

APPENDIX A: ADDITIONAL INFORMATION ABOUT EDUCATIONAL GOALS

Table A.1— Percentage of private secondary school principals reporting the second most important educational goals among those who reported religious development as the most important goal

	Basic literacy skills	Academic excellence	Vocational skills	Discipline	Personal growth	Human relations skills	Specific moral values
Total private schools ¹	22.7	40.0	0.6	10.4	10.7	0.1	15.5
Catholic							
Parochial	5.6	61.0	0.0	0.0	15.6	0.0	17.8
Diocesan	2.3	69.8	0.0	4.2	15.9	0.0	7.9
Private order	6.7	50.3	0.0	6.9	26.9	0.0	9.8
Other Religious							
Conservative Christian	27.0	37.4	0.0	16.2	6.6	0.0	12.8
Affiliated	26.4	38.3	0.0	4.2	11.9	0.6	18.6
Unaffiliated	27.5	19.7	5.5	5.8	11.3	0.0	30.2

¹ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

APPENDIX B: DETAILS OF THE MULTIPLE REGRESSION ANALYSIS

School Characteristics

- **Total enrollment K-12 plus ungraded:** total student enrollment of the school
- **Student/teacher ratio:** ratio of the total number of students divided by the total number of teachers in the school
- **Secondary school:** a dichotomous variable where 0 = combined and 1 = secondary
- **Urban area:** a dichotomous variable where 0 = No and 1 = Yes, Urban
- **Suburban area:** a dichotomous variable where 0 = No and 1 = Yes, suburban
- **Northeast region:** a dichotomous variable for region of the country where the school resides where 0 = No and 1 = Yes, Northeast region
- **Midwest region:** a dichotomous variable for region of the country where the school resides where 0 = No and 1 = Yes, Midwest region
- **West region:** a dichotomous variable for region of the country where the school resides where 0 = No and 1 = Yes, West region
- **Parental influence:** mean of principal's rating of parental influence in curriculum, discipline, and hiring policy (Scale of 1 for None to 7 for Great Deal)
- **Do you have any volunteers?:** a dichotomous variable where 0 = No and 1 = Yes
- **% minority enrollment:** percentage of student enrollment that is minority
- **All male school:** a dichotomous variable where 0 = Not all male enrollment and 1 = All male enrollment
- **All female school:** a dichotomous variable where 0 = Not all female enrollment and 1 = All female enrollment
- **College application rate:** percentage of students that apply to college

For private schools:

- **Parochial Catholic:** a dichotomous variable where 0 = No and 1 = Yes, Parochial Catholic
- **Diocesan Catholic:** a dichotomous variable where 0 = No and 1 = Yes, Diocesan Catholic
- **Private Order Catholic:** a dichotomous variable where 0 = No and 1 = Yes, Private Order Catholic
- **Conservative Christian:** a dichotomous variable where 0 = No and 1 = Yes, Conservative Christian
- **Affiliated Christian:** a dichotomous variable where 0 = No and 1 = Yes, Affiliated Christian
- **Unaffiliated Christian:** a dichotomous variable where 0 = No and 1 = Yes, Unaffiliated Christian
- **Nonsectarian Regular:** a dichotomous variable where 0 = No and 1 = Yes, Nonsectarian Regular

Appendix B.1— OLS estimates of basic skill as the most important educational goal regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#	#	#*	#
Student/ teacher ratio	#	#	#	#
Secondary schools	0.03	0.03	-0.05	0.03
<u>Community</u>				
Urban	0.06*	0.03	0.06*	0.03
Suburban	0.05	0.03	0.05	0.03
Northeast	-0.11*	0.03	-0.11*	0.03
Midwest	-0.02	0.04	-0.02	0.04
West	0.02	0.04	0.02	0.03
Parent influence	0.01	0.01	#	0.01
Volunteer service	-0.08*	0.02	-0.05*	0.02
<u>Student composition</u>				
% minority	#	#	#	#
Male schools	-0.19*	0.07	0.04	0.09
Female schools	-0.25*	0.06	-0.05	0.09
% applying to college	#*	#	#	#
<u>Sector Membership</u>				
Parochial			-0.25	0.14
Diocesan			-0.27	0.10
Private order			-0.41*	0.08
Conservative Christian			-0.41*	0.07
Affiliated			-0.41*	0.05
Unaffiliated			-0.32*	0.10
Regular			-0.24*	0.06
Intercept	0.45*		0.51*	
R ²	4%		9%	
n	3186		3186	

The absolute value of the entry is <.005, but >0.

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

Appendix B.2— OLS estimates of academic excellence as the most important educational goal regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#*	#	#*	#
Student/ teacher ratio	#*	#	-0.01*	#
Secondary schools	0.04	0.03	0.04	0.02
<u>Community</u>				
Urban	#	0.03	#	0.02
Suburban	-0.01	0.03	-0.01	0.02
Northeast	#	0.03	0.01	0.03
Midwest	-0.12*	0.03	-0.10*	0.02
West	-0.12*	0.03	-0.12*	0.02
Parent influence	0.01	0.01	0.01	0.01
Volunteer service	0.03	0.02	0.04	0.01
<u>Student composition</u>				
% minority	#	#	#	#
Male schools	0.09	0.09	0.05	0.08
Female schools	-0.01	0.09	-0.04	0.06
% applying to college	#*	#	#*	#
<u>Sector Membership</u>				
Parochial			-0.09	0.10
Diocesan			-0.16*	0.06
Private order			0.01	0.07
Conservative Christian			-0.17*	0.05
Affiliated			-0.06	0.04
Unaffiliated			0.12	0.07
Regular			0.28*	0.06
Intercept	0.09*		0.09*	
R ²	7%		8%	
n	3186		3186	

The absolute value of the entry is <.005, but >0

* Significant at $\alpha < .05$.

¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

Appendix B.3— OLS estimates of religious development as the most important educational goal regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#*	#	#*	#
Student/ teacher ratio	0.01*	#	#*	#
Secondary schools	-0.10*	0.03	0.01	0.01
<u>Community</u>				
Urban	#	0.02	0.02	0.01
Suburban	#	0.02	0.02	0.01
Northeast	0.03	0.02	0.02	0.01
Midwest	0.06*	0.02	0.04*	0.02
West	0.01	0.02	0.01	0.01
Parent influence	-0.01	0.01	#	0.01
Volunteer service	0.07*	0.02	0.02	0.01
<u>Student composition</u>				
% minority	#	#	#	#
Male schools	0.14	0.07	0.07	0.09
Female schools	0.07	0.08	-0.11	0.07
% applying to college	#*	#	#*	#
<u>Sector Membership</u>				
Parochial			0.46*	0.10
Diocesan			0.49*	0.11
Private order			0.42*	0.10
Conservative Christian			0.76*	0.06
Affiliated			0.51*	0.07
Unaffiliated			0.33*	0.11
Regular			0.05*	0.02
Intercept	0.09*		-0.02*	
R ²	19%		52%	
n	3186		3186	

The absolute value of the entry is <.005, but >0

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

Appendix B.4— OLS estimates of principal education regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#*	#	#*	#
Student/ teacher ratio	0.01	#	0.01	#
Secondary schools	0.06	0.04	-0.03	0.04
<u>Community</u>				
Urban	0.04	0.04	#	0.04
Suburban	-0.01	0.04	-0.02	0.04
Northeast	-0.01	0.04	-0.02	0.04
Midwest	-0.05	0.04	-0.05	0.04
West	-0.13*	0.04	-0.13*	0.03
Parent influence	0.02	0.01	0.02	0.01
Volunteer service	-0.01	0.03	0.01	0.03
<u>Student composition</u>				
% minority	#	#	#	#
Male schools	0.08	0.10	0.13	0.12
Female schools	0.01	0.08	-0.04	0.08
% applying to college	-0.03	#	#	#
<u>Sector Membership</u>				
Parochial			0.05	0.13
Diocesan			-0.04	0.12
Private order			-0.01	0.11
Conservative Christian			-0.51*	0.13
Affiliated			-0.19*	0.09
Unaffiliated			-0.27	0.17
Regular			-0.17*	0.07
Intercept	2.05*		2.22*	
R ²	8%		14%	
n	3180		3180	

The absolute value of the entry is <.005, but >0

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

Appendix B.5— OLS estimates of salary schedules regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	2.31*	0.16	1.75*	0.14
Student/ teacher ratio	-23.10	24.94	-5.48	22.35
Secondary schools	865.66*	367.39	-525.66*	192.79
<u>Community</u>				
Urban	124.84	166.64	-26.48	133.04
Suburban	-96.51	243.51	-228.74	234.92
Northeast	2234.03*	238.21	2185.33*	207.89
Midwest	185.32	200.53	243.22	169.20
West	659.64*	323.01	632.14*	299.99
Parent influence	71.16	85.59	15.21	70.16
Volunteer service	-453.06*	192.15	-43.57	141.73
<u>Student composition</u>				
% minority	22.92*	3.86	23.90*	2.90
Male schools	-2703.99*	422.86	-832.21	1143.17
Female schools	-1322.40*	598.76	-204.78	475.41
% applying to college	-22.68*	6.39	1.10	3.43
<u>Sector Membership</u>				
Parochial			-3586.31*	561.04
Diocesan			-3013.68*	544.14
Private order			-2579.05*	712.02
Conservative Christian			-7579.25*	577.96
Affiliated			-3136.93*	572.42
Unaffiliated			-6199.67*	1173.76
Regular			-2073.17*	667.34
Intercept	15792*		18140*	
R ²	39%		62%	
n	3004		3004	

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Teacher Demand and Shortage Questionnaire for Public School Districts and Private School Questionnaire).

Appendix B.6— OLS estimates of administrator/teacher ratio regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#*	#	#*	#
Student/ teacher ratio	0.02	0.01	0.02*	0.01
Secondary schools	-0.20	0.11	0.05	0.08
<u>Community</u>				
Urban	-0.04	0.09	-0.02	0.09
Suburban	-0.05	0.08	-0.02	0.08
Northeast	0.34*	0.08	0.37*	0.07
Midwest	0.19*	0.09	0.21*	0.09
West	0.31*	0.11	0.30*	0.11
Parent influence	0.03	0.04	0.04	0.04
Volunteer service	0.11	0.08	0.04	0.08
<u>Student composition</u>				
% minority	#*	#	#*	#
Male schools	1.20*	0.43	1.02*	0.47
Female schools	1.36*	0.48	1.42*	0.70
% applying to college	#	#	#	#
<u>Sector Membership</u>				
Parochial			0.11	0.26
Diocesan			0.02	0.22
Private order			-0.10	0.50
Conservative Christian			1.24*	0.43
Affiliated			1.21*	0.21
Unaffiliated			0.76*	0.29
Regular			0.71*	0.27
Intercept	1.76*		1.40*	
R ²	14%		18%	
n	3186		3186	

The absolute value of the entry is <.005, but >0.

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

Appendix B.7— OLS estimates of principal influence on curriculum regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#*	#	#	#
Student/ teacher ratio	0.01	0.01	#	0.01
Secondary schools	-0.05	0.08	0.17*	0.08
<u>Community</u>				
Urban	0.06	0.09	0.09	0.09
Suburban	0.16	0.09	0.19*	0.09
Northeast	0.31*	0.09	0.30*	0.09
Midwest	0.28*	0.07	0.29*	0.07
West	0.24*	0.09	0.24*	0.09
Parent influence	0.21*	0.04	0.23*	0.04
Volunteer service	0.01	0.06	-0.09	0.06
<u>Student composition</u>				
% minority	#	#	#	#
Male schools	0.60*	0.22	-0.08	0.24
Female schools	0.40*	0.16	-0.17	0.16
% applying to college	0.01*	#	#	#
<u>Sector Membership</u>				
Parochial			0.76*	0.22
Diocesan			0.96*	0.22
Private order			1.18*	0.15
Conservative Christian			1.06*	0.22
Affiliated			0.98*	0.12
Unaffiliated			1.32*	0.16
Regular			0.91*	0.16
Intercept	3.99*		3.81*	
R ²	9%		13%	
n	3186		3186	

The absolute value of the entry is <.005, but >0.

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Administrator Questionnaire).

Appendix B.8— OLS estimates of math graduation requirement regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ^a	(se)	(b) ^a	(se)
<u>Organizational size</u>				
School enrollment	#	#	#	#
Student/ teacher ratio	-0.01*	#	-0.01*	0.00
Secondary schools	-0.16*	0.04	-0.09*	0.04
<u>Community</u>				
Urban	#	0.04	0.06	0.04
Suburban	0.04	0.03	0.05	0.03
Northeast	-0.05	0.05	-0.04	0.05
Midwest	-0.40*	0.04	-0.40*	0.04
West	-0.30*	0.04	-0.30*	0.03
Parent influence	-0.01	0.02	-0.02	0.02
Volunteer service	0.03	0.03	0.01	0.02
<u>Student composition</u>				
% minority	#*	#	#*	#
Male schools	0.45*	0.10	0.31*	0.12
Female schools	0.05	0.08	-0.16	0.11
% applying to college	#*	#	#	#
<u>Sector Membership</u>				
Parochial			0.29	0.23
Diocesan			0.19	0.11
Private order			0.30	0.15
Conservative Christian			0.36	0.09
Affiliated			0.09	0.10
Unaffiliated			0.24	0.17
Regular			0.44	0.09
Intercept	2.96*		2.93*	
R ²	17%		19%	
n	2902		2902	

The absolute value of the entry is <.005, but >0.

