49	0.30	0.21	0.23	3.30	9	0
2002		0.39	0.49	0.30	0.21	0.23	1.10	9	0
2003		0.39	0.49	0.30	0.21	0.23	3.30	9	0
2004		0.39	0.49	0.30	0.21	0.23	3.30	9	0
<i>Change*</i>		-0.03	0.07	-0.08	0.00	-0.06	0.24	1	
39	1999	0.49	0.27	0.45	0.16	0.30	4.25	20	0
	2000	0.49	0.25	0.76	0.10	0.41	1.06	7	1
	2001	0.50	0.15	0.80	0.11	0.42	0.82	5	1
	2002	0.50	0.20	0.68	0.11	0.41	1.49	7	1
	2003	0.50	0.20	0.68	0.11	0.41	1.49	7	1
	2004	0.50	0.20	0.68	0.11	0.41	1.49	7	1
	<i>Change*</i>	0.01	-0.07	0.23	-0.04	0.11	-2.77	-13	
40	1999	0.30	0.46	0.40	0.22	0.26	3.98	13	0
	2000	0.30	0.46	0.40	0.22	0.26	3.98	13	0
	2001	0.23	0.55	0.34	0.23	0.20	3.54	9	0
	2002	0.23	0.55	0.34	0.23	0.20	3.54	9	0
	2003	0.23	0.55	0.34	0.23	0.20	3.54	9	0
	2004	0.23	0.55	0.34	0.23	0.20	3.54	9	0
	<i>Change*</i>	-0.06	0.09	-0.07	0.01	-0.06	-0.44	-4	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
41	1999	0.48	0.27	0.40	0.22	0.24	5.55	13	0
	2000	0.49	0.25	0.38	0.23	0.24	6.14	14	0
	2001	0.51	0.21	0.30	0.24	0.25	5.99	12	0
	2002	0.51	0.21	0.30	0.24	0.25	5.99	12	0
	2003	0.51	0.21	0.30	0.24	0.25	5.99	12	0
	2004	0.51	0.21	0.30	0.24	0.25	5.99	12	0
	<i>Change*</i>	0.03	-0.06	-0.10	0.02	0.01	0.44	-1	
42	1999	0.53	0.26	0.36	0.27	0.24	7.27	24	0
	2000	0.52	0.29	0.31	0.27	0.23	7.02	20	0
	2001	0.51	0.30	0.34	0.26	0.24	7.10	22	0
	2002	0.50	0.29	0.34	0.26	0.25	7.76	21	0
	2003	0.50	0.29	0.34	0.26	0.25	7.76	21	0
	2004	0.50	0.29	0.34	0.26	0.25	7.76	21	0
	<i>Change*</i>	-0.03	0.03	-0.02	-0.01	0.01	0.48	-3	
43	1999	0.43	0.20	0.31	0.40	0.24	6.92	14	0
	2000	0.43	0.20	0.31	0.40	0.24	6.92	14	0
	2001	0.43	0.20	0.31	0.40	0.24	6.92	14	0
	2002	0.41	0.20	0.33	0.41	0.23	7.04	17	0
	2003	0.41	0.20	0.33	0.41	0.23	7.04	17	0
	2004	0.41	0.21	0.33	0.42	0.22	7.01	16	0
	<i>Change*</i>	-0.02	0.01	0.02	0.02	-0.02	0.10	2	
44	1999	0.50	0.42	0.45	0.17	0.28	2.46	10	0
	2000	0.50	0.42	0.45	0.17	0.28	2.46	10	0
	2001	0.51	0.41	0.47	0.18	0.28	2.56	13	0
	2002	0.50	0.41	0.43	0.19	0.29	3.82	31	0
	2003	0.50	0.41	0.43	0.19	0.29	3.82	31	0
	2004	0.49	0.38	0.50	0.17	0.31	3.94	37	0
	<i>Change*</i>	-0.02	-0.04	0.04	0.00	0.03	1.47	27	
45	1999	0.50	0.23	0.21	0.48	0.19	6.35	26	0
	2000	0.50	0.23	0.22	0.45	0.19	8.14	29	0
	2001	0.50	0.23	0.22	0.45	0.19	8.14	29	0
	2002	0.49	0.23	0.23	0.45	0.19	8.25	30	0
	2003	0.49	0.23	0.23	0.45	0.19	8.25	30	0
	2004	0.47	0.25	0.24	0.43	0.18	7.87	27	0
	<i>Change*</i>	-0.03	0.02	0.03	-0.05	-0.01	1.52	1	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
46	1999	0.55	0.34	0.44	0.24	0.27	5.92	9	0
	2000	0.59	0.27	0.46	0.25	0.27	6.07	12	0
	2001	0.59	0.27	0.46	0.25	0.27	6.07	12	0
	2002	0.52	0.29	0.49	0.25	0.27	5.95	16	0
	2003	0.52	0.29	0.49	0.25	0.27	5.95	16	0
	2004	0.53	0.31	0.52	0.23	0.29	5.63	14	0
	<i>Change*</i>	-0.02	-0.04	0.07	-0.01	0.02	-0.29	5	
47	1999	0.45	0.16	0.23	0.57	0.23	6.43	45	0
	2000	0.45	0.16	0.23	0.57	0.23	6.43	45	0
	2001	0.46	0.16	0.24	0.56	0.24	6.33	40	0
	2002	0.46	0.16	0.25	0.55	0.24	6.33	41	0
	2003	0.47	0.16	0.24	0.56	0.24	6.33	39	0
	2004	0.47	0.16	0.24	0.56	0.24	6.33	39	0
	<i>Change*</i>	0.03	0.01	0.01	-0.01	0.01	-0.10	-6	
48	1999	0.34	0.25	0.29	0.45	0.30	6.95	29	0
	2000	0.34	0.25	0.29	0.45	0.30	6.95	29	0
	2001	0.41	0.21	0.25	0.49	0.18	6.62	14	0
	2002	0.44	0.16	0.18	0.52	0.18	6.43	11	0
	2003	0.45	0.15	0.17	0.52	0.18	6.06	10	0
	2004	0.48	0.14	0.36	0.42	0.26	6.25	13	0
	<i>Change*</i>	0.15	-0.11	0.07	-0.03	-0.03	-0.70	-16	
49	1999	0.47	0.32	0.43	0.23	0.28	4.50	27	0
	2000	0.45	0.33	0.44	0.22	0.28	4.48	26	0
	2001	0.45	0.33	0.44	0.22	0.28	4.48	26	0
	2002	0.50	0.27	0.53	0.23	0.31	3.25	12	0
	2003	0.50	0.27	0.53	0.23	0.31	3.25	12	0
	<i>Change*</i>	0.03	-0.05	0.10	0.01	0.04	-1.25	-15	
	50	1999	0.42	0.47	0.37	0.22	0.27	2.72	18
2000		0.42	0.47	0.37	0.22	0.27	2.72	18	0
2001		0.42	0.47	0.37	0.22	0.27	2.72	18	0
2002		0.42	0.47	0.37	0.22	0.27	2.72	18	0
2003		0.42	0.47	0.37	0.22	0.27	2.72	18	0
2004		0.41	0.50	0.30	0.24	0.23	2.58	15	0
<i>Change*</i>		-0.01	0.03	-0.07	0.02	-0.04	-0.13	-3	
51	1999	0.41	0.21	0.31	0.43	0.27	9.44	67	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
52	1999	0.54	0.27	0.38	0.22	0.28	3.21	11	0
	2000	0.54	0.27	0.38	0.22	0.28	3.21	11	0
	2001	0.51	0.26	0.34	0.24	0.28	3.59	13	0
	2002	0.51	0.26	0.34	0.24	0.28	3.59	13	0
	2003	0.51	0.26	0.34	0.24	0.28	3.59	13	0
	2004	0.51	0.24	0.19	0.26	0.22	3.32	10	0
	Change*	-0.03	-0.03	-0.19	0.04	-0.07	0.11	-1	
53	1999	0.47	0.26	0.52	0.27	0.30	3.54	14	0
	2000	0.47	0.26	0.52	0.27	0.30	3.54	14	0
	2001	0.47	0.25	0.51	0.27	0.31	3.60	15	0
	2002	0.45	0.25	0.50	0.26	0.30	3.74	16	0
	2003	0.45	0.25	0.50	0.26	0.30	3.74	16	0
	2004	0.47	0.23	0.32	0.31	0.21	3.40	11	0
	Change*	0.00	-0.03	-0.20	0.04	-0.09	-0.14	-3	
54	1999	0.50	0.39	0.52	0.14	0.31	3.09	22	0
	2000	0.50	0.39	0.52	0.14	0.31	3.09	22	0
	2001	0.50	0.42	0.52	0.13	0.31	2.79	18	0
	Change*	0.01	0.02	0.00	-0.01	0.00	-0.31	-4	
55	1999	0.52	0.24	0.25	0.45	0.25	3.74	18	0
	2000	0.52	0.24	0.25	0.45	0.25	3.74	18	0
	Change*	0.00	0.00	0.00	0.00	0.00	0.00	0	
56	2001	0.49	0.18	0.31	0.41	0.26	7.71	33	0
	2002	0.50	0.18	0.32	0.41	0.26	7.73	34	0
	2003	0.48	0.19	0.37	0.40	0.28	7.85	38	0
	2004	0.48	0.19	0.38	0.40	0.28	7.82	37	0
	Change*	-0.01	0.01	0.07	-0.01	0.02	0.11	4	
57	1999	0.51	0.47	0.38	0.21	0.32	1.71	11	0
	2000	0.51	0.47	0.38	0.21	0.32	1.71	11	0
	2001	0.51	0.47	0.39	0.21	0.33	1.61	10	0
	2002	0.51	0.47	0.39	0.21	0.33	1.61	10	0
	2003	0.51	0.47	0.39	0.21	0.33	1.61	10	0
	2004	0.51	0.47	0.39	0.21	0.33	1.61	10	0
	Change*	-0.01	0.00	0.00	0.00	0.01	-0.11	-1	
58	2001	0.57	0.37	0.46	0.20	0.28	2.05	17	0
	2002	0.57	0.37	0.46	0.20	0.28	2.05	17	0
	2003	0.57	0.37	0.46	0.20	0.28	2.05	17	0
	2004	0.57	0.37	0.46	0.20	0.28	2.05	17	0
	Change*	0.00	0.00	0.00	0.00	0.00	0.00	0	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
59	1999	0.42	0.20	0.32	0.33	0.29	3.85	16	0
	2000	0.42	0.20	0.32	0.33	0.29	3.85	16	0
	2001	0.42	0.20	0.32	0.33	0.29	3.85	16	0
	2002	0.44	0.19	0.30	0.35	0.28	4.07	18	0
	2003	0.44	0.19	0.30	0.35	0.28	4.07	18	0
	2004	0.42	0.19	0.15	0.41	0.22	3.77	14	0
	Change*	0.00	-0.01	-0.17	0.08	-0.06	-0.09	-2	
60	1999	0.69	0.18	0.31	0.24	0.26	7.46	11	0
	2000	0.57	0.23	0.40	0.24	0.27	8.05	19	0
	2001	0.61	0.17	0.28	0.24	0.25	10.23	15	0
	2002	0.59	0.21	0.30	0.22	0.27	10.25	17	0
	2003	0.59	0.21	0.30	0.22	0.27	10.25	17	0
	2004	0.59	0.21	0.30	0.22	0.27	10.25	17	0
	Change*	-0.10	0.03	-0.01	-0.02	0.01	2.79	6	
61	1999	0.66	0.25	0.33	0.24	0.29	10.82	23	0
	2000	0.63	0.25	0.35	0.23	0.29	11.59	27	0
	2001	0.60	0.25	0.35	0.24	0.28	11.84	32	0
	2002	0.60	0.25	0.37	0.24	0.29	11.58	32	0
	2003	0.63	0.24	0.35	0.23	0.29	11.58	28	0
	2004	0.63	0.24	0.35	0.23	0.29	11.58	28	0
	Change*	-0.03	-0.01	0.01	-0.01	0.00	0.77	5	
62	1999	0.51	0.51	0.58	0.09	0.33	1.64	8	0
