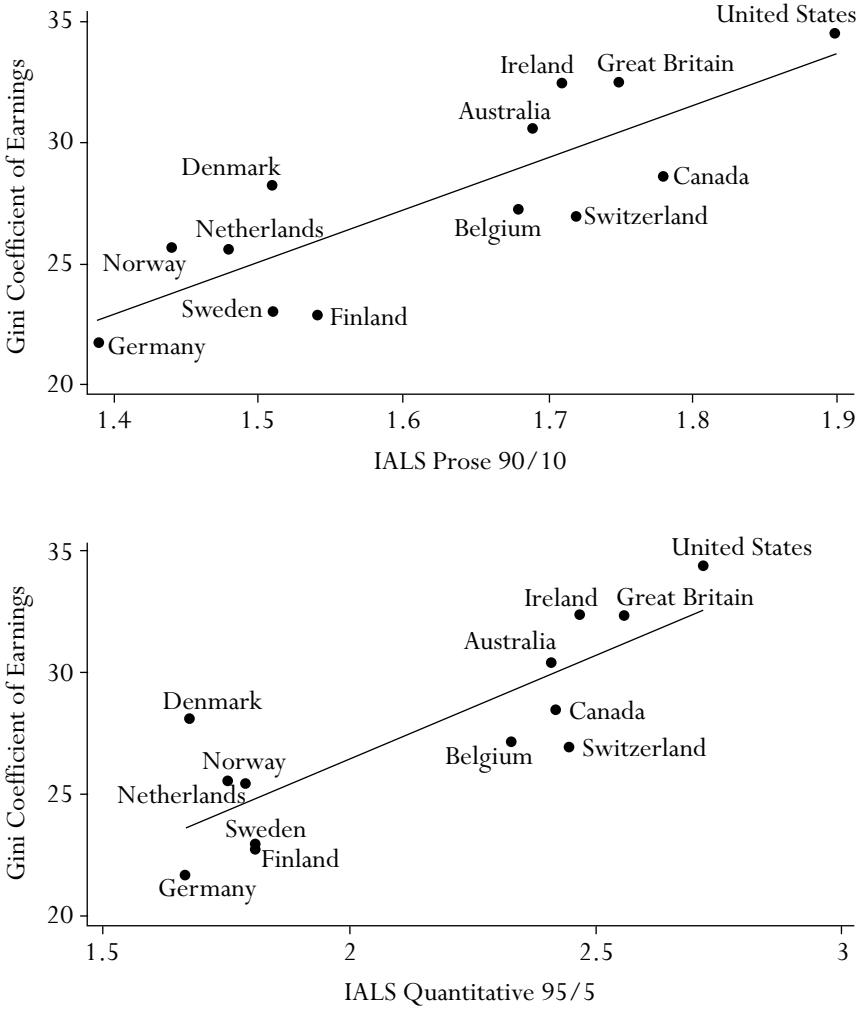
Figure I.1 Inequality in Earnings and Education



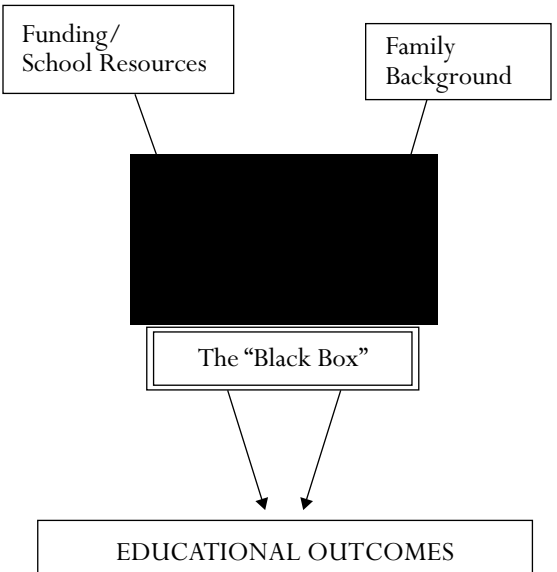
Sources: Inequality in earnings measured by the Gini coefficent is taken from Nickell (2004, table 9), which in turn comes from the Luxembourg Income Study data. Inequality in International Adult Literacy Survey (IALS) prose and quantitative literacy comes from the same source, taken from Organization for Economic Cooperation and Development (OECD 2001).

Table I.1 Total Expenditure per Pupil (ADA) in Public Elementary and Secondary Schools (Constant 2005–2006 Dollars)

School Year	Total Expenditure
1919–1920	$668
1929–1930	1,261
1939–1940	1,506
1949–1950	2,188
1959–1960	3,190
1969–1970	5,031
1974–1975	5,935
1979–1980	6,384
1984–1985	7,004
1989–1990	8,698
1994–1995	8,897
1999–2000	10,099
2000–2001	11,016

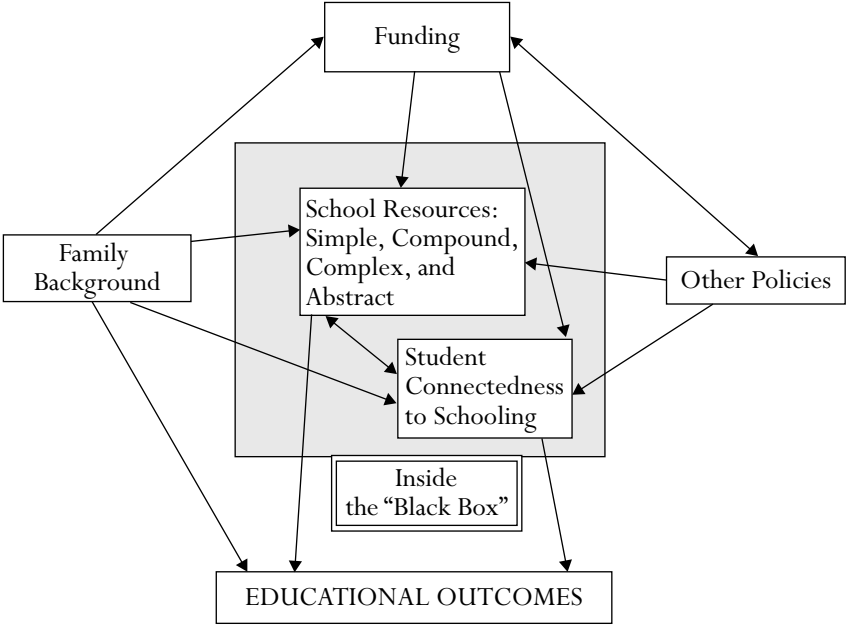
Source: National Center for Education Statistics (2006, table 167).

Figure 1.1 The "Black Box": Conventional Production Functions



Source: Author's compilation.

Figure 1.2 The Black Box Exposed: How Resources Impact Student Achievement



Source: Author's compilation.

Table 1.1 Variation in Resources

Variable	Coefficient of Variation
Financial resources	
Current expenditures per pupil (adjusted)	.234
Instructional expenditures per pupil (adjusted)	.244
Percent state revenue	.415
Percent federal revenue	1.107
Parental contributions per pupil (adjusted)	3.190
Simple resources	
Pupil-teacher ratio	.427
Low teacher salary	.159
High teacher salary	.213
Teacher certified	.366
Teacher education	.321
Compound resources	
Teacher experience in secondary education	.545
Teacher teaching in field of preparation	.294
Planning time	.370
Staff development	.530
Student in general education	1.416
Student in vocational education	2.886
Student in remedial education	1.717
Complex resources	
Teacher time use	.765
Conventional teaching	.239
Innovative teaching	.497
Teacher control	.183
Teacher sense of efficacy	.194
Teacher innovation	.951
Conventional math teaching	.255
Innovative math teaching	.421
Abstract resources	
Positive school climate	.234
Negative events	1.483
College pressure	.244
Staff responsibility	.193
Principal control	.221
School attendance rate	.059
Percent school lunch	1.037
School problems (administration-reported)	.523

Table 1.1 *Continued*

Variable	Coefficient of Variation
Family background	
Mother's education less than high school	2.899
Mother's education college	1.511
Mother's occupation low-status	1.480
Mother's occupation professional	1.288
Income per dependent (unadjusted)	.993
Income per dependent (adjusted)	.758
College savings	1.651
Parental aspirations low	2.024
Parental aspirations high	1.229
Family changes	2.859
Student changed school	2.571
Student language not English	2.995
Student connectedness	
Homework	.737
Television	.606
Use of counselor	.940
Attendance problems	.996
Total absences	.824
Behavior problems	4.169
Hours of employment	.999
Extracurricular activities	1.163
Outside activities	1.400
College-oriented peers	.332
Dropout-oriented peers	4.266
Gang activities	2.799

Source: NELS88, second follow-up, senior year. See appendix A for variable definitions and sources. Adjusted variables are corrected for cross-section price differences.

