Appendices

Appendix A. Effects on Covariates

We estimate effects on covariates using Equation A:

$$x_{isdt} = \delta NEE_{dt} + \beta_1 y_{isd(t-1)} + \beta_2 PPE_{d(t-1)} + \Delta_{dc} + \Phi_{tc} + e_{isdtc} \quad (A),$$

where x_{isdt} represents student-level gender, nonwhite racial status, FRPL, and prior-year achievement, and the school-level and district-level concentrations of female, nonwhite, and FRPL students, and the average student's prior-year achievement score. A statistically significant δ in Equation A would imply that NEE affects outcomes it should not affect, theoretically, undermining a causal interpretation of the results from Equation 1.

Citation: Hunter, S. B., & Bowser, K. M. (2026). Reformed teacher evaluation in rural Missouri: Main and moderated relationships with student achievement and relationships-to-expenditure ratios. *Education Policy Analysis Archives, 34*(42). https://doi.org/10.14507/epaa.34.9248

Appendix B. NEE Cost Analyses

Table B1

CBO and NEE Alignment

CBO Category	CBO Subdomain	NEE Alignment Rationale
Design and Implementation	…*expenditures associated with the* ***development of materials and processes****…such as the* ***teacher observation rubric*** *and the VAM. Activities associated with implementation, such as* ***trainings and observer calibrations****… (p. 7)*	NEE provides already developed materials including an **observation rubric.** NEE staff provide **annual and ongoing training** to NEE implementers, including required **observer calibrations**.
Peer, mentor, and external evaluators	…*includes the* ***salaries, benefits, and travel expenses of full-time peer and mentor observers****…Though school leaders conduct observations in all three districts, we are not able to account for their time spent on initiative-related activities in our expenditure estimates.* (p.8)	N/A
Management and communications	…*relate to activities regarding the* ***planning and implementation*** *of the effective teaching initiatives and the* ***communication efforts to introduce the reforms to the district staff*** *within each of the three teacher evaluation components.* (p. 8)	NEE is heavily involved in NEE rollout. NEE's plethora of **ready-made resources, including language and training materials, and accessibility to NEE staff support district communications efforts**, which otherwise would be more time and cost intensive.
Technology and data systems	…*investments that the districts made* ***to develop software infrastructure as well as to purchase information technology (IT) equipment*** *to support the teacher observation, VAM, and survey components.* (p. 8)	NEE provides all NEE users with access to the NEE Data Tool, a centrally managed **data management system**. Further, NEE staff provide all **technical support** via the NEE Help Desk.
Other	…*such as office* ***overhead and support for data collection****.* (p. 8)	NEE provides **support that may be found in the central offices of larger districts** (e.g., training, data management). Due to the vagueness of this category, we include in the upper bound cost estimates.

Notes. CBO subdomain definitions are quotes from Chambers et al. (2013).

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Table B2

CBO Start-Up Yearly and Total Per Pupil Expenditure Estimates

	Hillsborough County Public Schools	Memphis County Schools	Pittsburgh Public Schools
Year 1	$11.46 – $11.46	$5.44 – $5.64	$27 – $27
Year 2	$28.22 – $28.22	$14.11 – $16.2	$31.78 – $31.78
Year 3	$6.58 – $6.58	$4.7 – $4.7	$29.34 – $29.34
Total	$46.26 – $46.26	$30.62 – $41.81	$88.12 – $88.12

Notes. All costs per pupil dollars are adjusted to 2012 dollars. Ranges are conservative to liberal estimates based on disaggregated costs reported by Chambers et al. (2013).