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

Appendix B.9— OLS estimates of science graduation requirement regressed on sector membership and other school factors

	Model 1		Model 2	
	(b) ¹	(se)	(b) ¹	(se)
<u>Organizational size</u>				
School enrollment	#*	#	#	#
Student/ teacher ratio	-0.01	#	-0.01	#
Secondary schools	-0.16*	0.05	-0.11*	0.04
<u>Community</u>				
Urban	-0.01	0.04	-0.01	0.05
Suburban	0.03	0.04	0.03	0.04
Northeast	-0.08	0.05	-0.08	0.05
Midwest	-0.29*	0.05	-0.29*	0.05
West	-0.14*	0.05	-0.13*	0.05
Parent influence	-0.01	0.02	-0.02	0.02
Volunteer service	0.01	0.03	-0.01	0.03
<u>Student composition</u>				
% minority	#	#	#	#
Male schools	0.37*	0.10	0.27	0.14
Female schools	-0.13	0.156	-0.25	0.13
% applying to college	#	#	#	#
<u>Sector Membership</u>				
Parochial			0.30	0.17
Diocesan			0.26*	0.11
Private order			0.23	0.19
Conservative Christian			0.29	0.17
Affiliated			0.11	0.13
Unaffiliated			0.13	0.18
Regular			0.24*	0.11
Intercept	2.40*		2.41*	
R ²	7%		8%	
n	2902		2902	

The absolute value of the entry is <.005, but >0.

* Significant at $\alpha < .05$.¹ unstandardized coefficient

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (School Questionnaire).

APPENDIX C: TABLES OF STANDARD ERRORS

Appendix C.1— Standard errors of percentage of principals reporting the educational goals as the most important in public and private schools, 1990-91

	Basic literacy skills	Academic excellence	Vocational skills	Discipline	Personal growth	Human relations skills	Specific moral values	Religious development
Total public schools	0.9	0.9	0.3	0.7	0.8	0.3	0.2	N/A
Total private schools ¹	1.6	1.5	0.0	1.1	0.7	0.3	1.3	2.3
Private school type ¹								
Catholic								
Parochial	6.2	9.4	0.0	0.0	6.4	#	2.6	9.1
Diocesan	2.4	5.6	0.0	0.9	2.6	#	3.1	6.0
Private order	3.8	5.2	0.0	2.1	4.0	#	2.4	5.9
Other Religious								
Conservative Christian	3.1	3.1	0.0	1.4	0.4	#	3.2	5.4
Affiliated	4.2	3.3	0.0	2.0	2.5	#	0.5	4.9
Unaffiliated	5.5	5.9	0.0	7.9	2.1	#	2.5	7.0
Nonsectarian								
Regular	4.3	5.5	0.3	5.0	3.3	2.5	1.8	0.0

The absolute value of the entry is <.05, but >0.

¹ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (Administrator Questionnaire).

Appendix C.2— Standard errors of percentage of schools with principals' various educational degree and mean years of experience in public and private schools, 1990-91

	% Bachelor's degree or less	% Master's degree	Beyond Master's and PhD	Mean # of years teaching	Mean # of years as principal
Total public schools	0.3	1.1	1.1	0.1	0.3
Total private schools ¹	2.3	2.1	1.9	0.3	0.3
Private school type ¹					
Catholic					
Parochial	#	8.1	8.1	1.6	1.4
Diocesan	3.0	5.2	4.7	0.7	0.7
Private order	1.7	5.7	6.1	0.6	0.7
Other Religious					
Conservative Christian	6.1	4.7	2.8	0.5	0.6
Affiliated	6.0	5.7	4.5	0.8	0.8
Unaffiliated	8.1	6.6	5.8	0.8	1.0
Nonsectarian					
Regular	3.5	5.6	5.2	0.7	0.9

The absolute value of the entry is <.05, but >0.

¹ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (Administrator Questionnaire).

Appendix C.3.— Standard errors of percentage of schools with principals receiving leadership training in public and private schools, 1990-91¹

	Evaluation and supervision	Management techniques	Administrative internship	No training
Total public schools	0.7	1.0	1.0	0.5
Total private schools ²	3.2	2.6	1.9	2.3
Private school type ²				
Catholic				
Parochial	9.5	9.8	6.6	8.9
Diocesan	6.2	4.9	5.5	5.2
Private order	6.5	6.1	4.4	4.5
Other Religious				
Conservative Christian	5.3	5.6	3.1	3.4
Affiliated	5.8	5.6	3.4	5.8
Unaffiliated	7.6	7.1	6.3	7.5
Nonsectarian				
Regular	5.9	5.5	3.9	4.0

¹ Course work for a degree is not included.

² Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (Administrator Questionnaire).

Appendix C.4— Standard errors of mean annual salary from teacher salary schedule at different career stages in public and private schools, 1990-91

	Normal yearly base salary for a teacher with BA/BS degree and no experience ²		Highest possible step on the salary schedule ³	
	Mean	Difference from the public mean	Mean	Difference from the public mean
Total public schools	64	N/A	141	N/A
Total private schools ¹	225		440	
Private school type ¹				
Catholic				
Parochial	413		1,235	
Diocesan	300		579	
Private order	273		824	
Other Religious				
Conservative Christian	406		729	
Affiliated	536		1,080	
Unaffiliated	791		1,317	
Nonsectarian				
Regular	363		753	

¹ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

² For schools that do not have a salary schedule, the lowest range of base year teacher salaries was used in the calculation.

³ For schools that do not have a salary schedule, the highest range of base year teacher salaries was used in the calculation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Teacher Demand and Shortage Questionnaire for Public School Districts and Private School Questionnaire).

Appendix C.5— Standard errors of percentage of schools providing selected benefits to teachers in public and private schools, 1990-91

	Medical insurance	Pension contributions	Housing
Total public schools	0.4	1.0	0.3
Total private schools ¹	2.4	2.1	1.4
Private school type ¹			
Catholic			
Parochial	#	10.1	4.5
Diocesan	2.4	4.3	0.9
Private order	2.5	5.9	2.0
Other Religious			
Conservative Christian	5.8	2.5	2.2
Affiliated	5.8	5.6	4.6
Unaffiliated	6.5	6.2	4.4
Nonsectarian			
Regular	4.2	4.0	2.9

The absolute value of the entry is <.05, but >0.