Table 2.1 Explanatory Power (R-squared) of Different Sets of Independent Variables

	Specification 1	Specification 2	Specification 3	Specification 4	Specification 5	Specification 6
Dependent Variable						
MATHTS	.16	.45	.34	.35	.53	.58
SCITS	.19	.37	.32	.33	.45	.48
READTS	.13	.34	.28	.29	.43	.47
HISTTS	.12	.32	.26	.28	.41	.44
HIEDASP	.04	.15	.40	.16	.44	.45
HIOCASP	.06	.15	.16	.11	.21	.22
CONTED	.02	.16	.13	.10	.22	.23

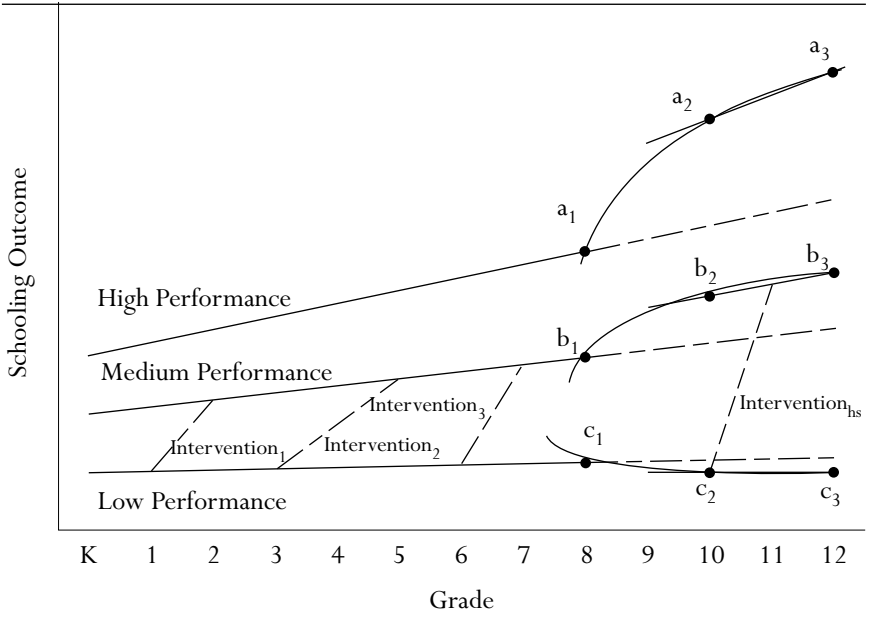
Source: Author's computations.
Specification 1: basic production function
Specification 2: adding school resources to specification 1
Specification 3: adding family background to specification 1
Specification 4: adding student connectedness to schooling to specification 1
Specification 5: adding school resources, family background, and student measures to specification 1
Specification 6: adding an instrumented lagged dependent variable to specification 5

Table 5.1 The Effects of Student Conceptions on Educational Outcomes

Educational Outcomes	Vocational Orientation	Personal Affiliation	Escapism	Altruism
Math scores	–.041***	–.012	–.022**	–.054***
Science scores	–.044***	–.038***	–.003	–.025**
Reading scores	–.060***	–.037***	–.016	–.007
History scores	–.051***	–.053***	–.009	.005
High educational aspirations (grade 12)	.061***	–.034***	.005	.032***
Continuing past high school	.066***	–.009	0	.011
SAT score	–.076***	–.062***	–.003	–.010
High educational aspirations (age 20)	.044***	–.017	.009	.014
Total credits	.008	.001	.021	–.012
Academic program	–.024	–.007	–.008	–.015
High school diploma	.018	–.016	–.015	–.007
Enrolled in a four-year college	.044*	–.035***	.015	–.009
Enrolled in a two-year college	.005	.016	–.016	.003

Source: Author's computations.
*significant at 10%; **significant at 5%; ***significant at 1%

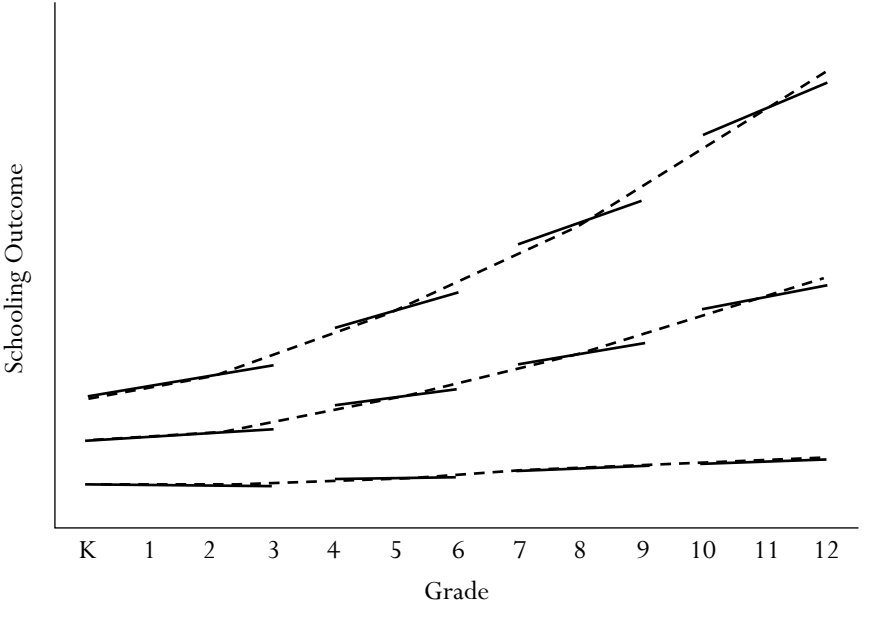
Figure 6.1 Potential Growth Trajectories, Kindergarten Through Grade Twelve, by Schooling Outcomes



Source: Author's compilation.

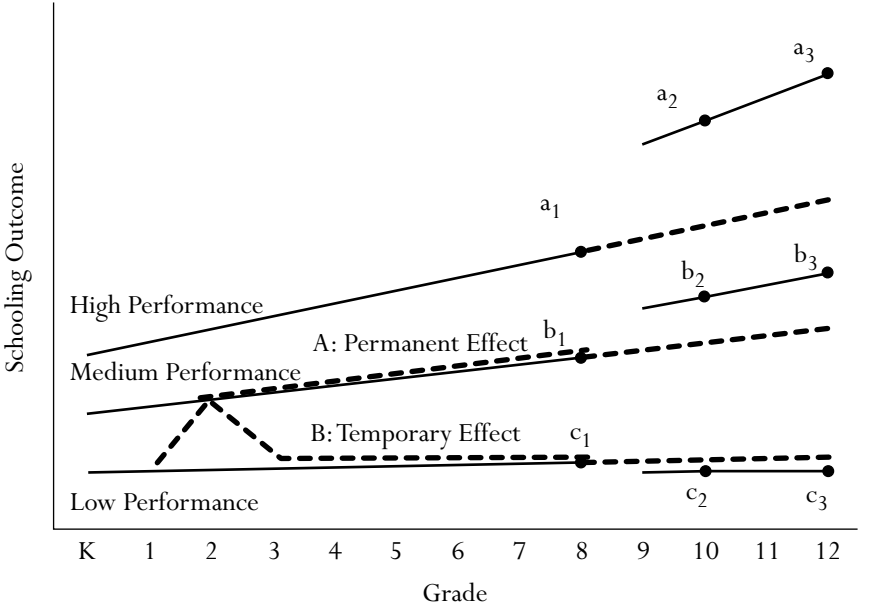
Note: Outcomes in this graph conventionally refer to test scores and other measures of learning, but they might also include measures of progress through schooling, measures of connectedness to schooling, and attitudes related to schooling.

