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The Geographical Distribution of Teacher Absenteeism in Large Urban School District Settings: Implications for School Reform Efforts Aimed at Promoting Equity and Excellence in Education

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Abstract

School reform efforts aimed at promoting equity and excellence at urban school settings are heavily dependent upon the quality of teaching personnel that are used to deliver the instructional program. Social Justice and other public policy issues related to equity and excellence at urban schools have begun to examine the impact that teacher absenteeism, and by extension the reliance on substitute teachers to deliver instructional might have on educational attainment. This study

combines school district data gathering mechanisms on teacher absence rates at school sites with Geographical Information Systems (G.I.S.) to map the association between a school's geographical environmental space and the propensity for teacher absence. The disparity between teaching resources as delivered by the school district vs. teacher resources as actually received by students in the classroom via teacher absenteeism is examined in the context of schools located in positive (high income) and negative (low income) geographical space. The study concludes that there is a strong association between the geographical quality of the school site setting, teacher absenteeism, and the reliance on substitute teachers to deliver instructional programs. Disparity in teacher absenteeism rates across large urban geographical areas threatens the promotion of equity and excellence in the schools by attenuating or lessening the effect of school resources to support instruction and amplifying the risk factors of students in the classroom.

Introduction

Assemble all the worst things in America- gambling, liquor, cigarettes, and toxic fumes, sewage, waste disposal, prostitution- put it all together. Then you dump it on black people and their schools. (Kozol, *Savage Inequalities*, p. 17)

The above insight is from a book that attempts to document the bleak environmental or geographical space context of some of our urban school settings and its possible impact on the community- especially children and adolescents that live in the community. Schools located in what might be termed, Negative Geographical Space or N.G.S. (Bruno,2000) are particularly troublesome with regard to promoting equity and excellence in their instructional programs. One educational research finding that seems to remain constant is that school reform efforts aimed at promoting equity and excellence in the schools are strongly dependent upon the quality of teaching personnel needed to deliver the instructional program to students in the classroom.

It is common knowledge that urban classroom teachers also tend to work under more stressful working conditions therefore use their sick days more frequently. In general, urban classroom teachers, teach more students a day, teach less academically prepared students, teach in more dangerous, high crime geographical areas of a large urban area, and generally lack teaching and instructional materials to deliver a quality instructional program. In essence, the geographical or environmental context of these school working conditions, even more that student poverty, are strongly associated with teacher attendance at the school site, their morale as professional educators, and a their sense of teaching efficacy in the classroom (Corcoran, Walker, & White, 1988).

With its [the urban school's] outdated textbooks and crumbling, dirty facilities, it operated in conditions that would not have been tolerated in other mixed or predominantly white communities. (Diver-Stamnes, 1995, p. 17)

The issue of teacher absenteeism is rapidly becoming an important topic area of

educational policy analysis largely because of its direct impact on the quality of instruction and its association with poor participation in school reform efforts. (Ehenberg, Rees, and Ehenberg, 1991). In an effort to explain the why to teacher absenteeism, some research studies have also examined the role of gender and its association with teacher absence (Scott & McClellan, 1990). All of these research efforts are directed towards developing a better understanding of the problem of teacher absenteeism and more importantly the propensity of teachers to use all of their available sick days as an "entitlement" of the profession.

Because of high levels of teacher absence and the extensive use and reliance on substitute teachers to deliver instructional programs there is a strong attenuation or a lessening of the impact of school resources that are devoted to instruction. There is also a corresponding amplification of student risk factors such as poverty. These two major consequences of teacher absenteeism, attenuation of school resources and the amplification of student risk factors, make the teacher absenteeism issue one of extreme importance for urban schools. Of particular importance is the impact that teacher absence might have on school reform efforts aimed at promoting equity and excellence at these schools. From a social justice perspective, another important issue to examine is if there is any systematic bias in the distribution of teacher absenteeism with higher teacher absenteeism in the low-income areas of large urban school districts. In essence, because educational researchers have suggested that the effectiveness of substitute teachers is far below that of regular teachers (Olsen, 1971). Teacher absenteeism, by extension, has implications for school reform and the quality of the instructional program at a school setting and policy issues dealing with improving equity and excellence in the schools.

In many instances in urban school settings, a substitute teacher cannot be found and a regular classroom teacher to cover the classroom time period from their free or preparation period. (Locker, 1999, Mckay,1999) . Finally from a purely financial perspective, teacher absenteeism is extremely expensive and substitute teacher salaries have to be paid in addition to regular teacher salaries thus adding to the per pupil cost of education. In essence, there is an attenuation or lessening of school resources needed to support instructional programs at these schools- a situation that would not be tolerated at predominantly white, suburban schools.

