# Chapter 4

# School Experiences

The national interest in developing programs to improve the schooling and educational outcomes of children attending urban public schools and particularly high poverty urban schools has never been greater. Many authors have debated how resources contribute to differences in the quality of the educational experiences found in urban schools generally and, particularly, in those that serve poor students.<sup>19</sup> This chapter contributes to that debate by presenting empirical evidence from nationally representative surveys to show whether and how the school experiences of these children differ from those of other students.

This chapter addresses three key areas that affect a child's public school experience: school resources and staff, school programs and coursetaking, and student behavior. Meaningful differences in these areas between schools in different locations lend support to the contention that some groups of students have less desirable educational experiences and more limited opportunities than other groups. These differences may be related, in turn, to the poorer outcomes for some groups of students observed in chapter 2. Further, they can help focus the national policy and research agenda on those areas that need to be improved for students attending high poverty public schools in urban locations.

The same analysis model that was used in previous chapters is used in this chapter to distinguish differences by school urbanicity and poverty concentration, separately and in combination with one another. Schools and students were grouped according to the urbanicity and level of poverty concentration in the school. Specifically, the analysis determines:

- 1) whether students' school experiences differ by location;
- whether their school experiences differ by school poverty concentration;

- whether differences by school location remain after accounting for the variation in school poverty concentration; and
- 4) whether the school experiences of students in urban high poverty schools differs from that of students in high poverty schools in other locations, and whether urban high poverty schools are different than predicted on the measures examined.

The phrase *greater than predicted* means that the differences between urban high poverty and other schools were larger than would be predicted from the additive effects of an urban and high poverty setting, indicating an interaction, or compounding effect, of the two. This chapter presents data separately for elementary and secondary schools when there are meaningful differences by level.

Current measures of school quality that are available in national surveys reflect neither the depth nor breadth of a student's school experiences (Bobbitt et al. 1992). Thus, the indicators presented in this chapter are limited by the available data and do not provide a thorough review of student experiences. Rather, they are a selective set of indicators for public schools and students. These indicators were chosen through a process that included a review of available data and research to identify important aspects of the school environment and an analysis that revealed those indicators that varied meaningfully by location and level of poverty in the school (see appendix C for a list of data reviewed).

Chart 4.1 displays the indicators for the three sections in this chapter—school resources and staff, school programs and coursetaking, and student behavior—as well

<sup>&</sup>lt;sup>19</sup>For example, Hedges, Laine, and Greenwald April 1994; Hanushek 1994; Hedges, Laine, and Greenwald May 1994.

as the results of the analyses (discussed in the next section). First, the school resources and staff section addresses the issue of the distribution of financial resources through teachers' rating of the adequacy of school resources and teacher salaries. The experience and availability of teachers are measured by years of teaching experience and the difficulties that administrators encounter in hiring teachers. Next, the demographics of the teaching force are characterized by the percentage of teachers who are minority and male. Finally, this section presents data on teachers' influence over the curricula they teach and teacher absenteeism as indicators of the control that teachers have over their work and teacher morale.

The second section presents indicators of student participation in public school programs and student coursetaking in four areas: preschool attendance, availability of gifted and talented programs, participation in vocational education, and mathematics coursetaking (geometry).

Finally, the third section presents indicators of student behaviors, both in and out of school, that affect their academic performance. Behaviors of individual students can affect their own as well as other students' academic performance. The first group presented are those that affect one's own performance: the amount of time spent doing homework, the amount of television watched on weekdays, and absenteeism from school. The second group reflect the influence of the classroom and school environment: the amount of time teachers spend maintaining discipline in the classroom, and students' perception of their own safety and the threat of weapons in their schools. Finally, this section presents two additional risk-taking behaviors outside of school that affect academic performance and completion: students' use of alcohol, and pregnancy.

Chart 4.1 reports the answers to the questions that were asked of the data for each indicator of school experience. Although the table presents the results of the complete analysis, this discussion will focus on the questions in the third and fourth columns: Are

urban public schools different after accounting for the higher poverty concentration in urban schools? Are urban high poverty schools different from suburban and rural high poverty schools? Are the school experiences of students in urban high poverty schools different than predicted?

#### **Summary of This Chapter's Findings**

- Students in urban public schools overall had less desirable experiences than those in other locations on 8 of the 20 measures analyzed, even after accounting for the higher poverty concentration in urban schools.
- Students in public schools with high poverty concentrations had less desirable school experiences than those in low poverty schools on every measure except the availability of minority staff and student use of alcohol.
- Students in high poverty urban public schools had less desirable school experiences than those in high poverty rural schools on nearly half of the measures, and had less desirable experiences than those in high poverty suburban schools on two of the indicators.
- Students in high poverty urban schools had unusually high rates of television watching compared with other groups of students, exceeding the rates that would be predicted from the differences by location and poverty concentration combined.
- Among the school resources and staff indicators, fewer necessary resources for teachers, hiring difficulties, lack of teacher influence over curriculum, and higher teacher absenteeism were problems affecting urban schools more than suburban and rural schools, and urban high poverty schools more than rural high poverty schools. However, urban high poverty schools had a more diverse staff than other schools, and more minor-

ity teachers than would be predicted from the combination of their location and poverty concentration compared with rural schools.

- School program and coursetaking indicators suggest that students in urban schools, overall, were at a disadvantage compared with those in suburban schools in their access to gifted and talented programs, but this disadvantage did not hold for urban high poverty schools compared with similar suburban schools.
- With regard to the other school program and coursetaking indicators—preschool attendance, participation in vocational education, and mathematics coursetaking—students in urban public schools, after accounting for poverty, and in urban high poverty schools were no different than others.

- Moreover, both students in urban and urban high poverty schools had higher preschool attendance rates than their rural counterparts.
- In the area of student behavior, absenteeism, class discipline, feeling safe at school, weapons possession, and pregnancy were more likely to be problems among urban students overall than among other students.
- In general, students in urban high poverty schools had more disciplinary problems and were much more likely to watch a lot of television. Otherwise, they behaved similarly to their suburban and rural counterparts with two exceptions: they were more likely to be absent than rural students, and weapons possession was more likely to be a problem in their schools than in rural schools.

CHART 4.1—SUMMARY OF RESULTS: SCHOOL EXPERIENCES					
INDICATOR	Are Urban Schools Different?	Are High Poverty Schools Different?	Are Urban Schools Different after Accounting for Poverty Concentration?	Are Urban High Poverty Schools Different from Other High Poverty Schools?  Are Urban High Poverty Schools Different than Predicted?	
I. SCHOOL RESOURCES AND STAFF					
Necessary Resources Available	Yes, urban lower than suburban and rural	Yes, high poverty lower than all others	Yes, urban lower than others	Yes, lower than rural high poverty, same as suburban high poverty  No different than predicted	
Teacher Salary	Yes, urban <b>higher</b> than rural, lower than suburban	Yes, high poverty lower than most others	Yes, urban <b>higher</b> than rural, same as suburban	Yes, higher than rural high poverty, same as suburban high poverty  No different than predicted	

INDICATOR	Are Urban Schools Different?	Are High Poverty Schools Different?	Are Urban Schools Different after Accounting for Poverty Concentration?	Are Urban High Poverty Schools Different from Other High Poverty Schools?  Are Urban High Poverty Schools Different than Predicted?
Teaching	Yes,	Yes,	Yes,	No,
Experience	urban lower than suburban, <b>higher</b> than rural	high poverty lower than all others	urban <b>higher</b> than rural, same as suburban	same as other high poverty
				No different than predicted
Difficulties Hiring Teachers	Yes, urban more than suburban and rural	Yes, high poverty more than all others	Yes, urban more than others	Yes, more than rural high poverty, same as suburban high poverty
				No different than predicted
Percent Minority Teachers	Yes, urban <b>higher</b> than suburban and rural	Yes, high poverty <b>higher</b> than all others	Yes, urban <b>higher</b> than others	Yes, higher than other high poverty
				Yes, <b>higher</b> than predicted
Percent Male Secondary Teachers	No, urban same as suburban and rural	Yes, high poverty lower than most others	No, urban same as others	Yes, higher than rural high poverty, same as suburban high poverty
				Yes, <b>higher</b> than predicted
Teachers' Influence over Curriculum	Yes, urban lower than suburban or rural	Yes, high poverty lower than all others	Yes, urban lower than others	Yes, lower that rural high poverty, same as suburban high poverty
				No different than predicted
Teacher Absenteeism	Yes, urban higher than suburban, and rural	Yes, high poverty higher than all others	Yes, urban higher than others	Yes, higher than rural high poverty, same as suburban high poverty
				No different than predicted

INDICATOR	Are Urban Schools Different?	Are High Poverty Schools Different?	Are Urban Schools Different after Accounting for Poverty Concentration?	Are Urban High Poverty Schools Different from Other High Poverty Schools?  Are Urban High Poverty Schools Different than Predicted?		
	<b>II. S</b> снос	DL PROGRAMS AND C	OURSETAKING			
Preschool Attendance Rates	Yes, urban lower than suburban, <b>higher</b> than rural	Yes, high poverty lower than all others	Yes, urban <b>higher</b> than rural, same as suburban	Yes, higher than rural high poverty, same suburban high poverty  No different		
Gifted and Talented Programs	Yes, urban lower than suburban, same as rural	Yes, high poverty lower than all others	Yes, urban lower than suburban, same as rural	Yes, lower that rural high poverty, same as suburban high poverty		
				Yes, lower than predicted		
Vocational Education Credits	No, urban same as suburban and rural	Yes, higher as poverty increases*	No, urban same as others	* No different than predicted		
Percentage of Seniors Who Took Geometry	Yes, urban lower than suburban, same as rural	Yes, lower as poverty increases*	No, urban same as others	* No different than predicted		
	III. STUDENT BEHAVIOR					
Television Watching on Weekdays	Yes, urban higher than suburban, same as rural	Yes, high poverty higher than all others	No, urban same as others	Yes, higher than other high poverty		
				Yes, higher than predicted		
Hours of Homework Completed	No, urban same as suburban and rural	Yes, high poverty lower than all others	No, urban same as others	No, same as other high poverty		
				No different than predicted		

<sup>\*</sup>This indicator was tested using poverty concentration as a continuous rather than categorical variable. Since the sample sizes for schools by urbanicity and poverty concentration combined were too small to produce reliable estimates, no comparisons were made between urban high poverty and other high poverty schools.

INDICATOR	Are Urban Schools Different?	Are High Poverty Schools Different?	Are Urban Schools Different after Accounting for Poverty Concentration?	Are Urban High Poverty Schools Different from Other High Poverty Schools?  Are Urban High Poverty Schools Different than Predicted?
Student Absenteeism	Yes, higher than suburban	Yes, high poverty higher than all others	Yes, urban higher than others	Yes, higher than rural high poverty, same as suburban high poverty
TE10	V	V	V	No different than predicted
Time Maintaining Discipline	Yes, urban higher than suburban and rural	Yes, high poverty higher than most others	Yes, urban higher than others	Yes, higher than other high poverty
				No different than predicted
Feeling Unsafe in School	Yes, urban higher than suburban and rural	Yes, high poverty higher than most others	Yes, urban higher than rural, same as suburban	No, same as other high poverty
				No different than predicted
Student Weapons Possession	Yes, urban higher than suburban and rural	Yes, high poverty higher than all others	Yes, urban higher than others	Yes, higher than rural high poverty, same as suburban high poverty
				No different than predicted
Student Use of Alcohol	Yes, urban <b>lower</b> than suburban and rural	Yes, high poverty <b>lower</b> than all others	Yes, urban <b>lower</b> than rural, same as	No, same as other high poverty
			suburban	No different than predicted
Student Pregnancy	Yes, urban higher than suburban, and rural	Yes, high poverty higher than all others	Yes, urban higher than others	No, same as other high poverty
				No different than predicted

# **School Resources and Staff**

Adequate resources and a committed, well-qualified, and professional staff of teachers are key elements of a vital learning environment which leads to high academic achievement (Special Study Panel on Education Indicators 1991). Yet urban high poverty public schools are often assumed to have fewer well-qualified teachers and fewer resources—issues that strike at the heart of what it means to provide high-quality education for all youngsters.

This section examines three aspects of school resources and staffing: availability of resources and teacher salaries, teacher experience and supply, and teacher characteristics and behavior. Each indicator has been selected for its relevance to policy debates about the quality of the school environment, but the indicators presented are by no means exhaustive.<sup>20</sup>

#### **Findings**

- Public urban schools did less well in providing necessary resources to teachers, and urban high poverty public schools did less well in this area than rural high poverty schools. However, urban teacher salaries were, in fact, higher than those for rural teachers. Teachers in high poverty urban schools also had higher salaries than their rural counterparts, and had about the same salaries as those in suburban high poverty schools.
- Teachers in urban public schools, after accounting for poverty, and urban high poverty schools were just as experienced as their suburban and rural counterparts. In fact, urban teachers, over-

all, were more experienced than rural teachers. However, administrators of urban schools, in general, and urban high poverty schools in particular, were more apt to complain about difficulties in hiring qualified teachers than most other administrators.