	2000	0.51	0.51	0.58	0.09	0.33	1.64	8	0
	2001	0.51	0.51	0.58	0.09	0.33	1.64	8	0
	2002	0.51	0.51	0.58	0.09	0.33	1.64	8	0
	2003	0.51	0.51	0.58	0.09	0.33	1.64	8	0
	2004	0.51	0.51	0.58	0.09	0.33	1.64	8	0
	Change*	0.00	0.00	0.00	0.00	0.00	0.00	0	
63	2002	0.38	0.44	0.24	0.35	0.16	7.00	16	0
	2003	0.38	0.44	0.24	0.35	0.16	7.00	16	0
	2004	0.38	0.44	0.24	0.35	0.16	7.00	16	0
	Change*	0.00	0.00	0.00	0.00	0.00	0.00	0	
64	1999	0.63	0.24	0.34	0.25	0.26	11.26	21	0
	2000	0.55	0.34	0.44	0.24	0.27	5.92	9	0
	2001	0.55	0.34	0.44	0.24	0.27	5.92	9	0
	Change*	-0.08	0.10	0.10	-0.01	0.01	-5.34	-12	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
65	1999	0.37	0.42	0.46	0.11	0.43	1.61	7	0
	2000	0.37	0.42	0.46	0.11	0.43	1.61	7	0
	2001	0.37	0.42	0.46	0.11	0.43	1.61	7	0
	2002	0.37	0.42	0.46	0.11	0.43	1.61	7	0
	2003	0.37	0.42	0.46	0.11	0.43	1.61	7	0
	2004	0.37	0.42	0.46	0.11	0.43	1.61	7	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0	
66	1999	0.53	0.35	0.50	0.19	0.31	3.41	34	0
	2000	0.53	0.35	0.50	0.19	0.31	3.41	34	0
	2001	0.51	0.36	0.49	0.19	0.31	3.46	36	0
	2002	0.53	0.38	0.46	0.20	0.29	3.27	31	0
	2003	0.53	0.39	0.45	0.22	0.27	2.99	26	0
	2004	0.53	0.39	0.45	0.22	0.27	2.99	26	0
	<i>Change*</i>	0.01	0.04	-0.05	0.03	-0.04	-0.41	-8	
67	1999	0.38	0.36	0.47	0.22	0.35	2.13	18	0
	2000	0.38	0.36	0.47	0.22	0.35	2.13	18	0
	2001	0.38	0.36	0.47	0.22	0.35	2.13	18	0
	2004	0.38	0.35	0.35	0.28	0.31	1.93	12	0
	<i>Change*</i>	-0.01	-0.01	-0.11	0.06	-0.05	-0.20	-6	
68	1999	0.48	0.25	0.45	0.10	0.39	2.74	10	0
	2000	0.51	0.21	0.48	0.10	0.41	2.71	9	0
	2001	0.56	0.26	0.40	0.09	0.38	2.65	7	0
	<i>Change*</i>	0.08	0.00	-0.05	0.00	-0.01	-0.09	-3	
69	1999	0.39	0.26	0.41	0.27	0.27	4.59	28	0
	2000	0.39	0.26	0.41	0.27	0.27	4.59	28	0
	2001	0.41	0.23	0.45	0.25	0.29	4.50	27	0
	2002	0.39	0.23	0.48	0.27	0.29	3.99	21	0
	2003	0.45	0.23	0.45	0.27	0.26	3.46	15	0
	2004	0.42	0.25	0.31	0.33	0.19	3.37	11	0
	<i>Change*</i>	0.03	-0.01	-0.10	0.06	-0.08	-1.21	-17	
70	1999	0.51	0.23	0.45	0.15	0.35	3.40	24	0
	2000	0.51	0.23	0.45	0.15	0.35	3.40	24	0
	2001	0.54	0.20	0.47	0.17	0.36	3.30	19	0
	2002	0.54	0.20	0.47	0.17	0.36	3.30	19	0
	2003	0.54	0.20	0.47	0.17	0.36	3.30	19	0
	<i>Change*</i>	0.03	-0.03	0.02	0.02	0.01	-0.10	-5	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
71	1999	0.49	0.30	0.32	0.36	0.23	6.97	50	0
	2000	0.49	0.30	0.31	0.35	0.23	8.62	53	0
	2001	0.49	0.29	0.31	0.35	0.23	8.59	51	0
	2002	0.48	0.29	0.32	0.36	0.23	8.61	52	0
	2003	0.47	0.33	0.32	0.34	0.23	8.86	63	0
	2004	0.46	0.33	0.31	0.33	0.22	8.69	58	0
	<i>Change*</i>	<i>-0.03</i>	<i>0.03</i>	<i>-0.01</i>	<i>-0.03</i>	<i>-0.01</i>	<i>1.72</i>	<i>8</i>	
72	2002	0.32	0.42	0.29	0.32	0.18	6.14	11	0
	2003	0.34	0.40	0.30	0.33	0.18	6.14	12	0
	2004	0.34	0.40	0.30	0.33	0.18	6.14	11	0
	<i>Change*</i>	<i>0.02</i>	<i>-0.03</i>	<i>0.01</i>	<i>0.01</i>	<i>0.00</i>	<i>0.00</i>	<i>0</i>	
73	1999	0.52	0.36	0.44	0.21	0.28	2.23	18	0
	2000	0.52	0.36	0.44	0.21	0.28	2.23	18	0
	2001	0.51	0.35	0.44	0.22	0.27	2.20	17	0
	2002	0.51	0.35	0.43	0.22	0.27	2.15	16	0
	2003	0.51	0.35	0.43	0.22	0.27	2.15	16	0
	2004	0.51	0.35	0.43	0.22	0.27	2.15	16	0
	<i>Change*</i>	<i>-0.01</i>	<i>-0.01</i>	<i>-0.01</i>	<i>0.01</i>	<i>-0.01</i>	<i>-0.08</i>	<i>-2</i>	
74	1999	0.44	0.21	0.23	0.53	0.25	10.16	96	0
	2000	0.44	0.21	0.23	0.53	0.25	10.16	96	0
	2001	0.44	0.21	0.23	0.54	0.24	10.14	95	0
	2002	0.49	0.19	0.24	0.52	0.23	9.64	72	0
	2003	0.49	0.19	0.23	0.53	0.23	9.56	70	0
	2004	0.50	0.19	0.25	0.54	0.23	9.28	66	0
	<i>Change*</i>	<i>0.06</i>	<i>-0.03</i>	<i>0.02</i>	<i>0.01</i>	<i>-0.02</i>	<i>-0.88</i>	<i>-30</i>	
75	1999	0.68	0.19	0.19	0.27	0.23	8.56	7	0
	2000	0.68	0.19	0.19	0.27	0.23	8.56	7	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0</i>	
76	2000	0.31	0.46	0.23	0.36	0.15	6.53	8	0
	2001	0.31	0.46	0.23	0.36	0.15	6.53	8	0
	2002	0.31	0.46	0.23	0.36	0.15	6.53	8	0
	2003	0.31	0.46	0.23	0.36	0.15	6.53	8	0
	2004	0.31	0.46	0.23	0.36	0.15	6.53	8	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0</i>	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
77	1999	0.40	0.42	0.30	0.29	0.21	8.24	46	0
	2000	0.38	0.43	0.31	0.29	0.21	8.81	36	0
	2001	0.38	0.45	0.30	0.29	0.21	8.02	34	0
	2002	0.39	0.46	0.30	0.28	0.22	7.56	32	0
	2003	0.37	0.42	0.31	0.32	0.21	5.77	17	0
	2004	0.37	0.42	0.31	0.32	0.21	5.77	17	0
	<i>Change*</i>	-0.03	0.00	0.00	0.03	0.00	-2.47	-29	
78	2001	0.37	0.21	0.72	0.11	0.61	0.77	5	1
	2002	0.37	0.21	0.72	0.11	0.61	0.77	6	1
	2003	0.37	0.21	0.72	0.11	0.61	0.77	6	1
	2004	0.37	0.21	0.72	0.11	0.61	0.77	6	1
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	1	
79	1999	0.51	0.33	0.40	0.17	0.27	3.13	10	0
	2000	0.51	0.33	0.40	0.17	0.27	3.13	10	0
	2001	0.46	0.37	0.32	0.18	0.25	2.96	7	0
	2002	0.46	0.37	0.32	0.18	0.25	2.96	7	0
	2003	0.46	0.37	0.32	0.18	0.25	2.96	7	0
	2004	0.46	0.37	0.32	0.18	0.25	2.96	7	0
	<i>Change*</i>	-0.05	0.04	-0.07	0.01	-0.02	-0.17	-3	
80	1999	0.44	0.33	0.39	0.19	0.27	5.24	32	0
	2000	0.44	0.33	0.39	0.19	0.27	5.24	32	0
	2001	0.44	0.33	0.37	0.19	0.27	4.90	29	0
	2002	0.42	0.34	0.35	0.19	0.25	4.50	23	0
	2003	0.42	0.34	0.35	0.19	0.25	4.50	23	0
	2004	0.42	0.34	0.35	0.19	0.25	4.50	23	0
	<i>Change*</i>	-0.02	0.01	-0.04	0.00	-0.01	-0.74	-9	
81	1999	0.55	0.28	0.31	0.31	0.22	5.38	9	0
	2000	0.55	0.28	0.31	0.31	0.22	5.38	9	0
	2001	0.55	0.26	0.40	0.28	0.24	5.66	12	0
	2002	0.50	0.31	0.43	0.25	0.24	5.62	14	0
	2003	0.50	0.31	0.43	0.25	0.24	5.62	14	0
	2004	0.50	0.31	0.43	0.25	0.24	5.62	14	0
	<i>Change*</i>	-0.05	0.04	0.12	-0.06	0.02	0.24	5	
82	1999	0.42	0.48	0.35	0.20	0.31	2.79	15	0
	2000	0.42	0.48	0.35	0.20	0.31	2.79	15	0
	2001	0.41	0.53	0.27	0.21	0.24	1.99	9	0
	2002	0.41	0.53	0.27	0.21	0.24	1.99	9	0
	2003	0.41	0.53	0.27	0.21	0.24	1.99	9	0
	2004	0.41	0.53	0.27	0.21	0.24	1.99	9	0
	<i>Change*</i>	0.00	0.05	-0.07	0.01	-0.06	-0.81	-6	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
83	1999	0.44	0.39	0.54	0.27	0.26	0.89	4	0
	2000	0.44	0.39	0.54	0.27	0.26	0.89	4	1
	2001	0.42	0.30	0.58	0.23	0.38	1.76	11	1
	2002	0.43	0.27	0.60	0.24	0.40	1.68	10	1
	2003	0.42	0.23	0.66	0.22	0.43	1.80	12	1
	2004	0.42	0.23	0.66	0.22	0.43	1.80	12	1
	<i>Change*</i>	-0.02	-0.16	0.12	-0.05	0.16	0.91	8	
84	1999	0.52	0.19	0.25	0.39	0.22	4.55	17	0
	2000	0.52	0.19	0.25	0.39	0.22	4.55	17	0
	2001	0.52	0.19	0.25	0.39	0.22	4.55	17	0
	2002	0.52	0.19	0.25	0.39	0.22	4.55	17	0
	2003	0.47	0.21	0.27	0.42	0.23	4.35	13	0
	2004	0.53	0.15	0.14	0.42	0.19	4.25	11	0
	<i>Change*</i>	0.01	-0.04	-0.11	0.03	-0.03	-0.30	-6	
85	1999	0.51	0.20	0.22	0.55	0.22	7.65	35	0
	2000	0.51	0.20	0.22	0.55	0.22	7.65	35	0
	2001	0.51	0.20	0.22	0.55	0.22	7.65	35	0
	2002	0.51	0.20	0.22	0.55	0.22	7.65	35	0
	2003	0.51	0.20	0.22	0.55	0.22	7.65	35	0
