

## **Additional Equity Cross-Tabulations**



## Additional Equity Cross-Tabulations

Chapters 2–7 report data on several key indicators, disaggregated by one or more equity factors: the prior achievement level of students in the class, the percentage of students in the class from race/ethnicity groups historically underrepresented in STEM, the percentage of students in the school eligible for free/reduced-price lunch, school size, community type, and region. This appendix includes data on each of these indicators by all relevant equity factors. Each table title includes a reference to the related table in the body of the report.

**Table E-1 (Table 2.4)**  
**Equity Analyses of Science Classes Taught by**  
**Teachers With Varying Experience Teaching Science**

	PERCENT OF CLASSES				
	0–2 YEARS	3–5 YEARS	6–10 YEARS	11–20 YEARS	≥ 21 YEARS
<b>Prior Achievement Level of Class</b>					
Mostly High	11 (1.6)	16 (1.7)	20 (2.0)	36 (2.8)	17 (1.9)
Average/Mixed	17 (1.1)	16 (1.3)	19 (1.2)	32 (1.5)	17 (1.1)
Mostly Low	19 (3.2)	21 (3.0)	20 (2.4)	29 (3.0)	10 (1.7)
<b>Percent of Historically Underrepresented Students in Class</b>					
Lowest Quartile	13 (1.4)	14 (1.5)	18 (1.6)	38 (2.2)	17 (1.5)
Second Quartile	13 (1.6)	16 (1.8)	19 (2.3)	34 (2.5)	18 (1.9)
Third Quartile	19 (1.7)	19 (2.0)	18 (1.5)	26 (2.3)	18 (2.4)
Highest Quartile	20 (2.2)	20 (3.3)	20 (2.4)	29 (3.1)	11 (1.4)
<b>Percent of Students in School Eligible for FRL</b>					
Lowest Quartile	11 (1.4)	16 (1.9)	18 (2.1)	40 (2.3)	15 (1.4)
Second Quartile	13 (1.3)	13 (1.6)	22 (2.2)	33 (2.6)	19 (2.0)
Third Quartile	22 (2.4)	20 (3.0)	16 (1.9)	27 (2.3)	16 (2.0)
Highest Quartile	19 (2.2)	19 (1.9)	21 (2.1)	27 (2.3)	13 (2.1)
<b>School Size</b>					
Smallest Schools	16 (2.6)	19 (3.8)	21 (3.8)	31 (3.5)	13 (2.3)
Second Group	16 (2.0)	17 (4.0)	18 (2.3)	31 (3.0)	17 (2.3)
Third Group	17 (1.6)	14 (1.4)	17 (1.5)	34 (2.0)	18 (1.9)
Largest Schools	16 (1.5)	18 (1.3)	20 (1.5)	32 (1.7)	14 (1.3)
<b>Community Type</b>					
Rural	17 (1.9)	15 (1.7)	19 (2.0)	33 (2.3)	16 (1.7)
Suburban	14 (1.2)	18 (1.2)	19 (1.4)	34 (1.6)	15 (1.1)
Urban	19 (2.1)	17 (2.9)	19 (2.1)	28 (2.2)	17 (2.1)
<b>Region</b>					
Midwest	15 (2.1)	15 (1.4)	16 (1.7)	32 (2.3)	23 (2.4)
Northeast	11 (1.4)	17 (4.5)	21 (3.2)	40 (3.6)	11 (1.6)
South	21 (1.8)	19 (1.5)	20 (1.2)	27 (1.7)	13 (1.3)
West	14 (1.9)	15 (1.6)	19 (2.2)	35 (3.0)	17 (1.9)

**Table E-2 (Table 2.4)**  
**Equity Analyses of Mathematics Classes Taught by**  
**Teachers With Varying Experience Teaching Mathematics**

	PERCENT OF CLASSES				
	0-2 YEARS	3-5 YEARS	6-10 YEARS	11-20 YEARS	≥ 21 YEARS
<b>Prior Achievement Level of Class</b>					
Mostly High	10 (1.7)	15 (1.9)	20 (2.3)	33 (2.3)	22 (2.1)
Average/Mixed	14 (1)	16 (1.2)	19 (1.1)	34 (1.4)	16 (1.2)
Mostly Low	17 (1.8)	20 (2.6)	17 (2.4)	33 (2.8)	13 (1.7)
<b>Percent of Historically Underrepresented Students in Class</b>					
Lowest Quartile	9 (1.4)	15 (1.8)	19 (1.5)	35 (2.1)	22 (1.6)
Second Quartile	14 (1.8)	19 (1.6)	20 (1.9)	33 (1.9)	15 (1.6)
Third Quartile	15 (1.6)	15 (2.1)	18 (1.7)	36 (2.6)	17 (1.9)
Highest Quartile	18 (2.3)	19 (2.4)	19 (2.1)	32 (2.8)	13 (1.9)
<b>Percent of Students in School Eligible for FRL</b>					
Lowest Quartile	12 (1.8)	17 (2.0)	19 (1.8)	34 (2.2)	18 (1.5)
Second Quartile	11 (1.4)	18 (1.9)	18 (1.8)	36 (2.2)	17 (1.6)
Third Quartile	17 (1.7)	14 (1.9)	18 (1.5)	33 (2.7)	17 (2.0)
Highest Quartile	15 (2.1)	18 (2.0)	19 (1.8)	32 (2.7)	15 (2.0)
<b>School Size</b>					
Smallest Schools	15 (2.4)	20 (2.3)	18 (2.8)	28 (2.7)	18 (2.7)
Second Group	17 (1.9)	16 (2.0)	19 (1.8)	31 (2.2)	18 (2.5)
Third Group	12 (1.6)	16 (1.5)	17 (1.6)	37 (1.9)	18 (1.7)
Largest Schools	14 (1.1)	17 (1.4)	19 (1.4)	34 (1.7)	15 (1.2)
<b>Community Type</b>					
Rural	12 (1.4)	15 (1.8)	22 (1.7)	33 (1.9)	18 (1.7)
Suburban	14 (1.1)	17 (1.2)	18 (1.2)	36 (1.6)	16 (1.3)
Urban	16 (2.0)	18 (2.0)	18 (1.5)	31 (1.7)	17 (1.9)
<b>Region</b>					
Midwest	11 (1.4)	16 (2.1)	16 (1.6)	35 (2.3)	22 (2.1)
Northeast	11 (1.9)	16 (2.5)	20 (2.1)	37 (3.1)	15 (2.0)
South	18 (1.5)	18 (1.3)	20 (1.6)	30 (1.8)	14 (1.3)
West	12 (1.8)	16 (2.2)	18 (2.0)	37 (3.0)	17 (2.1)

**Table E-3 (Table 2.4)**  
**Equity Analyses of High School Computer Science Classes Taught by Teachers With Varying Experience Teaching Computer Science**

	PERCENT OF CLASSES									
	0-2 YEARS		3-5 YEARS		6-10 YEARS		11-20 YEARS		≥ 21 YEARS	
<b>Prior Achievement Level of Class</b>										
Mostly High	27	(6.1)	30	(5.9)	19	(5.0)	19	(4.6)	5	(2.5)
Average/Mixed	35	(4.8)	27	(4.6)	13	(2.4)	24	(4.5)	2	(0.8)
<b>Percent of Historically Underrepresented Students in Class</b>										
Lowest Quartile	25	(6.5)	38	(8.0)	14	(4.5)	19	(5.1)	4	(2.8)
Second Quartile	25	(7.4)	26	(9.5)	18	(5.8)	30	(8.0)	1	(0.7)
Third Quartile	27	(6.5)	36	(6.8)	16	(5.7)	18	(6.6)	4	(2.2)
Highest Quartile	49	(9.5)	12	(5.2)	13	(3.7)	22	(9.2)	4	(2.1)
<b>Percent of Students in School Eligible for FRL</b>										
Lowest Quartile	28	(5.0)	30	(5.3)	16	(3.6)	24	(4.9)	2	(1.4)
Second Quartile	31	(8.3)	29	(7.1)	17	(5.9)	22	(6.5)	2	(1.9)
Third Quartile	23	(8.2)	36	(12.1)	8	(3.5)	33	(11.4)	1	(0.7)
Highest Quartile	56	(9.8)	12	(6.7)	21	(5.3)	3	(2.8)	8	(4.9)
<b>School Size</b>										
Smallest Schools	31	(17.8)	30	(15.9)	0	---†	36	(26.2)	4	(3.9)
Second Group	56	(10.4)	17	(7.4)	12	(5.4)	15	(8.5)	0	---†
Third Group	23	(6.2)	40	(10.5)	13	(6.1)	22	(9.2)	2	(1.5)
Largest Schools	29	(4.6)	25	(3.8)	19	(3.5)	23	(3.7)	4	(1.6)
<b>Community Type</b>										
Rural	46	(8.7)	25	(6.7)	11	(5.7)	12	(4.7)	6	(3.9)
Suburban	27	(3.9)	26	(4.2)	22	(4.5)	23	(3.9)	3	(1.3)
Urban	32	(7.5)	31	(6.8)	10	(3.9)	25	(7.5)	1	(1.2)
<b>Region</b>										
Midwest	18	(4.0)	43	(11.7)	9	(4.6)	30	(10.0)	0	(0.4)
Northeast	27	(8.7)	21	(6.8)	24	(6.3)	23	(7.3)	6	(3.6)
South	43	(6.8)	21	(4.9)	18	(4.2)	12	(3.5)	5	(2.2)
West	34	(8.7)	28	(6.4)	10	(4.5)	28	(7.1)	0	---†

† No computer science classes in the sample were taught by teachers in this category. Thus, it is not possible to calculate the standard error of this estimate.