- Teachers in urban and urban high poverty public schools were more likely to be minorities, but just as likely to be male as those in comparable schools in other locations. In fact, teachers in urban high poverty schools were more likely to be male than those in rural high poverty schools.
- Urban teachers and those in urban high poverty schools reported less influence over their curriculum than most teachers in other locations. Teachers' perceptions of the level of teacher absenteeism were higher among urban teachers than among teachers in other locations, even after taking poverty into account; however, teachers in urban high poverty schools did not consider teacher absenteeism more serious than those in suburban high poverty schools.
- Higher concentrations of poverty in schools had a consistent and pervasive relationship to poorer quality resources and staff. Only one resource and staffing indicator was favorable in high poverty schools: there were higher percentages of minority staff.

 $<sup>^{20}\</sup>mathrm{See}$  appendix C for a discussion of the criteria used in selecting indicators.

## **Availability of Resources**

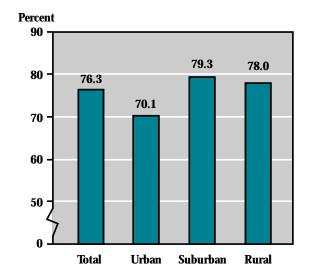
The issue of how school financial resources are distributed is controversial, with some arguing that the amount of expenditures has little effect on student outcomes (Hanushek 1989). Others have reported that school finances do make a difference (Rotberg 1993; Berliner 1993). According to a recent report from the Council of the Great City Schools, the average per pupil expenditure for large city public school students was less than the national average and was also less than the expenditure in suburban and rural public school districts (Council of the Great City Schools 1992).

National data on school finance were not available by the classifications of school location and poverty concentration required for this analysis. In addition, public school finances are determined primarily at the district level and are reported by district in national surveys.<sup>21</sup> Both the urbanicity and poverty concentration of schools can vary within a school district, as do expenditures and resource availability.

The school-level indicator presented in this section is derived from teacher opinion data on the availability of necessary materials (e.g., textbooks, supplies, copy machines) for the staff. Teacher responses can provide an indication of resource availability at the school level since teachers may be in the best position to judge whether the resources available in the school are adequate to meet the demands of instruction.

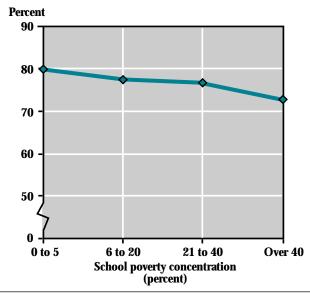
Are urban schools different? Seventy-six percent of public school teachers nationwide agreed that necessary materials were available in their schools in 1987–88. However, urban teachers were less likely to report that needed materials were available than teachers in either suburban or rural schools (figure 4.1). Seventy percent

Figure 4.1
Percentage of teachers who agreed that necessary materials are available in their schools, by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.2
Percentage of teachers who agreed that necessary materials are available in their schools, by school poverty concentration: 1987–88



of urban teachers reported that materials were adequate compared with 79 percent of suburban and 78 percent of rural teachers.

Are schools with high poverty concentrations different?

There were also differences by concentration of poverty in the schools. Teachers in schools with the highest concentration of poverty reported less frequently than teachers in any other school type that the resources available to the staff were adequate (72 percent compared with 80 percent of teachers in the low poverty schools) (figure 4.2).

Are urban schools different after accounting for the poverty concentration of the school? After accounting for differences in poverty concentration across school locales, teachers in urban schools were still less likely to report that necessary materials were available (figure 4.3). That is, the fact that urban schools are more like-

ly to have high concentrations of poverty is not the only explanation for why urban teachers were less likely to feel that resources were adequate.

Were teachers from urban high poverty schools less likely to have necessary materials than predicted? Teachers in urban high poverty schools were less likely to feel they had necessary materials than teachers in every other school type with the exception of teachers in suburban high poverty schools. Sixty-seven percent of teachers in urban high poverty schools felt that resources were adequate. However, an urban location and a high poverty concentration do not combine to create any additional disadvantage above and beyond that observed separately for urban teachers and teachers in high poverty schools.

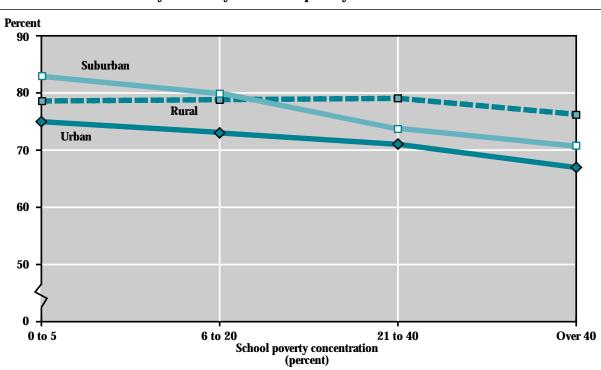


Figure 4.3
Percentage of teachers who agreed that necessary materials are available in their schools, by urbanicity and school poverty concentration: 1987–88

<sup>&</sup>lt;sup>21</sup>An interesting discussion on the differences in spending between districts can be found in William T. Hartman (Spring 1988, 436–459).

## **Teacher Salaries**

One of the largest components of education expenditures is teacher salaries. In the public schools, teacher salaries are often set as part of district policy and are dependent on the teacher's education level and experience. In 1990–91, 94 percent of all public school districts used teacher salary schedules (Choy et al. 1993). Given this fact, variations in teacher salaries are likely to reflect differences in teacher experience as well as regional economic differences. Comparing teacher salaries revealed meaningful differences by location and poverty concentration.

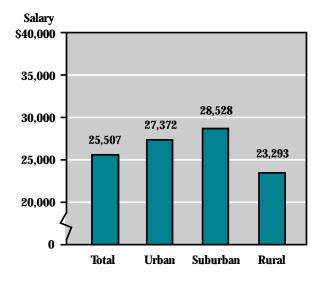
Are urban schools different? Nationally, the average academic base salary for public school teachers was \$25,507 in 1987–88.<sup>22</sup> Average salaries varied for teachers by the location of their schools, with rural salaries being notably lower than urban and suburban salaries. Teachers in urban schools averaged \$27,372,

which was lower than \$28,528 for teachers in suburban schools and higher than \$23,293 for teachers in rural schools (figure 4.4).

Are high poverty schools different? Average salaries also differed by school poverty concentration. The average base salary of \$28,841 for teachers in low poverty schools exceeded the national average of \$25,507, while the average salary of teachers in schools with the two highest levels of poverty concentration was lower than the national figure of about \$24,000 (figure 4.5). Salaries of teachers in schools with poverty concentrations of more than 40 percent and 21 to 40 percent were not statistically different from each other.

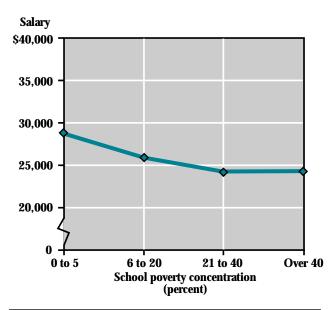
Are urban schools different after accounting for poverty concentration? When varying school poverty concentration was taken into account, the small disparity

Figure 4.4
Average academic base teacher salary, by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.5
Average academic base teacher salary,
by school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

in the average urban and suburban teacher salaries cited above disappeared and could no longer be considered different. Only the rural average teacher salary was different from the average urban salary. Figure 4.6 clearly shows the low level of the rural salaries when compared with the salaries in the other two locations. By contrast, suburban and urban salaries appear to be very similar at all levels of poverty concentration, with the exception of the low poverty category.

One factor that may explain these differences is the variation in the average years of experience for teachers by urbanicity and school poverty concentration. The average years of teaching experience seems to mirror average teacher salaries, with rural teachers and teachers in schools with higher poverty concentrations having less experience. (See appendix table 4.2.) Since public school teacher salaries are typically based on a salary schedule tied to teaching experience, as mentioned above, variation in salaries by years of teaching experi-

ence would be expected. (See the next section for further analysis of teacher experience.) Other factors affecting the urban-rural differential may include cost of living differences between rural and urban locations.

Were teachers in urban high poverty schools likely to have lower salaries than predicted? The salaries of teachers in urban high poverty schools were higher than those for rural teachers in similar schools (\$26,772 compared with \$21,470), and were no different from salaries for teachers in similar suburban schools. The salaries for teachers in urban high poverty schools were no lower than would be predicted from their location and poverty concentration (figure 4.6).

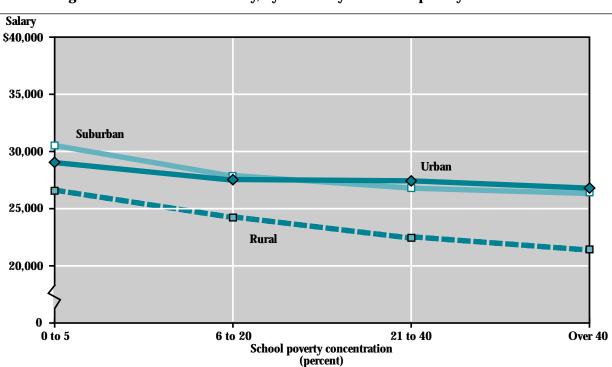


Figure 4.6
Average academic base teacher salary, by urbanicity and school poverty concentration: 1987–88

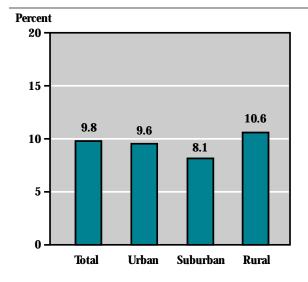
<sup>&</sup>lt;sup>22</sup>Academic base salary refers to the teacher salary received for teaching in the school year 1987–88. Not included are earnings from the summer of 1987 or additional compensation for extracurricular or additional activities such as coaching, student activity sponsorship, or evening classes. Also, earnings from non-school employment are not included.

## **Teacher Experience**

Some education policy research has linked teacher ability and qualifications with student achievement. For example, according to Hanushek (1989), "there are striking differences in average gain in student achievement across teachers." Citing a study in Texas, David Berliner (1993) stated, "The percentage of teachers with master's degrees accounted for 5% of the variation in student scores across districts in grades 1–7."

Although teacher quality is easy to understand, it is difficult to measure. Many indirect measures exist—ranging from objective data, such as the rates of teacher certification, level of education, coursework in the fields they teach, and number of years of teaching experience—to more subjective indicators such as administrators' and students' ratings of teacher performance. When discussing the limited explanatory power of current measures of teacher quality, Hanushek (1989) noted that one indicator of teacher quality, teacher experience, yielded the most statistically significant findings in a summary of studies attempting to

Figure 4.7
Percentage of teachers with 3 years or less teaching experience, by urbanicity: 1987–88



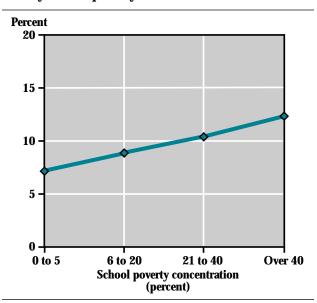
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

find links between achievement and education "inputs." Further, recent reports indicate that teacher quality varies by poverty concentration in the school. Jonathan Kozol (1991), quoting a principal from a high poverty New York public school, presents anecdotal evidence that teachers in these schools may be less qualified than those in higher income schools:

"These are the kids most in need," says Edward Flanery, the principal of one of the low-income schools, "and they get the worst teachers." For children of diverse needs in his overcrowded rooms [Flanery] says you need an outstanding teacher. "And what do you get? You get the worst."

Although no single indicator seems adequate to fully address the complex issues surrounding teacher quality, for the purposes of this analysis, data on the percentage of teachers with 3 years or less of teaching experience from the 1987–88 Schools and Staffing Survey (SASS) were compared by school location and poverty concentration. Other indicators examined—such as the

Figure 4.8
Percentage of teachers with 3 years
or less teaching experience,
by school poverty concentration: 1987–88



percentage of teachers who were certified, the number of courses they took in their main assignment field, and teacher degree attainment—did not reveal much variation by urbanicity or school poverty concentration. (See appendix C.)

Are urban schools different? On average, 10 percent of public school teachers nationwide had 3 years or less teaching experience in the 1987–88 school year. Ten percent of urban teachers had 3 years or less experience, which was greater than the 8 percent for suburban teachers but less than the 11 percent for rural teachers (figure 4.7).

Are high poverty schools different? The number of years of teaching experience varied by school poverty concentration (figure 4.8). High poverty schools had the highest percentage of teachers with 3 years or less teaching experience (12 percent), which was 70 percent higher than that of low poverty schools (7 percent).