Of course there are many legitimate reasons for a teacher to be absent. Typical reasons include illness, professional development, personal reasons, family bereavement, etc. (Alberta Teachers Association, 1998). Sometimes as teachers approach retirement age and have accumulated sick days with the school district, they begin to take their takes off to pursue their own personal interests or outside "moonlighting" activities. Since in most urban school settings each teacher is permitted to "bank" 10 days of sick leave per year, the total amount of sick days for a teacher can rapidly accumulate over a career in the classroom. What is most troublesome for educational policy makers is when classroom teachers at certain school sites begin to view their absenteeism from the classroom as an entitlement that goes with the teaching position. The sense of entitlement has enormous implications for the cost of instruction. Consider the following example:

Assume a **180 day** school year:

- **100 teachers at \$75,000 (salary plus benefits) = \$7,500,000 or \$416 per day per teacher**
- **Assume that each teacher takes 10 days of sick leave per year = 1000 teacher days missed or 10% of \$7,500,000 = \$750,000 of resources not being received and replaced with a substitute teacher at \$200 per day = \$200,000**
- **The net loss to students is \$7,500,000-\$750,000-\$200,000 = \$6,550,000**
(thus the disparity of resources actually received by students in the classroom can be quite large and significantly impact on the quality of the instructional program and threaten efforts aimed at promoting equity and excellence in the schools).

In addition to the attenuation of school resources towards instruction, when this sense of entitlement is most prevalent or biased towards schools located in negative or low-income geographical space the very students most in need of instructional quantity and quality are harmed. The challenges posed to teachers and educational leaders between the quality of geographical space or school site location, poverty, and school issues have also been explored in educational research studies. (Bruno, 2000; Lippenant, Burns, McArthur, 1996).

Purpose of Study

The purpose of this study extends these research efforts to examine the quality of geographical space and teacher absence linkage since it indirectly examines how school site location impacts on access to educational opportunity. Specifically this study examines the association between the quality of geographical space or the environmental context of the school setting and the rates of teacher absenteeism at the school site for all of the high schools located in a large urban.

The Substitute Teacher in Urban Settings

Equality of educational opportunity at a school exists when a child's educational opportunity does not depend upon either his parent's economic circumstances or his location within the state (Wise, 1972, p. 146)

As previously noted, issues related to quality of educational opportunity and the related issue of equity and excellence at urban schools strongly depend on the quality of classroom instructional programs. The reliance on substitute teachers to deliver instruction, because of teacher absence has great significance for these urban students because parents or the economic circumstances of these students make the school setting the only source of educational development. Instructional programs delivered mainly by substitute teachers, non-credential teachers, inexperienced teachers, etc. therefore are extremely important. Some of these issues have been previously and non-empirically addressed in various books on the problems of urban school setting. (Kozol, 1992).

Since the quality of substitute teachers and not fully interchangeable with the quality of the regular classroom teacher at most school settings, the issue of teacher absence has both practical (in terms of cost) and theoretical (in terms of equity) significance for the educational policy maker.

The regular high school classroom teacher is required to obtain a bachelor's degree in a same field that is related to his or her teaching assignment. This could range from the sciences, such as chemistry, to education such as special ed., to mathematics such as algebra II, to the fine arts such as painting. The regular classroom teacher is also required to complete two years of a teacher training program in a post graduate department of an accredited institution. While there are some exceptions, substitute teachers are typically under qualified to teach in the field of the regular classroom teacher, but are expected to fill the shoes of any regular teacher, whatever the subject matter field of the absent teacher (chemistry, mathematics, physics).

In some school districts, the minimum education requirement level for substitute teaching is set at extremely low professional levels. For example, in the state of Utah, all a substitute needs to teach is a high school degree and no criminal record. Fairfax County, Va., demands only two years of college for its substitutes. (Streisand & Toch, 1998). In recent studies, it was found that a large number of teacher-training graduates failed the recently introduced teacher-licensing exam. Last spring, nearly sixty percent of Massachusetts' education graduates failed a basic reading, writing, and subject matter test. A recent nationwide study by the Educational Testing Service found similar high rates of failure. (Streisand & Tock, 1998).

It is also noteworthy that most substitute teachers are usually not equipped with lesson plans for the classroom periods that they cover and typically show a film or do other "filling time" classroom activities. In the substitute teacher chat room found on the Internet, playing word bingo with the kids was a highly recommended form of filling class time. In essence, these substitute teachers are really not "substitutes" in an educational sense, but according to students highly paid "babysitters" to students that need quality teachers the most and require greater amounts of formal instructional time.

This study will focus on teacher absenteeism at the high school level of instruction because this level is most directly associated with equal educational opportunity via AP courses, preparing students for post high school graduation education exit exams from high school, and general preparation for post secondary education. It is also the setting where students at one of the most important stages of their psychosocial development require time connections with their classroom teachers for purposes of modeling, receiving vision for a future, advice, and counseling.

Finally, the role of geographical space on teacher absenteeism is often neglected as a variable in educational policy studies. Geographical space has its own unique qualities with regard to understanding behaviors such as teacher absenteeism. For example there is

- Location of the school setting: Where is the school located in geographical space? Where is the exact location and what is the land use surrounding the school setting i.e. the quality of the geographical space since it might impact on the quality of the instructional program, teacher turnover, and teacher absenteeism.