**Table E-4 (Table 2.5)**  
**Equity Analyses of Classes Taught by**  
**Teachers From Race/Ethnicity Groups Historically Underrepresented in STEM**

	PERCENT OF CLASSES		
	SCIENCE	MATHEMATICS	COMPUTER SCIENCE
<b>Prior Achievement Level of Class</b>			
Mostly High	14 (1.9)	12 (1.8)	9 (2.9)
Average/Mixed	16 (1.4)	17 (1.3)	20 (5.6)
Mostly Low	17 (2.7)	18 (2.4)	n/a
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	2 (0.7)	3 (0.7)	5 (3.0)
Second Quartile	6 (1.1)	5 (0.9)	7 (3.6)
Third Quartile	13 (1.4)	12 (1.4)	3 (2.3)
Highest Quartile	42 (4.1)	45 (3.4)	47 (11.1)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	8 (1.3)	7 (1.8)	6 (2.1)
Second Quartile	11 (2.5)	9 (1.5)	12 (3.9)
Third Quartile	13 (2.1)	12 (1.4)	19 (13.1)
Highest Quartile	33 (2.9)	38 (3.1)	42 (11.6)
<b>School Size</b>			
Smallest Schools	15 (3.5)	16 (2.7)	19 (14.7)
Second Group	13 (2.4)	14 (2.6)	28 (13.2)
Third Group	16 (2.3)	15 (2.3)	12 (11.1)
Largest Schools	18 (2.2)	18 (1.8)	14 (2.8)
<b>Community Type</b>			
Rural	8 (2.1)	8 (1.4)	13 (6.5)
Suburban	15 (1.3)	14 (1.6)	12 (3.0)
Urban	24 (3.3)	26 (2.6)	22 (7.6)
<b>Region</b>			
Midwest	6 (1.8)	3 (0.9)	14 (9.5)
Northeast	8 (1.9)	10 (2.1)	10 (4.5)
South	23 (2.3)	24 (2.1)	24 (7.8)
West	19 (2.4)	21 (2.9)	11 (3.6)

**Table E-5 (Table 2.16)**  
**Equity Analyses of Secondary Science Classes With**  
**Teachers With Substantial Background<sup>†</sup> in Subject of Selected Class**

	PERCENT OF CLASSES
<b>Prior Achievement Level of Class</b>	
Mostly High	72 (2.5)
Average/Mixed	61 (2.2)
Mostly Low	43 (5.1)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	63 (3.0)
Second Quartile	67 (3.1)
Third Quartile	57 (2.9)
Highest Quartile	56 (5.0)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	66 (2.7)
Second Quartile	64 (3.1)
Third Quartile	62 (3.6)
Highest Quartile	52 (4.2)
<b>School Size</b>	
Smallest Schools	55 (7.0)
Second Group	56 (4.1)
Third Group	68 (3.4)
Largest Schools	61 (2.5)
<b>Community Type</b>	
Rural	58 (3.2)
Suburban	65 (1.9)
Urban	59 (3.7)
<b>Region</b>	
Midwest	69 (2.9)
Northeast	71 (4.0)
South	58 (2.7)
West	50 (4.3)

<sup>†</sup> Defined as having either a degree or at least three advanced courses in the subject of their selected class.

**Table E-6 (Table 2.34)**  
**Equity Analyses of Class Mean Scores for**  
**Science Teachers' Beliefs About Teaching and Learning Composites**

	MEAN SCORE	
	TRADITIONAL BELIEFS	REFORM-ORIENTED BELIEFS
<b>Prior Achievement Level of Class</b>		
Mostly High	57 (1.4)	88 (0.5)
Average/Mixed	55 (0.8)	87 (0.5)
Mostly Low	61 (1.5)	84 (1.1)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	56 (1.1)	86 (0.7)
Second Quartile	55 (1.2)	86 (0.8)
Third Quartile	55 (1.0)	87 (0.6)
Highest Quartile	59 (2.5)	87 (0.9)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	54 (1.1)	87 (0.7)
Second Quartile	56 (1.1)	86 (0.8)
Third Quartile	56 (2.4)	87 (0.7)
Highest Quartile	60 (0.9)	86 (0.7)
<b>School Size</b>		
Smallest Schools	59 (1.4)	85 (1.3)
Second Group	52 (2.4)	87 (1.0)
Third Group	57 (0.9)	86 (0.5)
Largest Schools	57 (1.0)	87 (0.5)
<b>Community Type</b>		
Rural	57 (1.2)	85 (0.9)
Suburban	55 (2.0)	87 (0.4)
Urban	55 (2.0)	87 (0.9)
<b>Region</b>		
Midwest	55 (0.9)	86 (0.6)
Northeast	52 (2.8)	88 (1.1)
South	59 (0.8)	87 (0.5)
West	56 (1.1)	85 (1.0)



**Table E-7 (Table 2.35)**  
**Equity Analyses of Class Mean Scores for**  
**Mathematics Teachers' Beliefs About Teaching and Learning Composites**

	MEAN SCORE	
	TRADITIONAL BELIEFS	REFORM-ORIENTED BELIEFS
<b>Prior Achievement Level of Class</b>		
Mostly High	60 (0.9)	82 (0.8)
Average/Mixed	60 (0.7)	83 (0.5)
Mostly Low	61 (1.1)	83 (0.7)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	58 (0.9)	81 (0.7)
Second Quartile	60 (1.1)	82 (0.8)
Third Quartile	59 (1.3)	84 (0.6)
Highest Quartile	63 (1.0)	85 (0.7)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	57 (0.9)	82 (0.7)
Second Quartile	59 (1.2)	82 (0.7)
Third Quartile	61 (1.1)	84 (0.7)
Highest Quartile	63 (1.0)	85 (0.7)
<b>School Size</b>		
Smallest Schools	62 (1.9)	83 (1.1)
Second Group	58 (1.1)	84 (0.8)
Third Group	60 (0.9)	82 (0.8)
Largest Schools	60 (0.9)	83 (0.5)
<b>Community Type</b>		
Rural	61 (1.0)	82 (0.6)
Suburban	59 (0.7)	83 (0.5)
Urban	60 (1.1)	84 (0.6)
<b>Region</b>		
Midwest	57 (0.9)	82 (0.7)
Northeast	61 (1.2)	82 (1.1)
South	64 (0.9)	84 (0.5)
West	55 (1.0)	82 (0.7)

**Table E-8 (Table 2.36)**  
**Equity Analyses of Class Mean Scores for High School**  
**Computer Science Teachers' Beliefs About Teaching and Learning Composites**

	MEAN SCORE	
	TRADITIONAL BELIEFS	REFORM-ORIENTED BELIEFS
<b>Prior Achievement Level of Class</b>		
Mostly High	65 (2.7)	81 (1.4)
Average/Mixed	66 (1.9)	83 (1.4)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	65 (2.1)	80 (1.7)
Second Quartile	72 (4.1)	82 (2.5)
Third Quartile	61 (1.8)	85 (1.8)
Highest Quartile	66 (4.5)	84 (1.8)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	65 (1.7)	80 (1.4)
Second Quartile	67 (3.5)	82 (1.6)
Third Quartile	69 (5.2)	86 (2.4)
Highest Quartile	61 (2.8)	85 (2.3)
<b>School Size</b>		
Smallest Schools	80 (4.9)	84 (2.9)
Second Group	63 (3.7)	83 (3.0)
Third Group	65 (4.6)	84 (2.3)
Largest Schools	67 (2.0)	81 (0.9)
<b>Community Type</b>		
Rural	68 (3.6)	83 (2.8)
Suburban	68 (1.7)	83 (1.0)
Urban	62 (3.9)	81 (2.1)
<b>Region</b>		
Midwest	66 (4.7)	84 (2.9)
Northeast	71 (2.4)	81 (1.9)
South	65 (1.9)	83 (1.5)
West	63 (3.9)	81 (1.2)

**Table E-9 (Table 2.60)**  
**Equity Analyses of Class Mean Scores for**  
**Science Teachers' Perceptions of Preparedness Composites**

	MEAN SCORE			
	SCIENCE CONTENT PREPAREDNESS	PREPAREDNESS TO TEACH ENGINEERING†	PEDAGOGICAL PREPAREDNESS	PREPAREDNESS TO IMPLEMENT INSTRUCTION IN PARTICULAR UNIT
<b>Prior Achievement Level of Class</b>				
Mostly High	81 (1.3)	38 (1.9)	72 (1.1)	82 (0.9)
Average/Mixed	62 (0.8)	38 (1.0)	63 (0.7)	73 (0.6)
Mostly Low	61 (1.7)	33 (2.6)	60 (1.3)	69 (1.4)
<b>Percent of Historically Underrepresented Students in Class</b>				
Lowest Quartile	67 (1.4)	38 (1.8)	64 (0.9)	75 (1.0)
Second Quartile	66 (1.3)	37 (1.7)	65 (1.0)	77 (0.9)
Third Quartile	63 (1.5)	39 (1.6)	64 (1.1)	74 (1.0)
Highest Quartile	62 (1.5)	35 (2.0)	62 (1.7)	70 (1.4)
<b>Percent of Students in School Eligible for FRL</b>				
Lowest Quartile	68 (1.6)	38 (1.5)	64 (1.0)	76 (0.9)
Second Quartile	65 (1.5)	39 (1.5)	65 (1.1)	75 (0.9)
Third Quartile	63 (1.5)	35 (1.6)	63 (1.3)	73 (1.1)
Highest Quartile	62 (1.5)	37 (2.2)	63 (1.4)	71 (1.4)
<b>School Size</b>				
Smallest Schools	60 (2.7)	33 (3.2)	59 (1.8)	71 (1.7)
Second Group	64 (1.7)	37 (2.1)	64 (1.5)	73 (1.2)
Third Group	63 (1.3)	38 (1.4)	62 (0.9)	73 (0.8)
Largest Schools	67 (1.2)	38 (1.4)	66 (0.9)	75 (0.8)
<b>Community Type</b>				
Rural	65 (1.0)	34 (1.8)	63 (1.0)	75 (1.1)
Suburban	65 (0.9)	38 (1.0)	64 (0.6)	74 (0.7)
Urban	64 (1.6)	38 (1.6)	65 (1.4)	73 (1.2)
<b>Region</b>				
Midwest	67 (2.0)	36 (1.9)	66 (1.8)	75 (1.2)
Northeast	64 (1.4)	38 (1.5)	61 (0.8)	73 (0.9)
South	65 (0.9)	36 (1.1)	66 (0.7)	75 (0.9)
West	62 (1.4)	41 (2.4)	61 (1.2)	71 (1.2)

† The Preparedness to Teach Engineering composite was computed only for secondary science classes.