Are urban schools different after accounting for poverty concentration? Once the association between the schools' poverty concentration and teacher experience was taken into account, there was no difference between urban and suburban schools in teacher experience. The rural-urban difference, remained, however. As shown in figure 4.9, the urban and suburban percentages are very close at all levels of school poverty, while rural schools have a greater proportion of less experienced teachers in general.

Were teachers in urban high poverty schools more likely to have 3 years or less teaching experience than would be predicted? Urban teachers in high poverty schools were as likely as predicted to have 3 years or less teaching experience. In fact, the percentage of these teachers having less than 4 years of teaching experience (12 percent) was no different than in high poverty schools in other locations. The relatively high percentage of less experienced teachers in urban high poverty schools reflects the high poverty concentration of their schools, not the urban location (figure 4.9).

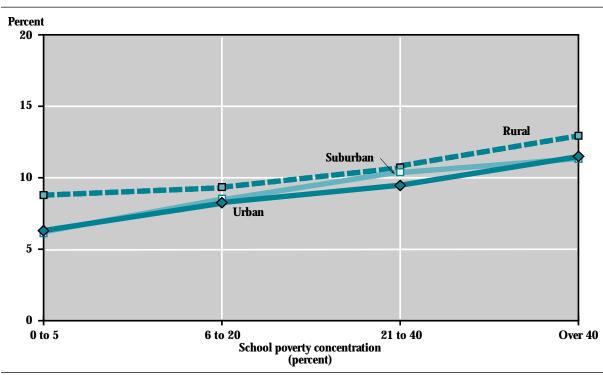


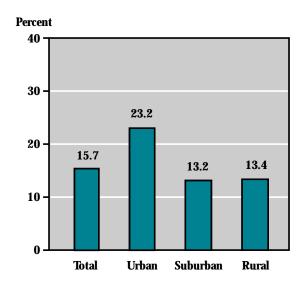
Figure 4.9
Percentage of teachers with 3 years or less teaching experience, by urbanicity and school poverty concentration: 1987–88

## **Difficulty Hiring Teachers**

Although predicted teacher shortages did not materialize in the late 1980s (Bobbitt 1991), reports persist that shortages of well-qualified teachers exist for schools in the inner cities serving large numbers of disadvantaged children (Oakes 1990). This section looks at evidence that the supply of teachers may vary by urbanicity and school type. The indicator below, drawn from the 1987–88 SASS, compares administrator reports of having general difficulties hiring teachers for their schools. <sup>23</sup>

Are urban schools different? Nationally, 16 percent of public school administrators reported that they experienced general difficulties hiring teachers when surveyed in 1987–88. For urban schools, this percentage was much higher (23 percent) than it was for suburban and rural schools, which were both at 13 percent (figure 4.10).

Figure 4.10
Percentage of principals who report difficulty hiring teachers, by urbanicity: 1987–88

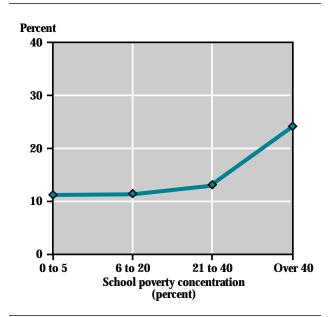


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Administrator File.

Are high poverty schools different? Administrators from high poverty schools were more likely than their peers in other schools to have difficulty hiring teachers. Twenty-four percent of the administrators from the highest poverty schools reported having difficulties—twice the proportion of the administrators from the lower poverty schools (those with 0–5 percent and 6–20 percent poverty concentration) and somewhat less than twice the proportion when compared with administrators from schools with 21–40 percent poverty concentration (figure 4.11).

Are urban schools different after accounting for poverty concentration? The differences between the high poverty schools and all other school types were quite large, and when the poverty concentration of schools in each location was taken into account, the

Figure 4.11
Percentage of principals who report
difficulty hiring teachers,
by school poverty concentration: 1987–88

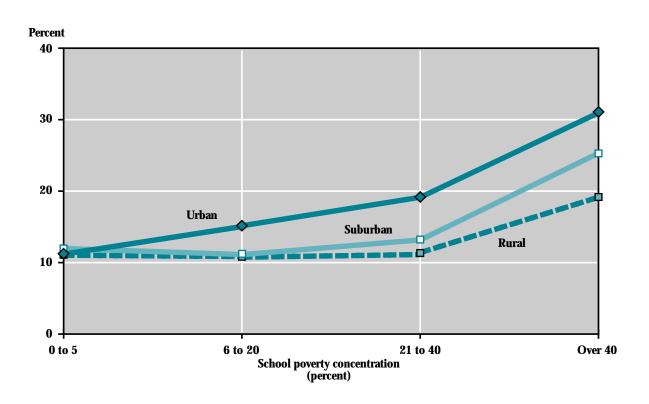


differences by location remained. Urban administrators were still more likely to have difficulties hiring teachers than their peers in other locations.

Were administrators in urban high poverty schools more likely to have hiring difficulties than predicted? Administrators from urban high poverty schools were more likely than their rural counterparts to experience difficulties in hiring teachers. Although it appears that they were more likely to experience difficulties than suburban administrators (31 percent of administrators in urban high poverty schools compared with 26 percent of administrators in suburban high poverty schools), this difference was not statistically significant.

In general, administrators in urban high poverty schools did not appear to have hiring difficulties beyond what would be predicted given their school location and poverty concentration (figure 4.12). This suggests that the combination of high poverty concentration in an urban setting does not add to the already greater hiring difficulties in these schools.

Figure 4.12
Percentage of principals who report difficulty hiring teachers, by urbanicity and school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Administrator File.

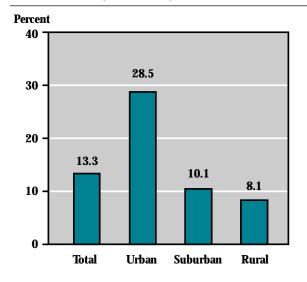
 $<sup>^{23} \</sup>rm{In}$  the context of the 1987–88 SASS survey, "general difficulties" refers to hiring teachers in all subject matters. The administrators were also asked to report on their difficulties in hiring teachers in different fields. However, since the fields were not defined for the 1987–88 survey, this study relies on the reports of general difficulties.

## **Percent Minority Teachers**

In chapter 1, it was shown that minority student enrollment is largest in high poverty urban schools. Urban schools, overall, are also more likely to serve greater percentages of minority students than rural and suburban schools. Even though researchers have debated this issue, policymakers are interested in the possible link between having strong minority representation among teachers and the high achievement and aspirations of minority students (King 1993). Recent reports suggest that the number of minority teachers in the public schools has not risen to meet the level of minority student enrollment. According to the Vice President of the National Education Association, teacher recruitment has not met the demands of creating a more diversified teaching force:

It's very disheartening to see that we have not made significant progress in these areas of teacher recruitment. . . . Students learn lessons about life both through formal instruction and what they see around them. We need more male elementary school teachers and more people of color at all grade levels (Jordan 1992).

Figure 4.13
Percentage of teachers who are minority, by urbanicity: 1987–88



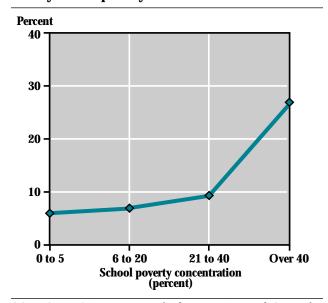
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

A recent report by the Council of the Great City Schools (1992) also noted,

[T]he demography of urban teachers does not match that of urban students . . . viewed from a different angle, these demographic patterns meant that there was one African-American teacher for every 25.4 African-American students in the Great City Schools, one white teacher for every 7.4 white students, one Hispanic teacher for every 62.9 Hispanic students, one Asian-American teacher for every 46.2 Asian-American students (see also King 1993).

Given student demographics, are schools in urban locations and those with high poverty concentrations more likely to employ greater numbers of teachers from minority backgrounds? The 1987–88 SASS asked schools to list the racial-ethnic backgrounds of all teachers using the categories of black non-Hispanic, white non-Hispanic, Native American, Asian or Pacific Islander, and Hispanic origin regardless of race. An indicator of the percentage of teachers who were members of a racial-ethnic minority was created by

Figure 4.14
Percentage of teachers who are minority, by school poverty concentration: 1987–88



combining all of the categories with the exception of white, non-Hispanic.

Are urban schools different? Nationally, 13 percent of the total public school teaching force in 1987–88 identified with a race-ethnicity other than white. The percentage of minority teachers in urban schools was almost three times higher (29 percent) than that of suburban schools (10 percent), and more than three times higher than that of rural schools (8 percent) (figure 4.13). In comparison, the percentage of minority students enrolled in urban schools was almost twice as high as the percentage of minority teachers (49 percent), and was twice as high as that in suburban and rural schools (20 percent and 16 percent, respectively).

Are high poverty schools different? Similarly, teachers in high poverty schools were three to four times more likely to belong to a racial-ethnic minority group than schools with lower poverty concentrations. Twenty-seven percent of the staff in schools with the highest poverty concentration were minorities, compared with 6 percent for schools with 0–5 percent of students living in poverty (figure 4.14).

Are urban schools different after accounting for poverty concentration? Despite the connection between school poverty concentration and the percentage of the teaching force that was from a minority background, differences between urban schools and those in other locations could not be attributed solely to differences in poverty concentration—in other words, the location of the school still mattered. Urban schools were more likely to have minority staff at all levels of school poverty (figure 4.15).

Were urban high poverty schools more likely to employ minority staff than predicted? Urban high poverty schools employed a higher proportion (39 percent) of minority staff than schools with similar poverty concentrations in suburban and rural locations (29 percent and 19 percent, respectively) (figure 4.15). This percentage is higher than predicted relative to rural high poverty schools. However, even this high percentage is lower than the percentage of minority students who are in high poverty urban schools. According to the 1987–88 SASS, 68 percent of students in urban schools with the highest concentration of poverty were from minority groups.

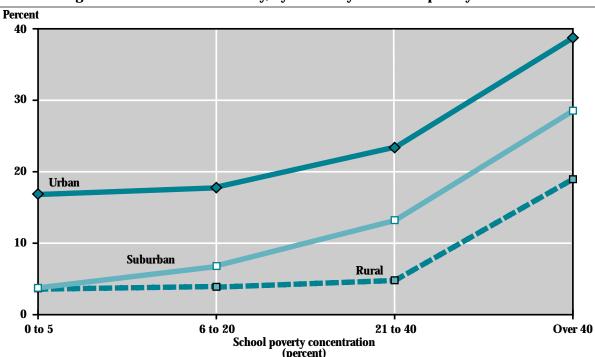


Figure 4.15
Percentage of teachers who are minority, by urbanicity and school poverty concentration: 1987–88

## **Teacher Gender**

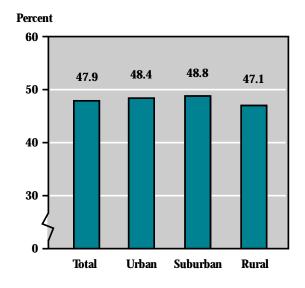
The public school teaching force is predominantly female. This is especially true at the elementary school level, where females make up 79 to 90 percent of all teachers, depending upon the combination of school location and poverty concentration. As with the issue of teacher minority background, researchers have not proven that students will achieve more if they are exposed to a mix of teachers that closely reflects student demographics. However, some researchers examining education issues in urban schools have highlighted the need for recruiting male teachers who could serve as role models for male students, particularly those who live in single-parent families (Jordan 1992). For example, in a report by the Council of the Great City Schools, the authors noted that during the 1990-91 school year there was one male teacher for every 34 male students in urban schools, while there was one

female teacher for every 12.3 female students (Council of the Great City Schools 1992). Since there was greater variation in the gender of secondary school teachers (secondary schools are more likely to employ male teachers than elementary schools), only secondary teachers are examined by gender in this section.

Are urban schools different? Nationally, 48 percent of public secondary school teachers in 1987–88 were male, and these proportions did not differ by school location. Forty-eight percent of teachers in urban secondary schools were male compared with 49 percent in suburban schools and 47 percent in rural schools (figure 4.16).

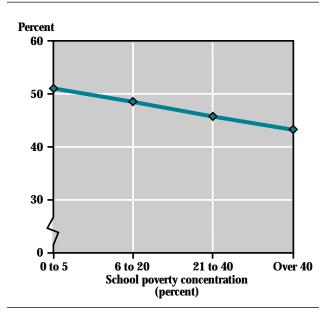
Are high poverty schools different? When schools were compared based on poverty concentration, differences

Figure 4.16
Percentage of secondary school teachers
who are male,
by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.17
Percentage of secondary school teachers
who are male,
by school poverty concentration: 1987–88

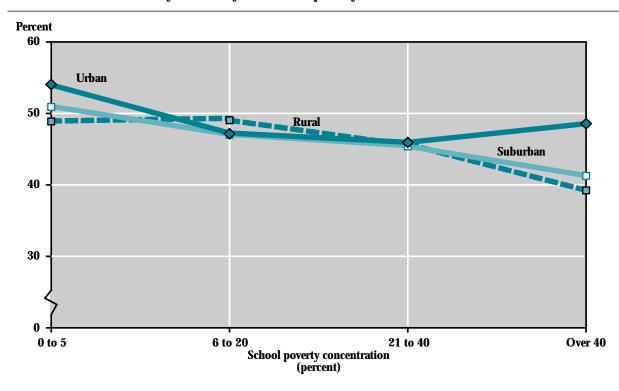


in the gender of the teaching force emerged. High poverty schools had a lower percentage of male teachers than low poverty schools (43 percent and 51 percent, respectively). However, there was no significant difference in the proportion of male teachers between the schools with the highest and next to highest poverty concentration (figure 4.17).