- Livability of the geographical space surrounding the school: What is it like to live and be schooled in the geographical space of the school setting? Since most teachers don't live in the same geographical space as the school setting there is a tendency to ignore what it is like for students to live and study in the area. The social well being of the community, crime rate, extent of graffiti, etc. all impact on the livability of the geographical space and working conditions in the classroom. It also impacts on student preparation for class and attitudes towards school.
- Likeability of school site area: How do other people in the community relate to their space and how is the pride in the community? Community well being, quality neighborhoods, and the support for schools are linked and have a major impact on the instructional program and what is expected from teachers and directly impacts on the motivation to teach.
- Locus of Control: How does this geographical space dominate others in the area or is dominate with regard to quality? How are ideas, people, and goods moved into and out of the geographical space. What is the investment in the community, resident turnover, etc and how do others view the geographical space. Conditions where the geographical space is considered as negative implies that the space has little attractiveness for either living or working. This characteristic relates to teacher turnover and the sense of entitlement with regard to absence from the classroom. This characteristic of geographical space might affect teacher absenteeism and teacher turnover.

This study combines recently developed data gathering mechanism on teacher absence rates at high school sites in a large urban school setting with Geographical Information Systems (G.I.S.). The purpose of this study is to map the association between the school's geographical space or physical environment (income level) and the propensity for teacher absence. The disparity between instructional resources as delivered vs. instructional resources as actually received by students in the classroom is examined in the context of a large urban school setting.

Specifically, the purpose of this study is twofold.

- First, to examine the geographical association between the quality of negative geographical space of a high school setting in a large urban school district (median family income in the area) and the rates of teacher absenteeism.
- Second, to examine how teacher absenteeism measures and the need for substitute teachers (filled and unfilled) are associated with school performance at the school site.

Methods

This study used teacher absence information collected at all high schools in a large urban school district. The average absence per teacher was especially noted along with information regarding the number of unfilled substitute teacher positions. G.I.S. methods were then used to plot these school settings by those above and below a threshold 8.0 days of teacher absence per year per teacher at the school site. The quality of the geographical space surrounding the school setting or the median level of income for the zip code of the school setting was then applied to the map of school sites that were

color-coded by high and low rates of teacher absenteeism. Finally, other important variables at the school site that might be related to substitute teachers, such as academic quality as measured by the Academic Performance Indicator or API, were also collected for each school site.

In this study the following variables were collected at each high school site in the school district.

Table 1
Description of Variables

Description	Variable
How often a teacher is absent from the classroom	Teacher absenteeism rate
Teachers without fully state certified credentials—many teaching in areas with no expertise	Number w/o credential
Teachers with less than 2 years of experience in the classroom- usually younger teachers	Number < 2 yrs experience
Number of requests to take the place of a classroom teacher	Substitute teacher requests
Number of times a substitute teacher cannot be found for the classroom	Substitute requests unfilled
Number of students leaving school and not entering any other educational program	Drop out rate
Number of students that leave before the end of the school year	Transiency percent
Number of times a students is asked to leave school for disciplinary reasons	Number suspensions
Number of times a students is asked to go to a different school- usually a continuation school	Opportunity transfers
Police reported crimes against property	Crimes against property
Police reported crimes against individuals	Crimes against people
Number of teachers needed to service student educational needs that are left unfilled	Number of unfilled teaching position
Level of academic performance at the school	Academic Performance Index

Findings

Note in Table 2 that the average absenteeism for the school district was 8.27 days per teacher per year. Note that this figure ranges from a low of 6.3 to a high of 11.4. Note also that the number of unfilled substitute teacher positions ranged from 9 to 306. The impact that geographical space might have on these statistics will be explored in a later

section of the study.

Table 2
Descriptive Data for Senior High Schools in a Large Urban Area
(n=49)

Variable	Mean	St. Dev.	Min.	Max.
Teacher absenteeism rate	8.27	1.06	6.33	11.44
Number w/o credential	26.84	10.8	8	61
Number < 2 yrs experience	46.31	14.6	19	89
Substitute teacher requests	1447	590.5	193	2571
Substitute requests unfilled	85.39	56.6	9	306
Drop out rate	5.53	3.2	.47	15.7
Transiency percent	37.2	12.4	16.7	77.1
Number suspensions	534.8	345.2	23	1608
Opportunity transfers	76.22	48.7	2	272
Crimes against property	11.27	9.2	2	54
Crimes against people	78.24	34.6	37	199
Number of unfilled teaching position	4.27	5.1	0	21
Academic Performance Index	531.82	83.3	370	737

Note from Table 3, the high inter-correlation between teacher absence rates and academic performance ($r = .54$) and the amount of unfilled substitute teacher positions ($r = .45$)

Table 3
Inter-correlation of All Variables with Teacher Absenteeism Rates
(= $p < .01$)**

Variable	Correlation
Teacher absenteeism rate	1.00
Number w/o credential	.37**
Number < 2 yrs experience	.24
Substitute teacher requests	-.01
Substitute requests unfilled	.45**
Drop out rate	.40**
Transiency percent	.50**

Number suspensions	-.04
Opportunity transfers	.19
Crimes against property	.44**
Crimes against people	.64**
Number of unfilled teaching position	.52**
Academic Performance Index	-.54**

With the complete address for each high school site, the exact geographical location of a school site was identified to within five feet of its actual location. When the median family income for the zip code that contains the school site was added, a pictorial representation of the quality of geographical space and output indicators (especially teacher absenteeism) was visually depicted.