	2004	0.51	0.20	0.22	0.55	0.22	7.71	36	0
	<i>Change*</i>	0.00	0.00	-0.01	0.00	0.00	0.06	1	
86	1999	0.60	0.45	0.49	0.21	0.28	2.04	9	0
	2000	0.60	0.45	0.49	0.21	0.28	2.04	9	0
	2001	0.57	0.46	0.48	0.21	0.27	2.08	10	0
	2002	0.57	0.46	0.48	0.21	0.27	2.08	10	0
	2003	0.57	0.46	0.48	0.21	0.27	2.08	10	0
	2004	0.57	0.46	0.48	0.21	0.27	2.08	10	0
	<i>Change*</i>	-0.03	0.01	-0.01	0.00	-0.01	0.04	1	
87	1999	0.45	0.35	0.35	0.30	0.24	6.93	56	0
	2000	0.46	0.35	0.35	0.30	0.25	6.32	51	0
	2001	0.43	0.35	0.34	0.30	0.27	5.25	53	0
	2002	0.46	0.36	0.35	0.30	0.25	4.98	48	0
	2003	0.46	0.36	0.35	0.30	0.25	4.98	48	0
	<i>Change*</i>	0.01	0.00	0.01	0.00	0.01	-1.94	-8	

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
88	1999	0.46	0.36	0.46	0.31	0.29	1.25	9	0
	2000	0.46	0.36	0.46	0.31	0.29	1.25	9	0
	2001	0.46	0.36	0.46	0.31	0.29	1.25	9	0
	2002	0.46	0.36	0.46	0.31	0.29	1.25	9	0
	2003	0.46	0.36	0.46	0.31	0.29	1.25	9	0
	2004	0.46	0.35	0.42	0.32	0.28	1.32	10	0
	<i>Change*</i>	<i>0.00</i>	<i>-0.01</i>	<i>-0.04</i>	<i>0.01</i>	<i>0.00</i>	<i>0.07</i>	<i>1</i>	
89	1999	0.49	0.29	0.52	0.17	0.30	1.81	8	0
	2000	0.49	0.29	0.52	0.17	0.30	1.81	8	0
	2001	0.52	0.30	0.55	0.16	0.32	1.93	10	0
	2002	0.52	0.30	0.55	0.16	0.32	1.93	10	0
	2003	0.52	0.30	0.55	0.16	0.32	1.93	10	0
	2004	0.52	0.30	0.55	0.16	0.32	1.93	10	0
	<i>Change*</i>	<i>0.03</i>	<i>0.00</i>	<i>0.03</i>	<i>-0.01</i>	<i>0.01</i>	<i>0.11</i>	<i>2</i>	
90	1999	0.48	0.17	0.23	0.56	0.23	9.16	65	0
	2000	0.48	0.17	0.23	0.56	0.23	9.16	65	0
	2001	0.48	0.17	0.23	0.56	0.23	9.16	65	0
	2002	0.49	0.17	0.24	0.55	0.23	8.89	62	0
	<i>Change*</i>	<i>0.01</i>	<i>0.00</i>	<i>0.01</i>	<i>-0.01</i>	<i>0.00</i>	<i>-0.27</i>	<i>-3</i>	
91	1999	0.36	0.30	0.51	0.14	0.33	2.92	16	0
	2000	0.36	0.30	0.51	0.14	0.33	2.92	16	0
	2001	0.40	0.31	0.47	0.17	0.30	3.37	20	0
	2002	0.41	0.31	0.45	0.17	0.29	4.27	23	0
	2003	0.41	0.31	0.45	0.17	0.29	4.27	23	0
	2004	0.42	0.33	0.34	0.19	0.25	4.22	19	0
<i>Change*</i>	<i>0.06</i>	<i>0.03</i>	<i>-0.17</i>	<i>0.05</i>	<i>-0.08</i>	<i>1.29</i>	<i>3</i>		
92	1999	0.39	0.15	0.43	0.40	0.30	2.35	20	0
	2000	0.39	0.14	0.41	0.41	0.29	2.30	19	0
	2001	0.39	0.14	0.42	0.40	0.30	2.22	18	0
	2002	0.40	0.22	0.41	0.41	0.28	3.11	29	0
	2003	0.40	0.21	0.41	0.44	0.26	3.11	27	0
	2004	0.42	0.23	0.35	0.47	0.23	3.15	23	0
<i>Change*</i>	<i>0.03</i>	<i>0.08</i>	<i>-0.08</i>	<i>0.07</i>	<i>-0.06</i>	<i>0.80</i>	<i>3</i>		
93	1999	0.38	0.28	0.42	0.25	0.24	4.06	13	0
	2000	0.38	0.28	0.42	0.25	0.24	4.06	13	0
	2001	0.38	0.28	0.42	0.25	0.24	4.06	13	0
	2002	0.38	0.28	0.42	0.25	0.24	4.06	13	0
	2003	0.38	0.28	0.42	0.25	0.24	4.06	13	0
	2004	0.37	0.32	0.31	0.27	0.20	4.01	11	0
<i>Change*</i>	<i>-0.01</i>	<i>0.03</i>	<i>-0.10</i>	<i>0.03</i>	<i>-0.05</i>	<i>-0.05</i>	<i>-2</i>		

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
94	1999	0.42	0.35	0.37	0.29	0.23	6.00	28	0
	2000	0.42	0.35	0.37	0.29	0.23	6.00	28	0
	2001	0.42	0.35	0.37	0.29	0.23	6.00	28	0
	2002	0.42	0.34	0.41	0.29	0.25	3.87	18	0
	2003	0.39	0.32	0.26	0.32	0.21	2.81	11	0
	2004	0.39	0.32	0.26	0.32	0.21	2.81	11	0
	<i>Change*</i>	-0.03	-0.03	-0.11	0.02	-0.02	-3.19	-17	
95	1999	0.38	0.28	0.35	0.33	0.27	9.08	74	0
	2000	0.39	0.28	0.34	0.32	0.26	9.38	81	0
	2001	0.39	0.28	0.34	0.31	0.27	7.94	71	0
	2002	0.42	0.26	0.39	0.31	0.27	7.32	62	0
	2003	0.47	0.23	0.34	0.30	0.24	6.16	35	0
	2004	0.45	0.27	0.26	0.35	0.21	6.72	44	0
	<i>Change*</i>	0.07	-0.01	-0.09	0.01	-0.05	-2.35	-30	
96	1999	0.38	0.38	0.39	0.27	0.29	6.83	19	0
	2000	0.37	0.40	0.45	0.24	0.31	4.82	16	0
	2001	0.35	0.47	0.37	0.31	0.21	4.75	11	0
	2002	0.36	0.46	0.36	0.31	0.21	4.77	12	0
	2003	0.36	0.46	0.36	0.31	0.21	4.77	12	0
	2004	0.36	0.46	0.36	0.31	0.21	4.77	12	0
	<i>Change*</i>	-0.02	0.08	-0.04	0.04	-0.08	-2.05	-7	
97	1999	0.57	0.20	0.31	0.23	0.24	6.75	9	0
	2000	0.58	0.20	0.34	0.22	0.24	6.50	7	0
	<i>Change*</i>	0.01	0.00	0.03	-0.01	0.00	-0.25	-2	
98	2004	0.50	0.32	0.43	0.24	0.32	4.39	19	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0	
99	1999	0.39	0.33	0.45	0.25	0.33	2.06	15	0
	2000	0.39	0.33	0.45	0.25	0.33	2.06	15	0
	2001	0.39	0.33	0.45	0.25	0.33	2.06	15	0
	2002	0.39	0.33	0.45	0.25	0.33	2.06	15	0
	2003	0.38	0.35	0.35	0.28	0.31	1.93	12	0
	<i>Change*</i>	-0.01	0.02	-0.09	0.02	-0.02	-0.14	-3	
100	1999	0.41	0.24	0.40	0.30	0.35	4.01	38	0
	2000	0.41	0.24	0.40	0.30	0.35	4.01	38	0
	2001	0.40	0.24	0.38	0.31	0.34	3.96	36	0
	2002	0.35	0.27	0.30	0.40	0.29	5.34	74	0
	2003	0.34	0.28	0.29	0.40	0.28	5.79	77	0
	2004	0.31	0.28	0.32	0.42	0.29	5.12	70	0
<i>Change*</i>	-0.09	0.04	-0.08	0.12	-0.05	1.11	32		

Appendix D1 (continued). Description of School Zone Contexts over Time

School	Year	Stability Mean	Ethnic Diversity Mean	Family Disruption Mean	Social Advantage Mean	Economic Deprivation Mean	Distance Between Home & School	Number of BGs in School Zone	Enhanced Option School
101	1999	0.38	0.21	0.40	0.41	0.25	6.40	18	0
	2000	0.38	0.21	0.40	0.41	0.25	6.40	18	0
	2001	0.38	0.21	0.40	0.41	0.25	6.40	18	0
	2002	0.37	0.22	0.40	0.40	0.25	6.24	16	0
	2003	0.37	0.22	0.40	0.40	0.25	6.24	16	0
	2004	0.41	0.22	0.41	0.41	0.23	6.23	14	0
	Change*	0.03	0.01	0.01	0.01	-0.01	-0.17	-4	
102	1999	0.48	0.20	0.48	0.21	0.34	3.37	24	0
	2000	0.48	0.20	0.48	0.21	0.34	3.37	24	0
	2001	0.48	0.20	0.48	0.21	0.34	3.37	24	0
	2002	0.46	0.22	0.56	0.17	0.41	3.45	26	0
	2003	0.47	0.22	0.55	0.17	0.40	3.49	27	0
	2004	0.47	0.22	0.53	0.17	0.38	3.70	32	0
	Change*	-0.01	0.02	0.05	-0.04	0.05	0.32	8	
103	1999	0.48	0.44	0.25	0.16	0.26	2.12	9	0
	2000	0.48	0.44	0.25	0.16	0.26	2.12	9	0
	2001	0.42	0.38	0.37	0.20	0.34	2.47	16	0
	2002	0.43	0.39	0.41	0.19	0.35	2.71	18	0
	2003	0.43	0.39	0.41	0.19	0.35	2.71	18	0
	2004	0.43	0.39	0.41	0.19	0.35	2.71	18	0
	Change*	-0.05	-0.05	0.16	0.03	0.09	0.59	9	
104	1999	0.38	0.39	0.36	0.22	0.29	6.06	65	0
	2000	0.38	0.39	0.36	0.22	0.29	6.06	65	0
	2001	0.37	0.40	0.30	0.23	0.26	5.41	50	0
	2002	0.41	0.38	0.32	0.22	0.24	4.66	38	0
	2003	0.41	0.38	0.32	0.22	0.24	4.66	38	0
	2004	0.41	0.38	0.32	0.22	0.24	4.66	38	0
	Change*	0.03	-0.01	-0.04	0.00	-0.04	-1.40	-27	
District									
Average	1999	0.465	0.305	0.382	0.274	0.278	4.867	22.946	—
	2000	0.462	0.309	0.386	0.272	0.278	4.710	21.645	—
	2001	0.458	0.310	0.392	0.270	0.280	4.490	21.255	—
	2002	0.457	0.316	0.386	0.276	0.273	4.460	21.098	—
	2003	0.455	0.317	0.382	0.274	0.270	4.421	20.000	—
	2004	0.453	0.319	0.379	0.274	0.269	4.345	19.207	—
	All Years	0.458	0.313	0.385	0.273	0.275	4.550	21.053	—
Avg. Change*	-0.012	0.014	-0.003	0.000	-0.010	-0.522	-3.739	—	

*Change is calculated by subtracting values from 2004 from the baseline values for 1999. When a school was not opened in 1999 or 2004, values for the latest year were subtracted from values in the earliest year.