¹ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 (Teacher Demand and Shortage Questionnaire for Public School Districts and Private School Questionnaire).

Appendix C.6— Standard errors of mean ratio of administrator and other staff per 10 teachers in public and private schools, 1990-91¹

	Administrative ² staff/Teacher ratio	Teacher aides/ Teacher ratio	Librarian and library aides/ Teacher ratio	Counselor/ Teacher ratio
Total public schools	0.1	0.1	#	#
Total private schools ³	0.3	0.2	#	0.1
Private school type ³				
Catholic				
Parochial	0.1	0.4	0.1	#
Diocesan	0.1	0.0	#	#
Private order	0.1	0.1	#	#
Other Religious				
Conservative Christian	0.5	0.4	0.2	0.1
Affiliated	0.2	0.3	0.1	0.1
Unaffiliated	1.6	0.4	0.1	0.1
Nonsectarian				
Regular	0.3	0.3	0.1	0.1

The absolute value of the entry is <.05, but >0.

¹ Half-time staff and teachers were divided by 2 and added to the full-time staff and teachers.

² Administrative staff include principal(s), assistant principal(s), guidance counselors, vocational counselors, and other professional staff such as curriculum specialists, administrative and business staff, social workers, and health professionals.

³ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (School Questionnaire).

Appendix C.7— Standard errors of mean years of academic instruction required for graduating in secondary schools in the public sector and by private schools, 1990-91

	English	Math	Computer sciences	Social studies	Science	Foreign language
Total public schools	#	#	#	#	#	#
Total private schools ¹	0.1	#	#	0.1	0.1	0.1
Private school type ¹						
Catholic						
Parochial	0.1	0.1	0.2	0.2	0.1	0.2
Diocesan	#	0.1	#	0.1	#	0.1
Private order	#	0.1	0.1	#	0.1	0.1
Other Religious						
Conservative Christian	0.2	0.1	0.1	0.2	0.1	0.1
Affiliated	#	0.1	0.1	0.1	0.1	0.2
Unaffiliated	0.1	0.1	0.1	0.1	0.1	0.2
Nonsectarian						
Regular	0.1	0.1	0.1	0.1	0.1	0.1

The absolute value of the entry is <.05, but >0.

¹ Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (School Questionnaire).

Appendix C.8— Standard errors of percentage of principals reporting group having a great deal of influence over decisions concerning “establishing curriculum” in the public sector and by private schools, 1990-91¹

	School Board	Principal	Teachers
Total public schools	0.9	1.0	1.1
Total private schools ²	2.4	1.5	2.6
Private school type ²			
Catholic			
Parochial	10.4	5.5	9.5
Diocesan	3.5	4.3	5.8
Private order	4.6	3.7	3.5
Other Religious			
Conservative Christian	4.8	3.5	5.5
Affiliated	5.7	5.0	5.6
Unaffiliated	8.2	3.9	7.7
Nonsectarian			
Regular	3.7	3.3	3.8

¹ A great deal of influence is defined as 5 to 6 on a scale ranging from 0 (none) to 6 (a great deal).

² Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (Administrator Questionnaire).

Appendix C.9— Standard errors of percentage of principals reporting group having a great deal of influence over decisions concerning “hiring new full-time teachers” in the public sector and by private schools, 1990-91¹

	School Board	Principal	Teachers
Total public schools	0.8	0.5	0.8
Total private schools ²	2.0	1.5	2.1
Private school type ²			
Catholic			
Parochial	8.4	#	6.4
Diocesan	3.6	2.7	5.3
Private order	3.0	1.1	4.1
Other Religious			
Conservative Christian	5.1	2.6	3.7
Affiliated	4.4	6.3	4.4
Unaffiliated	6.9	3.8	6.9
Nonsectarian			
Regular	3.5	1.6	3.3

The absolute value of the entry is <.05, but >0.

¹ A great deal of influence is defined as 5 to 6 on a scale ranging from 0 (none) to 6 (a great deal).

² Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (Administrator Questionnaire).

Appendix C.10— Standard errors of percentage of principals reporting group having a great deal of influence over decisions concerning “setting discipline policy” in the public sector and by private schools, 1990-91¹

	School Board	Principal	Teachers
Total public schools	1.1	0.7	0.9
Total private schools ²	2.4	1.6	2.8
Private school type ²			
Catholic			
Parochial	10.9	3.1	9.5
Diocesan	5.5	3.0	4.2
Private order	4.8	1.2	3.9
Other Religious			
Conservative Christian	5.0	3.5	6.2
Affiliated	5.3	5.4	5.2
Unaffiliated	7.6	3.4	8.2
Nonsectarian			
Regular	4.9	3.2	4.2

¹ A great deal of influence is defined as 5 to 6 on a scale ranging from 0 (none) to 6 (a great deal).

² Schools classified as Nonsectarian Special Emphasis and Special Education are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-1991 (Administrator Questionnaire).

**APPENDIX D: FORMULAE USED TO CALCULATE
COLUMN 3 OF TABLE 8**

Formula 1:

$$r_{Y12}^2 = 1 - \frac{SSE(X_1, X_2)}{SSE(X_2)}$$

where r_{Y12}^2 is the proportionate reduction in the variation of Y (dependent variable) remaining after X_2 is included in the model, and

$SSE(X_1, X_2)$ is the variation in Y when both X_1 and X_2 (independent variables) are included in the model, and

$SSE(X_2)$ is the variation in Y when X_2 is included in the model.

Formula 2:

$$F = \frac{SSE(R) - SSE(F)}{df_R - df_F} \div \frac{SSE(F)}{df_F}$$

where F is the F ratio (Large values of F lead to H_a , and

$SSE(F)$ is the error sum of squares for the full model, and

$SSE(R)$ is the error sum of squares for the reduced model, and

df_F is the degrees of freedom for the full model, and

df_R is the degrees of freedom for the reduced model.

APPENDIX E: TECHNICAL NOTES

The Schools and Staffing Survey (SASS) is a periodical survey for school districts, school administrators, schools, and teachers by the National Center for Education Statistics (NCES) of the U.S. Department of Education. The 1990-91 SASS consisted of four basic separate questionnaires administered during the school year: (1) the Teacher Demand and Shortage Questionnaire for Public School Districts, (2) the School Administrator Questionnaire, (3) the School Questionnaire, and (4) the Teacher Questionnaire. The Teacher Follow-up Survey was conducted a year later to a sample of teachers who participated in the Teacher Questionnaire.