Are urban schools different after accounting for poverty concentration? Taking into account the school poverty concentration, the results by school location remained the same. There were still no differences in the proportion of teachers that were male in urban, suburban, and rural schools.

Were urban high poverty schools more likely to employ male teachers than predicted? Urban high poverty schools were actually more likely than predicted to employ male teachers when compared with most rural schools; however, they were no different than predicted compared with suburban schools. Male teachers made up about half of all teachers in high poverty urban schools, which is about the same proportion as the national average. In fact, as can be seen in figure 4.18, high poverty schools in urban locations were more likely than those in rural locations to employ male teachers. Though it appears from figure 4.18 that high poverty urban schools were also more likely to have male teachers than suburban high poverty schools, this difference was not statistically significant.

Figure 4.18
Percentage of secondary school teachers who are male, by urbanicity and school poverty concentration: 1987–88



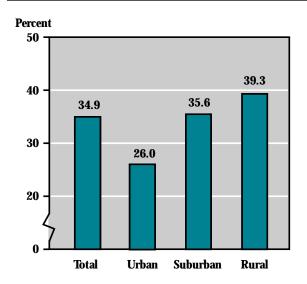
### **Teacher Influence Over Curriculum**

In recent years, reforms have stressed the importance of increasing the autonomy of school staff to make decisions on various aspects of school policy. These reforms not only advocate giving authority to those closest to the student but also seek the overall improvement of teaching as a profession. According to the Special Study Panel on Education Indicators (1991):

Recent research on effective schools . . . draws attention to very basic needs of teachers if they are to sustain their best efforts. Today's reform effort understands that better schools depend on teachers vested with greater authority to control classroom resources and determine curriculum and other core matters of their professional lives.

Social science researchers have established that workers who feel that they have control over their work have more positive attitudes toward their jobs and will therefore perform better (Special Study Panel on Education Indicators 1991; Choy et al. 1993a; Jones 1992). Although there is a growing body of research on teacher control and decision making in the classroom, there is little research that

Figure 4.19
Percentage of teachers who think that teachers have a great deal of influence on establishing curriculum, by urbanicity: 1987–88



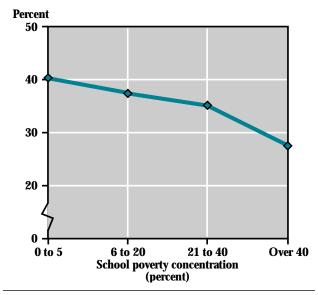
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

directly links teacher decision making to student achievement (Rowen 1990).

In 1987–88, teachers were asked to rate teachers' level of influence on several school policies as part of the SASS. Noticeable differences, both by school location and poverty concentration, were found in how teachers rated the influence of teachers over curriculum, and these findings are presented below. Interestingly, when asked about teachers' influence over other policy areas such as determining discipline, determining the content of in-service training programs, and ability grouping of students by classes, teacher responses did not vary by school poverty concentration or location. In addition, teachers' job satisfaction did not appear to vary by these school characteristics.

Are urban schools different? Nationally, 35 percent of public school teachers felt that teachers had a great deal of influence over establishing curriculum in their school.

Figure 4.20
Percentage of teachers who think that teachers have a great deal of influence on establishing curriculum, by school poverty concentration: 1987–88



When comparisons were made based on school location, however, urban teachers were less likely than suburban or rural teachers to feel that teachers had a great deal of influence in this area. Twenty-six percent of urban teachers thought that teachers had a great deal of influence over curriculum, as opposed to 36 percent of suburban and 39 percent of rural teachers (figure 4.19).

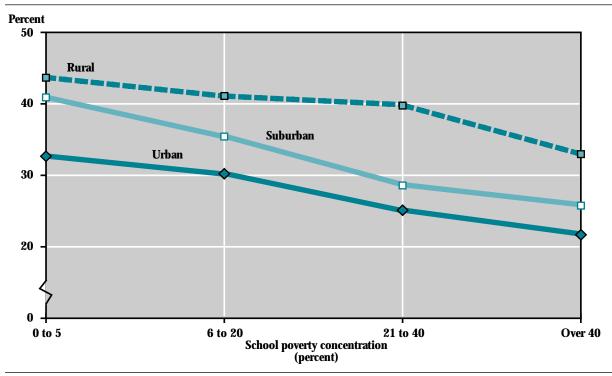
Are high poverty schools different? Teachers' perceived influence over curriculum tended to diminish as the concentration of poverty in their schools increased. While 41 percent of teachers in low poverty schools reported that teachers had a great deal of influence over curriculum, 28 percent of teachers in high poverty schools did so (figure 4.20).

Are urban schools different after accounting for poverty concentration? School location still mattered after taking into account differences in school poverty concentration. Teachers from schools in urban locations were still less

likely than teachers from suburban or rural schools to think that teachers have a great deal of influence over establishing curriculum when the concentration of poverty in their schools was held constant.

Were teachers in urban high poverty schools less likely to have a great deal of influence over establishing curriculum than predicted? Teachers in urban high poverty schools were less likely to report that teachers have a great deal of influence over curriculum than teachers in rural high poverty schools, but they reported a similar level of influence compared with teachers in suburban high poverty schools (figure 4.21). Twenty-two percent of teachers in high poverty urban schools thought that teachers had a great deal of influence over curriculum. However, it did not appear that teachers in urban high poverty schools considered teachers to be less influential than would be predicted based on the patterns for urban and high poverty schools separately.

Figure 4.21
Percentage of teachers who think that teachers have a great deal of influence on establishing curriculum, by urbanicity and school poverty concentration: 1987–88



## **Teacher Absenteeism**

Clearly, the consistent presence of the teacher in the classroom is of paramount importance in providing instruction to students. Beyond this, some research has suggested that high staff absenteeism indicates poor worker morale. Is there evidence to suggest that teacher absenteeism is a greater problem in urban schools, high poverty schools, or both? Teacher ratings of the seriousness of the problem of teacher absenteeism in their school, drawn from the 1987–88 SASS, are reported below.<sup>24</sup>

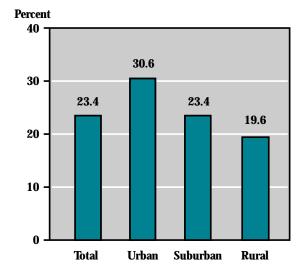
Are urban schools different? Nationally, 23 percent of teachers viewed teacher absenteeism as a moderate to serious problem in their schools. When responses were compared by the location of the school, urban teachers were more likely than teachers in both suburban and rural schools to consider teacher absenteeism as a problem. This can be clearly seen in figure 4.22, which

reported their co-workers' attendance as a moderate or serious problem, as compared with 23 percent of suburban and 20 percent of rural teachers.

shows that approximately 31 percent of urban teachers

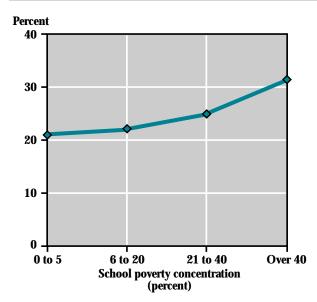
Are high poverty schools different? A clear relationship was also found between school poverty concentration and teachers' perception of teacher absenteeism. Thirty-one percent of teachers in the high poverty schools reported that they considered teacher absenteeism a problem, while 21 percent of teachers in the low poverty schools reported similarly. In fact, when the teachers from the high poverty schools were compared with their peers from schools in the other three poverty concentration categories, teachers from high poverty schools were more likely to perceive teacher absenteeism as a moderate to serious problem (figure 4.23).

Figure 4.22
Percentage of teachers who consider teacher absenteeism a problem in their school, by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.23
Percentage of teachers who consider teacher absenteeism a problem in their school, by school poverty concentration: 1987–88



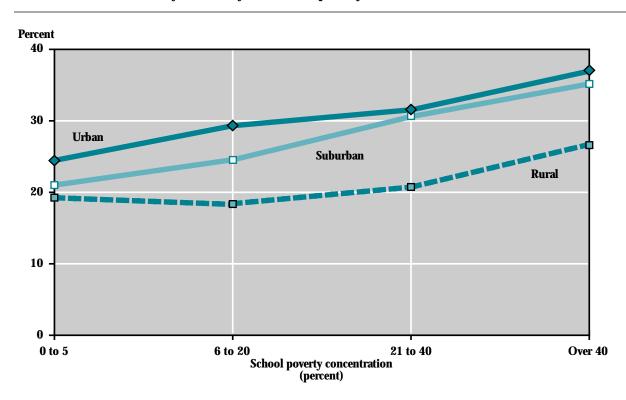
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Are urban schools different after accounting for poverty concentration? After taking into account varying levels of poverty concentration, the responses of teachers in urban schools were still higher than those of teachers in suburban and rural schools.

Was teacher absenteeism more likely to be perceived as a moderate to serious problem in urban high poverty schools than predicted? Teacher absenteeism was perceived to be a problem by a similarly high percentage of teachers in urban and suburban high poverty schools (37 and 35 percent, respectively), but was considered a greater problem in urban than in rural high

poverty schools. However, the responses of teachers in urban high poverty schools were at predicted levels, given their school's location and poverty concentration (figure 4.24).

Figure 4.24
Percentage of teachers who consider teacher absenteeism a problem in their school, by urbanicity and school poverty concentration: 1987–88



<sup>&</sup>lt;sup>24</sup>It is interesting to note that when asked the same question, administrators responded similarly but overall seemed to view the problem of teacher absenteeism as less serious. This is generally true of all responses to opinion questions from the 1987–88 SASS when comparisons were made between teachers and administrators evaluating school problems. Although the responses follow similar patterns by location and poverty concentration in the school (that is, they are usually considered as more serious problems in urban schools and in high poverty schools when compared to other school types), administrators seem less likely to view problems as serious than do teachers.

# **School Programs and Coursetaking**

The programs and courses in which students participate can influence their achievement in school, their opportunities to learn, and their potential experiences after graduating from high school. This section explores student participation in selected public school programs and courses at three levels: preschool, elementary, and secondary. Not all programs and courses could be presented. Those that were selected had varying rates of participation by school location and poverty concentration, and bore important relationships to outcomes.

Many parents elect to send their children to preschool and kindergarten before the age of mandatory schooling. Previous research has suggested a strong relationship between preschool attendance—in particular, high-quality, center-based early childhood programs—and lower participation rates in special education, lower rates of grade retention through the high school years, and higher rates of high school completion and higher earnings in the labor force (Hofferth et al. 1994). This section documents differences in the preschool attendance rates of students in schools with varying concentrations of poverty and in different locations.

Public schools offer programs and services designed to meet students' special needs, such as bilingual education, English as a second language, remedial reading and mathematics, special education, gifted and talented programs, day care, Chapter 1 (now Title 1) and diagnostic services. The availability of these programs is closely related to school size and level (whether a school is elementary or secondary) and each district's policies (Choy et al. 1993b). As part of this study, an analysis of the availability of these programs was undertaken to determine if program offerings varied by school location or level of poverty concentration. It was found that most programs were widely available. As a general rule, urban schools and high poverty schools were as likely to have such programs as suburban schools. More often than not, rural schools appeared less likely to offer a wide range of programs than either urban or suburban schools.

The availability of programs was often found to be related to the nature of the needs addressed by the programs. For example, Chapter 1 (Title 1) programs directed at disadvantaged students were found to be more prevalent in high poverty than low poverty schools in all locales. However, remedial reading and mathematics were found everywhere, as students needing these programs are found everywhere. Such obvious patterns did not warrant further analysis. Gifted and talented programs were selected for additional analysis because gifted and talented children are theoretically found everywhere, but programs serving them are not. Therefore, data on the availability of gifted and talented programs are presented in this section.

Consistent with the findings of chapter 2 and more generally with the findings of education researchers, one would expect students from high poverty schools and urban schools to be more likely to score lower on achievement tests overall and to need remedial programs. Similarly, on average, students from high poverty and urban schools would be less likely to be represented in advanced courses, particularly in science and mathematics, and to be overrepresented in vocational courses. Patterns of coursetaking were examined using transcripts of high school seniors to determine if there were differences between groups of students in their tendency to take vocational education or advanced courses.