Figure 6.2 Discontinuous Growth Trajectories, Kindergarten Through Grade Twelve, by Schooling Outcomes



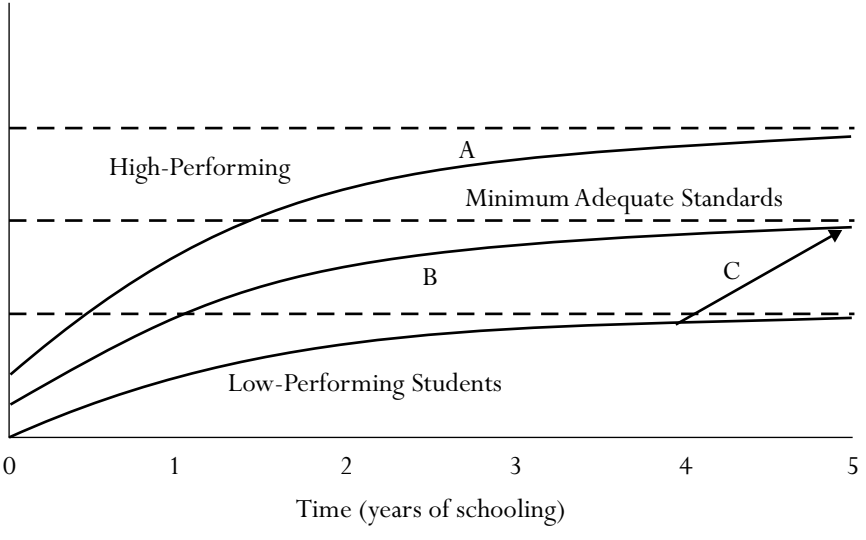
Source: Author's compilation.

Figure 6.3 Potential Growth Trajectories, Kindergarten Through Grade Twelve, by Schooling Outcome



Source: Author's compilation.

Figure 6.4 Trajectories to Meet Adequate Outcomes



Source: Author's compilation.

Table 6.1 The Landscape of Equity: Applications of Equity Concepts

Conceptions of Equity	Applied to Access	Applied to Funding	Applied to Resources	Applied to Outcomes
Noah Webster: "No barriers"	1. Policies of inclusion: special education, desegregation by race, gender	2. Neutrality-oriented school finance (Coons, Clune and Sugarmen 1970)	3. Policies of inclusion applied to special programs (like AP); language policies for ELL students	4. Affirmative action
Andrew Jackson: "No artificial distinctions" (equality)	5. The common school movement	6. *Serrano;* equality of funding; district efforts to eliminate intraschool inequality	7. Kozol (1992); equal resources for counselors and specialists	8. Radical egalitarians?
Andrew Jackson: "No artificial distinctions" (neutrality)	9. No differences (of gender, race, etc.) in AP or honors courses, in high-status majors	10. Wealth neutrality; income neutrality; racial neutrality in funding	11. Equity in the allocation of qualified teachers	12. No achievement gaps by race or gender; no ethnic variation in high school dropout rates
Adequacy	13. Minimum school standards; accreditation standards in postsecondary education	14. Adequacy 1 and 2; foundation formulas	15. *Williams*; class size reduction; "qualified teachers" in NCLB; state interventions for low-performing schools	16. Adequacy 3; minimum standards in NCLB; state exit exams

Policies of correction	17. Affirmative action for entry into elite public high schools and postsecondary education	18. Compensatory education; weighted student formulas	19. Compensatory education; early childhood programs; allocation of the best teachers to the lowest-performing students	20. Affirmative action for PSE access; Vonnegut, *Player Piano*[a]; set-asides for minority- and female-owned businesses

Source: Author's compilation.

[a] In *Player Piano* (1952), Kurt Vonnegut describes a world in which individual gifts are countered by social constraints: for example, especially intelligent individuals have their thoughts interrupted by electrical impulses every thirty seconds; especially graceful dancers are weighted down with sandbags. These egalitarian impulses effectively eliminate the effects of the superior "labor and economy, talent and virtue" noted by Webster, rather than getting low-achieving students to perform at higher levels. These are examples, in school finance jargon, of "equalizing down" rather than "equalizing up."

Note: Adequacy 1: the spending levels of districts or schools with high levels of performance. Adequacy 2: the spending necessary for specific resources (qualified teachers, certain pupil-teacher ratios, sufficient textbooks, etc.) that professionals judge to be adequate (the professional judgment method). Adequacy 3: a level of spending sufficient to bring all students to some adequate level of outcomes, which itself needs to be defined.

ELL = English-language learner
AP = advanced placement
NCLB = No Child Left Behind
PSE = postsecondary education

Table 6.2 Curriculum Material Taught by Grade Level

Grade	Meets Grade Level Standards						Average Grade Level
	K	1	2	3	4	5	
Mathematics							
K	100						K
1		100					1.0
2		23	77				1.8
3			45	55			2.6
4			40	40	20		2.8
5		2	35	59	2	2	2.7
Language arts							
K	100						K
1		100					1.0
2		20	80				1.8
3		2	14	84			2.8
4		2	30	35	33		3.0
5			28	60	10	2	2.9

Source: Hollingsworth and Ybarra (n.d.).
Note: The figures give the proportion of classroom materials in each grade (the row categories) meeting the grade-level standards of the column categories; for example, in second grade, 23 percent of mathematics materials were at first-grade levels and 77 percent were at second-grade level.

Table 7.1 Test Scores and Measures of Variation

	Eighth Grade	Tenth Grade	Twelfth Grade
Mathematics			
Mean	36.67	44.25	48.95
sd	11.73	13.58	14.10
cv	.320	.307	.288
Reading			
Mean	27.41	30.95	33.41
sd	8.53	9.92	9.98
cv	.311	.321	.298
Science			
Mean	19.00	21.85	23.64
sd	4.79	5.94	6.15
cv	.252	.272	.260
History			
Mean	29.77	31.73	35.01
sd	4.50	5.07	5.32
cv	.151	.155	.152

Source: Author's calculations.
sd = standard deviation
cv = coefficient of variation

Table 8.1 Characteristics of the Twelve Schools Visited

School/District	Grade Levels, SES[a]	Race-Ethnic Composition[a]	API Scores[b]	Summary of Approaches
Cityscape Charter/ Charterhouse	K–8, 400 students, 85% free or reduced lunch 65% ELL	80% Latino 15% African American 5% Pacific Islander	State = 7 Similar Schools = 10	Assessment and correction with direct instruction Finely differentiated assessment Three-part decision structure (academic team, SST, special education)
Hillcrest Elementary/ Littlefield USD	K–5, 440 students, 45% free or reduced lunch 30% ELL	40% Latino 25% White 10% Asian 10% multiple response 10% Pacific Islander 5% Filipino 2% African American	State = 7 Similar Schools = 4	Learning Center model (K–2-focused) Differentiated instruction and PD Hero-principal Single-track, year-round school
Wagner Elementary/ Grossmont USD	K–5, 340 students, 75% free or reduced lunch 30% ELL	45% Latino 35% African American 10% White 5% Filipino 3% Pacific Islander 1% Asian	State = 3 Similar Schools = 2	District-specified scripted curricula Limited resources for intervention (not all students who qualify are served)
Lakelands Elementary/ Littlefield USD	K–5, 300 students, 30% free or reduced lunch 20% ELL	45% White 25% Latino 20% Asian 5% African American 3% Filipino 3% Pacific Islander 1% multiple response	State = 9 Similar Schools = 8	Assessment and correction through booster club (24 students out of 300) Pull-out program taught by special education aide Other "little programs" SST and individualized plans