**Table E-10 (Table 2.61)**  
**Equity Analyses of Class Mean Scores for**  
**Mathematics Teachers' Perceptions of Preparedness Composites**

	MEAN SCORE		
	CONTENT PREPAREDNESS	PEDAGOGICAL PREPAREDNESS	PREPAREDNESS TO IMPLEMENT INSTRUCTION IN PARTICULAR UNIT
<b>Prior Achievement Level of Class</b>			
Mostly High	84 (0.8)	71 (0.9)	85 (0.8)
Average/Mixed	79 (0.5)	70 (0.6)	82 (0.6)
Mostly Low	78 (1.1)	69 (1.1)	79 (1.0)
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	81 (0.7)	68 (0.7)	83 (0.7)
Second Quartile	80 (0.8)	70 (0.8)	83 (0.9)
Third Quartile	78 (0.7)	70 (1.0)	81 (1.1)
Highest Quartile	79 (0.9)	71 (0.8)	80 (0.7)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	82 (0.7)	71 (0.8)	84 (0.8)
Second Quartile	79 (0.8)	69 (0.8)	82 (1.0)
Third Quartile	79 (0.9)	68 (0.9)	80 (0.9)
Highest Quartile	79 (0.9)	71 (0.8)	80 (0.7)
<b>School Size</b>			
Smallest Schools	77 (1.4)	69 (1.5)	82 (1.4)
Second Group	80 (0.9)	70 (0.9)	81 (0.9)
Third Group	80 (0.8)	69 (0.8)	82 (0.8)
Largest Schools	80 (0.6)	70 (0.6)	82 (0.6)
<b>Community Type</b>			
Rural	79 (0.8)	69 (0.9)	83 (0.8)
Suburban	80 (0.5)	70 (0.6)	82 (0.5)
Urban	79 (0.8)	70 (0.8)	81 (0.8)
<b>Region</b>			
Midwest	81 (0.9)	69 (0.8)	83 (0.8)
Northeast	81 (1.0)	70 (0.8)	84 (0.9)
South	78 (0.6)	71 (0.7)	81 (0.6)
West	81 (0.9)	68 (0.8)	80 (0.9)

**Table E-11 (Table 2.62)**  
**Equity Analyses of Class Mean Scores for High School**  
**Computer Science Teachers' Perceptions of Preparedness Composites**

	MEAN SCORE		
	CONTENT PREPAREDNESS	PEDAGOGICAL PREPAREDNESS	PREPAREDNESS TO IMPLEMENT INSTRUCTION IN PARTICULAR UNIT
<b>Prior Achievement Level of Class</b>			
Mostly High	68 (2.3)	67 (2.2)	73 (3.1)
Average/Mixed	67 (2.1)	71 (2.3)	72 (2.3)
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	64 (3.9)	65 (2.7)	70 (3.4)
Second Quartile	72 (3.5)	74 (3.8)	72 (3.1)
Third Quartile	65 (3.8)	68 (2.9)	75 (2.6)
Highest Quartile	69 (2.8)	73 (2.6)	73 (4.2)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	68 (1.9)	69 (2.4)	75 (2.1)
Second Quartile	66 (2.4)	68 (2.5)	70 (4.0)
Third Quartile	66 (5.1)	70 (4.6)	72 (2.5)
Highest Quartile	71 (4.8)	75 (3.9)	70 (5.8)
<b>School Size</b>			
Smallest Schools	63 (4.8)	63 (4.1)	67 (8.6)
Second Group	75 (2.8)	74 (4.9)	76 (5.9)
Third Group	69 (3.7)	72 (3.5)	72 (2.4)
Largest Schools	65 (1.7)	68 (1.6)	72 (2.2)
<b>Community Type</b>			
Rural	64 (3.5)	70 (2.9)	71 (2.9)
Suburban	65 (1.7)	68 (1.7)	72 (1.9)
Urban	71 (2.9)	72 (3.5)	74 (3.4)
<b>Region</b>			
Midwest	67 (4.7)	68 (4.4)	69 (3.3)
Northeast	64 (2.9)	69 (3.5)	74 (3.1)
South	71 (2.0)	72 (2.2)	72 (3.1)
West	66 (2.5)	69 (2.8)	75 (3.7)

**Table E-12 (Table 3.3)**  
**Equity Analyses of Classes Taught by Teachers With More Than**  
**35 Hours of Professional Development in the Last Three Years, by Subject**

	PERCENT OF CLASSES	
	SCIENCE	MATHEMATICS
<b>Prior Achievement Level of Class</b>		
Mostly High	36 (2.6)	36 (2.6)
Average/Mixed	15 (0.8)	24 (1.1)
Mostly Low	15 (2.1)	34 (2.5)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	20 (1.5)	25 (1.9)
Second Quartile	18 (1.7)	26 (2.0)
Third Quartile	19 (1.6)	25 (1.8)
Highest Quartile	15 (1.7)	33 (2.3)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	20 (1.6)	26 (2.1)
Second Quartile	20 (2.1)	29 (2.3)
Third Quartile	16 (1.7)	25 (2.1)
Highest Quartile	18 (1.8)	32 (2.2)
<b>School Size</b>		
Smallest Schools	9 (1.4)	26 (2.9)
Second Group	17 (2.2)	27 (2.8)
Third Group	18 (1.4)	29 (2.0)
Largest Schools	21 (1.6)	29 (1.7)
<b>Community Type</b>		
Rural	15 (1.5)	27 (2.5)
Suburban	19 (1.0)	27 (1.4)
Urban	19 (2.0)	30 (2.2)
<b>Region</b>		
Midwest	15 (2.0)	27 (2.0)
Northeast	17 (1.6)	25 (2.4)
South	19 (1.1)	29 (1.7)
West	21 (2.4)	30 (2.1)

**Table E-13 (Table 3.9)****Equity Analyses of Class Mean Scores for Extent Professional Development Aligns With Elements of Effective Professional Development Composite, by Subject**

	MEAN SCORE		
	SCIENCE	MATHEMATICS	COMPUTER SCIENCE
<b>Prior Achievement Levels of Class</b>			
Mostly High	57 (1.3)	56 (1.4)	55 (1.8)
Average/Mixed	52 (0.8)	58 (0.7)	58 (2.4)
Mostly Low	48 (1.6)	61 (1.5)	n/a
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	52 (1.4)	58 (1.2)	51 (3.2)
Second Quartile	50 (1.5)	54 (1.4)	59 (3.8)
Third Quartile	55 (1.4)	60 (1.3)	56 (2.6)
Highest Quartile	52 (1.5)	61 (1.2)	64 (3.3)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	53 (1.4)	57 (1.5)	54 (1.8)
Second Quartile	52 (1.5)	56 (1.3)	56 (1.9)
Third Quartile	52 (1.4)	60 (1.3)	60 (4.3)
Highest Quartile	54 (1.5)	60 (1.4)	64 (4.6)
<b>School Size</b>			
Smallest Schools	47 (2.6)	55 (2.2)	55 (5.5)
Second Group	51 (1.6)	59 (1.8)	61 (5.0)
Third Group	53 (1.1)	58 (0.9)	58 (4.0)
Largest Schools	54 (1.1)	59 (0.9)	56 (1.6)
<b>Community Type</b>			
Rural	50 (1.6)	57 (1.2)	59 (3.2)
Suburban	54 (0.9)	59 (0.9)	55 (2.0)
Urban	52 (1.4)	58 (1.2)	58 (3.5)
<b>Region</b>			
Midwest	50 (1.2)	60 (1.3)	62 (4.3)
Northeast	53 (1.9)	55 (1.3)	50 (2.7)
South	53 (1.0)	59 (0.9)	61 (2.6)
West	53 (1.8)	58 (1.5)	51 (2.5)

**Table E-14 (Table 3.14)**  
**Equity Analyses of Class Mean Scores for Extent Professional Development Supports Student-Centered Instruction Composite, by Subject**

	MEAN SCORE		
	SCIENCE	MATHEMATICS	COMPUTER SCIENCE
<b>Prior Achievement Levels of Class</b>			
Mostly High	54 (1.4)	55 (1.4)	56 (3.0)
Average/Mixed	51 (1.0)	59 (0.7)	59 (2.6)
Mostly Low	49 (1.8)	60 (1.6)	n/a
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	51 (1.4)	59 (1.1)	54 (3.5)
Second Quartile	50 (1.4)	53 (1.2)	62 (5.5)
Third Quartile	52 (1.5)	59 (1.1)	60 (3.4)
Highest Quartile	51 (1.9)	62 (1.5)	61 (4.2)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	51 (1.5)	58 (1.3)	54 (2.3)
Second Quartile	52 (1.3)	55 (1.1)	58 (3.5)
Third Quartile	50 (1.5)	59 (1.1)	63 (4.7)
Highest Quartile	53 (2.0)	62 (1.7)	62 (6.3)
<b>School Size</b>			
Smallest Schools	47 (2.9)	61 (1.8)	59 (8.2)
Second Group	51 (1.7)	60 (1.6)	65 (5.2)
Third Group	52 (1.4)	59 (1.1)	59 (4.9)
Largest Schools	52 (1.1)	57 (1.0)	56 (2.4)
<b>Community Type</b>			
Rural	48 (1.4)	58 (1.2)	65 (4.3)
Suburban	53 (1.0)	58 (1.0)	57 (2.1)
Urban	51 (1.5)	59 (1.4)	57 (4.8)
<b>Region</b>			
Midwest	51 (1.2)	60 (1.3)	61 (5.5)
Northeast	54 (2.2)	55 (1.8)	53 (3.1)
South	52 (1.2)	59 (0.9)	65 (2.9)
West	49 (1.6)	59 (1.3)	48 (4.1)