#### **Findings**

 Urban public school students attended preschool at rates that fell between their suburban and rural peers; however, after accounting for the level of poverty in their schools, their preschool attendance rates differed only from rural students' rates. Students from high poverty schools, regardless of location, were less likely to have attended preschool than students from schools with lower poverty concentrations. Rural students from all but the low poverty schools were also found to be

- less likely to have attended preschool than students from urban and suburban schools.
- Urban public schools offered fewer gifted and talented programs at the elementary school level than suburban schools, even after accounting for differences in school poverty concentration.
- Neither the likelihood of greater than average participation in vocational education nor taking higher level courses was found to be related to an urban setting apart from poverty concentration. When poverty was taken into account, urban students took vocational education courses and higher level mathematics at rates similar to those of their suburban and rural peers.
- High poverty urban public schools were as likely
  to offer gifted and talented programs as high
  poverty suburban schools, but were less likely
  than predicted to offer these programs than rural
  schools. Their students were more likely to have
  attended preschool than those in high poverty
  rural, but not suburban schools.
- High poverty public schools, in general, offered gifted and talented programs less frequently than low poverty schools. Students were more likely to take vocational education and were less likely to take more advanced courses as the poverty level in their school increased.

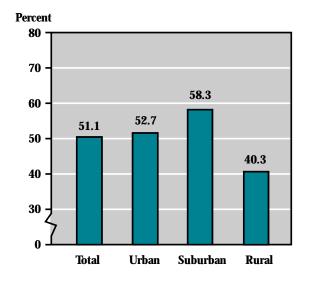
## **Preschool Attendance**

As stated above, research has suggested that preschool attendance is related to later school success, particularly for students facing greater disadvantages (Hofferth et al. 1994). Given the importance of preschool and early childhood programs, were students across all locations and poverty concentrations equally likely to have attended preschool? The answer to this question is obtained from the National Education Longitudinal Study of 1988 (NELS:88), which asked parents of 8th graders to report whether or not their child had attended preschool or nursery school programs. Since the students would have attended preschool during the late 1970s, these data do not account for changes in preschool attendance that have occurred since that time.

Are urban schools different? Nationally, according to their parents, 51 percent of public school 8th graders attended preschool, with urban students being less likely than suburban students and more likely than rural students to have attended. Fifty-three percent of students attending urban schools in the 8th grade had attended preschool compared with 58 percent of suburban and only 40 percent of rural students (figure 4.25).

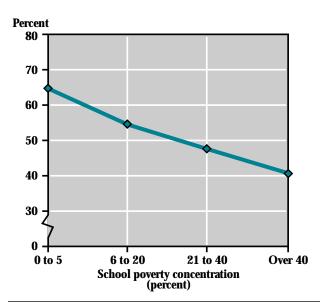
Are high poverty schools different? Rates of preschool attendance varied according to the poverty concentration of the schools the 8th graders attended. Forty percent of the students attending the highest poverty schools had attended preschool compared with 64 percent of students in the lowest poverty schools (figure 4.26).

Figure 4.25
Percentage of 8th-grade students
who attended preschool,
by urbanicity: 1988



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year Parent File.

Figure 4.26
Percentage of 8th-grade students
who attended preschool,
by school poverty concentration: 1988

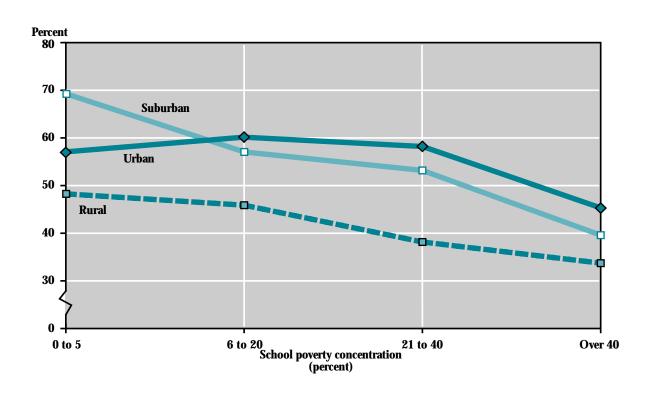


SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year Parent File.

Are urban schools different after accounting for poverty concentration? After accounting for differences in school poverty concentration across school locales, urban students were just as likely to have attended preschool as suburban students, but were still more likely to have attended than rural students. That is, the higher poverty concentration in urban schools seems to account for the differences between students in urban and suburban schools, but not the difference between urban and rural students. Rural students were less likely to have attended preschool than urban students at all levels of school poverty except the lowest.

Were students from urban high poverty schools less likely to have attended preschool than predicted? Urban students from schools with the highest poverty concentration were as likely as one would predict from the combination of their schools' characteristics to have attended preschool (figure 4.27). In fact, 45 percent of the parents of students from urban schools with the highest poverty concentration reported that their children had attended preschool compared with 34 percent of the parents of students attending high poverty rural schools. Students in urban and suburban high poverty schools had about the same levels of preschool attendance.

Figure 4.27
Percentage of 8th-grade students who attended preschool, by urbanicity and school poverty concentration: 1988

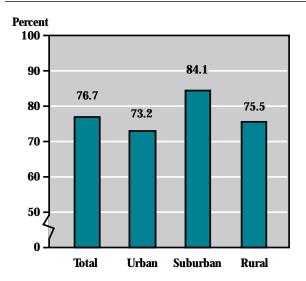


SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year Parent File.

## **Gifted and Talented Programs**

Gifted and talented programs provide those students selected by ability with the opportunity to expand their education beyond the basic curriculum. Some researchers have suggested that these programs are not available to all students equally, and that students in inner-city urban public schools are particularly unlikely to be offered or placed in programs for students of high ability (Oakes 1990). If these reports are true, some students who could benefit from more challenging curriculum may be placed at an unnecessary disadvantage when compared with other similar students. Comparisons of the availability of gifted and talented programs between public schools can be made using data from the 1987-88 SASS. Elementary schools were chosen for this analysis because of the importance of early coursework in determining later placement in academic tracks in secondary school, and the greater prevalence of these programs at the elementary level.<sup>25</sup>

Figure 4.28
Percentage of elementary schools that offer gifted and talented programs, by urbanicity: 1987–88

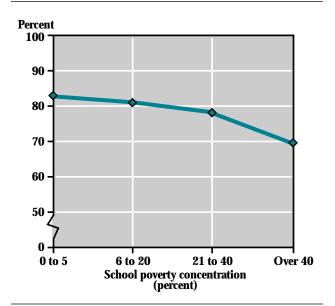


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, School File.

Are urban schools different? In 1987–88, 77 percent of public elementary schools offered gifted and talented programs nationally. Urban elementary schools, however, were less likely than suburban schools to offer these programs (figure 4.28). Seventy-three percent of urban elementary schools offered these programs compared with 84 percent of suburban schools. However, urban and rural schools did not differ in the proportions offering gifted and talented programs.

Are high poverty schools different? Schools with high poverty concentrations were less likely than other schools to offer gifted and talented programs. Of schools with the highest poverty concentrations, 70 percent reported offering a gifted and talented program, while 78 to 83 percent of other schools did so (figure 4.29).

Figure 4.29
Percentage of elementary schools that offer gifted and talented programs, by school poverty concentration: 1987–88

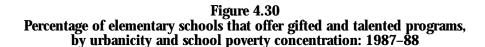


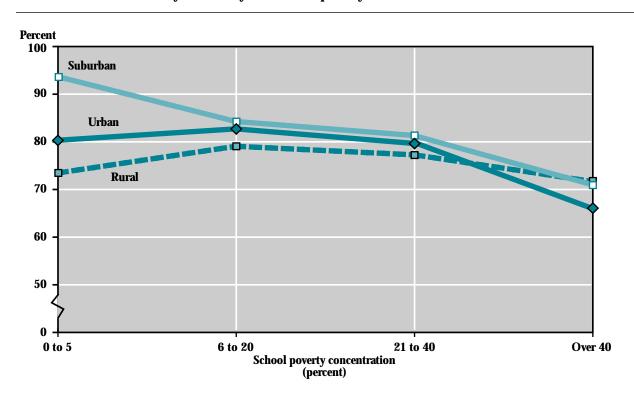
Are urban schools different after accounting for poverty concentration? After accounting for school poverty concentration, the differences between urban and suburban schools remained. That is, the higher poverty concentration of urban schools was not the only explanation for the disparity in the rate at which gifted and talented programs were offered in urban and suburban schools.

Were urban high poverty schools less likely to offer gifted and talented programs than predicted? Students in high poverty urban schools are at a disadvantage relative to rural schools in that they are less likely than predicted to have gifted and talented programs in their school. High poverty urban schools offered gifted and talented programs at a lower rate than rural high poverty schools

(figure 4.30). Sixty-six percent of urban high poverty schools offered gifted and talented programs compared with just over 70 percent of rural high poverty schools. Suburban high poverty schools were just as likely as urban high poverty schools to offer these programs; however, urban students at schools with the *lowest* poverty concentration are at a relative disadvantage compared with suburban schools. At the 0–5 percent level of poverty concentration, 80 percent of urban schools had gifted and talented programs compared with 94 percent of suburban schools. The percentages were similar for suburban and urban schools with higher poverty concentrations.

 $<sup>^{25}\</sup>mathrm{The}$  definition of elementary covers schools that include grades from kindergarten through the 6th grade, or ungraded, with no grades higher than the 8th.





SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, School File.

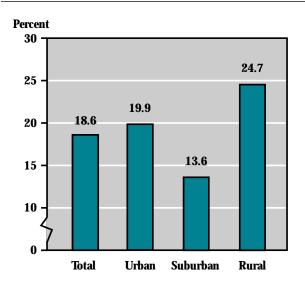
## **Vocational Coursetaking**

Nearly all students take a vocational course during their high school career. However, some students take considerably more vocational education courses than others. In this analysis, students who take six or more credits of vocational education are considered to be participating in vocational education more than the average high school student (Tuma 1995). The following analysis presents data from the high school transcripts of seniors obtained as part of the 1990 National Assessment of Educational Progress (NAEP) showing that vocational coursetaking varies by school location and poverty concentration. Interestingly, a similar analysis of the total number of academic credits students took did not reveal similar variation by these two school characteristics. This indicates that, although on average some groups of students take more vocational courses than others, academic

coursetaking does not vary when analyzed at the school level. However, research suggests that students who participate more in vocational education courses may take fewer advanced academic courses than their peers (Tuma 1996).

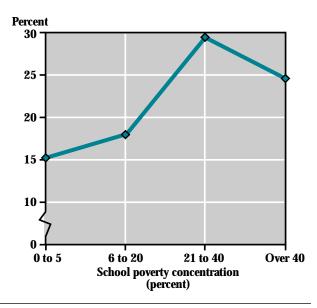
Are urban schools different? In 1990, about 19 percent of all graduating public high school seniors had taken six or more credits in vocational education (figure 4.31). Although it appears that urban students were more likely to take vocational education courses (20 percent) than suburban students (14 percent) and less likely than rural students (25 percent), these differences are not statistically significant. Students in urban schools were just as likely to take six or more credits in vocational education than students in suburban or rural schools. Rural students, however, were more

Figure 4.31
Percentage of graduating high school seniors who took 6 or more credits in vocational education, by urbanicity: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1990 High School Transcript Study.

Figure 4.32
Percentage of graduating high school seniors who took 6 or more credits in vocational education, by school poverty concentration: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1990 High School Transcript Study.

likely than suburban students to take six or more credits of vocational education—about one-fourth of rural students took that many credits compared with suburban students.

Are high poverty schools different? Students in public schools with high poverty concentrations were more likely to take six or more vocational credits than students in low poverty schools (figure 4.32). In the high poverty schools, one-fourth of all graduating seniors had completed six or more credits in vocational education compared with 15 percent of students in the low poverty schools.<sup>27</sup>

Are urban schools different after accounting for poverty concentration? After accounting for differences in school poverty concentration, urban students were still not statistically different in their vocational coursetaking than other students; however, rural students were, again, more likely than suburban students to take six or more vocational education credits.

Were students in urban high poverty schools more likely to have taken six or more vocational credits than predicted? Students in high poverty urban public schools were about as likely to take six or more vocational education credits as one would predict given the location and poverty concentration of their schools. That is, being in a high poverty urban school was not related to a greater than predicted incidence of taking a lot of vocational courses.<sup>28</sup>

<sup>&</sup>lt;sup>26</sup>One credit (or Carnegie Unit) is defined as a 1-year course meeting 1 hour a day.

<sup>&</sup>lt;sup>27</sup>The categories of poverty concentration used in this section are for illustrative purposes only. The actual statistical test was conducted on a continuous poverty concentration variable. Since the sample sizes for schools by urbanicity and poverty concentration combined were too small to produce reliable estimates, no comparisons were made between urban high poverty and other high poverty schools.

 $<sup>^{28}\</sup>mathrm{No}$  third figure is presented since the sample sizes for schools by urbanicity and poverty concentration are too small to produce reliable estimates.