Happy Valley Elementary/ Greenlands ESD	K–5, 435 students, 55% free or reduced lunch, 35% ELL	45% Latino 40% White 10% Asian 5% Filipino 5% African American 2% multiple response 2% Pacific Islander	State = 5 Similar Schools = 2	Multiple disconnected interventions Many "little programs" (mostly following assessment/correction approach) Each teacher identifies four students to target Vision and Learning Center model under development
Travis Academy/ Charterhouse	K–5, 200 students, 85% free or reduced lunch, less than 4% ELL	95% African American 1% Latino 1% Asian	API 690 (statewide ranking of 3 out of 10)	Assessment and correction using READ 180 Many smaller efforts Some looping; stable teachers and students Active principal
Horace Middle School/Taylor USD	6–8, 425 students, 60% free or reduced lunch, 10% ELL	40% African American 25% Latino 15% multiple response 15% White 5% Asian	State = 4 Similar Schools = 7	Improving instructional capacities of teachers through differentiated instruction Resource class in English and math, same teachers Smaller classes for struggling students Zero-period classes Mental health services
David Smith Middle School/ San Sebastian USD	7–8, 820 students, (NA)% free or reduced lunch, 30% ELL	55% Latino 15% African American 10% Asian 10% Filipino 5% White 5% Pacific Islander	State = 4 Similar Schools = 8	In-school math and English interventions instead of electives Saturday Academy run by Kaplan "Families" of 125 students

Table 8.1 *Continued*

School/District	Grade Levels, SES[a]	Race-Ethnic Composition[a]	API Scores[b]	Summary of Approaches
Grossmont Middle School/ Grossmont USD	6–8, 900 students, 60% free or reduced lunch, 15% ELL	40% African American 30% Latino 15% White 10% Filipino 2% Pacific Islander 1% Asian	State = 2 Similar Schools = 1	District-specified intervention (SRA Reach, High Point) Reform coordinator position responsibilities unclear After-school program to compensate for long-term sub
Bellson High School/Bellson USD	9–12, 1635 students, 35% free or reduced lunch, 16% ELL	45% Latino 25% African American 15% White 10% Asian 5% Filipino 2% Pacific Islander	State = 2 Similar Schools = 3	Many "little programs" (includes study center) Summer school, study center contracts for ninth-graders Small learning communities
Taylor High School/Taylor USD	9–12, 340 students, 30% free or reduced lunch, 5% ELL	35% White 30% African American 15% multiple response 10% Latino 7% Asian	State = 7 Similar Schools = 7	Small schools-within-schools Ninth-grade support team After-school intervention coordinator Accelerated reading classes Smaller introductory and intervention classes Ninth-grade grade Life Academy

				PD on differentiated instruction CAHSEE math and English intervention Intervention coordinator (tenth-grade case manager for at-risk students) RISE (after-school plus services)
West Creekside Continuation High School/Bayside USD	9–12, 185 students, 30% free or reduced lunch, 25% ELL	30% White 25% African American 20% Latino 10% Asian 10% Filipino 2% Pacific Islander 2% American Indian	525 API (no rankings available)	Smaller classes More interpersonal contacts CAHSEE intervention Interventions held during second period Planning advisory program where adviser tracks progress toward graduation

Source: Author's compilation.
Note: All schools and districts are referred to by pseudonyms.
SST = Student Study Team
PD = Professional development
CAHSEE = California High School Exit Exam
RISE = Responsibility, Integrity, Strength, Empowerment
CST = California Standards Test
[a] School data are taken from the California Department of Education website and have been rounded to the nearest 5% to avoid identifying specific schools.
[b] California's Academic Proficiency Index: Average school scores on the CST are used to rank schools in deciles from 1 (low) to 10 (high). In addition, groups of "similar" schools are developed based on racial-ethnic characteristics and school lunch eligibility, and all schools are again ranked from decile 1 (low) to decile 10 (high) compared to similar schools only.

Appendix B

Table B.1 Effects of School Resources on Schooling Outcomes

	MATHTS		SCITS		READTS		HISTTS	
Independent Variable	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
Simple resources								
Pupil-teacher ratio	–.025**	–.21**	–.011	–.007	–.005	–.004	–.001	.004
Low teacher salary	.025*	.028**	.018	.017	–0.003	–.004	0.015	.013
High teacher salary	.033**	.011	.016	.014	.030*	.020	.041**	.027
Compound resources								
Teacher experience in secondary school	.044***	.031***	.046***	.037***	.031***	.021**	.045***	.034**
Teaching in field of preparation	.023***	.014**	.016*	.009	.018**	.010	.026***	.018**
Planning time	.022**	.012	.034***	.030***	.019	.024**	.018	.024**
Staff development time	.014	.012	–.007	–.008	.007	.004	.008	.006
General education track	–.124***	–.078***	–.114***	.007***	–.091***	–.049***	–.112***	–.072***
Vocational education track	–.110***	–.067***	–.100**	–.066***	–.102***	–.059***	–.116***	–.078***
Remedial education enrollment	–.208***	–.161***	–.138***	–.104***	–.167***	–.126***	–.147***	–.111***
Complex resources								
Teacher use of time	–.031***	–.027***	–.026**	–.023***	–.021*	–.019	–.016	–.013
Conventional teaching	–.022**	–.017**	–.018*	–.013**	–.028**	–.025**	–.013	–.011
Innovative teaching	.007	.005	.008	.005	.014	.013	–.005	–.005
Teacher control	.033***	.028***	.017*	.016*	.020**	.020**	.017	.017
Teacher sense of efficacy	–.019*	–.013	.002	.005	–.004	.001	–.007	–.004
Department supports innovation	.006	–.002	.007	–.002	–.002	–.010	.002	–.007
Conventional math teaching	–.018*	–.011	–.022**	–.019**	–.021**	–.017	–.022**	–.019**
Innovative math teaching	.058***	.049***	.034***	.030***	.035***	.029***	.032***	.028***

Abstract resources								
Positive school climate	.037***	.026***	.046***	.036***	.055***	.040***	.027**	.021*
Negative events at school	−.031***	−.017*	.006	.004	−.042***	−.025**	−.024**	−.009
College pressure	−.006	−.006	−.010	−.010	−.007	−.006	−.017	−.014
Internal school control	.001	−.005	.005	−.001	.002	−.005	−.001	−.005
Principal control	−.012	−.005	−.016	−.009	.000	−.008	−.010	−.004
School attendance rate	.034**	.026***	.040***	.032***	.042***	.035***	.036***	.029***
Percent receiving school lunch	−.032**	−.016	−.036***	−.022**	−.016	−.007	−.046***	−.034***
School problems (administration-reported)	−.005	.012	−.001	.005	.006	.007	−.023	−.014*
Exogenous school structure and policy								
Private religious school	.012	.013	−.028**	−.009	.022*	.014	.014	.019
Private nonreligious school	.005	.008	−.040*	−.029*	−.001	.003	−.025	−.017
Magnet school	−.006	−.007	−.013	−.012	−.012	−.015*	−.014	−.015
Choice school	.013	.015	.005	.004	.005	.006	.018	.019*
ADA	−.466***	−.398***	−.311**	−.287**	−.283*	−.221*	−.370**	−.319**
ADA-squared	.487***	.411***	.329**	.302**	.326**	.254*	.396**	.338**
State exit exam	−.001	.012	−.012	.001	−.026	.010	−.016	−.007
District exit exam	.012	.008	−.005	−.007	−.017	−.021*	−.003	−.004
Competency tests	−.025	−.022	.008	.016	.018	−.016	.013	.022
Observations	12,021	12,021	11,943	11,943	12,020	12,020	11,887	11,887
R-squared	.53	.58	.45	.48	.43	.47	.41	.44