Appendix C. Coarsened Exact Matching Results

Table C1

Math Sample Matched Results

	Cohort 1		Cohort 2	
	L1	Mean	L1	Mean
District-level average student math achievement scores				
t = 2006-07	0.36	-0.03	0.19	-0.01
t = 2007-08	0.27	-0.01	0.18	-0.00
t = 2008-09	0.07	0.01	0.15	-0.00
t = 2009-10	0.29	0.00	0.16	-0.00
t = 2010-11	0.36	0.03	0.16	0.00
t = 2011-12			0.22	-0.03
District-level PPE				
t = 2006-07	0.26	$100.52	0.23	$2.60
t = 2007-08	0.48	$161.02	0.28	-$247.78
t = 2008-09	0.54	$129.05	0.21	-$72.98
t = 2009-10	0.42	$195.25	0.19	-$174.74
t = 2010-11	0.41	- $24.46	0.21	-$54.46
t = 2011-12			0.18	$129.99
Urbanicity	0.00	0.00	0.00	0.00

Notes: Districts are the unit of analysis. The multivariate L1 distance for Cohorts 1 and 2 is 1.0. Cohort 1 data from 2012 are purposefully omitted as outcomes for this cohort are measured in 2012. The sample of potential matches for Cohort 1 in 2010-11 included districts that would join NEE in 2011-12 but had not yet in 2010-11. Cohort 1 is always excluded from Cohort 2's potential matches.

Citation: Hunter, S. B., & Bowser, K. M. (2026). Reformed teacher evaluation in rural Missouri: Main and moderated relationships with student achievement and relationships-to-expenditure ratios. *Education Policy Analysis Archives, 34*(42). https://doi.org/10.14507/epaa.34.9248

Table C2

Reading Sample Matched Results

	Cohort 1		Cohort 2	
	L1	Mean	L1	Mean
District-level average student reading achievement scores				
t = 2006-07	0.46	-0.00	0.16	-0.03
t = 2007-08	0.68	0.09	0.20	-0.03
t = 2008-09	0.20	0.01	0.11	-0.00
t = 2009-10	0.37	0.04	0.23	-0.00
t = 2010-11	0.52	0.04	0.22	-0.01
t = 2011-12			0.26	-0.01
District-level PPE				
t = 2006-07	0.25	$36.90	0.17	-$188.50
t = 2007-08	0.46	$65.92	0.19	-$385.57
t = 2008-09	0.33	$37.70	0.21	-$221.64
t = 2009-10	0.33	$114.77	0.23	-$262.91
t = 2010-11	0.48	- $17.69	0.24	-$242.42
t = 2011-12			0.28	-$111.84
Urbanicity	0.00	0.00	0.00	0.00

Notes: See Table C1 notes.

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Appendix D. School Characteristics Moderating NEE's Effects on Achievement Scores

Table D1

Economic Disadvantage and Nonwhite Racial Proportions

	Math Scores		Reading Scores	
	I	II	III	IV
NEE* School FRPL < 50%	0.03 (-0.07,0.12)		0.02 (-0.04,0.08)	
NEE* School FRPL ≥ 50%	0.01 (-0.18,0.20)		0.01 (-0.04,0.06)	
NEE*School Proportion Nonwhite Students < 10%		0.01 (-0.02,0.04)		0.02 (-0.01,0.04)
NEE*School Proportion Nonwhite Students ≥ 10%		0.01 (-0.02,0.05)		0.01 (-0.04,0.05)
N(Student-Yr)	319602	319602	456232	456232

Notes: Models in columns I and III interact treatment with an indicator representing whether the school's proportion of FRPL students is below 50% or not. Models in columns II and IV interact treatment with an indicator representing whether the school's proportion of nonwhite students is below 10% or not. All models apply district-cohort fixed effects, year-cohort fixed effects, and control for urbanicity, student prior-year achievement score, district-level prior-year PPE, and the binary moderator. Point estimates and 95 percent confidence intervals represent NEE's total effects on student achievement scores within the subgroups. Standard errors multiway clustered by district, student, and cohort.