**Table E-15 (Table 3.33)**  
**Equity Analyses of Locally Offered Science**  
**Professional Development Available to Teachers**

	PERCENT OF SCHOOLS		
	WORKSHOPS	STUDY GROUPS	ONE-ON-ONE COACHING
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	44 (3.6)	33 (3.3)	26 (3.4)
Second Quartile	51 (5.0)	38 (4.3)	26 (4.3)
Third Quartile	51 (3.9)	36 (4.0)	26 (3.5)
Highest Quartile	56 (4.6)	38 (3.9)	35 (4.6)
<b>School Size</b>			
Smallest Schools	39 (4.9)	22 (4.3)	22 (4.7)
Second Group	57 (4.4)	36 (4.6)	31 (4.4)
Third Group	46 (4.3)	39 (3.1)	26 (3.4)
Largest Schools	62 (3.3)	49 (3.7)	34 (3.5)
<b>Community Type</b>			
Rural	37 (4.4)	32 (3.9)	20 (3.9)
Suburban	53 (2.8)	40 (2.6)	27 (2.5)
Urban	59 (4.6)	36 (3.5)	38 (4.5)
<b>Region</b>			
Midwest	35 (4.6)	34 (4.2)	23 (3.4)
Northeast	57 (5.3)	32 (5.2)	23 (4.4)
South	56 (3.0)	39 (2.9)	36 (3.6)
West	57 (5.0)	40 (4.3)	28 (4.7)

**Table E-16 (Table 3.34)**  
**Equity Analyses of Locally Offered Mathematics**  
**Professional Development Available to Teachers**

	PERCENT OF SCHOOLS		
	WORKSHOPS	STUDY GROUPS	ONE-ON-ONE COACHING
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	61 (4.5)	56 (4.3)	29 (4.1)
Second Quartile	63 (4.6)	63 (4.9)	33 (4.7)
Third Quartile	67 (3.8)	57 (5.0)	49 (4.5)
Highest Quartile	73 (3.7)	56 (4.3)	54 (4.6)
<b>School Size</b>			
Smallest Schools	56 (5.8)	46 (5.0)	26 (4.9)
Second Group	67 (4.9)	61 (4.1)	40 (4.1)
Third Group	69 (3.9)	56 (4.7)	44 (3.3)
Largest Schools	73 (2.9)	69 (3.4)	54 (3.9)
<b>Community Type</b>			
Rural	62 (4.6)	56 (4.1)	25 (3.6)
Suburban	63 (2.9)	62 (3.5)	43 (3.1)
Urban	75 (3.6)	53 (3.9)	51 (4.0)
<b>Region</b>			
Midwest	54 (4.5)	51 (4.7)	35 (3.9)
Northeast	65 (5.1)	49 (5.6)	36 (5.0)
South	72 (3.2)	61 (2.9)	45 (2.9)
West	72 (4.3)	67 (4.8)	45 (5.6)

**Table E-17 (Table 3.35)**  
**Equity Analyses of Locally Offered Computer Science**  
**Professional Development Available to Teachers**

	PERCENT OF SCHOOLS		
	WORKSHOPS	STUDY GROUPS	ONE-ON-ONE COACHING
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	33 (4.1)	38 (4.6)	22 (3.5)
Second Quartile	33 (3.8)	50 (4.7)	34 (4.0)
Third Quartile	29 (3.5)	35 (3.5)	18 (2.8)
Highest Quartile	36 (4.4)	49 (4.1)	29 (4.0)
<b>School Size</b>			
Smallest Schools	19 (3.8)	33 (5.1)	22 (3.7)
Second Group	33 (4.0)	46 (5.4)	29 (3.8)
Third Group	35 (3.7)	44 (3.6)	25 (3.1)
Largest Schools	42 (3.4)	48 (3.4)	28 (2.9)
<b>Community Type</b>			
Rural	24 (3.1)	35 (4.7)	22 (3.3)
Suburban	33 (2.7)	43 (3.2)	29 (2.4)
Urban	39 (3.9)	48 (4.2)	25 (3.4)
<b>Region</b>			
Midwest	32 (3.3)	38 (4.1)	27 (5.2)
Northeast	28 (4.2)	42 (5.4)	28 (3.5)
South	34 (2.8)	44 (3.2)	25 (2.7)
West	34 (4.8)	47 (4.8)	25 (3.9)

**Table E-18 (Table 3.38)**  
**Equity Analyses of Schools Offering Formal Induction Programs**

	PERCENT OF SCHOOLS†
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	70 (3.6)
Second Quartile	79 (3.6)
Third Quartile	77 (4.1)
Highest Quartile	78 (3.8)
<b>School Size</b>	
Smallest Schools	62 (4.9)
Second Group	69 (3.7)
Third Group	84 (3.0)
Largest Schools	89 (1.8)
<b>Community Type</b>	
Rural	71 (4.0)
Suburban	79 (2.4)
Urban	75 (3.7)
<b>Region</b>	
Midwest	73 (3.6)
Northeast	81 (4.6)
South	76 (2.8)
West	74 (4.1)

† Includes only those schools that provide a formal induction program.

**Table E-19 (Table 3.40)**  
**Equity Analyses of Schools**  
**Providing Formally Assigned School-Based Mentors**

	PERCENT OF SCHOOLS†
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	85 (3.4)
Second Quartile	87 (2.7)
Third Quartile	87 (2.5)
Highest Quartile	83 (3.4)
<b>School Size</b>	
Smallest Schools	87 (3.6)
Second Group	85 (3.1)
Third Group	82 (3.6)
Largest Schools	87 (2.5)
<b>Community Type</b>	
Rural	90 (3.1)
Suburban	87 (1.9)
Urban	78 (3.3)
<b>Region</b>	
Midwest	87 (2.6)
Northeast	89 (4.2)
South	88 (2.2)
West	75 (4.2)

† Includes only those schools that provide a formally assigned school-based mentor in its induction program.

**Table E-20 (Table 4.7)**  
**Equity Analyses of Average Number of**  
**AP Science Courses Offered at High Schools**

	AVERAGE NUMBER OF COURSES
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	2.0 (0.3)
Second Quartile	2.2 (0.3)
Third Quartile	1.1 (0.2)
Highest Quartile	1.4 (0.2)
<b>School Size</b>	
Smallest Schools	0.5 (0.2)
Second Group	1.0 (0.2)
Third Group	1.7 (0.2)
Largest Schools	3.2 (0.2)
<b>Community Type</b>	
Rural	0.9 (0.1)
Suburban	2.3 (0.2)
Urban	1.9 (0.3)
<b>Region</b>	
Midwest	1.1 (0.2)
Northeast	2.6 (0.3)
South	1.8 (0.3)
West	1.7 (0.1)

**Table E-21 (Table 4.11)**  
**Equity Analyses of Average Percentage of**  
**8<sup>th</sup> Graders Completing Algebra 1 and Geometry Prior to 9<sup>th</sup> Grade**

	PERCENT OF STUDENTS	
	ALGEBRA 1	GEOMETRY
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	48 (5.1)	17 (5.5)
Second Quartile	25 (4.1)	2 (0.8)
Third Quartile	20 (4.2)	2 (0.9)
Highest Quartile	29 (6.1)	7 (5.9)
<b>School Size</b>		
Smallest Schools	39 (6.4)	11 (5.7)
Second Group	29 (4.7)	9 (5.4)
Third Group	27 (3.1)	4 (1.2)
Largest Schools	36 (3.4)	6 (1.8)
<b>Community Type</b>		
Rural	19 (3.5)	1 (0.3)
Suburban	43 (3.7)	16 (5.3)
Urban	32 (4.9)	3 (1.0)
<b>Region</b>		
Midwest	30 (3.7)	3 (1.5)
Northeast	43 (5.5)	17 (10.0)
South	28 (4.4)	9 (4.6)
West	36 (6.2)	5 (2.3)

**Table E-22 (Table 4.16)**  
**Equity Analyses of Average Number of**  
**AP Mathematics Courses Offered at High Schools**

	AVERAGE NUMBER OF COURSES
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	1.3 (0.2)
Second Quartile	1.6 (0.2)
Third Quartile	0.9 (0.1)
Highest Quartile	0.8 (0.1)
<b>School Size</b>	
Smallest Schools	0.3 (0.1)
Second Group	0.9 (0.2)
Third Group	1.4 (0.1)
Largest Schools	2.0 (0.1)
<b>Community Type</b>	
Rural	0.6 (0.1)
Suburban	1.5 (0.1)
Urban	1.5 (0.2)
<b>Region</b>	
Midwest	0.9 (0.1)
Northeast	1.6 (0.2)
South	1.1 (0.1)
West	1.3 (0.2)

**Table E-23 (Table 4.20)**  
**Equity Analyses of Schools Offering Computer Science Instruction**

	PERCENT OF SCHOOLS
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	44 (3.9)
Second Quartile	38 (3.8)
Third Quartile	26 (3.4)
Highest Quartile	26 (3.5)
<b>School Size</b>	
Smallest Schools	23 (4.6)
Second Group	33 (3.7)
Third Group	34 (3.0)
Largest Schools	43 (3.1)
<b>Community Type</b>	
Rural	29 (3.8)
Suburban	34 (2.7)
Urban	35 (3.6)
<b>Region</b>	
Midwest	30 (3.8)
Northeast	43 (5.2)
South	24 (2.2)
West	44 (4.9)

**Table E-24 (Table 4.24)**  
**Equity Analyses of Average Number of**  
**AP Computer Science Courses Offered at High Schools**

	AVERAGE NUMBER OF COURSES
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	0.5 (0.1)
Second Quartile	0.3 (0.1)
Third Quartile	0.2 (0.1)
Highest Quartile	0.2 (0.1)
<b>School Size</b>	
Smallest Schools	0.1 (0.1)
Second Group	0.2 (0.0)
Third Group	0.3 (0.0)
Largest Schools	0.6 (0.1)
<b>Community Type</b>	
Rural	0.1 (0.0)
Suburban	0.4 (0.0)
Urban	0.4 (0.1)
<b>Region</b>	
Midwest	0.5 (0.1)
Northeast	0.2 (0.0)
South	0.3 (0.0)
West	0.3 (0.1)