Appendix D2. Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
1	1999	0.17	0.20	0.32	0.26	0.21	8.33	0.43	0
	2000	0.17	0.20	0.32	0.26	0.21	8.38	0.53	0
	2001	0.22	0.20	0.32	0.23	0.17	7.60	0.27	0
	2002	0.21	0.18	0.30	0.24	0.15	8.18	0.44	0
	Change*	0.04	-0.02	-0.02	-0.02	-0.06	-0.14	0.00	
2	1999	0.14	0.14	0.21	0.13	0.09	5.59	0.18	0
	2000	0.14	0.14	0.21	0.13	0.09	5.55	0.11	0
	2001	0.14	0.14	0.20	0.13	0.09	4.69	0.10	0
	2002	0.14	0.11	0.20	0.06	0.09	5.61	0.00	0
	2003	0.14	0.11	0.20	0.06	0.09	6.69	0.00	0
	2004	0.14	0.11	0.20	0.06	0.09	7.36	0.01	0
	Change*	-0.01	-0.02	-0.01	-0.08	-0.01	1.77	-0.17	
3	2000	0.20	0.17	0.12	0.10	0.04	7.87	0.98	0
	2001	0.20	0.16	0.14	0.09	0.04	8.37	1.27	0
	2002	0.20	0.16	0.14	0.08	0.04	7.73	1.20	0
	2003	0.20	0.17	0.14	0.09	0.04	7.94	1.05	0
	2004	0.20	0.17	0.14	0.09	0.04	7.94	2.23	0
	Change*	0.00	0.00	0.02	-0.01	0.00	0.07	1.26	
4	2002	0.15	0.13	0.31	0.15	0.15	9.83	2.77	0
	2003	0.15	0.13	0.32	0.15	0.15	10.91	2.70	0
	2004	0.15	0.13	0.32	0.15	0.15	11.94	1.96	0
	Change*	0.00	0.00	0.00	0.00	-0.01	2.11	-0.81	
5	1999	0.17	0.16	0.27	0.14	0.13	7.44	1.60	0
	2000	0.17	0.16	0.27	0.14	0.13	7.59	0.88	0
	2001	0.15	0.17	0.28	0.14	0.11	7.55	1.35	0
	2002	0.11	0.18	0.23	0.09	0.07	9.85	1.00	0
	2003	0.11	0.18	0.23	0.09	0.07	10.16	2.93	0
	2004	0.12	0.18	0.28	0.09	0.10	10.88	3.22	0
	Change*	-0.04	0.03	0.01	-0.05	-0.03	3.44	1.63	
6	1999	0.15	0.17	0.21	0.15	0.19	5.63	0.47	0
	2000	0.14	0.16	0.22	0.13	0.20	6.17	0.70	0
	2001	0.15	0.06	0.12	0.06	0.04	5.00	0.19	0
	2002	0.13	0.05	0.12	0.07	0.04	5.78	0.05	0
	2003	0.13	0.05	0.12	0.07	0.04	5.31	0.02	0
	2004	0.13	0.05	0.12	0.07	0.04	5.22	0.04	0
	Change*	-0.02	-0.12	-0.09	-0.08	-0.15	-0.40	-0.44	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
7	1999	0.19	0.17	0.30	0.22	0.13	10.74	1.55	0
	2000	0.19	0.17	0.30	0.22	0.13	11.03	0.97	0
	2001	0.16	0.17	0.33	0.21	0.13	9.21	0.86	0
	2002	0.16	0.17	0.33	0.21	0.13	8.66	0.87	0
	2003	0.15	0.17	0.37	0.22	0.15	9.09	0.61	0
	2004	0.17	0.17	0.35	0.21	0.14	8.94	1.12	0
	Change*	-0.02	0.00	0.05	-0.01	0.01	-1.80	-0.43	
8	1999	0.16	0.20	0.30	0.19	0.14	7.02	0.03	0
	2000	0.16	0.20	0.30	0.19	0.14	7.34	0.04	0
	2001	0.14	0.18	0.20	0.19	0.05	5.65	0.25	0
	2002	0.14	0.17	0.19	0.17	0.05	4.92	1.68	0
	2003	0.14	0.17	0.19	0.17	0.05	5.35	0.23	0
	2004	0.14	0.17	0.19	0.17	0.05	5.39	0.09	0
	Change*	-0.02	-0.03	-0.12	-0.02	-0.09	-1.63	0.07	
9	1999	0.12	0.19	0.27	0.17	0.13	6.23	0.11	0
	2000	0.12	0.19	0.27	0.17	0.13	6.03	0.10	0
	2001	0.12	0.19	0.27	0.17	0.13	7.45	0.15	0
	2002	0.13	0.19	0.29	0.17	0.15	6.49	0.00	0
	2003	0.12	0.17	0.26	0.15	0.13	6.25	0.07	0
	2004	0.12	0.18	0.26	0.14	0.12	4.58	0.02	0
	Change*	0.00	-0.02	-0.01	-0.03	-0.01	-1.65	-0.10	
10	1999	0.12	0.18	0.22	0.05	0.12	6.66	0.67	0
	2000	0.12	0.18	0.22	0.05	0.12	6.03	0.26	0
	2001	0.12	0.18	0.22	0.05	0.12	7.54	0.22	0
	2002	0.09	0.17	0.28	0.03	0.15	7.32	0.03	1
	2003	0.09	0.17	0.28	0.03	0.15	6.48	1.39	1
	2004	0.09	0.17	0.28	0.03	0.15	5.80	0.18	1
	Change*	-0.04	-0.01	0.06	-0.02	0.03	-0.86	-0.49	
11	1999	0.16	0.16	0.24	0.10	0.05	7.40	1.55	0
	2000	0.13	0.15	0.24	0.11	0.05	4.30	0.75	0
	2001	0.13	0.14	0.25	0.11	0.05	6.19	0.88	0
	2002	0.14	0.17	0.22	0.10	0.07	8.43	0.69	0
	2003	0.14	0.17	0.22	0.10	0.07	8.78	0.99	0
	2004	0.14	0.17	0.22	0.10	0.07	9.33	1.65	0
	Change*	-0.02	0.01	-0.02	0.00	0.02	1.93	0.10	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
12	1999	0.15	0.17	0.22	0.11	0.06	9.91	3.40	0
	2000	0.15	0.18	0.20	0.11	0.06	8.07	0.49	0
	2001	0.16	0.17	0.21	0.11	0.06	7.90	0.77	0
	2002	0.13	0.18	0.23	0.13	0.10	6.57	0.38	0
	2003	0.14	0.18	0.23	0.12	0.10	8.39	2.05	0
	2004	0.13	0.19	0.22	0.08	0.10	9.11	2.25	0
	<i>Change*</i>	-0.01	0.02	0.00	-0.03	0.04	-0.80	-1.15	
13	1999	0.21	0.15	0.31	0.19	0.14	6.47	0.15	0
	2000	0.21	0.15	0.31	0.19	0.14	6.96	0.18	0
	2001	0.21	0.15	0.31	0.19	0.14	6.05	0.09	0
	2002	0.20	0.16	0.29	0.21	0.12	7.01	0.05	0
	2003	0.20	0.16	0.29	0.21	0.12	6.39	0.08	0
	2004	0.20	0.18	0.32	0.21	0.13	6.75	0.06	0
	<i>Change*</i>	-0.01	0.02	0.01	0.02	-0.01	0.27	-0.08	
14	2004	0.21	0.11	0.16	0.09	0.13	6.36	0.22	1
<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
15	1999	0.16	0.18	0.20	0.14	0.18	11.48	1.37	0
	2000	0.15	0.18	0.21	0.15	0.19	10.97	1.56	0
	2001	0.17	0.17	0.26	0.19	0.16	11.80	1.57	0
	2002	0.16	0.18	0.28	0.18	0.15	12.76	1.76	0
	2003	0.16	0.18	0.28	0.18	0.15	7.90	2.26	0
	2004	0.16	0.18	0.28	0.18	0.15	7.96	1.28	0
	<i>Change*</i>	0.01	0.00	0.07	0.04	-0.03	-3.52	-0.09	
16	1999	0.24	0.16	0.23	0.14	0.15	7.67	0.69	0
<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
17	1999	0.17	0.15	0.32	0.11	0.13	6.28	0.14	0
	2000	0.17	0.15	0.32	0.11	0.13	5.94	0.15	0
	2001	0.15	0.16	0.30	0.11	0.11	5.59	0.08	0
	2002	0.17	0.14	0.24	0.09	0.07	5.73	0.05	0
	2003	0.17	0.14	0.24	0.09	0.07	8.46	0.01	0
	2004	0.17	0.14	0.24	0.09	0.07	6.80	0.06	0
	<i>Change*</i>	0.00	0.00	-0.08	-0.02	-0.06	0.52	-0.08	
18	1999	0.23	0.16	0.33	0.10	0.16	10.73	0.19	0
	2000	0.23	0.16	0.33	0.10	0.16	10.22	0.59	0
	2001	0.23	0.16	0.33	0.10	0.16	7.15	0.08	0
	2002	0.20	0.17	0.24	0.17	0.13	7.42	0.02	0
	2003	0.20	0.17	0.24	0.17	0.13	8.10	0.01	0
	2004	0.17	0.17	0.33	0.15	0.13	7.39	0.05	0
	<i>Change*</i>	-0.06	0.01	0.00	0.05	-0.03	-3.34	-0.14	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
19	1999	0.17	0.16	0.18	0.06	0.11	7.74	0.16	0
	2000	0.17	0.16	0.18	0.06	0.11	7.83	0.14	0
	2001	0.17	0.17	0.22	0.06	0.16	7.48	0.26	0
	2002	0.22	0.16	0.27	0.09	0.14	7.36	0.08	0
	2003	0.22	0.16	0.27	0.09	0.14	7.95	0.19	0
	2004	0.21	0.16	0.26	0.11	0.13	9.04	0.16	0
	<i>Change*</i>	0.04	0.00	0.08	0.05	0.03	1.30	0.00	
20	1999	0.25	0.16	0.25	0.15	0.16	6.76	0.23	0
	2000	0.25	0.17	0.25	0.16	0.16	6.65	0.17	0
	2001	0.25	0.17	0.25	0.16	0.16	6.31	0.22	0
	2002	0.21	0.17	0.18	0.10	0.11	5.86	0.06	0
	2003	0.21	0.17	0.18	0.10	0.11	6.66	0.16	0
	2004	0.22	0.17	0.15	0.08	0.04	5.78	0.04	0
	<i>Change*</i>	-0.04	0.01	-0.10	-0.08	-0.12	-0.98	-0.19	
21	1999	0.11	0.14	0.20	0.09	0.08	6.47	0.10	0
	2000	0.11	0.14	0.20	0.09	0.08	6.97	0.12	0
	2001	0.11	0.12	0.20	0.08	0.08	6.47	0.18	0
	2002	0.11	0.13	0.18	0.08	0.08	7.52	0.20	0
	2003	0.11	0.13	0.18	0.08	0.08	7.13	0.16	0
	2004	0.11	0.13	0.18	0.08	0.08	6.67	0.19	0
	<i>Change*</i>	0.00	-0.01	-0.02	-0.01	0.01	0.20	0.09	
22	1999	0.16	0.20	0.28	0.18	0.09	4.49	0.02	0
	2000	0.16	0.20	0.28	0.18	0.09	5.74	0.02	0
	2001	0.16	0.20	0.28	0.18	0.09	5.79	0.01	0
	2002	0.16	0.20	0.28	0.18	0.09	5.15	0.01	0
	2003	0.15	0.20	0.28	0.17	0.08	6.93	0.02	0
	2004	0.15	0.19	0.31	0.20	0.12	5.83	0.08	0
	<i>Change*</i>	0.00	-0.01	0.02	0.02	0.03	1.33	0.06	
23	1999	0.12	0.17	0.27	0.07	0.12	6.25	0.54	0
	2000	0.12	0.17	0.27	0.07	0.12	5.73	0.66	0
	2001	0.14	0.17	0.25	0.07	0.12	5.50	0.19	0
	2002	0.13	0.17	0.27	0.08	0.13	5.27	1.20	0
	2003	0.13	0.17	0.27	0.08	0.13	5.60	0.40	0
	2004	0.13	0.17	0.27	0.08	0.13	5.01	0.07	0
