U.S. Department of Education October 2016

# Race to the Top: Implementation and Relationship to Student Outcomes

Lisa Dragoset Jaime Thomas Mariesa Herrmann John Deke Susanne James-Burdumy Mathematica Policy Research

Cheryl Graczewski Andrea Boyle Courtney Tanenbaum Jessica Giffin Rachel Upton American Institutes for Research

Thomas E. Wei *Project Officer* Institute of Education Sciences



NATIONAL CENTER FOR EDUCATION EVALUATION AND REGIONAL ASSISTANCE

## Race to the Top: Implementation and Relationship to Student Outcomes

October 2016

Lisa Dragoset Jaime Thomas Mariesa Herrmann John Deke Susanne James-Burdumy Mathematica Policy Research

Cheryl Graczewski Andrea Boyle Courtney Tanenbaum Jessica Giffin Rachel Upton American Institutes for Research

**Thomas E. Wei** *Project Officer* Institute of Education Sciences

NCEE 2017-4001 U.S. DEPARTMENT OF EDUCATION



U.S. Department of Education John King Secretary

Institute of Education Sciences Ruth Curran Neild Deputy Director for Policy and Research Delegated Duties of the Director

National Center for Education Evaluation and Regional Assistance Joy Lesnick Acting Commissioner

#### October 2016

This report was prepared for the Institute of Education Sciences under Contract ED-IES-10-C-0077. The project officer is Thomas E. Wei in the National Center for Education Evaluation and Regional Assistance.

IES evaluation reports present objective information on the conditions of implementation and impacts of the programs being evaluated. IES evaluation reports do not include conclusions or recommendations or views with regard to actions policymakers or practitioners should take in light of the findings in the report.

This report is in the public domain. Authorization to reproduce it in whole or in part is granted. While permission to reprint this publication is not necessary, the citation should be:

Dragoset, L., Thomas, J., Herrmann, M., Deke, J., James-Burdumy, S., Graczewski, C., Boyle, A., Tanenbaum, C., Giffin, J., & Upton, R. (2016). *Race to the Top: Implementation and Relationship to Student Outcomes* (NCEE 2017-4001). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

This report is available on the IES website at http://ies.ed.gov/ncee.

Alternate Formats: Upon request, this report is available in alternate formats, such as Braille, large print, audiotape, or computer diskette. For more information, please contact the Department's Alternate Format Center at 202-260-9895 or 202-205-8113.

### ACKNOWLEDGMENTS

Many people contributed in significant ways to the Impact Evaluation of Race to the Top. First, we would like to thank members of the evaluation's Technical Work Group—Thomas Cook, Thomas Fisher, Guido Imbens, Brian Jacob, Thomas Kane, Sean Reardon, Eric Smith, Jeffrey Smith, James Spillane, Elizabeth Stuart, and Jonathan Supovitz—who imparted valuable input at critical junctures.

At Mathematica Policy Research, important contributions were made by Irma Perez-Johnson, who provided a thoughtful, critical review of the report; Eric Zeidman, Kristin Hallgren, and Nancy Duda, who led our large team of dedicated staff who recruited states into the study; Megan Hague Angus, who led the many committed individuals who interviewed states; Mark Brinkley, who led the development and management of the interview web interface; Cassie Pickens Jewell, who developed and managed project databases and worked to resolve questions about Memoranda of Understanding with states; Jacob Hartog and Marykate Zukiewicz, who identified interview questions that aligned with the RTT application; Amanda Beatty and Mai Miksic, who compiled prior research on the types of reforms promoted by RTT; John Chen, Mason DeCamillis, Emily Evans, Matthew Jacobus, Malik Mubeen, Luis Rodriguez, and Lisa Shang, who provided excellent programming assistance in cleaning and analyzing data; and Maura Butler, Sharon Clark, and Colleen Fitts, who expertly edited and produced the report.

At American Institutes for Research, we thank Liz Grant, who provided expert leadership; Mike Garet, who provided valuable quality assurance review; and Jizhi Zhang and Cong Ye, who provided excellent programming assistance in cleaning and analyzing data.

At Social Policy Research Associates, we thank Sukey Leshnick, who supervised a dedicated team of recruiters from Social Policy Research Associates.

Finally, we would like to extend a special thanks to the many states who participated in the study. Without their strong support and participation, this study would not have been possible.

### CONTENTS

EXECU	XECUTIVE SUMMARYxiv			
I.	INTRODUCTION1			
	A.	Scope, purpose, timing, and size of RTT grants	2	
	В.	Prior research on RTT reported both progress and challenges	5	
	C.	Prior research on the relationship between RTT-promoted policies and student outcomes is not conclusive	5	
	D.	Evaluation focus	6	
	E.	Report structure	7	
II.	ST	UDY SAMPLE, DATA COLLECTION, AND ANALYSIS	8	
	Α.	Study sample and data collection	8	
	В.	Analysis methods	13	
		1. RTT comparisons	14	
		2. Summarizing findings from the state interviews	14	
		3. ELL-focused analyses of the state interviews	16	
		4. Examining the relationship between receipt of an RTT grant and student outcomes	17	
III.	UN	DERSTANDING THE CONTEXT FOR RACE TO THE TOP		
IV.	ST	ATES' USE OF POLICIES AND PRACTICES PROMOTED BY RACE TO THE TOP	24	
	A.	No significant differences between RTT and other states in use of practices in the state capacity area	24	
	В.	Early RTT states reported using more standards and assessments practices than non-RTT states	29	
	C.	No significant differences between RTT and other states in use of practices in the data systems area	35	
	D.	RTT states reported using more teacher and principal certification and evaluation practices than other states	38	
	E.	Early RTT states reported using more school turnaround practices than non-RTT states	48	
	F.	Early RTT states reported using more charter school practices than non-RTT states	52	
	G.	Summary	56	
	Η.	Comparing and contrasting spring 2013 and spring 2012 findings	58	
V.		TENT TO WHICH STATES FOCUS ON ENGLISH LANGUAGE LEARNERS IN EIR USE OF POLICIES AND PRACTICES PROMOTED BY RACE TO THE TOP	59	
VI.	DIS	CUSSION OF MAIN FINDINGS	68	