Survey Content

- *The Teacher Demand and Shortage Questionnaire* was administered to public school districts and corresponding information was incorporated to the private school questionnaire. The questionnaire was divided into two sections: enrollment and teaching positions and district policy. The first section obtained information on the number of students, teachers, and librarians; teacher position vacancies; and new hires. The second section gathered information on teacher salary and benefits, incentives and compensation, hiring and retirement policies, and high school graduation requirements. In addition, information on race/ethnicity of students and teachers in the district was also collected. The data derived from this survey permit an estimation of teacher demand and shortage, an evaluation of teacher certification and training, and an assessment of the effect of various policies on teacher demand and supply.
- *The School Administrator Questionnaire* was mailed to both public and private school principals. It obtained information from school principals or headmasters about objective responses such as their education and training, teaching and administration experience, and salary and benefits, as well as subjective responses such as school problems and group influence by the State Department of Education, board, principal, teacher, or parent association on decisionmaking. The data derived from this survey allow an examination of principal qualifications and principals' perception of school problems and influence on school policies.
- *The School Questionnaire* was sent to both public and private schools. It gathered information about school characteristics, such as student characteristics, type of the program and services offered, length of school day and school year, and graduation and college application rate. It also collected data on staff patterns, such as current teacher characteristics, new teachers, and teacher vacancies and data on difficulty in hiring teachers in different field. The private school version of the questionnaire also included religious or other affiliation background about the school. These data provide information about student body, teacher experience, source of newly hired teachers, and number of teachers who left the school by teaching field.
- *The School Teacher Questionnaire* was also administered to both public and private school teachers. The two versions of the questionnaires were virtually identical. It asked information about current teaching status; teaching experience; teacher education, training, and certification; teaching assignment and workload; and teacher perceptions and attitudes about teaching, job mobility, and workplace conditions. This information allows for analysis of how these factors affect movement into and out of the teaching profession.

- *The Teacher Follow-up Survey* was sent out a year later to a sample of teachers who participated in the Teacher Questionnaire. One version of the questionnaire was for teachers who were still teaching, and the other version was for those who had left the teaching profession. This survey obtained data about employment and teaching status and possible sources of dissatisfaction with teaching as a profession. It also gathered information on family size and income. The data derived from this survey allow for comparisons of public and private school teacher job satisfaction and movement within and out of the teaching profession.

Copies of these questionnaires can be obtained by writing to:

School and Staffing Survey
National Center for Education Statistics
555 New Jersey Avenue, N.W.
Washington, DC 20208-5651

Sample Selection

SASS was designed to provide national estimates for public and private schools; state estimates for public schools; state elementary, state secondary, and national combined estimates for public schools; association and grade-level estimates for private schools; estimates of change from 1988 to 1991 in school-level characteristics; and national estimates for schools with greater than 25 percent Indian enrollment. The teacher questionnaire was designed to support comparisons between new and experienced teachers. Comparisons between bilingual and nonbilingual teachers are possible at the national level.

The sample for SASS conducted during the 1990-1991 school year included 12,856 schools and administrators, 62,217 teachers, and 5,515 local education agencies. To improve estimates of change between 1988 and 1991, the sample selection process controlled the amount of overlap between the 1988 and 1991 school samples, setting it at 30 percent for public schools and for private schools belonging to associations with high response rates in 1988. The overlap for associations that did not have high response rates was set by a sliding scale, and below a point it was minimized.

Schools were the primary sampling units for SASS. Each selected school received a school questionnaire and an administrator questionnaire. Next, a sample of teachers was selected within each school, and each sampled teacher received a teacher questionnaire. A “Teacher Demand and Shortage” (TDS) questionnaire was sent to the local education agency (LEA) associated with each selected school. Also, an additional sample of public school districts not associated with schools received the TDS questionnaire. The private questionnaire included TDS questions for the school.

Selection of Schools

The sampling frame used for public school selection was the 1988-89 school year Common Core of Data (CCD) file, an annual survey collected by the NCES from all state education agencies. CCD was believed to be the most complete list of public schools available. The list consisted of a total of 83,165 regular public schools, Department of Defense operated military base schools, and nonregular schools such as special education, vocational, and alternative schools.

The public school sample was stratified by type (Bureau of Indian Affairs [BIA] schools, Native American schools [schools with 25 percent or more Native American students], schools in Delaware, Nevada, and West Virginia [where it was necessary to implement a different sampling strategy to ensure that at least one school from each LEA in the state was included], or all other schools), state, and grade level (elementary, secondary, or combined). A total of 9,586 public schools were selected.

The sampling frame for private school was the 1989-90 Private School Survey (PSS), which was based on the 1986 Quality of Education Data (QED) private school list, supplemented by 20 private school association lists provided to the Census Bureau in the spring of 1989. The frame included 22,600 schools from the QED list and 1,586 schools were added from association lists.

To improve private school coverage, an area frame of schools was developed to identify schools not on the list frame. Census field representatives used telephone book and yellow pages and contacted local government offices, chambers of commerce, and religious institutions to compile a list of all private schools in each selected area. They then compared this list with the existing PSS list, and nonmatches were added to the universe as part of the area frame.

The private school sample of 3,270 was stratified by the 18 category school association membership (Military, Catholic, Friends, Episcopal, Hebrew Day, Solomon Schechter, other Jewish, Missouri Synod, Wisconsin Synod, Evangelical Lutheran, other Lutheran, Seven-Day Adventist, Christian Schools International, Association of Christian Schools International, National Association of Private Schools for Exceptional Children, Montessori, National Association of Independent Schools, or all else), grade level, and four census regions (Northeast, Midwest, South, and West).

Selection of LEAs

All LEAs that had at least one school selected for the school sample were included in the LEA sample for the TDS Survey. Each Bureau of Indian Affairs and Department of Defense school was defined to be an LEA. Some LEAs do not have schools, but hire teachers who teach in schools in other LEAs. To ensure representation of these teachers, a sample of 135 LEAs without eligible schools was selected. Only 14 of the 135 were actually in scope (that is, were an operating public school agency that reported hiring teachers). All LEAs in Delaware, Nevada, and West Virginia were included to reduce high standard errors in these states. The total LEA sample was 5,515.

Selection of Teachers

Each selected school was asked to provide a list of their teachers and selected characteristics, such as new (in third year or less of teaching)/experienced, bilingual/English as a Second Language (ESL), race/ethnicity, and field of teaching (general elementary, special education, and all others for elementary level teachers; math science, English, social studies, vocational education, special education, and all others for secondary teachers). This information in a selected SASS school comprised the school teacher frame. Eleven percent of private schools and 5 percent of the public schools did not provide a teacher list. A factor in the teacher weighting system was used to adjust these nonparticipant schools.