	<i>Change*</i>	0.01	0.00	0.00	0.01	0.00	-1.24	-0.46	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
24	1999	0.10	0.15	0.24	0.07	0.12	6.05	0.13	0
	2000	0.10	0.15	0.24	0.07	0.12	5.62	0.08	0
	2001	0.10	0.15	0.22	0.07	0.12	6.40	0.45	0
	2002	0.10	0.15	0.22	0.07	0.12	7.13	0.43	0
	2003	0.14	0.14	0.26	0.09	0.15	10.70	0.88	0
	2004	0.14	0.14	0.26	0.09	0.15	11.32	1.31	0
	<i>Change*</i>	<i>0.03</i>	<i>-0.01</i>	<i>0.02</i>	<i>0.03</i>	<i>0.03</i>	<i>5.27</i>	<i>1.18</i>	
25	1999	0.19	0.18	0.28	0.13	0.15	6.29	0.07	0
	2000	0.19	0.18	0.28	0.13	0.15	7.12	0.18	0
	2001	0.20	0.18	0.28	0.13	0.15	6.11	0.13	0
	2002	0.20	0.18	0.28	0.13	0.15	6.77	0.09	0
	2003	0.20	0.18	0.28	0.13	0.15	7.36	0.01	0
	2004	0.17	0.17	0.19	0.15	0.15	6.46	0.01	0
	<i>Change*</i>	<i>-0.02</i>	<i>-0.01</i>	<i>-0.10</i>	<i>0.02</i>	<i>0.01</i>	<i>0.16</i>	<i>-0.07</i>	
26	2001	0.17	0.17	0.23	0.16	0.20	10.70	0.61	0
	2002	0.17	0.17	0.22	0.15	0.20	11.68	0.62	0
	2003	0.17	0.17	0.22	0.15	0.20	10.60	3.03	0
	2004	0.17	0.17	0.22	0.15	0.20	11.14	3.49	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.01</i>	<i>0.00</i>	<i>0.00</i>	<i>0.44</i>	<i>2.88</i>	
27	1999	0.13	0.17	0.28	0.13	0.13	6.88	0.08	0
	2000	0.12	0.17	0.19	0.15	0.10	5.95	0.11	0
	2001	0.12	0.17	0.19	0.15	0.10	6.25	0.10	0
	2002	0.12	0.17	0.20	0.15	0.11	7.07	0.07	0
	2003	0.12	0.17	0.20	0.15	0.11	6.99	0.20	0
	2004	0.12	0.17	0.20	0.15	0.11	5.89	0.04	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.01</i>	<i>-0.09</i>	<i>0.02</i>	<i>-0.02</i>	<i>-0.99</i>	<i>-0.04</i>	
28	1999	0.12	0.17	0.23	0.12	0.09	13.75	4.56	0
	2000	0.12	0.18	0.21	0.19	0.11	10.79	1.19	0
	2001	0.12	0.18	0.21	0.19	0.11	10.25	0.77	0
	2002	0.12	0.17	0.18	0.21	0.10	8.98	0.64	0
	2003	0.12	0.17	0.18	0.21	0.10	10.08	1.61	0
	2004	0.12	0.17	0.18	0.21	0.10	9.58	1.88	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.00</i>	<i>-0.05</i>	<i>0.08</i>	<i>0.01</i>	<i>-4.17</i>	<i>-2.68</i>	
29	1999	0.16	0.15	0.26	0.17	0.12	9.35	2.24	0
	2000	0.16	0.16	0.30	0.14	0.14	9.30	1.66	0
	2001	0.16	0.16	0.31	0.14	0.15	9.86	1.55	0
	2002	0.17	0.16	0.31	0.17	0.14	8.45	1.36	0
	2003	0.17	0.15	0.14	0.18	0.08	7.42	1.12	0
	2004	0.17	0.15	0.18	0.19	0.12	7.21	1.00	0
	<i>Change*</i>	<i>0.01</i>	<i>0.00</i>	<i>-0.08</i>	<i>0.02</i>	<i>0.01</i>	<i>-2.14</i>	<i>-1.24</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
30	1999	0.18	0.14	0.25	0.22	0.17	5.35	0.02	0
	2000	0.18	0.14	0.25	0.22	0.17	4.47	0.04	0
	2001	0.18	0.17	0.27	0.22	0.18	4.02	0.08	0
	2002	0.17	0.19	0.31	0.25	0.19	3.50	0.04	0
	2003	0.17	0.19	0.32	0.25	0.18	4.48	0.05	0
	2004	0.17	0.19	0.33	0.25	0.18	4.74	0.22	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.05</i>	<i>0.08</i>	<i>0.03</i>	<i>0.01</i>	<i>-0.60</i>	<i>0.20</i>	
31	1999	0.20	0.15	0.34	0.23	0.15	7.86	0.66	0
	2000	0.20	0.15	0.34	0.23	0.15	7.36	0.60	0
	2001	0.19	0.11	0.31	0.10	0.09	8.43	0.85	0
	<i>Change*</i>	<i>-0.01</i>	<i>-0.04</i>	<i>-0.02</i>	<i>-0.13</i>	<i>-0.07</i>	<i>0.56</i>	<i>0.19</i>	
32	1999	0.14	0.15	0.29	0.13	0.14	15.06	3.58	0
	2000	0.14	0.15	0.30	0.14	0.14	15.72	2.54	0
	2001	0.14	0.15	0.31	0.14	0.14	14.69	1.99	0
	2002	0.15	0.15	0.32	0.15	0.15	11.31	1.46	0
	<i>Change*</i>	<i>0.01</i>	<i>0.00</i>	<i>0.03</i>	<i>0.01</i>	<i>0.01</i>	<i>-3.76</i>	<i>-2.12</i>	
33	1999	0.21	0.16	0.36	0.16	0.15	6.65	0.38	0
	2000	0.21	0.16	0.36	0.16	0.15	4.84	0.21	0
	2001	0.21	0.16	0.36	0.16	0.15	4.16	0.15	0
	2002	0.12	0.17	0.26	0.11	0.12	5.09	0.18	1
	2003	0.17	0.21	0.28	0.13	0.13	6.10	0.06	1
	2004	0.17	0.21	0.30	0.09	0.14	5.29	0.08	1
	<i>Change*</i>	<i>-0.04</i>	<i>0.05</i>	<i>-0.07</i>	<i>-0.07</i>	<i>-0.01</i>	<i>-1.36</i>	<i>-0.30</i>	
34	1999	0.16	0.19	0.22	0.16	0.16	6.03	0.11	0
	2000	0.16	0.19	0.22	0.16	0.16	7.41	0.15	0
	2001	0.17	0.18	0.11	0.15	0.05	5.40	0.05	0
	2002	0.18	0.21	0.13	0.19	0.04	5.18	0.07	0
	2003	0.18	0.21	0.13	0.19	0.04	5.82	0.10	0
	2004	0.18	0.21	0.13	0.19	0.04	5.36	0.06	0
	<i>Change*</i>	<i>0.02</i>	<i>0.01</i>	<i>-0.09</i>	<i>0.03</i>	<i>-0.12</i>	<i>-0.68</i>	<i>-0.06</i>	
35	1999	0.23	0.20	0.23	0.06	0.06	5.46	0.14	0
	2000	0.26	0.22	0.23	0.07	0.05	6.24	0.09	0
	2001	0.16	0.24	0.26	0.08	0.06	7.02	0.02	0
	2002	0.16	0.24	0.26	0.08	0.06	6.58	0.11	0
	2003	0.16	0.24	0.26	0.08	0.06	8.03	0.22	0
	2004	0.16	0.24	0.26	0.08	0.06	7.48	0.11	0
	<i>Change*</i>	<i>-0.07</i>	<i>0.04</i>	<i>0.03</i>	<i>0.02</i>	<i>0.00</i>	<i>2.02</i>	<i>-0.03</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
36	1999	0.16	0.17	0.17	0.17	0.10	6.69	0.02	0
	2000	0.16	0.17	0.17	0.17	0.10	7.00	0.33	0
	2001	0.16	0.17	0.17	0.17	0.10	6.12	0.25	0
	2002	0.17	0.18	0.18	0.17	0.10	6.35	0.06	0
	2003	0.18	0.19	0.17	0.18	0.11	6.10	0.18	0
	2004	0.18	0.19	0.17	0.18	0.11	7.49	0.04	0
	Change*	0.02	0.01	0.00	0.02	0.02	0.79	0.02	
37	1999	0.19	0.19	0.18	0.17	0.05	6.97	0.27	0
	2000	0.19	0.18	0.19	0.18	0.05	6.57	0.66	0
	2001	0.19	0.18	0.19	0.18	0.05	6.96	0.33	0
	2002	0.19	0.18	0.19	0.17	0.05	5.54	0.48	0
	2003	0.19	0.18	0.19	0.17	0.05	7.02	0.34	0
	Change*	0.01	-0.01	0.01	0.00	0.00	0.05	0.07	
	38	1999	0.14	0.16	0.37	0.08	0.16	6.12	0.21
2000		0.14	0.16	0.37	0.08	0.16	6.34	0.11	0
2001		0.16	0.14	0.30	0.07	0.08	6.24	0.05	0
2002		0.16	0.14	0.30	0.07	0.08	6.36	0.16	0
2003		0.16	0.14	0.30	0.07	0.08	5.07	0.04	0
2004		0.16	0.14	0.30	0.07	0.08	6.53	0.03	0
Change*		0.02	-0.03	-0.08	-0.01	-0.08	0.42	-0.18	
39	1999	0.16	0.17	0.29	0.08	0.11	8.67	1.02	0
	2000	0.17	0.19	0.19	0.05	0.12	7.46	0.43	1
	2001	0.16	0.09	0.21	0.05	0.13	4.62	0.13	1
	2002	0.14	0.13	0.35	0.08	0.11	5.64	0.10	1
	2003	0.14	0.13	0.35	0.08	0.11	6.10	0.08	1
	2004	0.14	0.13	0.35	0.08	0.11	5.43	0.04	1
	Change*	-0.02	-0.04	0.06	0.00	0.00	-3.24	-0.99	
40	1999	0.13	0.16	0.27	0.14	0.14	6.91	0.14	0
	2000	0.13	0.16	0.27	0.14	0.14	5.92	0.11	0
	2001	0.06	0.09	0.26	0.16	0.06	5.12	0.08	0
	2002	0.06	0.09	0.26	0.16	0.06	6.04	0.07	0
	2003	0.06	0.09	0.26	0.16	0.06	6.50	0.05	0
	2004	0.06	0.09	0.26	0.16	0.06	5.81	0.05	0
	Change*	-0.07	-0.07	-0.02	0.02	-0.09	-1.09	-0.09	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
41	1999	0.18	0.17	0.24	0.07	0.05	5.00	0.01	0
	2000	0.18	0.17	0.23	0.07	0.04	5.32	0.12	0
	2001	0.24	0.17	0.24	0.07	0.09	5.19	0.10	0
	2002	0.24	0.17	0.24	0.07	0.09	6.15	0.04	0
	2003	0.24	0.17	0.24	0.07	0.09	5.92	0.02	0
	2004	0.24	0.17	0.24	0.07	0.09	6.45	0.04	0
	<i>Change*</i>	<i>0.06</i>	<i>0.00</i>	<i>0.01</i>	<i>0.01</i>	<i>0.04</i>	<i>1.46</i>	<i>0.03</i>	
42	1999	0.19	0.19	0.22	0.09	0.05	7.65	0.43	0
	2000	0.20	0.19	0.20	0.10	0.05	9.00	2.01	0
	2001	0.20	0.18	0.21	0.10	0.07	8.55	2.41	0
	2002	0.20	0.19	0.22	0.12	0.07	7.62	0.86	0
	2003	0.20	0.19	0.22	0.12	0.07	9.95	1.31	0
	2004	0.20	0.19	0.22	0.12	0.07	9.42	2.58	0
	<i>Change*</i>	<i>0.01</i>	<i>0.01</i>	<i>0.00</i>	<i>0.03</i>	<i>0.02</i>	<i>1.76</i>	<i>2.15</i>	
43	1999	0.19	0.16	0.31	0.24	0.16	8.63	0.18	0