	HEASP		HOCASP		CONTED	
Independent Variable	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
Simple resources						
Pupil-teacher ratio	−.009	−.008	−.012	−.009	−.012	−.010
Low teacher salary	.022*	.019	.011	.008	−.025*	−.026*
High teacher salary	−.015	−.012	.035**	.033**	.033**	.037**

Table B.1 *Continued*

	HEASP		HOCASP		CONTED	
Independent Variable	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
Compound resources						
Teacher experience in secondary schools	.010	.009	.002	.001	–.021*	–.021**
Teaching in field of preparation	.002	.001	.024**	.022*	.014*	.014*
Planning time	–.008	–.008	–.031**	–.033**	–.003	–.003
Staff development time	.009	.009	.024*	.023**	.016	.017
General education track	–.057***	–.042***	–.056***	–.041***	–.012	.001
Vocational education track	–.044***	–.034***	–.097***	–.081***	–.040***	–.028**
Remedial education enrollment	–.049***	–.042***	–.053***	–.045***	–.045***	–.036***
Complex resources						
Teacher use of time	.002	–.001	.021*	.019*	.001	.001
Conventional teaching	–.008	–.009	.014	.014	–.018*	–.016
Innovative teaching	–.010	–.008	–.029**	–.027**	.003	.002
Teacher control	.010	.011	.018	.019	–.012	.012
Teacher sense of efficacy	–.001	.000	–.003	–.002	–.005	–.006
Department supports innovation	–.002	.001	–.011	–.013	–.010	–.009
Conventional math teaching	.005	.004	–.002	.001	.023**	.023**
Innovative math teaching	.024***	.027***	.036***	.022**	.010	.008
Abstract resources						
Positive school climate	–.004	–.002	.033**	.035***	.028**	.032**
Negative events at school	–.029***	–.030***	–.034**	–.029**	–.016	–.014
College pressure	.004	.004	–.023**	–.023**	–.026**	–.024**
Internal school control	.002	–.000	–.021	–.022	–.004	–.007
Principal control	–.005	–.004	–.011	–.009	.007	.009
School attendance rate	.009	.010	–.009	–.010	.017	.018
Percent receiving school lunch	–.001	–.005	–.047***	–.041***	–.025**	–.029**
Frequency of school problems	–.018	–.019	–.001	–.002	.007	.005

Exogenous school structure and policy						
Private religious school	.011	.005	.046***	.032**	.022**	.016
Private nonreligious school	−.026	−.036	−.025	−.025	−.028	−.028
Magnet school	−.010	−.010	−.010	−.009	−.014	−.014
School of choice	.011	.011	.007	.008	.005	.006
Average daily attendance	−.032	−.060	.111	.165	.155	.173
ADA-squared	.075	.098	−.085	−.149	−.093	−.125
State exit exam	−.009	−.006	−.013	−.010	.027	.027
District exit exam	.000	−.002	−.009	−.008	.017	.014
Competency tests	.027	.023	.017	.012	−.022	−.023
Observations	13,623	13,623	12,538	12,538	14,401	14,401
R-squared	.44	.45	.21	.21	.22	.23

Independent Variable	TOTCRED[a]	ACPRO[a]	DIPLOM[a]	ENR4YR[a]	ENR2YR[a]
Simple resources					
Pupil-teacher ratio	.012	−.039*	.050***	−.067***	.080***
Low teacher salary	.089**	.006	.015	.013	.008
High teacher salary	−.011	.016	−.007	.013	−.017
Compound resources					
Teacher experience in secondary schools	.016	.001	.001	.020*	−.011
Teaching in field of preparation	.026	.006	−.018	.007	.008
Planning time	.051	−.048**	.016	.001	−.003
Staff development time	−.027	−.032**	−.006	−.015	.028**
General education track	−.059***	−.161***	−.011	−.114***	.051***
Vocational education track	.017	−.136***	.010	−.115***	.008
Remedial education enrollment	−.041**	−.092***	−.049***	−.093***	.021

Table B.1 *Continued*

Independent Variable	TOTCRED[a]	ACPRO[a]	DIPLOM[a]	ENR4YR[a]	ENR2YR[a]
Complex resources					
Teacher use of time	.015	−.009	−.010	−.017	.033**
Conventional teaching	−.044**	−.024*	−.018	−.018	.025
Innovative teaching	.021	.005	.026	.023	−.058***
Teacher control	.047***	.013	.027	.020*	−.006
Teacher sense of efficacy	.028	.015	−.043***	.003	.002
Department supports innovation	−.037**	.027	−.001	−.004	−.005
Conventional math teaching	−.027*	−.023*	.000	.003	.010
Innovative math teaching	.005	.053***	.032*	.025**	−.022
Abstract resources					
Positive school climate	−.006	−.001	.004	−.009	−.022
Negative events at school	−.019	−.030**	.017	−.018*	−.007
College pressure	.016	.031*	−.011	.002	−.010
Internal school control	−.044	.008	−.007	.001	−.004
Principal control	.037*	−.030	.038*	−.028*	.007
School attendance rate	.004	.005	−.010	.000	.007
Percent receiving school lunch	−.034	−.027	−.067***	.011	−.049***
Frequency of school problems	−.007	−.022	−.033	−.014	−.008

Exogenous school structure and policy					
Private religious school	.084***	.074***	–.041**	.043**	–.019
Private nonreligious school	–.122***	–.084***	–.014	.001	.010
Magnet school	.023	.020	–.030	–.016	–.011
School of choice	–.004	–.013	–.037*	–.005	.009
Average daily attendance	–.573	.529***	.033	–.045	–.166
ADA-squared	.460	–.485***	–.077	.084	.145
State exit exam	–.011	.066**	–.022	–.009	–.051
District exit exam	.027	.000	.037	–.022	.031
Competency tests	.010	–.008	–.014	–.052*	.125***
Observations	13,133	13,133	12,927	11,155	11,155
R-squared	.31	.30	.28	.36	.07

Source: Author's calculations.

[a]These results are for specification 1 only.

Normalized beta coefficients: * significant at 10%; ** significant at 5%; *** significant at 1%

Table B.2 The Effects of Fiscal Variables on Effective School Resources

Dependent Variables	Current Expenditures per Pupil	Percent Instructional Expenditures	Percent State Revenue	Percent Federal Revenue	Parent Contribution per Pupil	R-Squared	Number of Observations
Simple resources							
Pupil-teacher ratio	–.234**	–.035	.022	–.014	0	.29	11,325
Low teacher salary	.382***	.059**	–.087**	–.114***	.038	.42	10,230
High teacher salary	.472***	.073***	–.101***	–.195***	–.037*	.62	10,144
Compound resources							
Teacher experience in secondary schools	.120***	.055**	–.018	–.077***	.005	.16	6,681
Teaching in field of preparation	.011	.028	–.049*	.048*	–.041*	.07	6,666
Planning time	.087**	.023	–.063	.074*	–.078***	.12	11,574
Staff development time	–.027	–.052***	–.021	–.026	.023	.08	11,574
Student counseling	.042***	.022*	–.006	.045**	–.002	.10	11,209
Extracurricular activities	.032*	–.015	.017*	–.022	–.031***	.14	11,333
General track	–.003	–.034**	–.004	–.029	–.033**	.10	10,945
Vocational track	.038**	.043**	–.006	.050**	.034**	.15	10,945
Remedial education	.003	–.011	–.021	.008	.015	.15	11,109