Teachers were stratified into one of the five groups in the following hierarchical order for each school: (1) Asian or Pacific Islander teachers, (2) American Indian or Alaska Native teachers, (3) Bilingual teachers, (4) new teachers, and (5) experienced teachers. Then, teachers were sorted by their primary field of teaching.

Within each school and teacher stratum, 56,051 public and 9,166 private school teachers were selected systematically with equal probability. The average number of teachers selected per school were 3.49, 6.98, and 5.23 teachers for public elementary, secondary, and combined schools, and 3.78, 4.72, and 2.83 teachers for private elementary, secondary, and combined schools, respectively.

Data Collection Procedures

The U.S. Bureau of the Census collected SASS data for NCES. Following introductory letters to local school districts, questionnaires were mailed to school districts and administrators in December 1990 and to schools and teachers in January and February 1991. About four or five weeks later, a second questionnaire was sent to each nonrespondent. A telephone follow-up of nonrespondents was conducted between March and June.

Response Rates

The weighted response rates were derived by dividing the sum of the basic weights for the interview cases by the sum of the basic weights for the eligible cases. The basic weight for each sample case was assigned at the time of sampling and is the inverse of the probability of selection. The final weighted questionnaire response rates for public and private sectors were as follows:

	Public	Private
Teacher Demand and Shortage	93.5	--
Administrator	96.7	90.0
School	95.3	83.9
Teacher*	90.3	84.3

-- not applicable

*The response rate for public school teachers does not include the 5 percent of the public schools that did not provide teacher lists, and for private school teachers does not include the 11 percent of the private schools that did not provide teacher lists. The effective response rate for public schools was 85.8 percent and for private schools, 75.9 percent.

Imputation

Values were imputed for questionnaire items that should have been answered but were not by (1) using data from other items on the questionnaire, (2) extracting data from a related component of the SASS (a school record to impute district data, for example), (3) extracting information about the sample case from other sources, such as the Common Core Data (CCD) or Private School Survey (PSS), or (4) extracting data from a respondent with similar characteristics.

Weighting

The sample weighting was developed for three purposes: (1) to take account of the selection probabilities at every state of selection, (2) to minimize biases that may result from unit nonresponse, and (3) to make use of available information from external sources to improve the precision of the sample estimates. The public sector was weighted to produce national and state estimates and the private sector was weighted to produce national and 18-group affiliation estimates.

The basic weight was the inverse of the probability of selection, and was adjusted for a sampling adjustment factor, a nonresponse factor, and a frame ratio adjustment factor.

- The sampling adjustment factor was applied to certain schools and administrators to account for duplicate records, merged schools, or any other circumstance that would affect the school's true probability of selection.
- The nonresponse adjustment factor was used to compensate for schools or administrators eligible for the survey but who were not interviewed, usually because they refuse to respond.
- The frame ratio adjustment factor adjusted for differences between expected and actual sample size.

Standard Errors

Estimates in the tables of this report are based on samples and are subject to sampling variability. Standard errors reported in this report were estimated using a balanced repeated replications procedure that incorporates the design features of this complex sample survey. They are generally higher than standard errors calculated under the assumptions of simple random sampling.

The standard errors provide indication of the accuracy of each estimate. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the universe value in approximately 95 percent of the cases. Note, however, that the standard errors do not take into account the effect of biases due to item nonresponse, measurement error, data processing error, or other possible systematic error.

The Bonferroni procedure is used to correct significance tests for multiple contrasts. This method corrects the significance (or alpha) level for the total number of contrasts made with a particular classification variable.

Additional Resources on Schools and Staffing Survey (SASS)

The following SASS data products may be obtained free of charge while supplies last from:

U.S. Department of Education
National Center for Education Statistics
SASS Data Products
555 New Jersey Avenue, NW, Room 422
Washington, DC 20208-5651

Reports

- Out-of-Field Teaching and Educational Equality (NCES 96-040)
- Schools and Staffing in the United States: A Statistical Profile: 1993–94 (NCES 96-124)
- Private School Universe Survey, 1993–94 (NCES 96-143)

- SASS by State, 1993–94 Schools and Staffing Survey: Selected State Results (NCES 96-312)
- Comparing Key Organizational Qualities of American Public and Private Secondary Schools (NCES 96-322)
- Schools and Staffing in the United States: Selected Data for Public and Private Schools, 1993-94 (E.D. Tab, NCES 95-191)
- Private Schools in the United States: A Statistical Profile, 1990–91 (NCES 95-330)
- Teacher Supply in the U.S.: Sources of Newly Hired Teachers in Public and Private Schools, 1988–1991 (NCES 95-348)
- Characteristics of American Indian and Alaska Native Education, Results from the 1990–91 SASS (NCES 95-735)
- Teacher Supply, Teacher Qualifications and Teacher Turnover, Aspects of Teacher Supply and Demand in the U.S., 1990–91 (NCES 95-744)
- The Patterns of Teacher Compensation (NCES 95-829)
- Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey, 1991-92 (E.D. Tab, NCES 94-337)
- SASS by State (NCES 94-343)
- Private School Universe Survey, 1991-92 (NCES 94-350)
- Qualifications of the Public School Teacher Workforce: 1988 and 1991 (NCES 94-665)
- America’s Teachers: Profile of a Profession (NCES 93-025)
- Private School Universe Survey, 1989-90 (NCES 93-122)
- Selected Tables on Teacher Supply and Demand (E.D. Tab, NCES 93-141)
- Schools and Staffing in the United States: A Statistical Profile, 1990-91 (NCES 93-146)
- Schools and Staffing in the United States: Selected Data for Public and Private Schools, 1990-91 (E.D. Tab, NCES 93-453)
- Schools and Staffing in the United States: A Statistical Profile, 1987-88 (NCES 92-120)
- Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey, 1988-89 (E.D. Tab, NCES 91-128)

Forthcoming Reports

- Characteristics of American Indian and Alaska Native Education, Results from the 1993–94 SASS
- America's Teachers: Profile of a Profession, 1993–94
- The State of Teaching as a Profession, 1990–91
- The Effects of Professionalization on Teachers: A Multi-Level Analysis, 1990–91
- Time Spent Teaching Core Academic Subjects in Elementary Schools: Comparisons Across Community School, Teacher, and Student Characteristics
- Job Satisfaction Among America's Teachers: Effects of Workplace, Conditions, Background Characteristics, and Teacher Compensation, 1993–94
- A Profile of Administration Policies and Practices for Limited English Proficiency Students: Screening Methods, Teacher Training, and Program Support, 1993–94
- Private Schools in the U.S.: A Statistical Profile, 1993–94
- Sources of Newly Hired Teachers in Public and Private Schools, 1988–94
- Characteristics of Students' Programs: Results from Their Student Records, 1993–94
- Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey, 1994-95
- Characteristics of Public School Districts, 1993-94
- School Principals in the United States, 1993-94