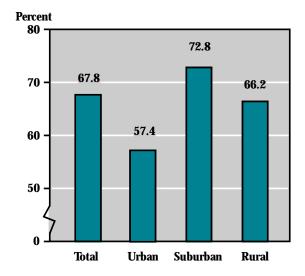
## **Mathematics Coursetaking**

A key feature of what constitutes a quality education is the opportunity to take advanced course work. Ideally, a measure of differences in course offerings across school types is desired, since if courses are not offered, students are not able to take them, and differences between schools in student achievement and attainment can result when students are not exposed to the same curricula. However, information on course offerings that schools provide is not a reliable predictor of what classes are actually offered during a school year. Student coursetaking is the best measure available, even though differences in coursetaking reflect students' placement and course selection in addition to differences in course offerings. Further, it is not known precisely how consistently course titles

reflect similar content; however, limited evidence suggests that course titles are reasonably reliable indicators of comparative content (Porter 1994).

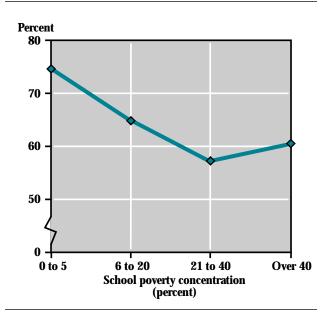
The data source for this analysis is the high school transcripts of seniors in the 1990 National Assessment of Educational Progress (NAEP). Since patterns of advanced coursetaking were found to be similar in mathematics, science, and foreign languages, only the results of the analysis of geometry are presented. Geometry was the course chosen because it is the most advanced, yet least specialized, mathematics class that is widely available and that a majority of students take. Also, evidence has shown that successful completion of geometry is related to a greater chance that students

Figure 4.33
Percentage of graduating high school seniors who took geometry, by urbanicity: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1990 High School Transcript Study.

Figure 4.34
Percentage of graduating high school seniors who took geometry, by school poverty concentration: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1990 High School Transcript Study.

will go on to college when compared with their peers who complete only algebra (Pelavin and Kane 1990).

Are urban schools different? In 1990, a little more than two-thirds (68 percent) of graduating public school seniors had taken geometry in high school (figure 4.33). Urban students were less likely than suburban students to have taken geometry. Fifty-seven percent of urban students had credits in geometry compared with almost 73 percent of suburban students. However, urban and rural students were not statistically different from each other on this measure.

Are high poverty schools different? Students in schools with higher poverty concentrations were less likely to have taken geometry than other students (figure 4.34). Sixty percent of students in the high poverty schools had taken geometry compared with 74 percent of students in the lowest poverty schools.<sup>29</sup>

Are urban schools different after accounting for poverty concentration? When the school poverty

concentration was taken into account, the difference between the proportion of urban and suburban students taking geometry was no longer statistically significant. Rural and suburban students were just as likely to have taken geometry as were urban students.<sup>30</sup>

Were students in urban high poverty schools less likely to have taken geometry than predicted? Students in urban high poverty schools were just as likely to have taken geometry as predicted from the combination of the effects of an urban and high poverty setting. There was no evidence that they were at any additional disadvantage related to the interaction, or compounding effect, of the two.

 $<sup>^{29}</sup>$ The categories of poverty concentration used in this section are for illustrative purposes only. The actual statistical test was conducted on a continuous poverty concentration variable.

<sup>&</sup>lt;sup>30</sup>No third figure is presented since the sample sizes for schools by urbanicity and poverty concentration are too small to produce reliable estimates.

# **Student Behavior**

Recently, researchers and policymakers have focused attention on the importance of the school learning environment and the influence of individual and peer behaviors on student performance. Goal six of the National Education Goals states that by the year 2000, "every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning" (National Education Goals Panel 1992). Because learning is constrained in an atmosphere of fear or disorderliness, student behavior influences school atmosphere and the climate for learning—whether it takes the form of violence and risk-taking activities (such as bringing a weapon to school or using alcohol) or a low commitment to academic effort (such as poor attendance, discipline, or study habits). These student behaviors also play a key role in determining student success in school and beyond. Studies of students considered to be "at risk" for school failure have shown that these students are likely to complete less homework, attend school less frequently, exhibit more aggressive behavior, and use illicit drugs more than their peers who are not at risk (Kaufman and Bradby 1992).

The indicators presented in this section can be broadly grouped into four categories of student behavior. Two indicators of student academic effort are time spent doing homework and watching television. The amount and quality of time spent in the classroom is represented by student absenteeism and time spent on discipline in the classroom. School violence is measured by how safe students feel in school and the extent of weapons possession at school. Finally, data on two student risk-taking behaviors, student alcohol use and pregnancy, are presented. Given the nature of these problems, the analysis is limited to secondary school data, with the exception of 8th-grade teacher reports of time spent maintaining classroom order and discipline.

When considering the results, it is important to emphasize that the actual incidence of a particular student behavior cannot be extrapolated from the data. These data reflect teachers' and students' perceptions of a particular problem. In one sense, teacher and student perceptions are direct measures of classroom and school conditions. However, teachers may have different perceptions of the seriousness of student behavior problems regardless of the frequency with which students engage in these particular behaviors in their schools. Behavior that might be considered intolerable to a teacher in one school may be a more common occurrence and, thus, less problematic to a teacher in another.

#### **Findings**

- About half of the student behaviors studied were more likely to be worse in public urban schools than in suburban or rural schools, even after accounting for the higher concentration of poverty in urban schools. More time was spent maintaining classroom discipline in urban schools, and student absenteeism, possession of weapons, and student pregnancy were greater problems.
- For the other half of behaviors studied, urban students were similar to other students after accounting for poverty differences. They spent the same amount of time doing homework and watching television as other students. Although they felt less safe at school than rural students, they were as likely to report feeling safe as suburban students. Urban students were considered by their teachers to be as likely to use alcohol as suburban students, but less likely than rural students.

- Discipline was more likely to be a problem in urban high poverty schools than in any other high poverty schools. Student absenteeism and weapons possession were worse in urban than in rural high poverty schools, but were the same as in suburban schools with a similar poverty concentration.
- Students in urban high poverty schools were similar to students in other high poverty schools

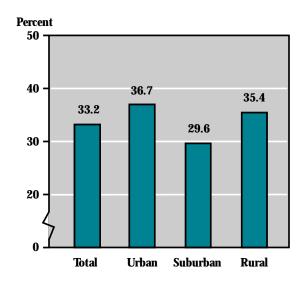
- in their homework effort, feelings of safety, alcohol use, and problems with pregnancy.
- The hours that students in urban high poverty schools spent watching television were higher than predicted, and cannot be explained by the combination of an urban school location and high poverty concentration alone.

## **Hours of Television Watched on Weekdays**

Time spent watching television limits the number of hours a student has available to complete homework (Mullis et al. 1991). Moreover, spending large amounts of time watching television has been correlated with weaker academic performance in recent national assessments (U.S. Department of Education 1993b). The National Assessment of Educational Progress (NAEP) has documented that students watched more hours of television and spent less time on homework per day in 1990 than in 1982 (U.S. Department of Education 1993b).

Are urban schools different? Nationally, 33 percent of public school 10th graders in 1990 reported watching at least 3 hours of television on weekdays. Urban students (37 percent) were more likely than suburban students (30 percent) to watch this much television.

Figure 4.35
Percentage of 10th-grade students who watch 3 or more hours of television on weekdays, by urbanicity: 1990



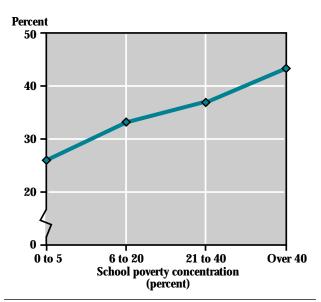
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

However, there was no statistical difference between urban and rural students (35 percent) on this measure (figure 4.35).

Are high poverty schools different? Students who attend high poverty schools were more likely to watch 3 or more hours of television per weekday than their peers in schools with lower poverty concentrations. Forty-three percent of students in high poverty schools watched 3 or more hours of television compared with 26 percent of students in low poverty schools, a difference of 17 percentage points (figure 4.36).

Are urban schools different after accounting for poverty concentration? After accounting for school poverty concentration, the difference between students attending urban and suburban schools disappeared.

Figure 4.36
Percentage of 10th-grade students who watch
3 or more hours of television on weekdays,
by school poverty concentration: 1990



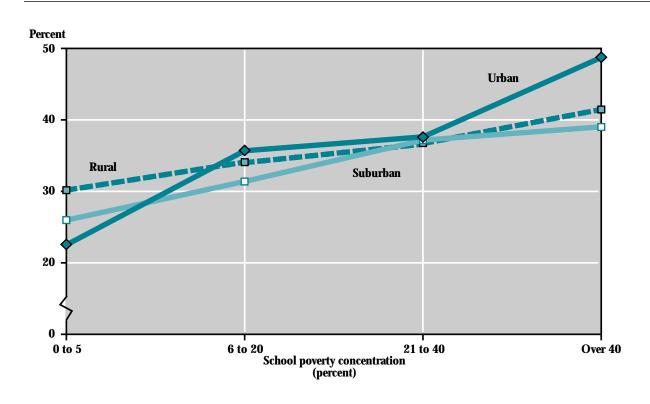
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

Therefore, the greater percentage of urban students watching a lot of television compared with their suburban counterparts can be explained by the greater likelihood that urban students attend schools with higher poverty concentrations.

Were students in urban high poverty schools likely to view television more frequently than predicted? Nearly one-half of students in urban high poverty schools reported watching television more than 3 hours per day. In fact, the rate for urban high poverty schools was higher than predicted given the overall rates of television

watching for urban students and students in all schools with high poverty concentrations. Although on average, after accounting for poverty, the proportion of urban students watching a lot of television was no different from suburban and rural students, this average masks the differences by level of poverty within urban schools. There was a wider gap between the television viewing habits of urban students in high poverty schools compared with urban students in low poverty schools than there was for either suburban or rural students (figure 4.37). In other words, poverty concentration mattered more in urban schools than in schools in other locations.

Figure 4.37
Percentage of 10th-grade students who watch 3 or more hours of television on weekdays, by urbanicity and school poverty concentration: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

## **Hours Spent on Homework**

The amount of time spent on homework is an important indicator of student effort. Tenth-grade students participating in the 1990 follow-up to the NELS:88 survey were questioned about the amount of time they spent on homework both in and out of school,<sup>31</sup> and these data are presented below.

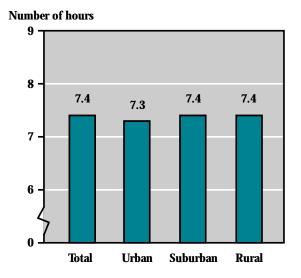
Are urban schools different? No difference was found in the number of hours students attending public schools in different locations spent doing homework. The average number of hours that urban, suburban, and rural students spent on homework was a little over 7 hours per week (figure 4.38).

Are high poverty schools different? The number of hours of homework completed by students differed according to the poverty concentration of their schools. Students attending high poverty schools completed 6 and a half hours of homework on average during the week, while students in low poverty schools completed almost 8 hours (figure 4.39).

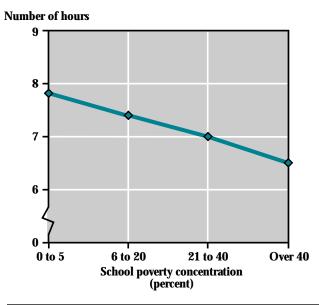
Are urban schools different after accounting for poverty concentration? There were still no differences between students attending urban, suburban, and rural schools after accounting for the varying school poverty concentration.

Figure 4.38
Average number of hours 10th-grade students spend on homework per week, by urbanicity: 1990

Figure 4.39
Average number of hours 10th-grade students spend on homework per week, by school poverty concentration: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

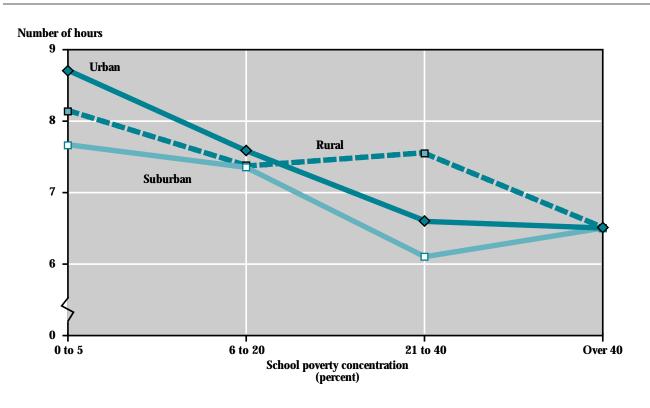


SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

Were students in urban high poverty schools less likely to spend time on homework than predicted? Students from urban high poverty schools did not spend less time doing homework than predicted. In fact, students attending these schools did as much homework as students in schools in other locations with similar poverty concentrations. Thus, despite their unusually high rate of television watching, these students did not appear to spend less time on home-

work than students in other high poverty schools (figure 4.40).