**Table E-25 (Table 5.8)**  
**Equity Analyses of Science Class Mean Scores**  
**for Curriculum Control and Pedagogy Control Composites**

	MEAN SCORE	
	CURRICULUM	PEDAGOGY
<b>Prior Achievement Level of Class</b>		
Mostly High	65 (1.9)	90 (1.0)
Average/Mixed	53 (1.4)	82 (0.9)
Mostly Low	46 (2.7)	79 (2.2)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	63 (1.8)	87 (1.1)
Second Quartile	56 (1.8)	83 (1.3)
Third Quartile	47 (1.7)	82 (1.1)
Highest Quartile	49 (4.1)	79 (2.3)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	56 (1.8)	84 (1.4)
Second Quartile	56 (2.2)	85 (1.3)
Third Quartile	55 (3.1)	84 (1.4)
Highest Quartile	47 (1.8)	79 (1.5)
<b>School Size</b>		
Smallest Schools	64 (3.5)	89 (1.8)
Second Group	60 (3.3)	81 (2.0)
Third Group	52 (1.6)	81 (1.4)
Largest Schools	49 (1.4)	83 (0.9)
<b>Community Type</b>		
Rural	61 (1.6)	87 (1.0)
Suburban	52 (1.0)	81 (0.8)
Urban	52 (3.4)	82 (1.8)
<b>Region</b>		
Midwest	59 (1.9)	82 (1.4)
Northeast	58 (3.7)	82 (2.2)
South	46 (1.6)	82 (1.0)
West	58 (1.7)	84 (1.2)

**Table E-26 (Table 5.9)**  
**Equity Analyses of Mathematics Class Mean Scores**  
**for Curriculum Control and Pedagogy Control Composites**

	MEAN SCORE	
	CURRICULUM	PEDAGOGY
<b>Prior Achievement Level of Class</b>		
Mostly High	59 (1.7)	88 (1.1)
Average/Mixed	45 (1.1)	81 (0.6)
Mostly Low	45 (1.8)	81 (1.0)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	56 (1.5)	85 (1.0)
Second Quartile	50 (1.8)	83 (0.9)
Third Quartile	41 (1.7)	81 (1.3)
Highest Quartile	42 (1.8)	79 (1.3)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	51 (1.9)	82 (0.8)
Second Quartile	49 (1.9)	84 (1.1)
Third Quartile	47 (1.6)	82 (1.2)
Highest Quartile	43 (2.0)	80 (1.3)
<b>School Size</b>		
Smallest Schools	61 (3.0)	84 (1.4)
Second Group	53 (2.3)	83 (1.0)
Third Group	46 (1.5)	81 (1.2)
Largest Schools	43 (1.4)	82 (0.7)
<b>Community Type</b>		
Rural	57 (1.7)	85 (1.0)
Suburban	45 (1.2)	81 (0.8)
Urban	45 (1.8)	81 (1.2)
<b>Region</b>		
Midwest	51 (1.9)	82 (1.2)
Northeast	50 (2.3)	82 (1.1)
South	43 (1.4)	82 (0.9)
West	50 (1.9)	83 (1.2)

**Table E-27 (Table 5.10)**  
**Equity Analyses of High School Computer Science**  
**Class Mean Scores for Curriculum Control and Pedagogy Control Composites**

	MEAN SCORE	
	CURRICULUM	PEDAGOGY
<b>Prior Achievement Level of Class</b>		
Mostly High	78 (2.7)	90 (2.2)
Average/Mixed	78 (2.3)	89 (1.8)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	76 (3.3)	93 (1.6)
Second Quartile	78 (4.0)	87 (3.5)
Third Quartile	75 (4.1)	89 (2.7)
Highest Quartile	83 (2.9)	89 (3.1)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	78 (2.5)	90 (1.9)
Second Quartile	78 (3.8)	89 (2.8)
Third Quartile	77 (3.8)	88 (3.6)
Highest Quartile	80 (4.1)	90 (2.3)
<b>School Size</b>		
Smallest Schools	88 (5.3)	96 (2.1)
Second Group	79 (4.8)	93 (2.4)
Third Group	77 (2.6)	87 (3.4)
Largest Schools	78 (2.3)	89 (1.7)
<b>Community Type</b>		
Rural	72 (4.3)	85 (4.0)
Suburban	77 (2.1)	92 (1.3)
Urban	82 (3.3)	88 (2.6)
<b>Region</b>		
Midwest	77 (3.2)	89 (3.1)
Northeast	77 (3.5)	90 (2.1)
South	75 (3.5)	89 (2.0)
West	85 (2.9)	89 (2.6)

**Table E-28 (Table 5.14)**  
**Equity Analyses of Science Class Mean Scores**  
**for the Reform-Oriented Instructional Objectives Composite**

	MEAN SCORE
<b>Prior Achievement Level of Class</b>	
Mostly High	68 (0.9)
Average/Mixed	63 (0.6)
Mostly Low	57 (1.3)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	64 (0.8)
Second Quartile	62 (1.0)
Third Quartile	62 (0.8)
Highest Quartile	64 (1.6)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	64 (0.8)
Second Quartile	62 (1.0)
Third Quartile	62 (1.5)
Highest Quartile	63 (0.9)
<b>School Size</b>	
Smallest Schools	62 (1.2)
Second Group	65 (1.6)
Third Group	61 (0.9)
Largest Schools	63 (0.7)
<b>Community Type</b>	
Rural	62 (0.8)
Suburban	63 (0.7)
Urban	64 (1.4)
<b>Region</b>	
Midwest	61 (0.7)
Northeast	66 (1.8)
South	63 (0.6)
West	63 (1.2)

**Table E-29 (Table 5.17)**  
**Equity Analyses of Mathematics Class Mean Scores**  
**for the Reform-Oriented Instructional Objectives Composite**

	MEAN SCORE
<b>Prior Achievement Level of Class</b>	
Mostly High	83 (0.6)
Average/Mixed	78 (0.4)
Mostly Low	77 (0.9)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	78 (0.5)
Second Quartile	78 (0.7)
Third Quartile	78 (0.6)
Highest Quartile	79 (0.8)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	80 (0.6)
Second Quartile	78 (0.6)
Third Quartile	77 (0.7)
Highest Quartile	80 (0.9)
<b>School Size</b>	
Smallest Schools	77 (1.1)
Second Group	79 (0.8)
Third Group	78 (0.6)
Largest Schools	78 (0.6)
<b>Community Type</b>	
Rural	77 (0.7)
Suburban	78 (0.6)
Urban	80 (0.8)
<b>Region</b>	
Midwest	77 (0.7)
Northeast	77 (0.9)
South	80 (0.6)
West	78 (0.9)

**Table E-30 (Table 5.19)**  
**Equity Analyses of High School Computer Science Class**  
**Mean Scores for the Reform-Oriented Instructional Objectives Composite**

	MEAN SCORE
<b>Prior Achievement Level of Class</b>	
Mostly High	81 (1.6)
Average/Mixed	81 (1.3)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	75 (1.9)
Second Quartile	80 (2.1)
Third Quartile	81 (1.7)
Highest Quartile	86 (2.2)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	78 (1.4)
Second Quartile	80 (1.8)
Third Quartile	82 (2.7)
Highest Quartile	85 (2.9)
<b>School Size</b>	
Smallest Schools	80 (3.8)
Second Group	86 (2.8)
Third Group	81 (2.0)
Largest Schools	79 (1.2)
<b>Community Type</b>	
Rural	83 (2.2)
Suburban	80 (1.1)
Urban	80 (2.9)
<b>Region</b>	
Midwest	80 (2.4)
Northeast	79 (1.8)
South	83 (1.6)
West	79 (2.3)

**Table E-31 (Table 5.25)**  
**Equity Analyses of Science Class Mean Scores for**  
**Engaging Students in the Practices of Science Composite**

	MEAN SCORE
<b>Prior Achievement Level of Class</b>	
Mostly High	51 (1.1)
Average/Mixed	43 (0.5)
Mostly Low	42 (1.5)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	43 (0.9)
Second Quartile	42 (0.9)
Third Quartile	43 (1.0)
Highest Quartile	47 (1.3)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	44 (0.9)
Second Quartile	43 (0.9)
Third Quartile	44 (1.3)
Highest Quartile	45 (1.1)
<b>School Size</b>	
Smallest Schools	43 (1.8)
Second Group	45 (1.4)
Third Group	43 (1.0)
Largest Schools	45 (0.7)
<b>Community Type</b>	
Rural	43 (0.9)
Suburban	44 (0.6)
Urban	47 (1.2)
<b>Region</b>	
Midwest	41 (0.9)
Northeast	47 (1.4)
South	45 (0.8)
West	42 (1.1)

**Table E-32 (Table 5.34)**  
**Equity Analyses of Mathematics Class Mean Scores for**  
**Engaging Students in Practices of Mathematics Composite**

	MEAN SCORE
<b>Prior Achievement Level of Class</b>	
Mostly High	75 (0.8)
Average/Mixed	73 (0.5)
Mostly Low	72 (0.9)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	73 (0.5)
Second Quartile	72 (0.9)
Third Quartile	73 (0.8)
Highest Quartile	74 (0.9)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	73 (0.7)
Second Quartile	73 (0.7)
Third Quartile	72 (0.8)
Highest Quartile	74 (0.8)
<b>School Size</b>	
Smallest Schools	72 (1.0)
Second Group	74 (0.9)
Third Group	73 (0.7)
Largest Schools	73 (0.6)
<b>Community Type</b>	
Rural	72 (0.6)
Suburban	73 (0.5)
Urban	73 (0.8)
<b>Region</b>	
Midwest	82 (2.0)
Northeast	65 (2.9)
South	77 (1.8)
West	76 (2.7)



**Table E-33 (Table 5.42)**  
**Equity Analyses of High School Computer Science Class Mean Scores for Engaging Students in Practices of Computer Science Composite**