	2000	0.19	0.16	0.31	0.24	0.16	8.13	0.23	0
	2001	0.19	0.16	0.31	0.24	0.16	7.25	0.09	0
	2002	0.18	0.14	0.29	0.22	0.14	8.40	0.10	0
	2003	0.18	0.14	0.29	0.22	0.14	9.44	0.16	0
	2004	0.19	0.14	0.29	0.22	0.14	7.06	0.01	0
	<i>Change*</i>	<i>0.00</i>	<i>-0.01</i>	<i>-0.02</i>	<i>-0.02</i>	<i>-0.01</i>	<i>-1.57</i>	<i>-0.17</i>	
44	1999	0.12	0.11	0.21	0.07	0.07	9.67	0.37	0
	2000	0.12	0.11	0.21	0.07	0.07	6.67	1.58	0
	2001	0.10	0.12	0.20	0.07	0.07	7.28	2.36	0
	2002	0.14	0.14	0.21	0.09	0.08	11.14	2.57	0
	2003	0.14	0.14	0.21	0.09	0.08	11.00	2.73	0
	2004	0.15	0.15	0.26	0.09	0.11	12.52	1.11	0
	<i>Change*</i>	<i>0.03</i>	<i>0.04</i>	<i>0.05</i>	<i>0.02</i>	<i>0.04</i>	<i>2.85</i>	<i>0.73</i>	
45	1999	0.19	0.19	0.18	0.17	0.05	4.75	0.05	0
	2000	0.19	0.18	0.19	0.18	0.05	5.88	0.08	0
	2001	0.19	0.18	0.19	0.18	0.05	5.47	0.10	0
	2002	0.19	0.18	0.19	0.17	0.05	5.98	0.05	0
	2003	0.19	0.18	0.19	0.17	0.05	6.77	0.06	0
	2004	0.19	0.18	0.19	0.16	0.05	5.76	0.02	0
	<i>Change*</i>	<i>0.00</i>	<i>-0.01</i>	<i>0.01</i>	<i>-0.01</i>	<i>0.00</i>	<i>1.01</i>	<i>-0.03</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
46	1999	0.14	0.15	0.22	0.08	0.08	5.22	0.07	0
	2000	0.14	0.18	0.19	0.07	0.07	4.99	0.16	0
	2001	0.14	0.18	0.19	0.07	0.07	5.09	0.16	0
	2002	0.16	0.18	0.20	0.13	0.08	5.90	0.27	0
	2003	0.16	0.18	0.20	0.13	0.08	5.15	0.21	0
	2004	0.15	0.19	0.19	0.09	0.07	5.07	0.12	0
	<i>Change*</i>	0.00	0.03	-0.03	0.01	-0.01	-0.14	0.05	
47	1999	0.16	0.15	0.25	0.18	0.11	4.71	0.08	0
	2000	0.16	0.15	0.25	0.18	0.11	4.43	0.24	0
	2001	0.17	0.16	0.26	0.19	0.11	5.18	0.21	0
	2002	0.17	0.15	0.26	0.19	0.11	4.07	0.11	0
	2003	0.16	0.16	0.25	0.18	0.10	4.86	0.00	0
	2004	0.16	0.16	0.25	0.18	0.10	5.11	0.07	0
	<i>Change*</i>	0.00	0.01	0.00	0.00	0.00	0.41	0.00	
48	1999	0.18	0.17	0.33	0.20	0.17	5.79	0.06	0
	2000	0.18	0.17	0.33	0.20	0.17	5.41	0.02	0
	2001	0.15	0.18	0.26	0.17	0.07	4.89	0.02	0
	2002	0.14	0.11	0.15	0.14	0.07	5.17	0.04	0
	2003	0.15	0.11	0.16	0.14	0.07	6.62	0.00	0
	2004	0.12	0.12	0.35	0.22	0.16	6.37	0.02	0
	<i>Change*</i>	-0.06	-0.06	0.02	0.02	-0.02	0.58	-0.04	
49	1999	0.19	0.18	0.22	0.12	0.09	7.45	3.00	0
	2000	0.17	0.17	0.22	0.12	0.09	7.98	2.89	0
	2001	0.17	0.17	0.22	0.12	0.09	7.77	1.87	0
	2002	0.17	0.19	0.19	0.15	0.09	6.71	2.73	0
	2003	0.17	0.19	0.19	0.15	0.09	6.69	3.61	0
	<i>Change*</i>	-0.02	0.01	-0.03	0.03	0.00	-0.76	0.62	
50	1999	0.17	0.18	0.23	0.08	0.12	6.61	0.05	0
	2000	0.17	0.18	0.23	0.08	0.12	5.71	0.06	0
	2001	0.17	0.18	0.23	0.08	0.12	5.92	0.08	0
	2002	0.17	0.18	0.23	0.08	0.12	5.83	0.12	0
	2003	0.17	0.18	0.23	0.08	0.12	6.31	0.03	0
	2004	0.18	0.17	0.16	0.07	0.08	6.40	0.12	0
	<i>Change*</i>	0.00	0.00	-0.07	-0.01	-0.04	-0.21	0.06	
51	1999	0.17	0.17	0.29	0.20	0.15	6.74	2.18	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
52	1999	0.12	0.18	0.34	0.10	0.13	7.25	0.10	0
	2000	0.12	0.18	0.34	0.10	0.13	8.06	0.11	0
	2001	0.14	0.17	0.32	0.10	0.12	6.51	0.09	0
	2002	0.14	0.17	0.32	0.10	0.12	7.42	0.17	0
	2003	0.14	0.17	0.32	0.10	0.12	8.21	0.14	0
	2004	0.16	0.17	0.15	0.10	0.04	6.64	0.04	0
	<i>Change*</i>	0.04	0.00	-0.18	0.00	-0.09	-0.61	-0.06	
53	1999	0.17	0.16	0.32	0.18	0.15	6.94	0.37	0
	2000	0.17	0.16	0.32	0.18	0.15	6.94	0.21	0
	2001	0.16	0.16	0.32	0.17	0.15	6.91	0.19	0
	2002	0.17	0.16	0.31	0.17	0.15	7.28	0.13	0
	2003	0.17	0.16	0.31	0.17	0.15	7.42	0.11	0
	2004	0.19	0.14	0.17	0.16	0.09	7.93	0.13	0
	<i>Change*</i>	0.02	-0.02	-0.16	-0.01	-0.07	0.99	-0.23	
54	1999	0.12	0.15	0.22	0.07	0.08	10.43	0.99	0
	2000	0.12	0.15	0.22	0.07	0.08	10.48	1.19	0
	2001	0.12	0.14	0.22	0.07	0.07	11.69	2.41	0
	<i>Change*</i>	0.00	-0.01	0.00	0.00	0.00	1.26	1.42	
55	1999	0.15	0.20	0.22	0.21	0.13	8.77	0.13	0
	2000	0.15	0.20	0.22	0.21	0.13	7.83	0.28	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	-0.94	0.15	
56	2001	0.19	0.15	0.30	0.23	0.14	8.57	0.24	0
	2002	0.19	0.15	0.31	0.23	0.14	9.48	0.38	0
	2003	0.20	0.16	0.33	0.22	0.14	9.24	0.46	0
	2004	0.20	0.16	0.33	0.23	0.14	10.26	0.24	0
	<i>Change*</i>	0.00	0.01	0.03	0.00	0.01	1.69	0.00	
57	1999	0.13	0.08	0.26	0.10	0.12	6.81	0.19	0
	2000	0.13	0.08	0.26	0.10	0.12	6.55	0.22	0
	2001	0.14	0.08	0.28	0.10	0.12	7.55	0.34	0
	2002	0.14	0.08	0.28	0.10	0.12	6.70	0.10	0
	2003	0.14	0.08	0.28	0.10	0.12	6.53	0.55	0
	2004	0.14	0.08	0.28	0.10	0.12	5.93	0.24	0
	<i>Change*</i>	0.01	0.00	0.01	0.00	0.00	-0.88	0.05	
58	2001	0.10	0.15	0.22	0.07	0.12	5.05	0.92	0
	2002	0.10	0.15	0.22	0.07	0.12	6.14	1.55	0
	2003	0.10	0.15	0.22	0.07	0.12	7.02	0.58	0
	2004	0.10	0.15	0.22	0.07	0.12	6.88	0.11	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	1.83	-0.81	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
59	1999	0.11	0.17	0.32	0.21	0.14	6.88	0.43	0
	2000	0.11	0.17	0.32	0.21	0.14	6.36	0.16	0
	2001	0.11	0.17	0.32	0.21	0.14	6.09	0.34	0
	2002	0.12	0.16	0.31	0.22	0.14	6.10	0.33	0
	2003	0.12	0.16	0.31	0.22	0.14	5.86	0.17	0
	2004	0.12	0.16	0.11	0.21	0.09	5.81	0.03	0
	<i>Change*</i>	0.02	0.00	-0.20	0.00	-0.05	-1.07	-0.40	
60	1999	0.12	0.19	0.27	0.09	0.08	6.02	0.44	0
	2000	0.18	0.19	0.27	0.13	0.08	6.28	0.23	0
	2001	0.14	0.15	0.24	0.07	0.06	6.51	0.13	0
	2002	0.15	0.18	0.23	0.09	0.08	6.23	0.07	0
	2003	0.15	0.18	0.23	0.09	0.08	7.09	0.06	0
	2004	0.15	0.18	0.23	0.09	0.08	7.25	0.15	0
	<i>Change*</i>	0.03	-0.01	-0.03	0.00	-0.01	1.22	-0.29	
61	1999	0.12	0.19	0.28	0.08	0.11	10.02	3.65	0
	2000	0.14	0.19	0.28	0.08	0.11	9.06	2.76	0
	2001	0.17	0.18	0.26	0.10	0.10	8.56	2.59	0
	2002	0.17	0.18	0.26	0.10	0.10	7.54	1.82	0
	2003	0.15	0.18	0.26	0.08	0.10	8.71	1.92	0
	2004	0.15	0.18	0.26	0.08	0.10	8.84	2.77	0
	<i>Change*</i>	0.03	-0.01	-0.02	0.01	-0.01	-1.18	-0.88	
62	1999	0.08	0.06	0.21	0.02	0.08	7.42	1.16	0
	2000	0.08	0.06	0.21	0.02	0.08	7.19	1.02	0
	2001	0.08	0.06	0.21	0.02	0.08	6.87	1.73	0
	2002	0.08	0.06	0.21	0.02	0.08	7.57	0.27	0
	2003	0.08	0.06	0.21	0.02	0.08	6.63	0.25	0
	2004	0.08	0.06	0.21	0.02	0.08	6.38	0.19	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	-1.05	-0.97	
63	2002	0.16	0.13	0.12	0.12	0.04	7.46	0.84	0
	2003	0.16	0.13	0.12	0.12	0.04	8.39	0.27	0
	2004	0.16	0.13	0.12	0.12	0.04	9.09	1.38	0
	<i>Change*</i>	0.00	0.00	0.00	0.00	0.00	1.63	0.53	
64	1999	0.14	0.19	0.26	0.08	0.08	7.02	0.31	0
	2000	0.14	0.15	0.22	0.08	0.08	4.51	0.18	0
	2001	0.14	0.15	0.22	0.08	0.08	4.25	0.17	0
	<i>Change*</i>	0.00	-0.03	-0.03	0.00	0.00	-2.77	-0.15	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
65	1999	0.11	0.10	0.36	0.12	0.18	7.05	0.10	0
	2000	0.11	0.10	0.36	0.12	0.18	6.42	0.09	0
	2001	0.11	0.10	0.36	0.12	0.18	6.91	0.12	0
	2002	0.11	0.10	0.36	0.12	0.18	6.49	0.36	0
	2003	0.11	0.10	0.36	0.12	0.18	6.80	0.07	0
	2004	0.11	0.10	0.36	0.12	0.18	6.31	0.09	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.74</i>	<i>-0.01</i>	
66	1999	0.14	0.14	0.27	0.09	0.12	13.72	2.08	0
	2000	0.14	0.14	0.27	0.09	0.12	10.72	2.67	0
	2001	0.14	0.15	0.26	0.09	0.12	9.55	2.24	0