Figure 4.40
Average number of hours 10th-grade students spend on homework per week, by urbanicity and school poverty concentration: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

<sup>&</sup>lt;sup>31</sup>To create a figure for homework hours completed during the week, data on time spent on homework both in and out of school were combined. In order to combine these data, which were already in discrete categories, a score midway between the range for each category was created; then, an overall score was created by summing the two separate scores for homework completed in and out of school. The analysis was conducted using this overall score.

#### Student Absenteeism

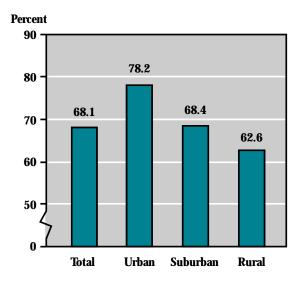
Of all the student behavior problems that teachers were asked about in the 1987–88 SASS, absenteeism was the one rated serious most frequently, regardless of school location and poverty concentration.<sup>32</sup> A related behavior, tardiness, was also frequently rated as a serious problem by teachers, particularly in urban and high poverty schools. Since the patterns for these two indicators were quite similar, only data for student absenteeism are presented below. Teachers who rated absenteeism either as a moderate or serious problem were grouped together to produce a percentage who consider this behavior a problem in their school.

Are urban schools different? Nationally, 68 percent of public school teachers rated student absenteeism as a

moderate or serious problem in their schools. Urban teachers were more likely than either suburban or rural teachers to rate this as a problem. Seventy-eight percent of urban teachers considered this a problem in their schools as opposed to 68 percent of suburban and 63 percent of rural teachers (figure 4.41).

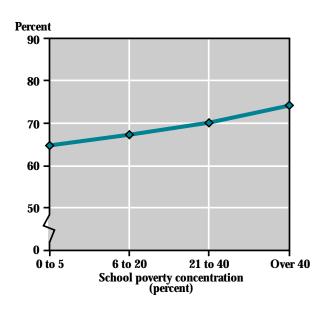
Are high poverty schools different? Student absenteeism was most likely to be considered a problem by teachers in high poverty schools. Seventy-four percent of teachers in schools with more than 40 percent poverty concentration considered student absenteeism a moderate or serious problem, while 65 percent of teachers in low poverty schools held the same view (figure 4.42).

Figure 4.41
Percentage of secondary teachers who believe that student absenteeism is a problem in their school, by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.42
Percentage of secondary teachers who believe that student absenteeism is a problem in their school, by school poverty concentration: 1987–88



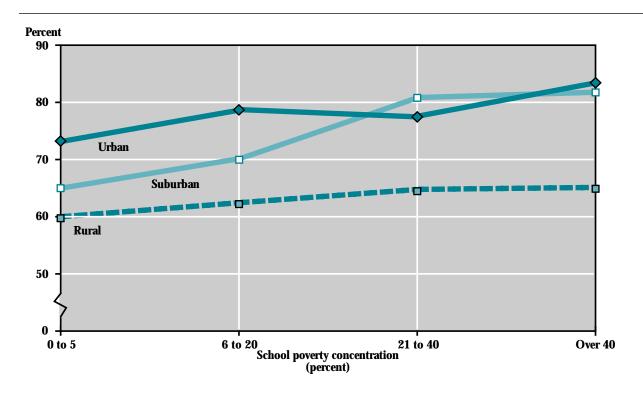
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Are urban schools different after accounting for poverty concentration? Accounting for poverty concentration did not eliminate the differences by school location. Urban teachers were still more likely to consider student absenteeism a moderate or serious problem in their schools when compared with suburban and rural teachers.

Were teachers in urban high poverty schools more likely to consider student absenteeism a problem in their schools than predicted? Teachers in urban high poverty schools were more likely to consider student absenteeism a problem than teachers in rural high poverty schools (84 percent compared with 65 percent). However, this rate was no higher than predicted.

There was little difference between teachers in suburban schools with moderately high to the highest poverty concentrations and their urban counterparts on this measure. Teachers in urban and suburban schools were more likely to consider student absenteeism a problem as school poverty concentration increased. However, the percentage of rural teachers rating student absenteeism a problem was lower than that of teachers in suburban and urban schools, and it did not increase as much with poverty concentration as it did in urban and suburban schools (figure 4.43).

Figure 4.43
Percentage of secondary teachers who believe that student absenteeism is a problem in their school, by urbanicity and school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, Teacher File.

 $<sup>^{\</sup>rm 32}{\rm Administrators}$  also rated this as a serious problem most frequently.

## **Time Spent Maintaining Classroom Discipline**

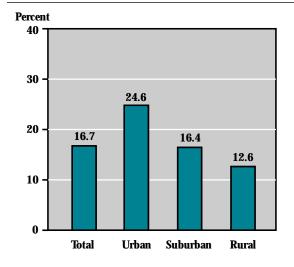
Recent studies comparing U.S. and Asian classroom practices have suggested that in the United States, teachers spend a greater proportion of time on activities other than instruction than they do in Japan and China (Stevenson and Stigler 1992). According to Harold Stevenson, American teachers spend proportionately more time disciplining students in the classroom than their Asian peers. Time spent on discipline means less time available for instruction and learning.

One index of need for discipline is the degree to which American children engage in irrelevant activities in the classroom . . . Such activities as talking to other children and wandering about the classroom diminish the child's own opportunities for learning and are potentially disruptive to other children. This type of irrelevant behavior, in addition to the fidgeting and inattentiveness often described by American teachers, makes maintaining discipline a pervasive and difficult problem in American classrooms (Stevenson and Stigler 1992).

Researchers have also suggested that teachers spend more time disciplining students and maintaining order in schools in poor urban settings than in non-urban and more advantaged schools (Karweit 1992). In this section, data from the base year of the National Education Longitudinal Survey of 1988 (NELS:88) is used to examine this perception. In NELS:88, 8th-grade teachers were asked about the time they spent maintaining order and discipline in their classrooms.<sup>33</sup> Less than 2 percent of these teachers reported that their classes met more than 5 hours per week. Therefore, teachers who spent 1 hour or more per week maintaining classroom order were spending at least one-fifth of their instruction time on discipline.

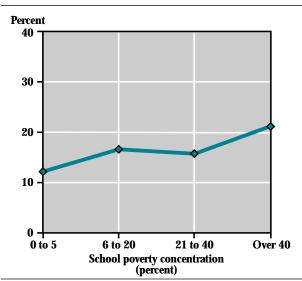
Are urban schools different? Teachers of 8th-grade students in urban public schools were more likely to spend substantial amounts of time maintaining classroom order and discipline than their suburban and rural counterparts. Urban 8th-grade teachers were almost twice as likely as rural teachers to report that they spend at least 1 hour per week maintaining order in their classes (25 percent compared with 13 percent). Sixteen percent of suburban teachers reported spending this much classroom time on these tasks (figure 4.44).

Figure 4.44
Percentage of teachers of 8th-grade students who spend at least 1 hour per week maintaining classroom order and discipline, by urbanicity: 1988



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year Teacher File.

Figure 4.45
Percentage of teachers of 8th-grade students
who spend at least 1 hour per week
maintaining classroom order and discipline,
by school poverty concentration: 1988



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year Teacher File.

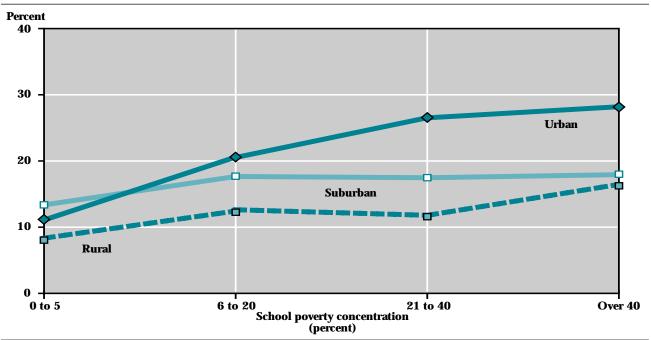
Are high poverty schools different? Teachers of 8thgrade students from the highest poverty schools were generally more likely to spend classroom time maintaining order and discipline than were teachers from schools with lower poverty concentrations (figure 4.45). In particular, 21 percent of 8th-grade teachers from high poverty schools spent at least 1 hour per week in their classes on discipline compared with 12 percent of teachers in low poverty schools.

Are urban schools different after accounting for poverty concentration? After taking poverty concentration into account, urban teachers of 8th-grade students were still more likely to spend at least 1 hour per week maintaining order in their classrooms. The higher proportion of poor students in urban locations is not the only explanation for the fact that teachers in urban schools were likely to spend more time disciplining their students than teachers in rural and suburban schools.

Were teachers in urban high poverty schools more likely to spend at least 1 hour on discipline in their classrooms than predicted? Teachers of 8th-grade stu-

dents in urban high poverty schools were more likely to spend at least 1 hour maintaining classroom order and discipline than 8th-grade teachers in other high poverty schools. However, their responses were no different from teachers in other urban schools with moderate levels of poverty concentration (figure 4.46). Twenty-eight percent of urban 8th-grade teachers spent this amount of time on discipline—at least 10 percentage points higher than 8th-grade teachers in suburban or rural high poverty schools. However, teachers in urban high poverty schools did not spend more time disciplining students than predicted compared with teachers in other schools. This suggests that high poverty concentration and an urban setting do not interact to add to the already larger amounts of time teachers spend on maintaining discipline in these schools.

Figure 4.46
Percentage of teachers of 8th-grade students who spend at least 1 hour per week maintaining classroom order and discipline, by urbanicity and school poverty concentration: 1988



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, Base Year Teacher File.

<sup>&</sup>lt;sup>33</sup>Although the student sample in the NELS:88 survey was designed to represent the student population in the United States, the teacher sample is not nationally representative. This means that one can discuss these data nationally for students, but not teachers. In one of the following combinations of subject areas—math and English, math and social studies, science and English, or science and social studies—two teachers were chosen for each student. (If one teacher taught both subjects to a student, then one teacher was chosen for that student.)

## **School Safety**

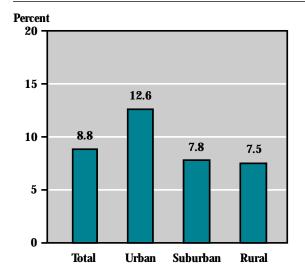
Perhaps no other school climate issue has received as much recent media attention as safety in the public schools. Reports surface almost weekly on incidents of weapons possession, drug use, violence, racial conflict and crime on school campuses, particularly in the inner cities. There have even been individual reports of students choosing not to attend their classes out of fear. (Such behavior clearly may exacerbate the problem of student absenteeism discussed earlier in this section.)<sup>34</sup> Despite what appears to be increasing reports of school violence, a recent study comparing sophomores in 1980 and 1990 revealed that in 1990, 10th graders were in general less likely to report that they felt unsafe at school than were students surveyed in 1980 (Rasinski et al. 1993). Whether this suggests a positive change in school safety nationally or simply increased desensitization to violence is unclear. Nevertheless, in

1990 the percentage of students who reported feeling unsafe at school differed by school location and poverty concentration, as presented below.

Are urban schools different? Nationally, approximately 9 percent of 10th graders agreed or strongly agreed that they did not feel safe at school in 1990. Tenth graders attending urban schools were more likely to report that they did not feel safe at school—13 percent compared with 8 percent each of suburban and rural students (figure 4.47).

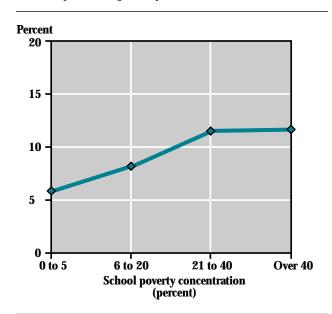
Are high poverty schools different? Students in high poverty schools were less likely to feel safe than those in schools with the lowest poverty concentrations (figure 4.48). However, students in schools with the highest poverty concentration were just as likely to feel unsafe

Figure 4.47
Percentage of 10th-grade students who do not feel safe at school, by urbanicity: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

Figure 4.48
Percentage of 10th-grade students who do not feel safe at school, by school poverty concentration: 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

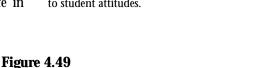
as those in schools with the next to highest concentration of poverty. Approximately 12 percent of students in high poverty schools felt unsafe, compared with 6 to 8 percent in schools with the lowest and next to lowest poverty concentrations.

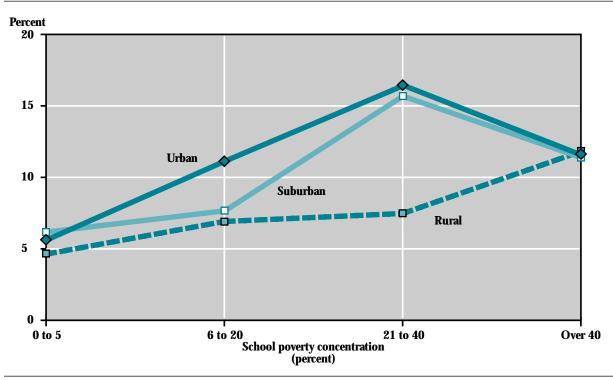
Are urban schools different after accounting for poverty concentration? Once the higher poverty concentrations in urban schools are considered, urban and suburban students' perception of school safety are similar; but urban students overall still felt less safe than their rural peers.