Complex resources							
Teacher collaboration	−.092***	−.011	−.063**	−.035	.050**	.25	6,570
Conventional teaching	−.056**	−.025	.031	.014	.003	.04	11,574
Innovative teaching	−.052**	.044	.010	.002	.007	.07	11,574
Teacher control	.048*	.088***	.010	.019	−.093***	.22	7,180
Teacher efficacy	.026	.009	−.052*	.019	−.033	.16	6,655
School and department support innovation	.006	.028	−.090***	.0	.026	.24	6,588
Math teaching conventional	−.035	.033*	−.022	.024	−.010	.05	11,574
Math teaching innovative	−.035	.025	−.029	.008	−.035**	.08	11,574
Abstract resources							
School attendance rate	−.100**	.040	−.071*	−.029	−.113	.21	10,794
Positive school climate	.033*	.015	−.041**	−.007	−.022	.15	11,453
Negative events	−.017	−.029**	−.004	−.006	.009	.20	11,450

Source: Author's calculations.
Beta coefficients: *significant at 10%; ** significant at 5%; *** significant at 1%

Table B.3 The Effects of Family Background on Schooling Outcomes

	MATH		SCI		READ		HIST	
Independent Variables	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
Mother's education less than high school	–.025**	–.010	–.031***	–.020**	–0.008	.005	–0.008	–.001
Mother's education some college	0.021*	–.010	.026*	–.003	0.019*	–.009	0.021*	–.007
Mother's education BA or higher	.105***	.006	.099***	.004	.097***	–.001	.111***	.011
Mother's occupation unskilled	.021**	–.011	–.024**	–.011	–.029***	–.015	–0.021	–.012
Mother's occupation professional or managerial	–0.007	–.010	–0.010	–.010	0.001	–.001	0.004	.002
Income per dependent (adj.)	.023**	.002	0.015	.002	0.014	–.003	0.023*	.010
College savings	0.008	–.001	0.011	.001	–0.005	–.011	0.003	–.003
Parent aspirations low	–.088***	–.068***	–.063***	–.068***	–.075***	–.056***	–.060***	–.045***
Parent aspirations high	0.009	–.009	0.011	–.009	0.017	.001	0.020	.002
Female head of household	–0.002	.000	–0.003	.000	0.008	.007	–0.015	–.016
Family changes	–0.005	–.030	–0.017	–.003	–0.016	–.015	–0.014	–.013
Changed school	–.025**	–.017	–0.011	–.005	0.002	.005	0.002	.004
Language not English	0.010	.010	–0.022	–.013	–.043***	–.033**	–0.011	–.006
Religious	0.002	.004	0.010	.011	.020*	.018*	0.015	.016

	HEDASP		HOCASP		CONTED	
Independent Variables	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
Mother's education less than high school	–0.011	–.008	0.022	.017	–0.008	–.003
Mother's education some college	–0.010	–.014	0.016	.006	.037**	.026*
Mother's education BA or highter	.054***	.032**	.059***	.036**	.042***	.028*
Mother's occupation unskilled	0.008	.008	–0.015	–.016	–.023*	–.020*

Mother's occupation professional or managerial	.005	.000	.011	.005	–.019	–.018
Income per dependent	.031***	.022*	.006	–.001	–.014	–.021*
College savings	.000	–.004	–.001	–.003	.023*	.019*
Parent aspirations low	.019**	.022**	–.161***	–.151***	–.118***	–.106**
Parent aspirations high	.522***	.494***	.050***	.043***	–.034***	–.044***
Female head of household	–.005	–.011	–.010	–.013	–.023	–.023*
Family changes	–.012	.008	.000	.004	.009	.001
Changed school	.004	.003	–.023*	–.024*	–.007	–.003
Language not English	.000	–.006	–.007	–.008	–.024	–.030*
Religious	.019*	.019*	.024**	.022**	–.006	–.002

Independent Variables	TOTCRED	ACPRO	DIPLOM	ENR4YR	ENR2YR
Mother's education less than high school	–.018	.024	–.031	.012	–.012
Mother's education some college	.068***	.021	–.004	.032**	.026
Mother's education BA or higher	.104***	.088***	.012	.145***	–.032
Mother's occupation unskilled	–.032	–.019	–.002	–.004	–.041***
Mother's occupation professional or managerial	–.022	–.011	.019	.004	–.019
Income per dependent	–.028	.020	–.018	.019	.000
College savings	.002	.033**	.008	.053***	–.040***
Parent aspirations low	–.020	–.053***	–.023	–.111***	.000
Parent aspirations high	–.008	.030*	.028	.030***	–.023
Female head of household	–.066***	–.006	–.049***	.021**	–.016
Family changes	–.021	–.015	–.004	–.035***	.004
Changed school	–.082***	–.027**	–.058***	–.041***	.044**
Language not English	.069**	.002	.028	.021	.021
Religious	–.002	–.020*	.010	.016	–.015

Source: Author's calculations.
Coefficients are beta coefficients: * significant at 10%; ** significant at 5%; *** significant at 1%

Table B.4 The Effects of Demographic Variables

	Dependent Variables						
Independent Variables	MATHTS	SCITS	READTS	HISTTS	HED ASP	HOC ASP	CONTED
Male							
Spec. 1	.038***	.147***	–.117***	.072***	–.060***	–.193***	–.098***
Spec. 2	.090***	.196***	–.050***	.138***	–.007	–.154***	–.060***
Spec. 3	.068***	.115***	–.014	.082***	–.001	–.110***	–.050
Coef. 2/Coef. 1	2.36	1.33	.45	1.92	.117	.800	.61
Coef. 3/Coef. 1	1.78	.79	.12	1.14	.020	.57	.51
Black							
Spec. 1	–.228***	–.267***	–.197***	–.182***	.021	–.027	–.022
Spec. 2	–.111***	–.164***	–.099***	–.082***	.024	.020	.024*
Spec. 3	–.035***	–.081***	–.036***	–.032***	–.002	.013	.004
Coef. 2/Coef. 1	.49	.61	.50	.45	1.14	n.a.	n.a.
Coef. 3/Coef. 1	.15	.30	.18	.18	n.a.	n.a.	n.a.
Latino							
Spec. 1	–.171***	–.193***	–.153***	–.153***	–.014	–.031**	.009
Spec. 2	–.068***	–.074***	–.041***	–.038***	.002	.014	.062***
Spec. 3	–.024**	–.029**	–.009	–.009	–.001	.012	.047***
Coef. 2/Coef. 1	.40	.38	.27	.250	.12	.45	10.33
Coef. 3/Coef. 1	.14	.15	.06	.06	.29	.39	5.22
Asian							
Spec. 1	.053***	–.003	.015	.019	.075***	.044***	.048***
Spec. 2	.020*	–.011	.009	.001	.006	.013	.035***
Spec. 3	.009	–.002	.021***	.003	.005	.005	.023***
Coef. 2/Coef. 1	.38	3.67	.60	.05	.08	.30	.73
Coef. 3/Coef. 1	.17	.67	1.40	.16	.07	.11	.48

American Indian							
Spec. 1	−.080***	−.081***	−.083***	−.081***	.001	−.010	−.024
Spec. 2	−.039***	−.042***	−.047***	−.045***	.001	.005	−.006
Spec. 3	−.011	−.022	−.019	−.024	−.001	.006	−.008
Coef. 2/Coef. 1	.490	.52	.56	.56	1.00	.50	.25
Coef. 3/Coef. 1	.14	.27	.23	.30	n.a.	n.a.	.33
Disabled							
Spec. 1	−.069**	−.089**	−.093**	−.074**	.030	.003	−.019
Spec. 2	−.027**	−.056**	−.051**	−.038**	.023*	.012	.010
Spec. 3	−.023	−.52**	−.046**	−.035**	.024**	.010	.010
Coef. 2/Coef. 1	.30	.62	.55	.51	.78	4.00	n.a.
Coef. 3/Coef. 1	.33	.58	.49	.47	.80	3.33	n.a.