Figure 1 depicts the large urban geographical area while Figure 2 is a plot of the location of school sites with teacher absenteeism above 8.00. Figure 3 is a plot of the location of school sites with teacher absenteeism rates both above and below 8.0, while Figure 4 is the same plot with the quality of the geographical space (median level of income) overlaid on the map. Figures 5 and 6 specifically examine school sites with above and below 8.0 teacher absence rates and Academic Performance Indices (API) above and below the 500 point average for the school district.

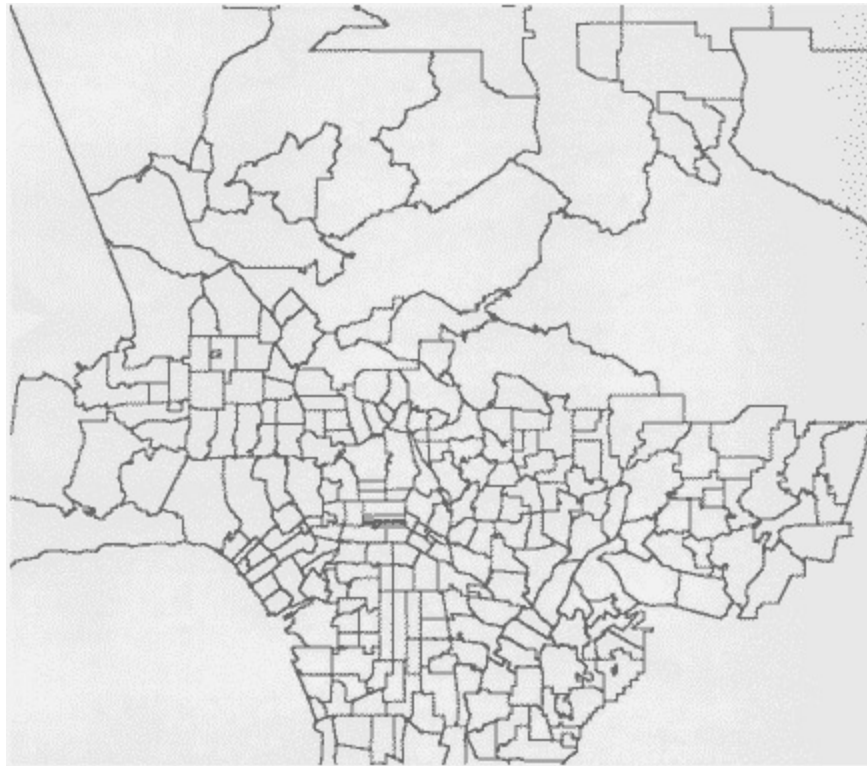


Figure 1: The Los Angeles Urban Area (zip codes)

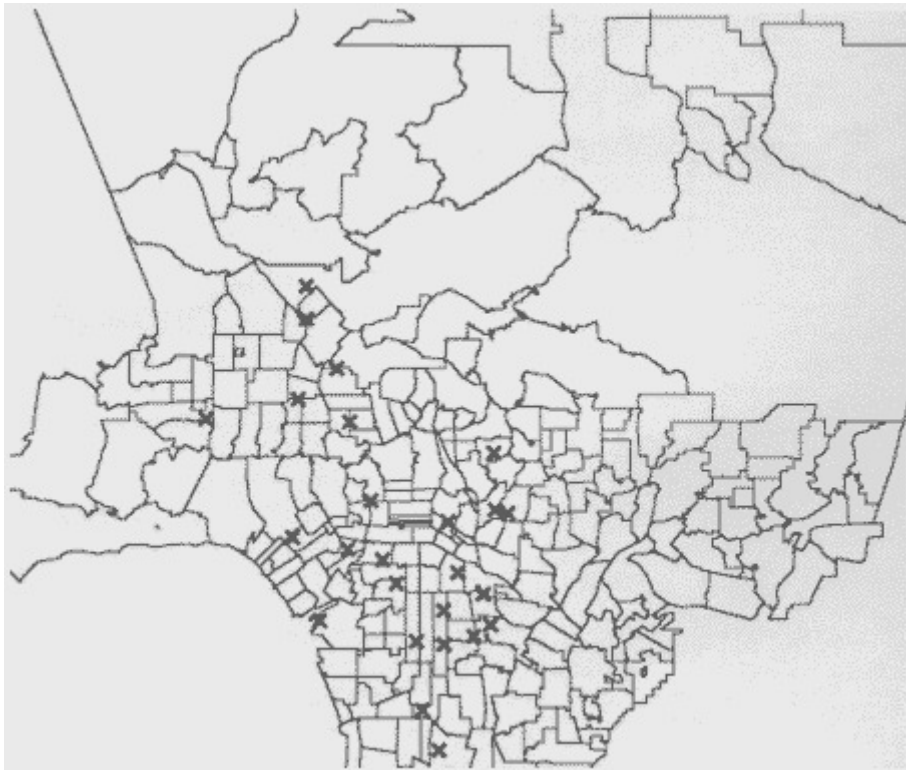


Figure 2: Distribution of High Teacher Absence Schools (> 8.0)