Citation: Hunter, S. B., & Bowser, K. M. (2026). Reformed teacher evaluation in rural Missouri: Main and moderated relationships with student achievement and relationships-to-expenditure ratios. *Education Policy Analysis Archives, 34*(42). https://doi.org/10.14507/epaa.34.9248

Appendix E. Nonparametric Event Study Estimates for Content-Specific Subsamples

	Math	Reading
	I	II
Panel A. School Prior-Year Achievement < 0 Sample		
4 Yrs Before NEE x Treated	-0.01	-0.02
	(0.01)	(0.01)
3 Yrs Before NEE x Treated	-0.01	0.01
	(0.02)	(0.00)
2 Yrs Before NEE x Treated	0.00	0.02
	(0.01)	(0.01)
NEE's Firsdt Yr x Treated	0.07*	0.03*
	(0.01)	(0.01)
N(Student-Yr)	119927	193228
Panel B. Average Teacher Years of Experience < 12 Sample		
4 Yrs Before NEE x Treated	0.01	-0.00
	(0.01)	(0.01)
3 Yrs Before NEE x Treated	-0.00	-0.00
	(0.04)	(0.02)
2 Yrs Before NEE x Treated	0.02	0.00
	(0.01)	(0.01)
NEE's First Yr x Treated	0.05*	0.01
	(0.01)	(0.02)
N(Student-Yr)	101179	211135

Notes: Point estimates and 95 percent confidence intervals. Estimates represent NEE's 'effects' on achievement scores relative to the 'effect' one year before NEE's introduction. Students are the unit of analysis. Models apply district-cohort fixed effects, year-cohort fixed effects, and controls for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Standard errors are multiway clustered by district, student, and cohort. The sample in Panel A is restricted to the subsample of schools where the average student's achievement score was below zero. The sample in Panel B is restricted to the subsample of schools where the average teacher's years of experience is below the state average. * $p < 0.05$.

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Appendix F. Sensitivity Analyses

Table F1

Nonparametric Event Study Estimates for Full Sample

	Math	Reading
	I	II
4 Yrs Before NEE x Treated	0.01	0.00
	(-0.40,0.42)	(-0.17,0.18)
3 Yrs Before NEE x Treated	0.03*	0.01
	(0.00,0.06)	(-0.36,0.39)
2 Yrs Before NEE x Treated	0.02	0.00
	(-0.18,0.23)	(-0.25,0.26)
NEE's First Yr x Treated	0.03	0.01
	(-0.18,0.23)	(-0.12,0.14)
N(Student-Yr)	319602	456232

Notes: Point estimates and 95 percent confidence intervals. Estimates represent NEE's 'effects' on achievement scores relative to the 'effect' one year prior to NEE's introduction. Students are the unit of analysis. Models apply district-cohort fixed effects, year-cohort fixed effects, and controls for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Standard errors multiway clustered by district, student, and cohort. * $p < 0.05$, ** $p < 0.01$.

Table F2

NEE's Effect: Cohort 1 vs Cohort 2 Sample and Cohort-Specific

	Math		Reading	
	I	II	III	IV
NEE: Cohort 1	0.01	0.02	0.02	0.01
	(-0.04, 0.06)	(-0.01, 0.05)	(-0.05, 0.09)	(-0.04, 0.06)
NEE: Cohort 2	0.02		0.01	
	(-0.01, 0.04)		(-0.03, 0.05)	
N(Student-Yr)	319096	78885	456232	83744
Matched Sample	X		X	
C1 vs C2 Sample		X		X

Notes: All models control for urbanicity, student prior-year math score, and district-level prior-year PPE. Models I and III apply district-cohort and year-cohort fixed effects. Columns II and IV apply Equation 1 to 2007-08 through 2011-12 using data from Cohorts 1 and 2 only; in 2011-12, Cohort 1 was in its first year of NEE implementation, and Cohort 2 had not yet implemented NEE. Point estimates and 95 percent confidence intervals represent NEE's total effects. Standard errors in Models I and III multiway clustered by district, student and cohort; Models II and IV multiway clustered errors by district and student.