Were students in urban high poverty schools more likely to feel unsafe at school than predicted? Students in urban high poverty schools were just as likely to feel unsafe as students in high poverty schools in other locations. In fact, the percentage who did not feel safe in

urban high poverty schools was not statistically different from the percentages in other urban schools, with the exception of urban students in the lowest poverty schools. Thus, an urban high poverty setting did not present any additional safety risk from the students' perspective. Given the heightened news reports, what seems most surprising is that the magnitude of the problem as reported by students is not high, ranging from 5 percent of students in low poverty rural schools to approximately 16 percent of students in urban and suburban schools with a poverty concentration of 21 to 40 percent (figure 4.49).

<sup>&</sup>lt;sup>34</sup>See, for example, *The New York Times*, October 15, 1993, B3. According to Robert D. McFadden, "20% of New York City Public-School Students Carry Weapons, Study Finds." This statement refers to a study conducted in June 1992 by the Federal Centers for Disease Control and Prevention, the city Health Department, and city school officials, which links school violence to student attitudes.





Percentage of 10th-grade students who do not feel safe at school, by urbanicity and school poverty concentration: 1990

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow-up Student File.

# **Student Possession of Weapons**

The presence of weapons on school campuses poses a serious threat to the school learning environment. Though still rare, shootings and weapon-related violent acts occurring inside or near schools have received much publicity in recent years, and, to the extent they do occur, they interfere with the ability of students and teachers to concentrate on schooling.

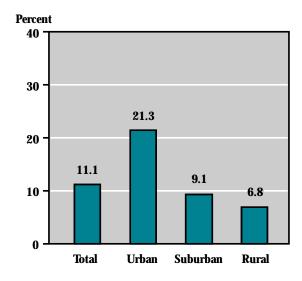
Are urban schools different? Nationally, 11 percent of teachers reported that weapons possession by students was a moderate or serious problem in their school in 1987–88. Teachers' responses, however, varied widely by location (figure 4.50). Urban teachers were more

than twice as likely as suburban or rural teachers to view weapons possession as a problem in their schools—21 percent compared with 9 percent and 7 percent, respectively. This finding supports the perception that urban students are exposed to more weapons in the school than either suburban or rural students.

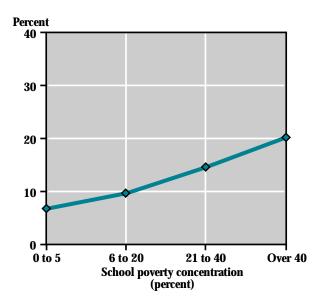
Are high poverty schools different? Teachers in high poverty schools were more than twice as likely to report that weapons possession was a problem than teachers in schools with the two lowest concentrations of poverty (figure 4.51). Twenty-one percent of teachers in high poverty schools reported that

Figure 4.50
Percentage of secondary teachers who believe that student weapons possession is a problem in their school, by urbanicity: 1987–88

Figure 4.51
Percentage of secondary teachers who believe that student weapons possession is a problem in their school, by school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.



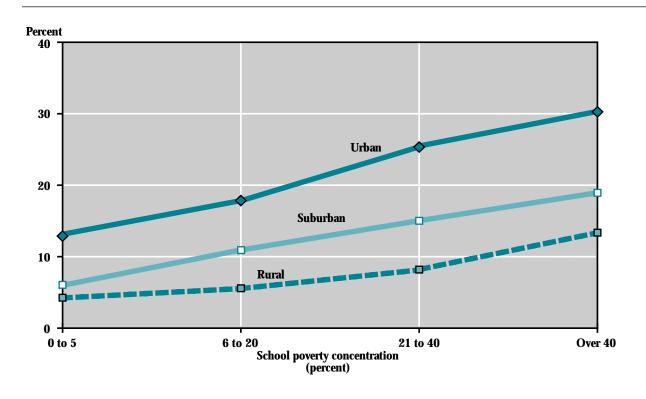
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

weapons possession was a problem compared with 6 percent of teachers in the lowest poverty schools and 10 percent of the teachers in schools with a 6–20 percent poverty concentration.

Are urban schools different after accounting for poverty concentration? After accounting for differences in school poverty concentration, school location was still found to be strongly related to teacher responses. Teachers in urban schools were more likely to view student weapons possession as a problem in their schools when compared with either suburban or rural teachers.

Were teachers in urban high poverty schools more likely to view student possession of weapons as a moderate to serious problem in their schools than predicted? Teachers in urban high poverty schools were more likely to report that weapons possession was a problem than teachers in many other school types, but their reports were no different from teachers in urban schools with the next highest poverty concentration and suburban schools with the highest poverty concentrations. The combination of an urban and a high poverty setting did not reveal an additional risk of exposure to weapons (figure 4.52).

Figure 4.52
Percentage of secondary teachers who believe that student weapons possession is a problem in their school, by urbanicity and school poverty concentration: 1987–88



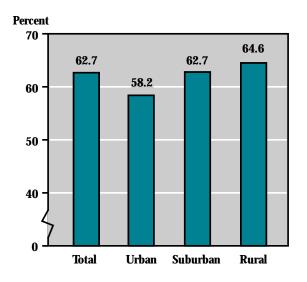
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

#### **Student Alcohol Use**

Some recent reports on the "at-risk" behaviors of youth have shown that student use of illegal substances has declined over the past two decades (U.S. Department of Education 1993c). Nevertheless, students' use of alcohol and drugs has remained a serious issue for educators and parents, with recent reports indicating that the use of illegal substances by teenagers may be again on the rise (University of Michigan 1994). Even in the late 1980s, alcohol use among students seems to have been of particular concern to teachers who participated in the 1987–88 SASS. Secondary school teachers nationwide rated student use of alcohol as a moderate or serious problem in their schools more frequently than student drug abuse (63 percent compared with 57 percent).

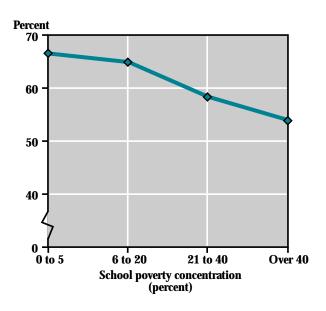
Are urban schools different? Nationwide, 63 percent of teachers considered student alcohol use as a moderate to serious problem in their schools. Teachers in urban schools were *less* likely (58 percent) to consider alcohol use a problem than were teachers from either suburban (63 percent) or rural (65 percent) schools. Of the four student problems presented in this report, this is the only case where urban teachers were less likely to report a student behavior as a problem than teachers in schools in other locations (figure 4.53). However, urban public school teachers view the use of drugs as a serious problem in their schools more frequently than do suburban or rural school teachers, although the percentages who do so are less than for alcohol use (Choy et al. 1992).

Figure 4.53
Percentage of secondary teachers who think that student alcohol use is a problem in their school, by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.54
Percentage of secondary teachers who think that student alcohol use is a problem in their school, by school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

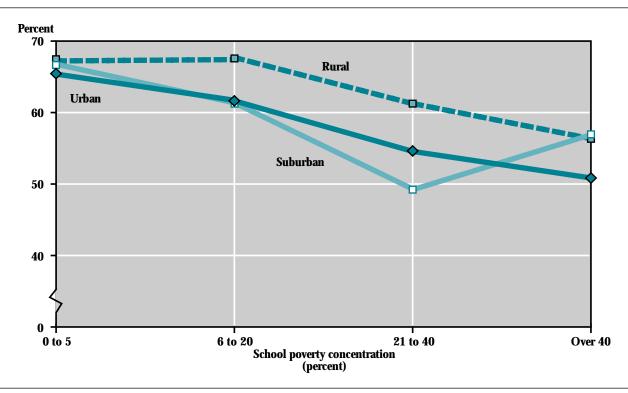
Are high poverty schools different? Teachers in high poverty schools were *less* likely than teachers in any other school poverty concentration category to report alcohol use as a moderate or serious problem in their schools. Fifty-four percent of teachers in high poverty schools considered student alcohol use a problem compared with 65 to 67 percent of teachers in the two low poverty concentration categories (figure 4.54). In this report, there are no other indicators describing a student behavior negatively related to academic outcomes that is more prevalent in schools with low poverty concentrations.

Are urban schools different after accounting for poverty concentration? When poverty concentration was taken into account, the differences by urbanicity changed. Urban teachers were still less likely than

rural teachers to report alcohol use as a moderate to serious problem. Urban teachers, however, no longer differed from their suburban counterparts in their perception of alcohol use as a problem.

Were teachers in urban high poverty schools less likely to think that student alcohol use was a moderate to serious problem in their schools than predicted? Teacher reports that alcohol use was a problem were similar in urban, suburban, and rural high poverty schools (51, 57, and 56 percent respectively), and were no different than predicted in urban high poverty schools (figure 4.55). It is interesting that student alcohol use is considered a problem more often by rural teachers than either urban or suburban teachers for the two middle levels of poverty concentration.

Figure 4.55
Percentage of secondary teachers who think that student alcohol use is a problem in their school, by urbanicity and school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

## **Student Pregnancy**

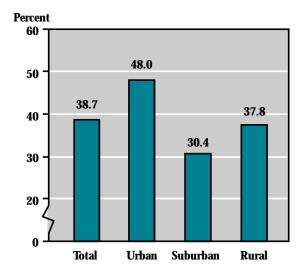
Teenage pregnancy limits the educational opportunities of many female students, particularly those in poor urban settings. In addition, student pregnancy places significant demands on the social services of both the school and the community (Males 1993; 1994; Caldas 1994). This section examines how teachers perceive the problem in their schools.

Are urban schools different? Nationally, 39 percent of teachers in 1987-88 considered student pregnancy to be a moderate or serious problem in their schools. A much larger percentage of urban teachers (48 percent)

considered this a problem when compared with suburban and rural teachers (30 percent and 38 percent, respectively) (figure 4.56).

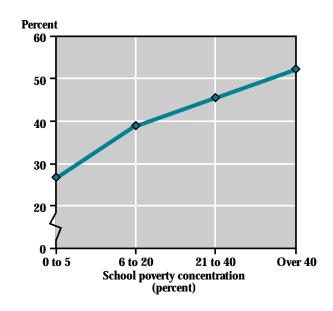
Are high poverty schools different? Teachers' perceptions of the problem of pregnancy differed greatly by school poverty concentration. Teachers in high poverty schools were twice as likely to consider student pregnancy a moderate or serious problem than teachers in low poverty schools (52 percent compared with 26 percent) (figure 4.57).

Figure 4.56
Percentage of secondary teachers who think that student pregnancy is a problem in their school, by urbanicity: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Figure 4.57
Percentage of secondary teachers who think that student pregnancy is a problem in their school, by school poverty concentration: 1987–88

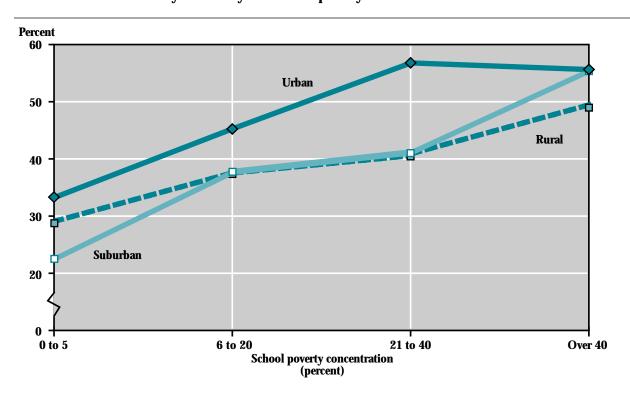


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.

Are urban schools different after accounting for poverty concentration? After accounting for poverty concentration, urban teachers were still more likely to consider student pregnancy a problem than their counterparts in other locations. The higher concentration of poverty in urban schools is not the only explanation for the greater prevalence of teacher concern about student pregnancy in these schools.

Were teachers in urban high poverty schools more likely to consider student pregnancy a moderate or serious problem in their schools than predicted? Teachers in urban high poverty schools were as likely to consider student pregnancy a moderate or serious problem as predicted, given the poverty concentration and location of their schools. Urban teachers reported this problem more frequently than their counterparts at the middle two levels of school poverty concentration and more frequently than suburban teachers in low poverty schools, but not more frequently than those in high poverty schools (figure 4.58). There is no statistical difference between the proportion of teachers in urban high poverty schools who thought student pregnancy was a problem and the proportion of teachers who thought so in other high poverty schools.

Figure 4.58
Percentage of secondary teachers who think that student pregnancy is a problem in their school, by urbanicity and school poverty concentration: 1987–88



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88, Teacher File.