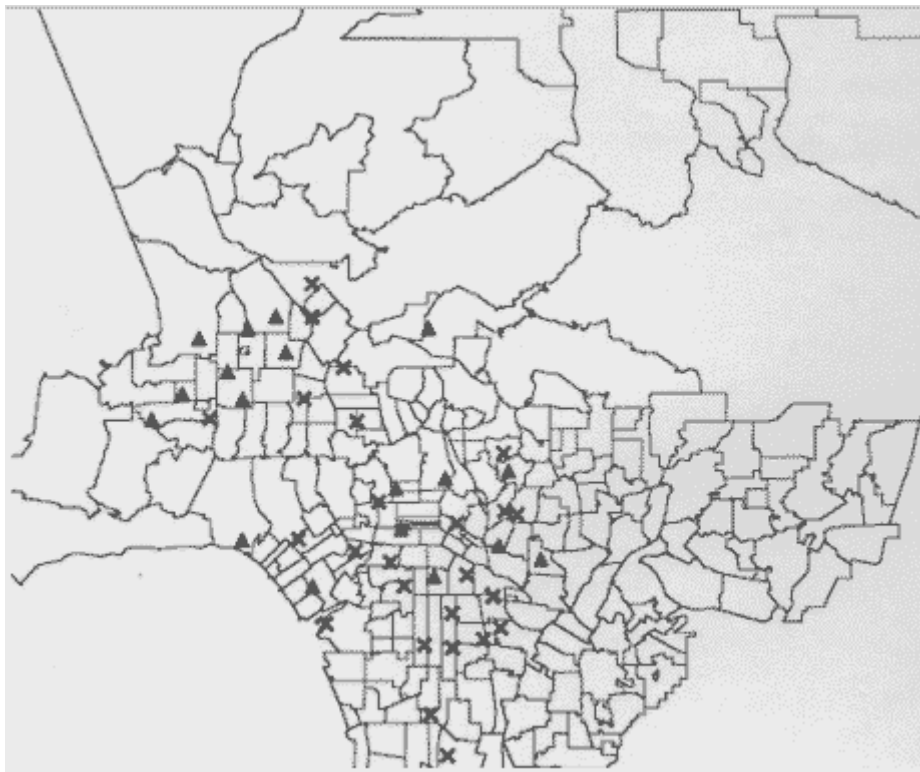


Figure 3: Distribution of High and Low Teacher Absenteeism Schools (Symbol X = highest and triangle = lowest)

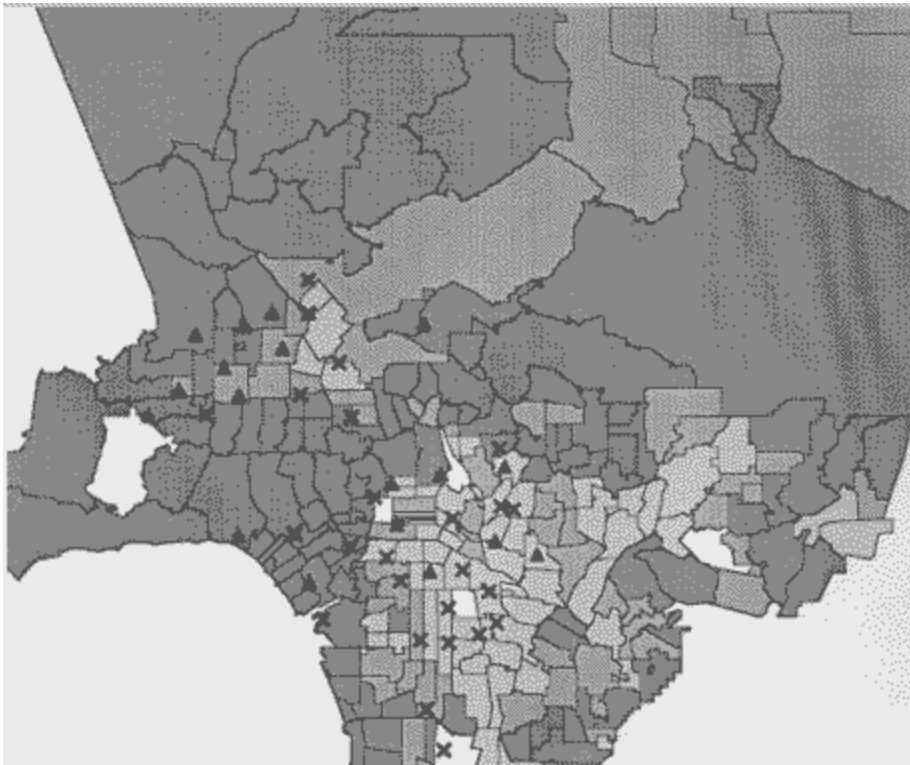


Figure 4: Distribution of High and Low Teacher Absenteeism Schools with Geographical Space (Dark areas highest per capita income-(Symbol X = highest and triangle = lowest)