	MEAN SCORE
<b>Prior Achievement Level of Class</b>	
Mostly High	55 (1.7)
Average/Mixed	56 (1.7)
<b>Percent of Historically Underrepresented Students in Class</b>	
Lowest Quartile	53 (2.0)
Second Quartile	54 (4.1)
Third Quartile	57 (3.0)
Highest Quartile	59 (2.9)
<b>Percent of Students in School Eligible for FRL</b>	
Lowest Quartile	54 (1.9)
Second Quartile	57 (2.4)
Third Quartile	54 (3.4)
Highest Quartile	60 (4.1)
<b>School Size</b>	
Smallest Schools	59 (4.4)
Second Group	57 (5.1)
Third Group	56 (3.3)
Largest Schools	54 (1.5)
<b>Community Type</b>	
Rural	59 (2.7)
Suburban	53 (1.5)
Urban	57 (3.2)
<b>Region</b>	
Midwest	56 (3.7)
Northeast	52 (2.9)
South	59 (2.3)
West	53 (2.1)

**Table E-34 (Table 5.47)**  
**Equity Analyses of Classes Required to Take**  
**External Assessments Two or More Times Per Year, by Subject**

	PERCENT OF CLASSES	
	SCIENCE	MATHEMATICS
<b>Prior Achievement Level of Class</b>		
Mostly High	35 (3.2)	66 (2.4)
Average/Mixed	29 (1.5)	78 (1.6)
Mostly Low	39 (4.2)	78 (2.7)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	21 (2.1)	70 (2.2)
Second Quartile	28 (2.6)	73 (2.2)
Third Quartile	36 (3.1)	78 (2.3)
Highest Quartile	38 (4.0)	81 (2.7)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	20 (2.3)	68 (2.7)
Second Quartile	32 (3.2)	77 (2.2)
Third Quartile	36 (3.6)	83 (2.2)
Highest Quartile	36 (3.1)	77 (2.8)
<b>School Size</b>		
Smallest Schools	24 (4.4)	69 (4.5)
Second Group	22 (2.8)	73 (2.7)
Third Group	29 (2.9)	79 (2.3)
Largest Schools	37 (2.2)	77 (1.8)
<b>Community Type</b>		
Rural	30 (2.9)	73 (2.2)
Suburban	32 (1.8)	78 (1.6)
Urban	30 (3.6)	74 (2.5)
<b>Region</b>		
Midwest	32 (3.3)	82 (2.0)
Northeast	20 (2.8)	65 (2.9)
South	42 (2.0)	77 (1.8)
West	19 (3.1)	76 (2.7)

**Table E-35 (Table 6.27)**  
**Equity Analyses of Median Amount Schools Spent**  
**Per Pupil on Science Equipment and Consumable Supplies**

	MEDIAN AMOUNT		
	EQUIPMENT	CONSUMABLE SUPPLIES	TOTAL†
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	\$1.26 (0.3)	\$2.24 (0.2)	\$5.62 (0.8)
Second Quartile	\$0.90 (0.2)	\$1.59 (0.4)	\$3.44 (0.7)
Third Quartile	\$0.46 (0.3)	\$1.14 (0.2)	\$2.55 (0.6)
Highest Quartile	\$0.42 (0.2)	\$1.09 (0.2)	\$2.05 (0.7)
<b>School Size</b>			
Smallest Schools	\$0.90 (0.4)	\$1.75 (0.4)	\$4.61 (1.2)
Second Group	\$0.98 (0.3)	\$1.98 (0.3)	\$3.62 (0.6)
Third Group	\$0.66 (0.2)	\$1.23 (0.2)	\$2.48 (0.6)
Largest Schools	\$0.65 (0.2)	\$1.17 (0.2)	\$2.34 (0.4)
<b>Community Type</b>			
Rural	\$1.03 (0.2)	\$1.85 (0.5)	\$4.06 (0.7)
Suburban	\$0.84 (0.2)	\$1.49 (0.2)	\$3.25 (0.5)
Urban	\$0.48 (0.2)	\$1.14 (0.3)	\$2.06 (0.6)
<b>Region</b>			
Midwest	\$1.06 (0.3)	\$2.00 (0.6)	\$4.41 (0.7)
Northeast	\$1.41 (0.4)	\$2.92 (0.7)	\$6.62 (1.9)
South	\$0.39 (0.1)	\$1.06 (0.2)	\$1.70 (0.3)
West	\$0.98 (0.3)	\$1.27 (0.3)	\$3.11 (1.0)

† The "Total" column includes spending on software.

**Table E-36 (Table 6.28)**  
**Equity Analyses of Median Amount Schools Spent**  
**Per Pupil on Mathematics Equipment and Consumable Supplies**

	MEDIAN AMOUNT		
	EQUIPMENT	CONSUMABLE SUPPLIES	TOTAL†
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	\$0.68 (0.1)	\$1.10 (0.3)	\$4.20 (1.1)
Second Quartile	\$1.11 (0.2)	\$0.98 (0.4)	\$4.59 (1.2)
Third Quartile	\$1.03 (0.2)	\$1.13 (0.2)	\$4.87 (1.1)
Highest Quartile	\$1.16 (0.3)	\$0.95 (0.3)	\$5.38 (1.3)
<b>School Size</b>			
Smallest Schools	\$1.36 (0.3)	\$1.50 (0.5)	\$7.39 (1.5)
Second Group	\$0.93 (0.2)	\$0.79 (0.3)	\$4.79 (1.1)
Third Group	\$0.98 (0.2)	\$1.06 (0.3)	\$3.91 (0.9)
Largest Schools	\$0.76 (0.1)	\$0.75 (0.2)	\$3.85 (0.6)
<b>Community Type</b>			
Rural	\$0.98 (0.3)	\$0.69 (0.2)	\$4.68 (1.1)
Suburban	\$0.97 (0.2)	\$1.35 (0.2)	\$5.39 (0.8)
Urban	\$0.83 (0.3)	\$0.75 (0.3)	\$3.94 (1.0)
<b>Region</b>			
Midwest	\$0.95 (0.2)	\$0.86 (0.3)	\$4.22 (1.2)
Northeast	\$1.23 (0.6)	\$1.90 (0.5)	\$7.16 (1.4)
South	\$0.82 (0.2)	\$0.81 (0.2)	\$4.94 (0.8)
West	\$0.86 (0.2)	\$0.92 (0.2)	\$2.93 (1.1)

† The "Total" column includes spending on software.

**Table E-37 (Table 6.32)**  
**Equity Analyses of Class Mean Scores for the**  
**Adequacy of Resources for Instruction Composite, by Subject**

	MEAN SCORE	
	SCIENCE	MATHEMATICS
<b>Prior Achievement Level of Class</b>		
Mostly High	74 (1.6)	82 (1.0)
Average/Mixed	60 (1.1)	79 (0.8)
Mostly Low	54 (2.5)	76 (1.4)
<b>Percent of Historically Underrepresented Students in Class</b>		
Lowest Quartile	65 (1.7)	81 (1.0)
Second Quartile	64 (1.7)	82 (1.0)
Third Quartile	60 (1.4)	78 (1.2)
Highest Quartile	56 (2.9)	76 (1.4)
<b>Percent of Students in School Eligible for FRL</b>		
Lowest Quartile	66 (2.1)	81 (1.1)
Second Quartile	63 (2.0)	81 (0.9)
Third Quartile	61 (2.8)	79 (1.2)
Highest Quartile	54 (1.6)	76 (1.2)
<b>School Size</b>		
Smallest Schools	57 (2.7)	81 (1.8)
Second Group	62 (3.4)	77 (1.2)
Third Group	59 (1.8)	80 (1.2)
Largest Schools	63 (1.2)	79 (0.8)
<b>Community Type</b>		
Rural	62 (1.6)	81 (1.0)
Suburban	61 (1.0)	80 (0.8)
Urban	61 (2.5)	77 (1.1)
<b>Region</b>		
Midwest	60 (1.8)	79 (1.2)
Northeast	69 (3.0)	82 (1.2)
South	60 (1.2)	78 (1.0)
West	57 (1.7)	78 (1.1)

**Table E-38 (Table 7.10)**  
**Equity Analyses of School Programs/Practices**  
**to Enhance Students' Interest in Science/Engineering,**  
**by Percentage of Students Eligible for Free/Reduced-Price Lunch**

	PERCENT OF SCHOOLS			
	PERCENT OF STUDENTS IN SCHOOL ELIGIBLE FOR FRL			
	Lowest Quartile	Second Quartile	Third Quartile	Highest Quartile
Family nights	35 (3.9)	38 (4.0)	37 (3.9)	43 (4.9)
After-school help	39 (3.6)	44 (4.8)	43 (4.0)	55 (4.4)
After-school programs for enrichment	38 (4.5)	33 (3.8)	32 (3.9)	39 (4.2)
Science clubs	47 (3.9)	40 (4.2)	44 (4.1)	38 (4.9)
Engineering clubs	39 (3.6)	33 (3.8)	30 (3.8)	26 (3.5)
Participation in local or regional science/engineering fair	39 (4.3)	45 (4.3)	38 (3.9)	44 (4.8)
Participation in science competitions	25 (2.8)	27 (3.3)	26 (3.4)	20 (3.9)
Participation in engineering competitions	36 (3.6)	39 (4.3)	25 (3.3)	25 (3.7)
Encourage students to participate in summer programs/camps	70 (4.0)	77 (3.6)	67 (4.3)	70 (4.4)
Visits to business, industry, and/or research sites	36 (3.9)	48 (4.4)	41 (4.1)	45 (5.4)
Meetings with mentors who work in science/engineering fields	26 (3.5)	32 (4.6)	33 (3.9)	28 (4.3)
Internships in science/engineering fields†	28 (4.8)	27 (4.0)	23 (5.2)	19 (4.3)

† Includes only those schools with high school students.