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Appendix G. Content-Specific Subsample Effects: Within and Between Cohort Effects

	Math			Reading		
	I	II	III	IV	V	VI
Panel A. School Prior-Year Achievement < 0 Sample						
NEE Cohort 1	0.04			0.03*		
	(-0.06,0.15)			(0.01, 0.05)		
NEE Cohort 2	0.08*			0.03*		
	(0.06,0.10)			(0.01, 0.05)		
NEE Year 1		0.06**	0.09***		0.02	0.01
		(0.02,0.10)	(0.05,0.13)		(-0.00,0.04)	(-0.04,0.06)
NEE Year 2		0.03			0.02	
		(-0.01,0.07)			(-0.00,0.04)	
N(Student-Yr)	119927	43513	34197	193228	62660	31466
Panel B. Average Teacher Years of Experience < 12 Sample						
NEE Cohort 1	-0.03			-0.00		
	(-0.21,0.14)			(-0.02,0.02)		
NEE Cohort 2	0.06*			0.03		
	(0.00, 0.13)			(-0.02,0.08)		
NEE Year 1		-0.03	0.07***		-0.03	0.01
		(-0.08,0.01)	(0.03,0.11)		(-0.10,0.04)	(-0.02,0.05)
NEE Year 2		0.06*			0.00	
		(0.01,0.11)			(-0.09,0.09)	
N(Student-Yr)	101179	35898	24583	211135	75820	26090
Cohort 1	X	X	X	X	X	X
Cohort 2	X		X			X

Notes: Columns I and IV moderate NEE's effect by cohort. Columns II and V moderate the effects of Cohort 1 only by year. Columns III and VI apply Equation 1 to 2007-08 through 2011-12 using data from Cohorts 1 and 2; in 2011-12, Cohort 1 was in its first year of NEE implementation, and Cohort 2 was in its last year of non-NEE implementation. Point estimates and 95 percent confidence intervals represent total effects on student achievement scores. Standard errors in columns I, III, IV, and VI are multiway clustered by district, student, and cohort; standard errors in columns II and V are clustered by district and student. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

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Appendix H. Sensitivity of Effects to Omitted Variables with Benchmarked Relationships for Content-Specific Subsamples

	Math			Reading		
	I	II	III	IV	V	VI
	$R^2_{NEE\sim OV\|X}$	$R^2_{Y\sim OV\|X,NEE}$	Coef	$R^2_{NEE\sim OV\|X}$	$R^2_{Y\sim OV\|X,NEE}$	Coef
Panel A. School Avg Prior-Year Achievement < 0						
0.1 x Prior-Year Ach	0.000	0.318	0.06*	0.000	0.290	0.04*
0.2 x Prior-Year Ach	0.000	0.636	0.06*	0.000	0.579	0.04*
0.3 x Prior-Year Ach	0.000	0.954	0.06*	0.000	0.869	0.03*
N(Student-Yr)	119927			193228		
Panel B. Average Teacher Years of Experience < 12						
0.1 x Prior-Year Ach	0.000	0.269	0.03*	0.000	0.268	0.03
0.2 x Prior-Year Ach	0.000	0.538	0.03*	0.000	0.536	0.03
0.3 x Prior-Year Ach	0.000	0.807	0.03*	0.000	0.804	0.02
N(Student-Yr)	101179			211135		

Notes: Models apply Equation 1. Standard errors from models in columns III and VI in Table 4. *NEE* represents treatment, *OV* the hypothetical omitted variables, and *X* all righthand-side variables from Equation 1 excluding *NEE*. $R^2_{NEE\sim OV|X}$ represents the residual variation in *NEE*. $R^2_{Y\sim OV|X,NEE}$ represents the residual variation in student achievement scores. "Coef" is the estimated treatment effect if Equation 1 controlled for *OV*.
* $p < 0.05$

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Appendix I. Additional Placebo Tests and Compositional Tests