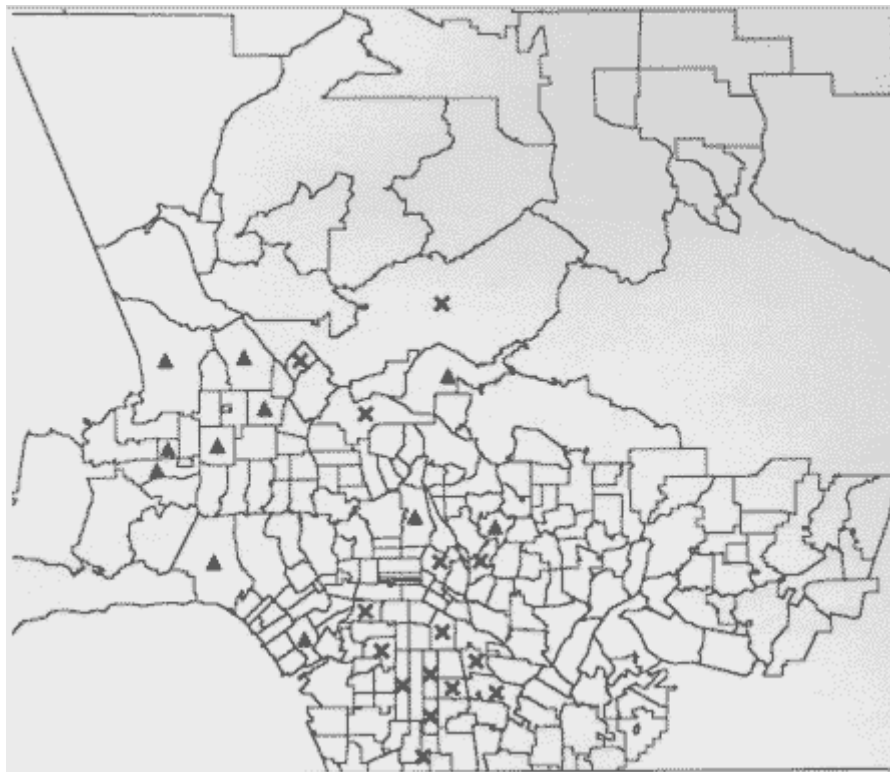


Figure 5: Distribution of High Absenteeism-Poor Performance- Low Absenteeism-High Performance Schools (Symbol X = highest absence-poorest performance and triangle = lowest absence and highest performance)

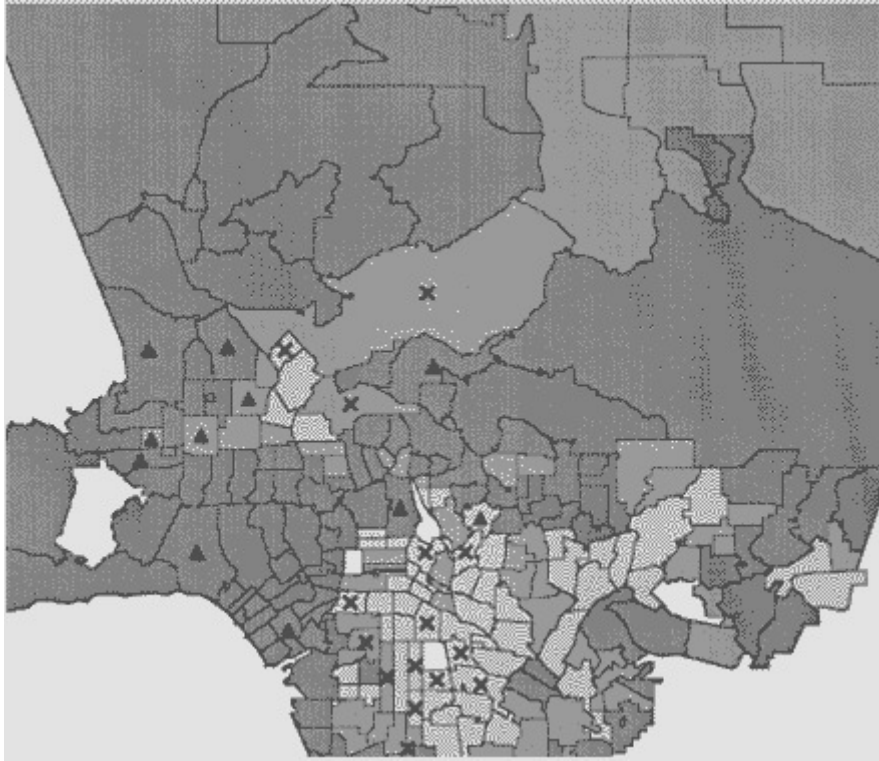


Figure 6: Distribution of High Absence- Poor Performing and Low Absence- High Performing School and Geographical Space (Dark Areas have Highest Per Capita Income-(Symbol X = highest absence-poorest performance and triangle = lowest absence and highest performance)