**Table E-39 (Table 7.10)**  
**Equity Analyses of School Programs/Practices**  
**to Enhance Students' Interest in Science/Engineering, by School Size**

	PERCENT OF SCHOOLS			
	SCHOOL SIZE			
	Smallest Schools	Second Group	Third Group	Largest Schools
Family nights	25 (4.9)	34 (4.5)	46 (3.5)	45 (3.6)
After-school help	40 (5.6)	49 (4.6)	40 (3.6)	52 (3.3)
After-school programs for enrichment	26 (4.5)	35 (5.3)	36 (3.5)	43 (3.0)
Science clubs	27 (4.3)	44 (4.8)	44 (4.3)	53 (3.6)
Engineering clubs	19 (3.6)	27 (4.4)	35 (3.7)	45 (3.3)
Participation in local or regional science/engineering fair	34 (5.1)	50 (5.3)	34 (3.5)	51 (3.3)
Participation in science competitions	13 (3.0)	25 (3.9)	27 (3.1)	32 (3.3)
Participation in engineering competitions	20 (4.2)	24 (3.3)	35 (3.4)	45 (3.6)
Encourage students to participate in summer programs/camps	68 (4.7)	77 (3.5)	69 (4.3)	71 (3.5)
Visits to business, industry, and/or research sites	36 (4.8)	44 (5.2)	43 (4.2)	46 (3.7)
Meetings with mentors who work in science/engineering fields	24 (4.5)	26 (3.5)	34 (4.3)	34 (3.4)
Internships in science/engineering fields†	6 (3.1)	24 (5.8)	30 (4.8)	34 (3.6)

† Includes only those schools with high school students.

**Table E-40 (Table 7.10)**  
**Equity Analyses of School Programs/Practices**  
**to Enhance Students' Interest in Science/Engineering, by Community Type**

	PERCENT OF SCHOOLS		
	COMMUNITY TYPE		
	Rural	Suburban	Urban
Family nights	23 (3.8)	42 (2.9)	44 (4.8)
After-school help	47 (4.2)	44 (3.1)	46 (4.2)
After-school programs for enrichment	28 (4.1)	36 (3.6)	40 (3.8)
Science clubs	36 (3.8)	45 (3.4)	44 (4.9)
Engineering clubs	28 (3.8)	31 (2.6)	35 (4.1)
Participation in local or regional science/engineering fair	42 (4.4)	42 (3.3)	41 (4.3)
Participation in science competitions	23 (3.2)	24 (2.1)	27 (3.9)
Participation in engineering competitions	32 (3.3)	32 (2.7)	29 (3.9)
Encourage students to participate in summer programs/camps	73 (4.5)	69 (2.7)	74 (4.1)
Visits to business, industry, and/or research sites	45 (4.4)	35 (3.0)	52 (5.1)
Meetings with mentors who work in science/engineering fields	28 (4.1)	27 (2.8)	36 (4.3)
Internships in science/engineering fields <sup>†</sup>	17 (3.7)	26 (3.6)	31 (5.5)

<sup>†</sup> Includes only those schools with high school students.

**Table E-41 (Table 7.10)**  
**Equity Analyses of School Programs/Practices**  
**to Enhance Students' Interest in Science/Engineering, by Region**

	PERCENT OF SCHOOLS			
	REGION			
	Midwest	Northeast	South	West
Family nights	27 (4.2)	45 (5.3)	36 (3.1)	47 (5.3)
After-school help	40 (4.2)	40 (5.0)	50 (3.4)	47 (5.4)
After-school programs for enrichment	33 (3.8)	47 (6.2)	31 (3.1)	36 (4.8)
Science clubs	34 (3.9)	53 (4.9)	43 (3.4)	43 (5.9)
Engineering clubs	25 (3.3)	40 (4.5)	32 (2.9)	34 (4.7)
Participation in local or regional science/engineering fair	33 (4.3)	43 (5.7)	47 (3.3)	45 (5.4)
Participation in science competitions	23 (2.5)	36 (4.4)	23 (2.2)	20 (4.0)
Participation in engineering competitions	29 (3.5)	34 (4.5)	32 (3.0)	29 (4.9)
Encourage students to participate in summer programs/camps	71 (4.5)	76 (4.2)	71 (3.3)	69 (4.7)
Visits to business, industry, and/or research sites	45 (4.6)	46 (6.2)	42 (3.5)	37 (5.4)
Meetings with mentors who work in science/engineering fields	26 (3.9)	41 (5.6)	28 (3.0)	29 (4.3)
Internships in science/engineering fields <sup>†</sup>	31 (5.1)	33 (5.9)	21 (3.7)	16 (4.2)

<sup>†</sup> Includes only those schools with high school students.

**Table E-42 (Table 7.11)**  
**Equity Analyses of School Programs/Practices to Enhance Students' Interest in Mathematics, by Percentage of Students Eligible for Free/Reduced-Price Lunch**

	PERCENT OF SCHOOLS			
	PERCENT OF STUDENTS IN SCHOOL ELIGIBLE FOR FRL			
	Lowest Quartile	Second Quartile	Third Quartile	Highest Quartile
Family nights	20 (3.9)	23 (4.2)	34 (4.0)	45 (4.1)
After-school help	65 (4.1)	70 (4.2)	76 (3.7)	81 (3.6)
After-school programs for enrichment	30 (3.8)	25 (4.0)	20 (3.5)	36 (4.1)
Mathematics clubs	30 (3.8)	26 (3.6)	27 (3.6)	24 (3.4)
Participation in local or regional mathematics fair	20 (3.2)	18 (3.7)	12 (2.5)	19 (3.2)
Participation in mathematics competitions	39 (4.3)	32 (3.9)	36 (4.0)	26 (3.7)
Encourage students to participate in summer programs/camps	49 (4.2)	38 (4.9)	46 (4.6)	64 (4.2)
Visits to business, industry, and/or research sites	16 (3.1)	11 (2.6)	16 (2.8)	23 (4.4)
Meetings with mentors who work in mathematics fields	11 (2.5)	10 (2.1)	14 (2.7)	22 (3.8)
Internships in mathematics fields <sup>†</sup>	11 (3.3)	5 (2.1)	3 (1.2)	7 (2.3)

<sup>†</sup> Includes only those schools with high school students.

**Table E-43 (Table 7.11)**  
**Equity Analyses of School Programs/Practices to Enhance Students' Interest in Mathematics, by School Size**

	PERCENT OF SCHOOLS			
	SCHOOL SIZE			
	Smallest Schools	Second Group	Third Group	Largest Schools
Family nights	23 (4.8)	30 (4.2)	33 (3.4)	34 (3.6)
After-school help	67 (5.0)	75 (4.2)	74 (3.6)	76 (3.4)
After-school programs for enrichment	26 (5.2)	20 (4.0)	34 (4.0)	31 (3.5)
Mathematics clubs	13 (3.6)	25 (4.2)	29 (3.0)	41 (3.5)
Participation in local or regional mathematics fair	8 (3.1)	20 (3.7)	18 (2.9)	24 (2.8)
Participation in mathematics competitions	23 (4.5)	31 (4.3)	35 (3.1)	44 (3.6)
Encourage students to participate in summer programs/camps	45 (5.5)	55 (4.4)	45 (4.3)	53 (3.3)
Visits to business, industry, and/or research sites	16 (4.1)	18 (3.5)	17 (3.6)	15 (2.2)
Meetings with mentors who work in mathematics fields	14 (3.5)	14 (3.5)	11 (2.2)	18 (2.6)
Internships in mathematics fields <sup>†</sup>	4 (2.1)	6 (2.7)	7 (2.1)	9 (1.8)

<sup>†</sup> Includes only those schools with high school students.



**Table E-44 (Table 7.11)**  
**Equity Analyses of School Programs/Practices**  
**to Enhance Students' Interest in Mathematics, by Community Type**

	PERCENT OF SCHOOLS		
	COMMUNITY TYPE		
	Rural	Suburban	Urban
Family nights	17 (3.1)	31 (2.7)	40 (4.2)
After-school help	74 (4.2)	69 (2.4)	77 (4.1)
After-school programs for enrichment	21 (3.6)	27 (3.1)	35 (4.3)
Mathematics clubs	25 (3.3)	29 (3.1)	25 (2.9)
Participation in local or regional mathematics fair	18 (3.7)	19 (2.3)	14 (2.6)
Participation in mathematics competitions	34 (4.0)	34 (2.9)	32 (3.7)
Encourage students to participate in summer programs/camps	45 (4.3)	49 (3.3)	55 (4.4)
Visits to business, industry, and/or research sites	16 (3.0)	14 (2.1)	19 (4.2)
Meetings with mentors who work in mathematics fields	12 (2.7)	13 (2.3)	18 (3.3)
Internships in mathematics fields†	4 (1.4)	7 (1.7)	8 (2.8)

† Includes only those schools with high school students.

**Table E-45 (Table 7.11)**  
**Equity Analyses of School Programs/Practices**  
**to Enhance Students' Interest in Mathematics, by Region**

	PERCENT OF SCHOOLS			
	REGION			
	Midwest	Northeast	South	West
Family nights	23 (3.7)	27 (4.6)	37 (3.3)	30 (4.6)
After-school help	67 (4.3)	72 (5.5)	78 (3.5)	72 (4.2)
After-school programs for enrichment	23 (3.9)	34 (5.6)	29 (3.1)	27 (3.9)
Mathematics clubs	18 (2.6)	32 (4.1)	32 (3.1)	25 (4.5)
Participation in local or regional mathematics fair	14 (2.9)	15 (3.1)	22 (2.5)	17 (4.4)
Participation in mathematics competitions	32 (3.6)	37 (5.5)	37 (3.3)	27 (4.7)
Encourage students to participate in summer programs/camps	44 (4.5)	52 (5.7)	52 (3.4)	50 (5.5)
Visits to business, industry, and/or research sites	14 (3.2)	15 (3.3)	20 (2.9)	14 (3.9)
Meetings with mentors who work in mathematics fields	5 (1.4)	22 (5.4)	19 (2.6)	13 (3.5)
Internships in mathematics fields†	4 (2.0)	10 (3.0)	9 (2.4)	3 (1.4)

† Includes only those schools with high school students.