Table I1

Placebo Tests for Content-Specific Subsamples

	I	II	III	IV
Years Preceding NEE	t-1	t-2	t-3	t-4
Panel A. Math				
Panel A1. School Prior-Year Achievement < 0 Sample				
NEE	0.00	0.02	-0.01	0.00
	(-0.06, 0.06)	(-0.15, 0.18)	(-0.28, 0.26)	(-0.05, 0.05)
N(Student-Yr)	119927	119927	119927	119927
Panel A2. Average Teacher Years of Experience < 12 Sample				
NEE	-0.01	0.00	-0.04	0.00
	(-0.21, 0.18)	(-0.15, 0.15)	(-0.51, 0.43)	(-0.52, 0.52)
N(Student-Yr)	101179	101179	101179	101179
Panel B. Reading				
Panel B1. School Prior-Year Achievement < 0 Sample				
NEE	-0.05*	0.01	-0.01*	0.02*
	(-0.07, -0.04)	(-0.05, 0.07)	(-0.02, -0.00)	(0.01, 0.03)
N(Student-Yr)	193228	193228	193228	193228
Panel B2. Average Teacher Years of Experience < 12 Sample				
NEE	-0.01	0.02	0.02	-0.03
	(-0.18, 0.16)	(-0.32, 0.36)	(-0.16, 0.21)	(-0.07, 0.02)
N(Student-Yr)	211135	211135	211135	211135

Notes: Point estimates and 95 percent confidence intervals in parentheses represent NEE's 'effect' on achievement scores in years preceding NEE's introduction. Models apply district-cohort fixed effects, year-cohort fixed effects, and control for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Panels A1 and B1 models applied to the subsample of schools where the average student's achievement score was below zero. Panels A2 and B2 models were applied to the subsample of schools where the average teacher's years of experience were below the state average. Standard errors are multiway clustered by district, student, and cohort. * $p < 0.05$.

Table I2

Placebo Tests

	I	II	III	IV
Years Preceding NEE	t-1	t-2	t-3	t-4
Panel A. Math Scores				
NEE	0.00	0.02	-0.01	0.00
	(-0.06,0.06)	(-0.15,0.18)	(-0.28,0.26)	(-0.05,0.05)
N(Student-Yr)	319602	319602	319602	319602
Panel B. Reading Scores				
NEE	0.00	-0.01	0.01	-0.00
	(-0.15, 0.15)	(-0.18, 0.18)	(-0.24, 0.26)	(-0.02, 0.01)
N(Student-Yr)	456232	456232	456232	456232

Notes: Point estimates and 95 percent confidence intervals in parentheses represent NEE's 'effect' on achievement scores in years preceding NEE's introduction. Models apply district-cohort fixed effects, year-cohort fixed effects, and control for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Standard errors multiway clustered by district, student, and cohort.

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Table I3

Effects on Observable Characteristics for Schools with Prior-Year Achievement < 0