**Table 4
High Teacher Absenteeism Schools (n = 27)**

Variable	Mean	St. Dev.	Min.	Max.
Teacher absenteeism rate	9.01	.77	8.05	11.44
Number w/o credential	29.22	1.6	11	29.2
Number < 2 yrs experience	47.6	14.2	19	47.6
Substitute teacher requests	1444.4	637.1	193	2571
Substitute requests unfilled	99.2	62.8	15	306
Drop out rate	6.1	3.09	1.25	15.7
Transiency percent	39.8	13.6	18.42	77.1
Number suspensions	628.5	393.9	59	1606
Opportunity transfers	78.5	59.8	2	272
Crimes against property	13.0	11.2	3	54
Crimes against people	91.04	38.6	42	199
Number of unfilled teaching position	5.75	5.5	0	21

Academic Performance Index	505.74	74.16	370	653
Number of schools (n=27) Percent in Negative Geographical space (low community income)= 96%				

Note from Table 4 that high teacher absence (>8.0) was separated from those schools below 8.0. Note the variations in the API's for these two groupings of schools (370-653) with an average of 505.- Also note that there is far more criminal activity and higher teacher turnover at these high absence schools

Table 5
Low Teacher Absenteeism Schools (n = 22)

Variable	Mean	St. Dev.	Min.	Max.
Teacher absenteeism rate	7.3	.52	6.3	7.97
Number w/o credential	23.9	10.5	8	49
Number < 2 yrs experience	44.8	15.2	22	83
Substitute teacher requests	1451.1	542.6	402	2508
Substitute requests unfilled	68.4	51.9	9	237
Drop out rate	4.8	3.3	.47	13.34
Transiency percent	34.1	10.33	16.74	53.7
Number suspensions	419.8	234.9	23	895
Opportunity transfers	53.5	25.1	2	100
Crimes against property	9.2	5.6	2	21
Crimes against people	62.6	20.8	37	113
Number of unfilled teaching position	2.5	3.9	0	18
Academic Performance Index	563.8	84.2	426	737
Number of schools (n=22) Percent in Negative Geographical space (low community income)= 10%				

Note in Table 5 that low absence schools have an API of 426 to 737 with an average of 564. Also note that there we less unfilled substitute teacher positions.

Table 6
Inter-correlation of Variables with Teacher Absenteeism ** p <.01 * p <.05

Variable	High absenteeism	Low Absenteeism
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	Schools	Schools
Teacher absenteeism rate	1.00	1.00
Number w/o credential	.26	.19
Number < 2 yrs experience	.24	.31
Substitute teacher requests	.44**	.31*
Substitute requests unfilled	1.00**	.33*
Drop out rate	.21	.45**
Transiency percent	.49**	.31*
Number suspensions	.07	.21
Opportunity transfers	.07	-.02
Crimes against property	.61**	-.16
Crimes against people	.51**	.19
Number of unfilled teaching position	.52**	.37*
Academic Performance Index	-.45**	-.37*
Number of schools	27	22

Note from Table 6, the correlation with academic performance was -.45 and -.37 and the number teaching without teaching credentials .26 to -.19.

Table 7
High Teacher Absence-Low Academic Attainment Schools (n=16)

Variable	Mean	St. Dev.	Min.	Max.
Teacher absenteeism rate	9.2	.90	8.1	11.44
Number w/o credential	33.5	10.2	22	61
Number < 2 yrs experience	52.4	15.1	19	89
Substitute teacher requests	1465.1	619.5	477	2571
Substitute requests unfilled	116	67.4	22	306
Drop out rate	6.7	2.9	2.8	15.7
Transiency percent	45.6	14.1	29.3	77.1
Number suspensions	761.5	451.5	59	1608
Opportunity transfers	82.81	47.9	2	198
Crimes against property	15.8	13.8	3	54
Crimes against people	110.2	38.2	62	199
Number of unfilled teaching position	8.44	5.7	1	21

Academic Performance Index	454.1	36.7	370	497
Number of schools (n=16)				
Percent in Negative Geographical space (low community income)= 100%				

Table 8
Descriptive Analysis: Low Absenteeism-High Academic Performance Schools (n=16)