Issue Briefs

- Are High School Teachers Teaching Core Subjects Without College Majors or Minors in Those Subjects? (Issue Brief, NCES 96-839)
- Where Do Minority Principals Work? (Issue Brief, NCES 96-840)
- What Academic Programs are Offered Most Frequently in Schools Serving American Indian and Alaska Native Students? (Issue Brief, NCES 96-841)
- How Safe are the Public Schools: What Do Teachers Say? (Issue Brief, NCES 96-842)
- Extended Day Programs in Elementary and Combined Schools (Issue Brief, NCES 96-843)
- What Criteria are Used in Considering Teacher Applicants? (Issue Brief, NCES 96-844)

- Private School Graduation Requirements (Issue Brief, NCES 95-145)
- How Much Time Do Public and Private School Teachers Spend in Their Work? (Issue Brief, NCES 95-709)
- Migration and Attrition of Public and Private School Teachers: 1991–92 (Issue Brief, NCES 95-770)
- Which Types of Schools Have the Highest Teacher Turnover? (Issue Brief, NCES 95-778)
- Libraries/Media Centers in Schools: Are There Sufficient Resources? (Issue Brief, NCES 95-779)
- Who Influences Decisionmaking About School Curriculum: What Do Principals Say? (Issue Brief, NCES 95-780)
- Public and Private School Principals: Are There Too Few Women? (Issue Brief, NCES 94-192)
- Sources of Newly Hired Teachers in Public and Private Schools, 1988-91 (Issue Brief, NCES 94-481)
- What are the Most Serious Problems in Schools? (Issue Brief, NCES 93-149)
- Teacher Salaries—Are They Competitive? (Issue Brief, NCES 93-450)
- Teaching and Administrative Work Experience of Public School Principals (Issue Brief, NCES 93-452)
- Teacher Attrition and Migration (Issue Brief, NCES 92-148)

Video

- Americas Teachers: Profile of a Profession

Methods

- 1993-94 Schools and Staffing Survey: Sample Design and Estimation (Technical Report, NCES 96-089)
- An Exploratory Analysis of Nonrespondents in the 1990-91 Schools and Staffing Survey (NCES 96-338)
- Design Effects and Generalized Variance Functions for the 1990–91 Schools and Staffing Surveys (SASS) Volume I--User's Manual (NCES 95-342I)
- Design Effects and Generalized Variance Functions for the 1990–91 Schools and Staffing Surveys (SASS) Volume II--Technical Report (NCES 95-340II)

- Quality Profile for SASS: Aspects of the Quality of Data in the Schools and Staffing Surveys (Technical Report, NCES 94-340)
- 1990-91 Schools and Staffing Survey: Sample Design and Estimation (Technical Report, NCES 93-449)
- Modeling Teacher Supply and Demand, with Commentary (Research and Development Report, NCES 93-461)
- 1987-88 Schools and Staffing Survey: Sample Design and Estimation (Technical Report, NCES 91-127)

CD-ROMs

- Schools and Staffing Survey: 1993–94 Electronic Codebook and Public Use Data
- Schools and Staffing Survey: 1990–91 Electronic Codebook and Public Use Data
- Schools and Staffing Survey, 1987–88 Microdata and Documentation

Questionnaires

- SASS and PSS Questionnaires 1993–1994 (NCES 94-674)
- SASS and TFS Questionnaires 1990–1991
- SASS and TFS Questionnaires 1987–1988

User's Manuals

- 1990–91 Schools and Staffing Survey: Data File User's Manual Volume I: Survey Documentation (NCES 93-144-I)
- 1990–91 Schools and Staffing Survey: Data File User's Manual Volume II: Restricted-Use codebook (NCES 93-144-II)
- 1990–91 Schools and Staffing Survey: Data File User's Manual Volume III: Public-Use codebook (NCES 93-144-III)
- 1990–91 Schools and Staffing Survey: Data File User's Manual Volume IV: Bureau of Indian Affairs (BIA) Restricted-Use Codebooks: Administrator, Schools, and Teachers (NCES 93-144-IV)
- 1991–92 Teacher Followup Survey Data File User's Manual—Public-Use Version (NCES 94-331)
- 1991–92 Teacher Followup Survey Data File User's Manual—Restricted-Use Version (NCES 94-478)

- 1988–89 Teacher Followup Survey Data File User’s Manual—Public-Use Version (NCES 92-058)

Forthcoming User’s Manuals

- 1993–94 Schools and Staffing Survey, Data File User's Manual Volume I: Survey Documentation
- 1993–94 Schools and Staffing Survey, Data File User's Manual Volume II: Restricted-Use Codebook
- 1993–94 Schools and Staffing Survey, Data File User's Manual Volume III: Public-Use Codebook
- 1993–94 Schools and Staffing Survey, Data File User’s Manual Volume IV: Bureau of Indian Affairs (BIA) Restricted-Use Codebooks: Administrator, Schools, and Teachers
- 1993–94 Schools and Staffing Survey, Data File User's Manual Volume V: Restricted-Use Codebook Students' Records

Conference Papers

- Using Classroom Instructional Process Items in National Center for Education Statistics Study To Measure Student Opportunity to Learn: A Progress Report
- Heaven or Hell? The Teaching Environment of Beginning Teachers
- Using Opportunity to Learn Items in Elementary and Secondary National Surveys
- Characteristics of Public and Private School Teachers
- Characteristics of Mathematics and Science Teachers
- Teacher Training, Certification and Assignment
- Teacher Turnover: Patterns of Entry To and Exit from Teaching
- Moonlighting Among Public and Private School Teachers
- Characteristics of Bilingual Education and English as a Second Language Teachers
- Highlights of Minority Data from the Schools and Staffing Survey
- Teacher Incentive Research with SASS
- Teacher Salaries: Comparing States After Adjusting for Teacher Experience and Education
- What are the Characteristics of Principals Identified as Effective by Teachers

- Schools at Risk: Results of the 1987-88 Schools and Staffing Survey
- Destinations of Movers and Leavers: Where Do They Go?
- Teacher Salaries: Comparing States After Adjusting for Teacher Experience and Education
- Classroom Environment and Support of Beginning Teachers: A Test of the "Crucible versus Cradle" Theory of Teacher Induction
- Why do Teachers Leave Teaching? Reasons for Teacher Attrition from the Teacher Followup Survey