**Table E-46 (Table 7.22)**  
**Equity Analyses of School Mean Scores for**  
**Factors Affecting Science Instruction Composites**

	MEAN SCORE		
	EXTENT TO WHICH A LACK OF RESOURCES IS PROBLEMATIC	EXTENT TO WHICH STUDENT ISSUES ARE PROBLEMATIC	EXTENT TO WHICH TEACHER ISSUES ARE PROBLEMATIC
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	32 (2.5)	16 (1.5)	33 (2.1)
Second Quartile	31 (2.3)	24 (1.6)	30 (2.2)
Third Quartile	38 (2.8)	33 (1.8)	35 (2.3)
Highest Quartile	40 (2.1)	38 (2.1)	41 (2.5)
<b>School Size</b>			
Smallest Schools	33 (2.7)	25 (2.1)	31 (2.8)
Second Group	37 (2.9)	24 (2.0)	33 (2.4)
Third Group	35 (1.9)	29 (1.5)	37 (2.1)
Largest Schools	36 (2.1)	30 (1.5)	37 (1.7)
<b>Community Type</b>			
Rural	34 (2.2)	28 (1.8)	30 (2.2)
Suburban	36 (1.6)	25 (1.1)	34 (1.6)
Urban	35 (2.4)	31 (1.7)	38 (2.3)
<b>Region</b>			
Midwest	31 (2.0)	26 (1.6)	33 (2.1)
Northeast	31 (2.8)	21 (2.5)	31 (3.1)
South	36 (1.5)	31 (1.5)	34 (1.7)
West	43 (2.8)	28 (1.9)	39 (2.3)

**Table E-47 (Table 7.22)**  
**Equity Analyses of School Mean Scores for**  
**Factors Affecting Mathematics Instruction Composites**

	MEAN SCORE		
	EXTENT TO WHICH A LACK OF RESOURCES IS PROBLEMATIC	EXTENT TO WHICH STUDENT ISSUES ARE PROBLEMATIC	EXTENT TO WHICH TEACHER ISSUES ARE PROBLEMATIC
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	20 (1.5)	23 (2.1)	21 (2.0)
Second Quartile	18 (1.8)	32 (2.3)	18 (1.9)
Third Quartile	20 (1.7)	46 (1.9)	20 (1.6)
Highest Quartile	26 (2.3)	48 (2.3)	25 (2.0)
<b>School Size</b>			
Smallest Schools	23 (2.4)	34 (2.7)	18 (2.0)
Second Group	19 (1.7)	35 (2.4)	21 (2.1)
Third Group	19 (1.5)	38 (2.1)	21 (1.5)
Largest Schools	22 (2.0)	39 (2.0)	23 (1.3)
<b>Community Type</b>			
Rural	22 (1.9)	36 (2.4)	19 (1.8)
Suburban	20 (1.2)	34 (1.5)	22 (1.4)
Urban	22 (2.1)	42 (2.2)	21 (2.0)
<b>Region</b>			
Midwest	19 (2.1)	36 (2.0)	20 (2.1)
Northeast	17 (2.0)	31 (2.5)	20 (2.7)
South	23 (1.7)	39 (1.7)	21 (1.6)
West	23 (1.9)	38 (2.6)	24 (2.0)

**Table E-48 (Table 7.31)**  
**Equity Analyses of Class Mean Scores for**  
**Factors Affecting Science Instruction Composites**

	MEAN SCORE		
	EXTENT TO WHICH THE POLICY ENVIRONMENT PROMOTES EFFECTIVE INSTRUCTION	EXTENT TO WHICH STAKEHOLDERS PROMOTE EFFECTIVE INSTRUCTION	EXTENT TO WHICH SCHOOL SUPPORT PROMOTES EFFECTIVE INSTRUCTION
<b>Prior Achievement Level of Class</b>			
Mostly High	63 (1.2)	73 (1.3)	72 (1.9)
Average/Mixed	63 (0.8)	66 (0.9)	65 (1.2)
Mostly Low	58 (1.4)	52 (2.9)	58 (3.1)
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	62 (1.4)	68 (1.1)	64 (1.8)
Second Quartile	61 (1.2)	68 (1.5)	64 (2.0)
Third Quartile	63 (1.3)	65 (1.9)	66 (2.1)
Highest Quartile	61 (1.5)	61 (2.6)	66 (2.6)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	63 (1.2)	71 (1.4)	68 (1.8)
Second Quartile	62 (1.4)	68 (1.2)	63 (1.9)
Third Quartile	62 (1.3)	63 (1.4)	63 (1.5)
Highest Quartile	60 (1.2)	60 (2.4)	65 (2.6)
<b>School Size</b>			
Smallest Schools	65 (2.2)	69 (2.6)	63 (3.3)
Second Group	61 (1.4)	63 (1.5)	64 (2.0)
Third Group	62 (1.3)	65 (1.6)	64 (1.7)
Largest Schools	62 (1.0)	66 (1.2)	67 (1.8)
<b>Community Type</b>			
Rural	64 (1.2)	65 (1.3)	63 (1.9)
Suburban	61 (0.9)	65 (1.1)	64 (1.3)
Urban	63 (1.6)	66 (2.0)	68 (2.2)
<b>Region</b>			
Midwest	61 (1.4)	65 (1.7)	61 (1.9)
Northeast	64 (1.6)	70 (1.9)	67 (2.7)
South	64 (1.0)	65 (1.2)	67 (1.6)
West	57 (1.3)	64 (2.3)	63 (2.4)

**Table E-49 (Table 7.32)**  
**Equity Analyses of Class Mean Scores for**  
**Factors Affecting Mathematics Instruction Composites**

	MEAN SCORE		
	EXTENT TO WHICH THE POLICY ENVIRONMENT PROMOTES EFFECTIVE INSTRUCTION	EXTENT TO WHICH STAKEHOLDERS PROMOTE EFFECTIVE INSTRUCTION	EXTENT TO WHICH SCHOOL SUPPORT PROMOTES EFFECTIVE INSTRUCTION
<b>Prior Achievement Level of Class</b>			
Mostly High	66 (1.6)	71 (2.1)	71 (1.9)
Average/Mixed	67 (0.8)	67 (1.0)	71 (1.0)
Mostly Low	62 (1.4)	55 (2.2)	69 (2.1)
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	67 (1.2)	69 (1.6)	70 (1.6)
Second Quartile	67 (1.0)	69 (1.4)	71 (1.6)
Third Quartile	64 (1.4)	65 (1.7)	71 (1.8)
Highest Quartile	64 (1.5)	59 (2.1)	71 (1.7)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	66 (1.0)	72 (1.4)	72 (1.7)
Second Quartile	65 (1.2)	66 (1.4)	71 (1.0)
Third Quartile	66 (1.2)	63 (1.5)	70 (1.6)
Highest Quartile	65 (1.3)	60 (1.7)	71 (1.5)
<b>School Size</b>			
Smallest Schools	71 (2.2)	66 (2.6)	70 (2.2)
Second Group	66 (1.6)	67 (1.8)	69 (1.8)
Third Group	66 (1.0)	65 (1.3)	73 (1.5)
Largest Schools	64 (0.9)	64 (1.4)	70 (1.2)
<b>Community Type</b>			
Rural	67 (1.3)	65 (1.9)	69 (1.6)
Suburban	66 (0.7)	66 (1.0)	71 (1.2)
Urban	64 (1.3)	65 (1.7)	71 (1.4)
<b>Region</b>			
Midwest	67 (1.0)	66 (1.4)	71 (1.3)
Northeast	66 (1.4)	66 (2.1)	70 (1.8)
South	66 (1.1)	64 (1.3)	73 (1.2)
West	63 (1.5)	67 (1.7)	68 (2.0)

**Table E-50 (Table 7.33)**  
**Equity Analyses of Class Mean Scores for**  
**Factors Affecting Computer Science Instruction Composites**

	MEAN SCORE		
	EXTENT TO WHICH THE POLICY ENVIRONMENT PROMOTES EFFECTIVE INSTRUCTION	EXTENT TO WHICH STAKEHOLDERS PROMOTE EFFECTIVE INSTRUCTION	EXTENT TO WHICH SCHOOL SUPPORT PROMOTES EFFECTIVE INSTRUCTION
<b>Prior Achievement Level of Class</b>			
Mostly High	57 (2.4)	73 (2.0)	71 (2.9)
Average/Mixed	59 (3.0)	68 (2.2)	75 (2.3)
<b>Percent of Historically Underrepresented Students in Class</b>			
Lowest Quartile	56 (3.7)	67 (3.7)	64 (4.6)
Second Quartile	52 (4.8)	68 (3.1)	79 (3.9)
Third Quartile	56 (3.3)	67 (3.6)	75 (3.8)
Highest Quartile	66 (3.8)	75 (3.0)	76 (4.3)
<b>Percent of Students in School Eligible for FRL</b>			
Lowest Quartile	53 (2.9)	69 (2.6)	70 (2.5)
Second Quartile	58 (3.2)	69 (2.8)	75 (4.3)
Third Quartile	63 (2.9)	68 (5.4)	79 (4.6)
Highest Quartile	66 (6.6)	74 (4.4)	75 (4.1)
<b>School Size</b>			
Smallest Schools	75 (5.6)	68 (9.3)	86 (8.0)
Second Group	62 (6.4)	69 (5.5)	70 (4.4)
Third Group	54 (3.7)	70 (4.7)	78 (4.8)
Largest Schools	57 (2.4)	70 (1.7)	72 (2.4)
<b>Community Type</b>			
Rural	60 (4.5)	68 (2.9)	73 (4.8)
Suburban	56 (2.8)	71 (2.7)	72 (2.6)
Urban	61 (5.2)	69 (3.1)	76 (3.9)
<b>Region</b>			
Midwest	52 (2.7)	64 (5.2)	79 (4.8)
Northeast	54 (6.3)	65 (3.7)	65 (4.3)
South	62 (3.2)	71 (2.4)	73 (3.1)
West	61 (4.0)	75 (2.4)	76 (3.1)