	Dependent Variables				
Independent Variables	TOT CRED	ACPRO	DIPLOM	ENR4YR	ENR2YR
Male					
Spec. 1	−.079***	−.069***	−.064***	−.063***	−.008
Spec. 2	−.041**	−.042***	−.025*	−.030***	−.021
Coef. 2/Coef. 1	.520	.610	.390	.48	2.63
Black					
Spec. 1	−.095***	−.049***	−.132***	−.046***	−.026**
Spec. 2	−.033	−.012	−.059***	.027**	−.033**
Coef. 2/Coef. 1	.35	.24	.45	.59	1.26
Latino					
Spec. 1	−.052	−.089***	−.094***	−.093***	.042**
Spec. 2	−.018	−.035***	−.019	−.011	.015
Coef. 2/Coef. 1	.35	.39	.20	.12	.36

Table B.4 *Continued*

	Dependent Variables				
	TOT CRED	ACPRO	DIPLOM	ENR4YR	ENR2YR
Asian					
Spec. 1	.077***	.057***	.024**	.046***	.010
Spec. 2	.025	.028**	.015	.001	–.001
Coef. 2/Coef. 1	.32	.49	.63	.03	n.a.
American Indian					
Spec. 1	–.036	–.015	–.065***	–.048***	–.001
Spec. 2	–.029	.001	–.034**	–.017*	–.006
Coef. 2/Coef. 1	.81	.07	.52	.35	6.00
Disabled					
Spec. 1	.013	.033	.009	–.046**	.026
Spec. 2	.022	.042**	.017*	–.020	.025
Coef. 2/Coef. 1	1.69	1.27	1.89	.43	.96

Source: Author's calculations.
Specification 1: Demographic variables only.
Specification 2: Demographic variables plus all school and nonschool resource variables.
Specification 3: Specification 2 plus lagged dependent variable (if available)
n.a. = not applicable because of sign reversal.

Table B.5 The Effects of Student Connectedness to Schooling

	Dependent Variables							
	MATHTS		SCITS		READTS		HISTTS	
Independent Variables	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
HMWRK	.061***	.038***	.042***	.025***	.026***	.008	.015	.003
READ	.010	–.001	.059***	.032***	.117***	.080***	.111***	.079***
COUNS	.029***	.024**	.025**	.022**	.032***	.027***	.035***	.031***
ACHELP	–.029***	–.034***	–.041***	–.045***	–.046***	–.050***	–.025**	–.030***
ATTPROB	–.017	–.007	–.034***	–.023**	–.018*	–.009	–.026**	–.013
ABSENT12	–.018**	–.008	–.004	.001	.004	.007	–.016	–.012
BEHPROB	–.016	–.005	–.008	–.001	–.004	.004	–.014	–.006
WRKHRS	–.027***	–.025***	–.026***	–.023**	–.028***	–.024***	–.019	–.017
EXTRACUR	.014	–.005	–.018	–.029**	–.034***	–.042***	–.026***	–.035***
OUTACT	.092***	.063***	.092***	.068***	.071***	.045**	.095***	.023***
TV	.067***	–.040***	–.060***	–.035***	–.043***	–.022**	–.033***	–.018
COLLPEERS	.035***	.014	.020*	.004	.033***	.015	.039***	.023**
DROPPEERS	–.006	.001	–.023*	–.016	–.022**	–.012	–.015	–.007
GANG	–.018	–.012	–.034***	–.027***	–.032***	–.024***	–.049***	–.040***
BABY	–.010	.002	–.009	.001	–.024***	–.011	–.006	.004
VOCVAL	–.041***	–.030***	–.044***	–.035***	–.060***	–.047***	–.051***	–.040***
AFFILVAL	–.012	–.013	–.038***	–.036***	–.037***	–.035***	–.053***	–.050***
ESCAPVAL	–.022**	–.020***	–.003	.000	–.016*	–.013	–.009	–.006
ALTRVAL	–.054***	–.043***	–.025**	–.019**	.007	–.000	.005	.011

Table B.5 *Continued*

	HEASP		HOCASP		CONTED	
Independent Variables	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
HMWRK	.047***	.038***	.020	.021	.022**	.019**
READ	.021**	.013	.002	–.001	.028**	.030**
COUNS	.019*	.015	.028**	.026**	.052***	.050**
ACHELP	.026**	.020**	.034***	.033***	.146***	.139**
ATTPROB	–.012	–.009	.056***	.058***	.001	.006
ABSENT12	–.001	–.001	.006	.005	–.006	–.006
BEHPROB	.018	.016	.005	.009	–.008	–.007
WRKHRS	–.007	–.010	–.018	–.014	.006	.003
EXTRACURR	.033***	.024***	.022	.014	.025**	.015
OUTACT	.050***	.043***	.018	.014	–.023***	–.027***
TV	–.026***	–.024***	–.025**	–.025**	–.032***	–.033***
COLLPEERS	.063***	.058***	.048***	.043***	.096***	.085***
DROPPEERS	.006	.005	.013	.014	–.029*	–.026**
GANG	–.005	–.004	–.037***	–.035***	–.005	–.022
BABY	–.012	–.009	–.024	–.021	–.041**	–.037*

Independent Variables	Total Credits[a]	Academic Program[a]	High School Diploma[a]	Enrolled in Four-Year College[a]	Enrolled in Two-Year College[a]
HMWRK	.040**	.001	.074***	.022**	–.036**
READ	.005	–.0098	–.016	–.022**	.024**
COUNS	.050***	.022*	.054***	.024**	.016
ACHELP	.073***	.009	.061***	.083***	.010
ATTPROB	–.096***	–.026**	–.108***	–.016	–.006
ABSENT12	–.018	–.030***	–.062***	–.025***	–.017
BEHPROB	–.101***	–.017**	–.103***	–.038***	–.021
WRKHRS	–.031**	–.029***	.028	–.050***	.013
EXTRACURR	.055***	.047***	.025*	.043***	–.015
OUTACT	.031**	.025**	.012	.060***	–.047***
TV	–.030*	–.007	–.019	–.024**	–.013
COLLPEERS	.004	.037***	.027*	.066***	.004
DROPPEERS	–.064***	.000	–.041***	.002	.002
GANG	–.002	–.035***	–.002	–.038***	.036**
BABY	–.050***	–.014**	–.056***	–.033***	–.032***

Source: Author's calculations.
Note: Specification 2 includes a lagged dependent variable.
[a] Results are for specification 1 only.
Beta coefficients: ***significant at 1%; ** significant at 5%; * significant at 10%

Table B.6 The Parameters of Linear Growth Models

	Math		Reading		Science	
	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
cv (sch int)	.159	.089	.127	.052	.113	.063
cv (sch slope)	.206	.217	.273	.249	.270	.294
ρ (int, slope)	.333	–.113	.267	–.102	.549	–.08
(Z value)	(6.27)	(–1.76)	(4.06)	(–1.14)	(9.09)	(–.91)
cv (ind int)	.267	.243	.259	.209	.196	.188
cv (ind slope)	.477	.552	.800	.792	.639	.892
ρ (int, slope)	.211	.095	.046	–.043	.234	.093
(Z value)	(15.79)	(6.91)	(2.89)	(–2.6)	(13.59)	(4.84)
cv (r_{is})	.085	.083	.120	.119	.114	.114
TIME (standard error)	3.06 (.028)	2.57 (.091)	1.47 (.021)	1.45 (.082)	1.118 (.015)	.763 (.052)
Number of observations	40,693	40,693	40,703	40,703	40,526	40,526
–2 res LL	286,840	281,954	274,757	270,788	235,372	230,736

Table B.6 *Continued*

History		Educational Aspirations		Occupational Aspirations		Continuing Education	
Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2	Spec. 1	Spec. 2
.069	.042	.385	.452	.156	.28	.062	.027
.238	.217	.707	.707	.385	.333	–.791	.782
.021	–.379	.071	–.894	–.4	–.671	.577	.414
(.37)	(–5.22)	(.49)	(–2.72)	(–1.38)	(–1.33)	(1.72)	(.83)
.119	.112	1.088	2.857	.563	2.073	.178	.144
.472	.478	3.873	3.162	3.846	3.162	–7.906	4.518
.100	–.011	–.456	–.474	–.555	–.636	–.100	–.224
(5.71)	(–.64)	(–16.65)	(–15.44)	(–24.81)	(–26.14)	(–2.31)	(–6.82)
.068	.067	1.042	1.042	.456	.44	.299	.277
1.25	1.22	.020	.022	.026	.029	–.004	.007
(.014)	(.047)	(.001)	(.005)	(.001)	(.007)	(.001)	(.004)
40,355	40,355	43,126	43,126	34,313	34,313	43,578	43,578
224,993	220,755	54,957	43,969	46,134	43,195	31,031	25,869

Source: Author's calculations.
Specification 1: Variation within individuals and within schools, with TIME only.
Specification 2: Variation within individuals and within schools, with TIME and all time-varying and time-invariant independent variables.