NCES Working Papers Related to SASS

WP 94-01 Schools and Staffing Survey (SASS). Papers Presented at the Meetings of the American Statistical Association

Section on Survey Research Methods, August 1992

- a. "The Schools and Staffing Survey: Research Issues"
- b. "The Schools and Staffing Survey: How Reinterview Measures Data Quality"
- c. "Mail Versus Telephone Response in the 1991 Schools and Staffing Surveys"
- d. "Questionnaire Research in the Schools and Staffing Survey: A Cognitive Approach"
- e. "Balance Half-Sample Replication with Aggregation Units"
- f. "Characteristics of Nonrespondents in the Schools and Staffing Surveys' School Sample"
- g. "Improving Reliability and Comparability on NCES Data on Teachers and Other Education Staff"

Establishment Surveys Conference, June 1993

- a. "Sampling Frames at the United States National Center for Education Statistics"
- b. "Monitoring Data Quality in Education Surveys"

Section on Survey Research Methods, August 1993

- a. "Generalization Variance Functions for the Schools and Staffing Surveys"
- b. "A Bootstrap Variance Estimator for the Schools and Staffing Survey"
- c. "Adjusting for Nonresponse Bias of Correlated Items Using Logistic Regression"
- d. "Comparisons of School Locale Setting: Self-Reported Versus Assigned"
- e. "Characteristics of Nonrespondents to the 1990-91 Schools and Staffing Survey"

Social Statistics Section, August 1993

- a. "Implicit Markets for Teacher Quality and School Attributes"
- b. "Who Decides? Principals' and Teachers' Views on Decision-Making"
- c. "Determinants of Pupil-Teacher Ratios at School Sites: Evidence from the Schools and Staffing Survey"

- WP 94-02** Generalized Variance Estimates for Schools and Staffing Survey (SASS)
- WP 94-03** 1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report
- WP 94-04** The Accuracy of Teachers' Self-report on Their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey
- WP 94-06** Six Papers on Teachers from the 1990–91 Schools and Staffing Survey and Other Related Surveys
- a. "The Results of the 1993 Teacher List Validation Study (TLVS)"
 - b. "Designing the Teacher Follow-up Survey (TFS): Issues and Content"
 - c. "Understanding the Supply of Elementary and Secondary Teachers: The Role of the School and Staffing Survey and the Teacher Followup Survey"
 - d. "Teacher Retention/Attrition: Issues for Research"
 - e. "Reflections on a SASS Longitudinal Study"
 - f. "Whither Didst Thou Go? Retention, Reassignment, Migration, and Attrition of Special and General Education Teachers in National Perspective"
- WP 95-01** Schools and Staffing Survey: 1994. Papers Presented at the 1994 Meeting of the American Statistical Association (95-01)

Estimation Issues in School Surveys

- a. "Intersurvey Consistency in School Surveys"
- b. "Estimation Issues Related to the Student Component of the SASS"
- c. "Properties of the Schools and Staffing Survey's Bootstrap Variance Estimator"
- d. "Optimal Periodicity of a Survey: Sampling Error, Data Deterioration, and Cost"

NCES Working Papers Related to SASS (*continued*)

Response and Coverage Issues in School Surveys

- a. "Some Data Issues in School-Based Surveys"
- b. "The 1991–92 Teacher Follow-up Survey Reinterview and Extensive Reconciliation"
- c. "Improving Coverage in a National Survey of Teachers"
- d. "Improving the Coverage of Private Elementary-Secondary Schools"

Education Research Using the Schools and Staffing Surveys and the National Education Longitudinal Study

- a. "Adding Value to the Value-Added Educational Production Function Specification"
- b. "Teacher Quality in Public and Private Schools"
- c. "Teacher Shortages and Teacher Quality"
- d. "Work Experience, Local Labor Markets, and Dropping out of High School"

-
- WP 95-02** QED Estimates of the 1990–91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates
- WP 95-03** Schools and Staffing Survey: 1990–91 SASS Cross-Questionnaire Analysis
- WP 95-08** CCD Adjustment to the 1990–91 SASS: A Comparison of Estimates
- WP 95-09** The Results of the 1993 Teacher List Validation Study (TLVS)
- WP 95-10** The Results of the 1991–92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation
- WP 95-11** Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work
- WP 95-15** Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Followup Survey
- WP 95-16** Intersurvey Consistency in NCES Private School Surveys
- WP 95-17** Estimates of Expenditures for Private K–12 Schools
- WP 95-18** An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey
- WP 96-01** Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study
- WP 96-02** Selected papers presented at the meeting of the 1995 American Statistical Association (96-02)

Overcoming the Bureaucratic Paradigm: Memorial Session in Honor of Roger Herriot

- a. "1995 Roger Herriot Award Presentation"
- b. "Space/Time Variations in Survey Estimates"
- c. "Out of the Box: Again and Again, Roger Herriot at the Census Bureau"

Design and Estimation Issues for School Based Surveys

- a. "Improving the Coverage of Private Elementary-Secondary Schools"
- b. "Improving GLS Estimation in NCES Surveys"
- c. "Optimal Periodicity of a Survey: Alternatives under Cost and Policy Constraint"
- d. "Properties of the Schools and Staffing Survey's Bootstrap Variance Estimator"

Data Quality and Nonresponse in Education Surveys

- a. "Assessing Quality of CCD Data Using a School-Based Sample Survey"
- b. "Documentation of Nonresponse and Consistency of Data Categorization Across NCES Surveys"
- c. "Multivariate Modeling of Unit Nonresponse for 1990-91 Schools and Staffing Surveys"
- d. "Evaluation of Imputation Methods for State Education Finance Data"
- e. "Variance Estimates Comparison by Statistical Software"
- f. "Teacher Supply and Demand in the U.S."

WP 96-05 Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey

WP 96-06 The Schools and Staffing Survey (SASS) for 1998-99; Design Recommendations to Inform Broad Education Policy

WP 96-07 Should SASS Measure Instructional Processes and Teacher Effectiveness?

WP 96-09 Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS

WP 96-10 1998-99 Schools and Staffing Survey: Issues Related to Survey Depth

WP 96-11 Towards an Organizational Data Base on America's Schools: A Proposal for the Future of SASS, with Comments on School Reform, Governments, and Finance

WP 96-12 Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey

WP 96-15 Nested Structures: District Level Data in the SASS

WP 96-16 Strategies for Collecting Finance Data from Private Schools