	2002	0.13	0.15	0.25	0.09	0.12	9.44	3.17	0
	2003	0.12	0.14	0.21	0.07	0.10	8.92	2.73	0
	2004	0.12	0.14	0.21	0.07	0.10	8.44	2.46	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.00</i>	<i>-0.06</i>	<i>-0.02</i>	<i>-0.02</i>	<i>-5.28</i>	<i>0.38</i>	
67	1999	0.15	0.13	0.33	0.16	0.17	11.42	0.49	0
	2000	0.15	0.13	0.33	0.16	0.17	9.82	1.00	0
	2001	0.15	0.13	0.33	0.16	0.17	9.02	0.72	0
	2004	0.15	0.13	0.32	0.16	0.17	8.18	0.01	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.01</i>	<i>0.00</i>	<i>0.00</i>	<i>-3.24</i>	<i>-0.47</i>	
68	1999	0.24	0.21	0.24	0.07	0.14	7.55	0.14	0
	2000	0.23	0.16	0.24	0.07	0.14	5.01	0.16	0
	2001	0.23	0.15	0.20	0.07	0.10	7.91	0.06	0
	<i>Change*</i>	<i>0.00</i>	<i>-0.06</i>	<i>-0.04</i>	<i>0.00</i>	<i>-0.05</i>	<i>0.36</i>	<i>-0.08</i>	
69	1999	0.18	0.20	0.37	0.18	0.16	6.71	0.21	0
	2000	0.18	0.20	0.37	0.18	0.16	5.28	0.15	0
	2001	0.19	0.19	0.39	0.18	0.17	7.63	0.38	0
	2002	0.19	0.18	0.40	0.19	0.17	7.01	0.10	0
	2003	0.17	0.17	0.34	0.16	0.13	7.70	0.37	0
	2004	0.17	0.19	0.28	0.15	0.05	6.21	0.17	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.00</i>	<i>-0.09</i>	<i>-0.02</i>	<i>-0.11</i>	<i>-0.50</i>	<i>-0.04</i>	
70	1999	0.21	0.16	0.28	0.10	0.14	8.63	2.28	0
	2000	0.21	0.16	0.28	0.10	0.14	9.21	2.79	0
	2001	0.22	0.15	0.31	0.10	0.16	7.86	1.86	0
	2002	0.22	0.15	0.31	0.10	0.16	8.39	1.67	0
	2003	0.22	0.15	0.31	0.10	0.16	7.47	1.95	0
	<i>Change*</i>	<i>0.01</i>	<i>-0.01</i>	<i>0.03</i>	<i>0.00</i>	<i>0.01</i>	<i>-1.16</i>	<i>-0.33</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
71	1999	0.16	0.19	0.24	0.17	0.10	8.13	0.36	0
	2000	0.16	0.19	0.23	0.17	0.09	8.33	0.71	0
	2001	0.17	0.19	0.24	0.17	0.10	7.29	0.52	0
	2002	0.17	0.19	0.24	0.17	0.10	7.27	0.86	0
	2003	0.18	0.20	0.23	0.16	0.09	6.56	1.98	0
	2004	0.18	0.20	0.21	0.15	0.09	8.16	1.09	0
	Change*	0.02	0.01	-0.03	-0.02	0.00	0.03	0.72	
72	2002	0.15	0.16	0.13	0.08	0.05	5.35	0.03	0
	2003	0.17	0.17	0.13	0.08	0.05	6.80	0.01	0
	2004	0.17	0.17	0.13	0.08	0.05	6.11	0.00	0
	Change*	0.01	0.02	0.00	0.01	0.00	0.76	-0.03	
73	1999	0.11	0.15	0.23	0.08	0.11	5.91	0.17	0
	2000	0.11	0.15	0.23	0.08	0.11	6.68	0.44	0
	2001	0.12	0.15	0.21	0.08	0.09	5.50	0.34	0
	2002	0.13	0.16	0.22	0.08	0.09	5.43	0.12	0
	2003	0.13	0.16	0.22	0.08	0.09	6.54	0.20	0
	2004	0.13	0.16	0.22	0.08	0.09	5.85	0.05	0
	Change*	0.02	0.01	-0.01	0.00	-0.02	-0.06	-0.12	
74	1999	0.20	0.17	0.24	0.20	0.12	8.29	0.38	0
	2000	0.20	0.17	0.24	0.20	0.12	9.84	0.79	0
	2001	0.20	0.17	0.23	0.20	0.12	9.04	0.61	0
	2002	0.17	0.17	0.24	0.20	0.09	7.61	1.67	0
	2003	0.16	0.17	0.22	0.20	0.08	8.10	1.26	0
	2004	0.16	0.17	0.25	0.20	0.09	7.65	1.47	0
	Change*	-0.03	0.00	0.01	0.00	-0.03	-0.64	1.10	
75	1999	0.06	0.14	0.08	0.07	0.04	5.23	0.09	0
	2000	0.06	0.14	0.08	0.07	0.04	7.92	0.10	0
	Change*	0.00	0.00	0.00	0.00	0.00	2.70	0.00	
76	2000	0.13	0.18	0.13	0.16	0.05	4.65	0.05	0
	2001	0.13	0.18	0.13	0.16	0.05	5.71	0.03	0
	2002	0.13	0.18	0.13	0.16	0.05	5.57	0.03	0
	2003	0.13	0.18	0.13	0.16	0.05	5.91	0.03	0
	2004	0.13	0.18	0.13	0.16	0.05	5.60	0.07	0
	Change*	0.00	0.00	0.00	0.00	0.00	0.95	0.02	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
77	1999	0.18	0.18	0.18	0.12	0.08	9.59	0.86	0
	2000	0.17	0.18	0.20	0.13	0.09	8.73	1.31	0
	2001	0.17	0.17	0.19	0.13	0.09	8.78	0.70	0
	2002	0.17	0.17	0.20	0.13	0.09	7.03	0.45	0
	2003	0.16	0.17	0.23	0.16	0.10	8.52	2.00	0
	2004	0.16	0.17	0.23	0.16	0.10	8.56	1.92	0
	<i>Change*</i>	<i>-0.02</i>	<i>-0.01</i>	<i>0.05</i>	<i>0.03</i>	<i>0.02</i>	<i>-1.03</i>	<i>1.06</i>	
78	2001	0.08	0.20	0.18	0.05	0.11	3.81	1.71	1
	2002	0.08	0.20	0.18	0.05	0.11	7.89	0.33	1
	2003	0.08	0.20	0.18	0.05	0.11	6.75	0.31	1
	2004	0.08	0.20	0.18	0.05	0.11	7.87	0.47	1
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>4.05</i>	<i>-1.24</i>	
79	1999	0.18	0.18	0.19	0.08	0.08	6.09	0.15	0
	2000	0.18	0.18	0.19	0.08	0.08	6.04	0.11	0
	2001	0.20	0.16	0.14	0.08	0.05	5.20	0.02	0
	2002	0.20	0.16	0.14	0.08	0.05	6.35	0.08	0
	2003	0.20	0.16	0.14	0.08	0.05	5.84	0.00	0
	2004	0.20	0.16	0.14	0.08	0.05	6.10	0.00	0
	<i>Change*</i>	<i>0.02</i>	<i>-0.01</i>	<i>-0.05</i>	<i>0.01</i>	<i>-0.03</i>	<i>0.01</i>	<i>-0.15</i>	
80	1999	0.16	0.16	0.20	0.10	0.10	11.16	0.58	0
	2000	0.16	0.16	0.20	0.10	0.10	10.87	1.41	0
	2001	0.17	0.16	0.20	0.10	0.10	10.78	0.44	0
	2002	0.18	0.15	0.18	0.10	0.10	10.22	2.61	0
	2003	0.18	0.15	0.18	0.10	0.10	10.27	0.43	0
	2004	0.18	0.15	0.18	0.10	0.10	10.71	0.85	0
	<i>Change*</i>	<i>0.01</i>	<i>-0.01</i>	<i>-0.02</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.45</i>	<i>0.26</i>	
81	1999	0.15	0.17	0.20	0.11	0.05	5.98	0.03	0
	2000	0.15	0.17	0.20	0.11	0.05	6.19	0.07	0
	2001	0.14	0.16	0.25	0.12	0.06	5.86	0.28	0
	2002	0.12	0.19	0.22	0.11	0.06	7.03	0.06	0
	2003	0.12	0.19	0.22	0.11	0.06	7.60	0.01	0
	2004	0.12	0.19	0.22	0.11	0.06	7.74	0.02	0
	<i>Change*</i>	<i>-0.03</i>	<i>0.02</i>	<i>0.01</i>	<i>0.00</i>	<i>0.01</i>	<i>1.76</i>	<i>-0.01</i>	
82	1999	0.15	0.19	0.18	0.06	0.15	7.32	1.23	0
	2000	0.15	0.19	0.18	0.06	0.15	7.35	1.51	0
	2001	0.15	0.17	0.15	0.05	0.09	5.61	0.36	0
	2002	0.15	0.17	0.15	0.05	0.09	5.35	0.12	0
	2003	0.15	0.17	0.15	0.05	0.09	6.10	0.03	0
	2004	0.15	0.17	0.15	0.05	0.09	5.81	0.03	0
	<i>Change*</i>	<i>0.01</i>	<i>-0.02</i>	<i>-0.03</i>	<i>-0.01</i>	<i>-0.06</i>	<i>-1.51</i>	<i>-1.20</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
83	1999	0.11	0.21	0.26	0.15	0.10	7.53	0.34	0
	2000	0.11	0.21	0.26	0.15	0.10	7.31	0.17	1
	2001	0.12	0.19	0.30	0.14	0.17	7.40	0.18	1
	2002	0.12	0.18	0.31	0.15	0.16	7.64	0.53	1
	2003	0.12	0.18	0.31	0.15	0.16	6.66	0.34	1
	2004	0.12	0.18	0.31	0.15	0.16	7.56	0.51	1
	Change*	0.01	-0.03	0.06	-0.01	0.06	0.04	0.16	
84	1999	0.17	0.14	0.27	0.18	0.08	7.29	1.58	0
	2000	0.17	0.14	0.27	0.18	0.08	6.98	0.28	0
	2001	0.17	0.14	0.27	0.18	0.08	5.15	0.01	0
	2002	0.17	0.14	0.27	0.18	0.08	7.63	0.57	0
	2003	0.16	0.15	0.30	0.20	0.09	7.12	0.55	0
	2004	0.12	0.10	0.13	0.18	0.05	5.82	0.01	0
	Change*	-0.05	-0.04	-0.14	0.00	-0.04	-1.47	-1.57	
85	1999	0.17	0.17	0.20	0.19	0.07	5.22	0.03	0
	2000	0.17	0.17	0.20	0.19	0.07	4.52	0.04	0
	2001	0.17	0.17	0.20	0.19	0.07	3.83	0.02	0
	2002	0.17	0.17	0.20	0.19	0.07	4.63	0.01	0
	2003	0.17	0.17	0.20	0.19	0.07	4.96	0.01	0
	2004	0.17	0.17	0.20	0.19	0.07	5.07	0.06	0
	Change*	0.00	0.00	0.00	0.00	0.00	-0.15	0.03	
86	1999	0.05	0.08	0.21	0.06	0.12	6.93	1.38	0
	2000	0.05	0.08	0.21	0.06	0.12	7.27	1.13	0
	2001	0.11	0.08	0.20	0.05	0.12	6.87	1.08	0
	2002	0.11	0.08	0.20	0.05	0.12	6.86	0.17	0
	2003	0.11	0.08	0.20	0.05	0.12	7.44	0.08	0
	2004	0.11	0.08	0.20	0.05	0.12	6.06	0.01	0
	Change*	0.06	0.00	-0.01	0.00	0.00	-0.87	-1.37	
87	1999	0.17	0.20	0.22	0.14	0.10	8.59	0.34	0
	2000	0.17	0.21	0.23	0.15	0.11	6.90	0.23	0
	2001	0.19	0.21	0.25	0.16	0.13	7.36	0.46	0
	2002	0.17	0.21	0.23	0.15	0.11	6.67	0.91	0