Table B.7 The Correlation Coefficients Between Slopes and Intercepts

	Spec. 1	Spec. 2	Spec. 3	Spec. 4
Math				
Among schools	.333	–.073	.293	–.113
	(6.27)	(1.16)	(5.61)	(–1.76)
Among individuals	.211	.140	.163	.095
	(15.79)	(10.31)	(12.21)	(6.91)
Reading				
Among schools	.267	–.044	.236	–.102
	(4.06)	(6.49)	(3.50)	(–1.14)
Among individuals	.046	–.005	–.001	–.043
	(2.89)	(0.33)	(0.09)	(–2.6)
Science				
Among schools	.549	0	.484	–.08
	(9.09)	(0.01)	(8.13)	(–.91)
Among individuals	.234	.137	.187	.093
	(13.59)	(7.44)	(10.76)	(4.84)
History				
Among schools	.021	–.351	.010	–.379
	(.37)	(5.35)	(0.19)	(–5.22)
Among individuals	.100	.024	.048	–.011
	(5.71)	(12.30)	(2.65)	(–.64)
Educational aspirations				
Among schools	.071	–.671	–.079	–.894
	(.49)	(2.32)	(0.26)	(–2.72)
Among individuals	–.456	–.480	–.456	–.474
	(–16.65)	(14.58)	(18.16)	(–15.44)
Occupational aspirations				
Among schools	–.400	–.447	–.707	–.671
	(–1.38)	(0.88)	(2.14)	(–1.33)
Among individuals	–.555	–.699	–.669	–.636
	(–24.81)	(25.35)	(25.35)	(–26.14)
Continuing education				
Among schools	.577	.250	.365	.414
	(1.72)	(0.35)	(2.01)	(.83)
Among individuals	–.100	–.224	–.209	–.224
	(–2.31)	(5.97)	(4.40)	(–6.82)

Source: Author's calculations.
Note: Z-values are in parentheses.
Specification 1: TIME only.
Specification 2: TIME plus family background and demographic variables.
Specification 3: TIME plus school resources and student ability to benefit.
Specification 4: TIME plus all independent variables included.

Table B.8 The Coefficients of Time-Invariant Variables

Independent Variables	Math		Reading		Science	
	Intercept	Slope	Intercept	Slope	Intercept	Slope
Male	.644***	.253*** 57.1%	–1.487***	–.057* 15.3%	1.088***	.277*** 101.8%
Black	–6.205***	–.430*** 27.7%	–3.725***	–.291*** 16.4%	–2.591***	–.450*** 69.5%
Latino	–3.616***	–.144** 15.9%	–1.856***	–.075 16.2%	–1.358***	–.215*** 63.3%
Asian American	2.551***	.238*** 37.3%	–.030	.203** 160.7%	.193	.005 n.s.
American Indian	–5.058***	–.487** 38.5%	–3.297***	–.276 33.1%	–1.741***	–.334*** 76.0%
Disabled	–6.182***	–.756*** 62.7%	–4.214***	–.661*** 62.7%	–1.820***	–.483*** 106.0%
Language not English	0.088	.114 n.s.	–1.028***	.106 n.s.	–.503***	.126*** #
Mother's education low	–1.443***	–.297*** n.s.	–1.165***	–.113 161.0%	–.406**	–.163*** 161.2%
Mother's education middle	1.807***	.223***	1.326***	.059	.707***	.063**
Mother's education high	6.779***	.527*** 31.1%	4.545***	.219*** 19.3%	2.276***	.233*** 40.9%
Materials	3.419***	.098 n.s.	2.563***	–.095 49.0%	1.302***	.159*** 49.1%

Table B.8 *Continued*

History		Educational Aspirations		Occupational Aspirations		Continuing Education	
Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope
.767***	.074*** 38.6%	–.040***	.001	–.160***	.006**	–.021***	–.004**
–1.738***	–.145*** 33.4%	.033***	.002	.020	–.003	.057***	–.009***
–.959***	–.041 17.1%	.015	–.001	–.001	–.002	.035***	.0004
.250	.079 n.s.	.049***	–.001	.021	–.002	.028**	.003
–1.677***	–.079 n.s.	–.050*	.009	–.039	–.009	–.012	–.011
–1.644***	–.293** 71.2%	–.074**	.038***	–.098*	.008	–.089***	.010
–.339**	.151*** ##	.040***	–.003	.053***	–.008	.039***	–.008**
–.577***	–.032 n.s.	.009	–.012	–.030	.016**	–.041***	.003
.685***	.043**	.026***	–.001	.046***	.002	.047***	.0004
2.232***	.174*** 31.0%	.124***	–.0005	.138***	–.006	.064***	–.0003
1.375***	–.023 n.s.	.167***	–.016***	.127***	–.013	.129***	–.003

Source: Author's calculations.
*** significant at 1%; ** significant at 5%; * significant at 10%; n.s. = not significant
# eliminates a gap of –.503 points
reverses a gap of –.339 points to +.265 points

Table B.9 The Coefficients of Time-Varying School and Nonschool Resources

Independent Variables	Reading Test	Math Test	Science Test	History Test	Educational Aspirations	Occupational Aspirations	Continuing Education
School resources							
Simple							
Low teacher salary	–.022	.018	.023***	.006	.0002	.001	.001
Pupil/teacher ratio	–.026***	–.047**	–.021***	.005	–.001**	–.001**	.001***
Compound							
Experience of first teacher	.001	.003	.004**	.006**	.0002	.0001	.0004**
Experience of second teacher	–.006	.001	–.002	.003	.0001	.0002	–.0001
First teacher teaching in-field	.285**	.152	.187***	.011	.021**	.055**	.005
Second teacher teaching in-field	.364***	.567***	.253***	.119	.001	.019*	–.012**
Complex							
TimeStruc	–1.543***	–2.297***	–1.078***	–.733***	–.029	–.049	–.020
Abstract							
School climate	3.387***	2.487***	2.151***	1.473***	.172***	.096***	.121***
Negative events	–1.726***	–1.174***	–.726***	–.640***	–.040***	–.099***	–.004

Table B.9 *Continued*

Family background							
Parent aspirations low	–.992***	–.781***	–.586***	–.570***	–.045***	–.166***	–.147***
Parent aspirations high	.386***	.128*	.312***	.349***	.424***	.062***	–.001
Income per dependent	.014***	.012***	.009***	.009***	.001***	.001***	.0004***
Student connectedness to schooling							
Outside activities	.614***	.894***	.541***	.063	.127***	.042***	.074***
TV	–.183***	–.192***	–.111***	–.028**	–.005***	–.006***	–.004***
Homework	.035***	.047***	.025***	.024***			
Work hours	–.009***	–.008***	–.004**	.002			
Attendance trouble	–5.810***	–4.247***	–3.166***	–3.736***	–.071***	.057	–.347***
Total absences	–.011**	–.037***	–.012***	–.008**	–.001***	–.0001	.0003
Exogenous							
ADA	–2.239***	–2.209***	–.739*	–.208	–.081**	.071	–.083***
ADA-squared	.198***	.218***	.075**	.001	.007**	–.003	.006***

Source: Author's compilation.