Panel A. Student Characteristics	Math Students		Reading Students	
Female	0.00	(-0.10, 0.09)	0.00	(-0.01, 0.01)
Nonwhite	-0.00	(-0.04, 0.05)	-0.01	(-0.03, 0.01)
FRPL	-0.03	(-0.08, 0.03)	-0.01*	(-0.02, -0.01)
Prior-Year Achievement Score	-0.01	(-0.05, 0.03)	-0.01	(-0.02, 0.00)
Panel B. School Characteristics				
Concentration Female Students	0.00	(-0.03, 0.04)	-0.01	(-0.02, 0.00)
Concentration Nonwhite Students	-0.00	(-0.06, 0.07)	-0.01	(-0.03, 0.01)
Concentration FRPL Students	-0.03	(-0.10, 0.05)	-0.01*	(-0.02, -0.00)
Avg Stdt Prior-Yr Ach Score	-0.02	(-0.09, 0.05)	-0.01	(-0.02, 0.00)
Concentration Female Teachers	0.01	(-0.15, 0.18)	0.00	(-0.02, 0.03)
Concentration Nonwhite Teachers	0.00	(-0.01, 0.01)	0.00*	(0.00, 0.01)
Concentration Adv Degrees	0.00	(-0.09, 0.08)	0.00	(-0.00, 0.01)
Avg Tch Years of Experience	-0.47	(-7.66, 6.72)	-0.20	(-0.85, 0.45)
Panel C. District Characteristics				
Concentration Female Students	0.00	(-0.01, 0.01)	-0.01	(-0.02, 0.00)
Concentration Nonwhite Students	0.02	(-0.01, 0.05)	0.01	(-0.01, 0.03)
Concentration FRPL Students	-0.02	(-0.05, 0.01)	-0.01	(-0.03, 0.00)
Avg Stdt Prior-Yr Ach Score	-0.01	(-0.04, 0.02)	-0.01	(-0.02, 0.00)
Concentration Female Teachers	0.01	(-0.01, 0.02)	0.01	(-0.00, 0.03)
Concentration Nonwhite Teachers	-0.00	(-0.00, 0.00)	0.00	(-0.00, 0.00)
Concentration Adv Degrees	0.01	(-0.03, 0.05)	0.01*	(0.00, 0.02)
Avg Tch Years of Experience	0.29	(-0.07, 0.66)	0.09	(-0.33, 0.51)
Per Pupil Expenditure	-157.94	(-2396.33, 2080.45)	37.36	(-3468.37, 3543.09)
Prior-Year Per Pupil Expenditure	-95.45	(-337.03, 146.12)	9.41	(-0.28, 1.11)
N(Student-Yr)	119927		193228	

Notes: Point estimates and 95 percent confidence intervals in parentheses represent NEE's 'effect' on each covariate. A different regression generates each row. Models apply district-cohort fixed effects, year-cohort fixed effects, and control for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Standard errors are multiway clustered by district, student, and cohort. * $p < 0.05$

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Table I4

Effects on Observable Characteristics for Schools with Avg Tch Experience < 12

Panel A. Student Characteristics	Math Students		Reading Students	
Female	-0.01	(-0.05, 0.03)	0.00	(-0.03, 0.03)
Nonwhite	-0.00	(-0.03, 0.04)	0.00	(-0.03, 0.03)
FRPL	-0.02	(-0.14, 0.10)	-0.01	(-0.09, 0.07)
Prior-Year Achievement Score	-0.08	(-0.23, 0.06)	-0.05	(-0.17, 0.07)
Panel B. School Characteristics				
Concentration Female Students	0.00	(-0.00, 0.00)	0.00	(-0.02, 0.01)
Concentration Nonwhite Students	-0.00	(-0.02, 0.02)	0.00	(-0.02, 0.01)
Concentration FRPL Students	-0.01	(-0.12, 0.10)	-0.01	(-0.10, 0.08)
Avg Stdt Prior-Yr Ach Score	-0.07	(-0.19, 0.04)	-0.05	(-0.17, 0.07)
Concentration Female Teachers	-0.01	(-0.11, 0.09)	0.04	(-0.13, 0.21)
Concentration Nonwhite Teachers	0.01	(-0.02, 0.03)	0.01	(-0.01, 0.02)
Concentration Adv Degrees	0.01	(-0.04, 0.06)	0.01	(-0.06, 0.07)
Avg Tch Years of Experience	0.66	(-0.64, 1.97)	-0.12	(-0.96, 0.72)
Panel C. District Characteristics				
Concentration Female Students	0.00	(-0.01, 0.00)	0.00	(-0.02, 0.01)
Concentration Nonwhite Students	-0.00	(-0.43, 0.42)	0.00	(-0.02, 0.01)
Concentration FRPL Students	-0.01	(-0.05, 0.04)	-0.01	(-0.04, 0.02)
Avg Stdt Prior-Yr Ach Score	-0.04	(-0.13, 0.06)	-0.02	(-0.13, 0.08)
Concentration Female Teachers	0.01	(-0.08, 0.10)	0.01	(-0.06, 0.08)
Concentration Nonwhite Teachers	-0.00	(-0.01, 0.01)	0.00	(-0.01, 0.01)
Concentration Adv Degrees	0.01	(-0.05, 0.06)	0.01	(-0.04, 0.05)
Avg Tch Years of Experience	0.51	(-0.55, 1.57)	0.01	(-0.56, 0.58)
Per Pupil Expenditure	17.36	(-1687.45, 1722.16)	-186.15	(-834.31, 462.02)
Prior-Year Per Pupil Expenditure	-215.48	(-632.89, 201.94)	167.78	(-3462.87, 3798.42)
N(Student-Yr)	101179		211112	