	2003	0.17	0.21	0.23	0.15	0.11	7.17	0.37	0
	Change*	0.00	0.01	0.01	0.01	0.00	-1.42	0.03	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
88	1999	0.15	0.12	0.32	0.17	0.12	5.45	0.20	0
	2000	0.15	0.12	0.32	0.17	0.12	5.16	0.18	0
	2001	0.15	0.12	0.32	0.17	0.12	4.26	0.30	0
	2002	0.15	0.12	0.32	0.17	0.12	3.01	0.01	0
	2003	0.15	0.12	0.32	0.17	0.12	5.16	0.23	0
	2004	0.14	0.12	0.32	0.16	0.11	4.42	0.23	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.00</i>	<i>0.01</i>	<i>-0.01</i>	<i>-0.01</i>	<i>-1.03</i>	<i>0.03</i>	
89	1999	0.14	0.16	0.27	0.11	0.06	8.44	0.71	0
	2000	0.14	0.16	0.27	0.11	0.06	6.55	0.10	0
	2001	0.14	0.17	0.25	0.10	0.07	7.70	0.27	0
	2002	0.14	0.17	0.25	0.10	0.07	6.74	0.49	0
	2003	0.14	0.17	0.25	0.10	0.07	8.32	0.19	0
	2004	0.14	0.17	0.25	0.10	0.07	7.18	0.15	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.02</i>	<i>-0.01</i>	<i>0.01</i>	<i>-1.27</i>	<i>-0.56</i>	
90	1999	0.17	0.16	0.24	0.19	0.09	5.92	0.22	0
	2000	0.17	0.16	0.24	0.19	0.09	5.93	0.12	0
	2001	0.17	0.16	0.24	0.19	0.09	6.10	0.28	0
	2002	0.17	0.16	0.25	0.20	0.10	5.49	0.02	0
	<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>0.01</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.43</i>	<i>-0.20</i>	
91	1999	0.17	0.16	0.30	0.11	0.17	7.22	0.12	0
	2000	0.17	0.16	0.30	0.11	0.17	8.22	0.07	0
	2001	0.18	0.16	0.30	0.12	0.16	8.16	0.12	0
	2002	0.17	0.15	0.29	0.11	0.15	9.36	0.06	0
	2003	0.17	0.15	0.29	0.11	0.15	9.03	0.14	0
	2004	0.16	0.14	0.19	0.11	0.11	7.02	0.07	0
	<i>Change*</i>	<i>-0.01</i>	<i>-0.02</i>	<i>-0.11</i>	<i>0.00</i>	<i>-0.06</i>	<i>-0.20</i>	<i>-0.05</i>	
92	1999	0.12	0.14	0.33	0.24	0.15	6.99	0.02	0
	2000	0.12	0.14	0.33	0.24	0.16	5.95	0.02	0
	2001	0.12	0.15	0.33	0.23	0.16	6.25	0.04	0
	2002	0.12	0.19	0.29	0.22	0.13	7.38	0.11	0
	2003	0.12	0.19	0.26	0.21	0.12	7.72	0.08	0
	2004	0.12	0.20	0.24	0.20	0.11	7.15	0.06	0
	<i>Change*</i>	<i>0.00</i>	<i>0.06</i>	<i>-0.08</i>	<i>-0.04</i>	<i>-0.05</i>	<i>0.16</i>	<i>0.04</i>	
93	1999	0.12	0.14	0.28	0.12	0.13	7.28	0.08	0
	2000	0.12	0.14	0.28	0.12	0.13	8.01	0.19	0
	2001	0.12	0.14	0.28	0.12	0.13	6.91	0.23	0
	2002	0.12	0.14	0.28	0.12	0.13	5.99	0.05	0
	2003	0.12	0.14	0.28	0.12	0.13	7.59	0.04	0
	2004	0.13	0.13	0.12	0.11	0.07	6.67	0.03	0
	<i>Change*</i>	<i>0.01</i>	<i>-0.02</i>	<i>-0.15</i>	<i>-0.01</i>	<i>-0.06</i>	<i>-0.61</i>	<i>-0.05</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
94	1999	0.15	0.17	0.22	0.09	0.11	6.23	0.09	0
	2000	0.15	0.17	0.22	0.09	0.11	6.37	0.04	0
	2001	0.15	0.17	0.22	0.09	0.11	5.96	0.03	0
	2002	0.16	0.18	0.24	0.10	0.12	6.57	0.12	0
	2003	0.16	0.22	0.13	0.11	0.06	7.02	0.05	0
	2004	0.16	0.22	0.13	0.11	0.06	6.44	0.02	0
	<i>Change*</i>	<i>0.01</i>	<i>0.05</i>	<i>-0.09</i>	<i>0.02</i>	<i>-0.04</i>	<i>0.20</i>	<i>-0.07</i>	
95	1999	0.20	0.18	0.29	0.21	0.16	12.62	0.47	0
	2000	0.20	0.18	0.29	0.20	0.16	10.28	1.16	0
	2001	0.20	0.19	0.31	0.21	0.16	9.55	0.85	0
	2002	0.19	0.17	0.33	0.21	0.15	9.25	0.83	0
	2003	0.17	0.15	0.31	0.18	0.12	8.82	1.15	0
	2004	0.19	0.18	0.21	0.20	0.09	8.01	0.66	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.00</i>	<i>-0.09</i>	<i>-0.01</i>	<i>-0.07</i>	<i>-4.60</i>	<i>0.19</i>	
96	1999	0.13	0.18	0.26	0.14	0.19	5.30	0.03	0
	2000	0.13	0.17	0.26	0.14	0.19	5.70	0.02	0
	2001	0.15	0.13	0.25	0.12	0.12	4.77	0.03	0
	2002	0.15	0.12	0.25	0.12	0.12	5.07	0.03	0
	2003	0.15	0.12	0.25	0.12	0.12	4.87	0.04	0
	2004	0.15	0.12	0.25	0.12	0.12	5.65	0.00	0
	<i>Change*</i>	<i>0.02</i>	<i>-0.05</i>	<i>-0.02</i>	<i>-0.02</i>	<i>-0.07</i>	<i>0.35</i>	<i>-0.03</i>	
97	1999	0.14	0.14	0.27	0.08	0.05	6.35	0.23	0
	2000	0.16	0.16	0.30	0.08	0.06	5.82	0.30	0
	<i>Change*</i>	<i>0.02</i>	<i>0.02</i>	<i>0.03</i>	<i>0.00</i>	<i>0.01</i>	<i>-0.54</i>	<i>0.08</i>	
98	2004	0.17	0.17	0.33	0.15	0.13	8.98	3.38	0
<i>Change*</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>		
99	1999	0.16	0.12	0.34	0.15	0.16	7.43	0.32	0
	2000	0.16	0.12	0.34	0.15	0.16	6.99	0.26	0
	2001	0.16	0.12	0.34	0.15	0.16	8.01	0.48	0
	2002	0.16	0.12	0.34	0.15	0.16	6.81	0.37	0
	2003	0.15	0.13	0.32	0.16	0.17	6.59	0.17	0
	<i>Change*</i>	<i>-0.01</i>	<i>0.01</i>	<i>-0.03</i>	<i>0.01</i>	<i>0.01</i>	<i>-0.84</i>	<i>-0.16</i>	
100	1999	0.19	0.16	0.33	0.22	0.16	11.23	0.44	0
	2000	0.19	0.16	0.33	0.22	0.16	12.39	0.88	0
	2001	0.20	0.16	0.33	0.23	0.16	11.93	1.77	0
	2002	0.20	0.18	0.28	0.23	0.16	6.49	1.05	0
	2003	0.20	0.19	0.29	0.23	0.16	8.74	0.75	0
	2004	0.18	0.19	0.32	0.23	0.17	8.61	1.35	0
	<i>Change*</i>	<i>-0.02</i>	<i>0.03</i>	<i>-0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>-2.62</i>	<i>0.92</i>	

Appendix D2 (continued). Description of School Zone Contexts over Time

School	Year	Stability SD	Ethnic Diversity SD	Family Disruption SD	Social Advantage SD	Economic Deprivation SD	Number of Absences	Number of Disciplinary Events	Enhanced Option School
101	1999	0.17	0.17	0.29	0.19	0.12	6.28	0.04	0
	2000	0.17	0.17	0.29	0.19	0.12	6.78	0.11	0
	2001	0.17	0.17	0.29	0.19	0.12	6.41	0.13	0
	2002	0.17	0.17	0.30	0.20	0.13	7.22	0.16	0
	2003	0.17	0.17	0.30	0.20	0.13	7.70	0.12	0
	2004	0.19	0.19	0.36	0.20	0.13	7.08	0.16	0
	Change*	0.02	0.02	0.07	0.02	0.01	0.79	0.12	
102	1999	0.21	0.19	0.27	0.17	0.15	14.13	2.31	0
	2000	0.21	0.19	0.27	0.17	0.15	11.54	0.46	0
	2001	0.21	0.19	0.27	0.17	0.15	11.13	1.98	0
	2002	0.21	0.18	0.29	0.13	0.14	11.56	2.44	0
	2003	0.20	0.18	0.29	0.13	0.14	13.52	1.50	0
	2004	0.19	0.16	0.28	0.12	0.15	12.30	2.33	0
	Change*	-0.01	-0.03	0.01	-0.05	0.00	-1.82	0.02	
103	1999	0.10	0.10	0.12	0.06	0.06	6.90	0.15	0
	2000	0.10	0.10	0.12	0.06	0.06	6.99	0.09	0
	2001	0.15	0.15	0.24	0.22	0.17	6.62	0.23	0
	2002	0.14	0.15	0.27	0.21	0.16	6.40	0.05	0
	2003	0.14	0.15	0.27	0.21	0.16	6.77	0.06	0
	2004	0.14	0.15	0.27	0.21	0.16	5.83	0.03	0
	Change*	0.04	0.06	0.15	0.15	0.11	-1.06	-0.12	
104	1999	0.18	0.19	0.27	0.18	0.15	13.07	1.21	0
	2000	0.18	0.19	0.27	0.18	0.15	11.60	2.41	0
	2001	0.18	0.19	0.23	0.15	0.13	9.98	1.80	0
	2002	0.17	0.19	0.23	0.14	0.12	8.47	1.11	0
	2003	0.17	0.19	0.23	0.14	0.12	9.00	0.40	0
	2004	0.17	0.19	0.23	0.14	0.12	9.40	0.59	0
	Change*	-0.01	0.00	-0.03	-0.04	-0.03	-3.67	-0.62	
District									
t	1999	0.157	0.163	0.257	0.134	0.118	7.66	0.655	—
	2000	0.157	0.163	0.253	0.134	0.116	7.319	0.572	—
	2001	0.159	0.159	0.251	0.133	0.111	7.060	0.572	—
	2002	0.155	0.160	0.245	0.135	0.108	7.045	0.559	—
	2003	0.155	0.161	0.240	0.132	0.106	7.388	0.596	—
	2004	0.153	0.160	0.232	0.131	0.102	7.200	0.606	—
	All Year	0.156	0.161	0.246	0.133	0.111	7.277	0.593	—
Avg. Change*	-0.004	-0.003	-0.026	-0.004	-0.016	-0.460	-0.049	—	

*Change is calculated by subtracting values from 2004 from the baseline values for 1999. When a school was not opened in 1999 or 2004, values for the latest year were subtracted from values in the earliest year.

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