Variable	Mean	St. Dev.	Min.	Max.
Teacher absenteeism rate	7.3	.53	6.3	7.97
Number w/o credential	21.4	10.2	8	49
Number < 2 yrs experience	89	15.4	22	83
Substitute teacher requests	1482	548.3	584	2508
Substitute requests unfilled	64.5	55.2	16	237
Drop out rate	4.2	2.1	.47	8.7
Transiency percent	31.1	8.9	16.74	46.2
Number suspensions	382.7	192.7	23	685
Opportunity transfers	47.4	23.2	2	100
Crimes against property	8.3	5.2	2	20
Crimes against people	57.1	14.1	38	89
Number of unfilled teaching position	1.5	2.0	0	7
Academic Performance Index	598.4	71.0	510	737
Number of schools (n=16)				
Percent in Negative Geographical space (low community income)= 5%				

Table 9
Correlations for High-Absence and Low-Absence Schools With Regard to Academic Performance (above and below 500 on the API)

Variable	High teacher absenteeism schools with low performance	Low teacher absenteeism schools with high performance
Teacher absenteeism rate	1.00	1.00
Number w/o credential	.22*	.19*
Number < 2 yrs experience	.09	.41**
Substitute teacher requests	-.03	.45**

Substitute requests unfilled	-.79**	.40**
Drop out rate	.33*	.36*
Transiency percent	.69**	.31*
Number suspensions	-.10	-.15
Opportunity transfers	.03	-.10
Crimes against property	.69**	-.10
Crimes against people	.76**	.35*
Number of unfilled teaching position	.57**	.52**
Academic Performance Index	-.88**	-.33*
Number of schools	16	16

See Figures 5 and 6 for a geographical mapping of these schools. From Table 9 note the high correlation and differences in these correlation measures with regard to the number of teachers with less than 2 years of experience and the number of substitute teacher requests. Most important is the number of substitute teacher requests that remain unfilled and teacher absence.

Policy Issues: The distribution of teacher absences

The principal finding of this study is that the effect of teacher absenteeism is felt not equally across all school sites, but is felt most unfavorably in the urban schools or schools that are located in poor, low median family income geographical space. This finding corroborates the findings of other studies regarding how poverty impacts the urban school. As one national study has found, with teaching vacancies, rural and small town schools (10%) are less likely to use substitute teachers than central city schools (24%) and urban fringe schools (16%). These rural and small town schools (96%) are more likely to hire qualified teachers than central city schools (90%); but they are almost equally likely to do so when compared to urban fringe schools (95%) (NEA, 1998).

The amount of teacher absences at schools in these negative geographical space areas is also an indicator of teacher morale and stress. When there is high teacher absence, it tends to lower the morale of remaining teachers resulting in higher teacher turnover. This could be the cause of the failure of these schools to attract more committed teachers or the danger and stress posed by working in high-risk neighborhoods that result in teachers leaving the classroom.

Since urban districts are often plagued with gang violence and unsafe schools and neighborhoods, the latter condition is highly significant to examine for the policy maker since there is an actual threat to a teacher's physical safety. As a result and as expected, there should not only be more teacher absence in poorer areas of the city, but lower retention rates of qualified and experienced teachers.

Summary, Recommendation, and Conclusions

As noted earlier, students in a classroom eventually lose the desire to learn when the

regular teacher is frequently absent and the delivery of the instructional program is by an array of substitute teachers. In essence, teacher absenteeism has important implications for school reform, teacher training, educational leadership, and issues related to social justice aimed at promoting equity and excellence in the schools. The use of substitute teachers puts added strain on the efforts of school reform by not only increasing the costs of instruction, but by changing the delivery of instruction from fully credentialed and permanent teachers to part time and substitute teachers. In addition with heavy reliance on substitute teachers to deliver instructional programs, the teaching efforts of the regular teacher towards school reform might be undermined. One of the main characteristics between successful and unsuccessful school reform efforts is the closing the disparity between resources as distributed vs. resources as received in the classroom. The degree of teacher absence at a school site is directly related to this resource distribution-reception disparity.

Finally educational leadership has to recognize the fact that teaching at low-income area schools increases the propensity of teachers to be absent. With this in mind highly trained substitute teacher pools might need to be developed at the site so that instruction is continued when the teacher is absent. The shortage of substitute teachers (Lilly, 1998) and the effective use of substitute teachers (Holdaway and Benhaw (1974) in the classroom have also been studied and should be considered part of school administrative training. (Pitkoff, 1993). Some states implementing large scale studies of substitute teaches include Wisconsin (Substitute Teaching in Wisconsin, 2000) and Nova Scotia (Unicomb et al., 2000)

In conclusion research on low-income schools should examine in closer detail the disparity between resources as delivered to the classroom vs. resources as actually received by students in the classroom. Teacher absenteeism is a major contributor to instructional resource disparity or resources that are not actually being delivered to students in the classroom. In addition the notion of attenuation or the lessening of the impact of school resources and the amplification of risk factors of students needs to be examined in much closer detail by educational researchers.

This study partially demonstrates that the dual problem of attenuation of school district resources and amplification of student risk are both impacted by teacher absenteeism. In addition, the quality of geographical space as measured by the median income of the area is also highly associated with teacher absenteeism. This association between the quality of geographical space, teacher absenteeism, and educational attainment raises issues of social justice and has the potential to undermine school reform efforts at promoting equity and excellence in urban schools.

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