Notes: Point estimates and 95 percent confidence intervals in parentheses represent NEE's 'effect' on each covariate. A different regression generates each row. Models apply district-cohort fixed effects, year-cohort fixed effects, and control for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Standard errors are multiway clustered by district, student, and cohort. * $p < 0.05$

Citation: Hunter, S. B., & Bowser, K. M. (2026). Reformed teacher evaluation in rural Missouri: Main and moderated relationships with student achievement and relationships-to-expenditure ratios. *Education Policy Analysis Archives, 34*(42). https://doi.org/10.14507/epaa.34.9248

Table I5

Compositional 'Effects' on Observable Characteristics

Panel A. Student Characteristics	Math Students		Reading Students	
Female	0.00	(-0.10, 0.10)	0.00	(-0.07,0.06)
Nonwhite	0.00	(-0.01, 0.01)	0.00	(-0.03,0.03)
FRPL	-0.01	(-0.14, 0.13)	0.00	(-0.06,0.06)
Panel B. School Characteristics				
Concentration Female Students	0.00	(-0.08, 0.08)	0.00	(-0.04,0.04)
Concentration Nonwhite Students	0.00	(-0.01, 0.01)	0.00	(-0.05,0.04)
Concentration FRPL Students	0.00	(-0.10, 0.10)	0.00	(-0.06,0.06)
Concentration Female Teachers	-0.01	(-0.08, 0.05)	0.00	(-0.09,0.08)
Concentration Nonwhite Teachers	0.00	(-0.04, 0.04)	0.00	(-0.03,0.03)
Concentration Adv Degrees	0.01	(-0.03, 0.04)	0.01	(-0.02,0.03)
Avg Tch Years of Experience	0.08	(-3.08, 3.24)	0.01	(-2.14,2.15)
Panel C. District Characteristics				
Concentration Female Students	0.00	(-0.07, 0.07)	0.00	(-0.03,0.03)
Concentration Nonwhite Students	0.00	(-0.34, 0.34)	0.00	(-0.03,0.03)
Concentration FRPL Students	-0.01	(-0.08, 0.07)	0.00	(-0.04,0.03)
Concentration Female Teachers	-0.01	(-0.10, 0.09)	0.00	(-0.14,0.14)
Concentration Nonwhite Teachers	0.00	(-0.02, 0.01)	0.00	(-0.01,0.01)
Concentration Adv Degrees	0.01	(-0.00, 0.02)	0.01	(-0.02,0.03)
Avg Tch Years of Experience	0.12	(-1.25, 1.50)	0.09	(-0.50,0.68)
Per Pupil Expenditure	-103.07	(-626.35, 420.22)	27.21	(-812.70, 867.13)
N(Student-Yr)	319602		456232	

Notes: Point estimates and 95 percent confidence intervals in parentheses represent NEE's effect on each post-treatment observable. Each row generated by a different regression. Models apply district-cohort fixed effects, year-cohort fixed effects, and control for urbanicity, student prior-year achievement score, and district-level prior-year PPE. Standard errors multiway clustered by district, student, and cohort.

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