A	. RTT implementation findings	68
В	. Findings on the relationship between RTT grant receipt and student outcomes	69
С	. Questions of interest and potential explanations for findings	70
REFERE	VCES	73
APPENDI	X A ADDITIONAL FIGURES BASED ON STATE INTERVIEWS	A-1
APPENDI	X B DETAILED FINDINGS FROM STATE INTERVIEWS	B-1
APPENDI	X C INTERVIEW QUESTIONS ALIGNED WITH RTT POLICIES AND PRACTICES	C-1
	X D CHANGE OVER TIME IN STATES' USE OF POLICIES AND PRACTICES ED BY RTT	D-1
	X E RELATIONSHIP BETWEEN RTT REFORMS AND CHANGES IN STUDENT	E-1

### TABLES

ES.1.	Objectives of the RTT grants, by topic area	xvii
l.1.	Information about RTT competition rounds 1, 2, and 3	3
I.2.	Information about RTT applicants and grantees	4
II.1.	RTT objectives and policies and practices addressed by state interview questions, by topic area	9
II.2.	RTT objectives and the ELL-focused policies and practices aligned with those objectives that were addressed by state interview questions, by topic area	11
III.1.	Baseline characteristics of early RTT states, later RTT states, and non-RTT states	20
IV.1.	Policies and practices aligned with RTT objectives on state capacity, by subtopic	25
IV.2.	Policies and practices aligned with RTT objectives on standards and assessments, by subtopic	30
IV.3.	Policies and practices aligned with RTT objectives on data systems, by subtopic	35
IV.4.	Policies and practices aligned with RTT objectives on teacher and principal certification and evaluation	39
IV.5.	Policies and practices aligned with RTT objectives on school turnaround, by subtopic	48
IV.6.	Policies and practices aligned with RTT objectives on charter schools, by subtopic	52
V.1.	Distribution of ELL population and ELL achievement gap	60
V.2.	ELL-focused policies and practices aligned with RTT objectives	61
B.1.	Abbreviations for subtopics	B-3
B.2.	State implementation of comprehensive education reform plans	B-4
B.3.	States' education reform priorities	B-5
B.4.	Role of state education agency in education reform	B-7
B.5.	State provision of targeted supports for implementing statewide education reforms	B-8
B.6.	State monitoring of districts' implementation of state education reforms	B-9
B.7.	State work with intermediaries to support implementation of statewide education reforms	B-10
B.8.	Groups with which states expected intermediaries to work	B-11
B.9.	Structural changes at the state education agency	B-12
B.10.	State coordination of RTT and/or SIG with other federal programs	B-13
B.11.	State-level gaps in expertise to support education reforms	B-14
B.12.	Barriers constraining state educational agency capacity to implement statewide education reforms	B-15
B.13.	State adoption of the Common Core State Standards	B-16

B.14.	Changes to state policies and practices in response to adopting the Common Core State Standards	B-17
B.15.	State participation in consortia to develop assessments aligned to Common Core State Standards	B-18
B.16.	Funds provided by states to districts and/or schools to support implementation of Common Core State Standards	B-19
B.17.	State investments in new technology to assist with implementation of the Common Core State Standards	B-20
B.18.	State investments in new technology to assist with implementation of the assessments associated with the Common Core State Standards	B-21
B.19.	Materials provided by states to help practitioners understand the Common Core State Standards and/or change instruction based on the standards	B-22
B.20.	State support to districts and/or schools for implementation of Common Core State Standards	B-24
B.21.	State support to districts and/or schools to aid in implementation of Common Core State Standards with English language learners	B-25
B.22.	State implementation of Statewide Longitudinal Data Systems	B-26
B.23.	State requirements related to district data systems	B-27
B.24.	Access to State Longitudinal Data Systems	B-28
B.25.	Usage of State Longitudinal Data Systems	B-29
B.26.	Uses of statewide longitudinal data by state staff	B-30
B.27.	State support for district data use	B-31
B.28.	Access to individual student-level data in State Longitudinal Data Systems	B-32
B.29.	Authorization of alternative-route certification programs for teachers	B-33
B.30.	Changes made to state regulations related to teacher preparation or certification programs	B-34
B.31.	States' assessment of alternative-route teacher certification programs	B-35
B.32.	Authorization of alternative-route certification programs for principals	B-37
B.33.	Changes made to state regulations related to principal preparation or certification programs	B-38
B.34.	States' evaluation of alternative-route principal certification programs	B-39
B.35.	State requirements for district adoption of teacher evaluation models	B-41
B.36.	Role of student achievement growth in teacher evaluations	B-42
B.37.	State-reported requirements for performance measures (other than student achievement growth) for evaluations of teachers <i>in tested grades and subjects</i>	B-43
B.38.	State-reported requirements for performance measures (other than student achievement growth) for evaluations of teachers <i>in nontested grades and subjects</i>	B-44

B.39.	Rating levels for overall teacher performance	.B-45
B.40.	State regulations on tenure and frequency of teacher evaluation	.B-46
B.41.	State regulations on the use of teacher evaluation results	.B-47
B.42.	State requirements for district adoption of principal evaluation models	.B-48
B.43.	Role of student achievement growth in principal evaluations	.B-49
B.44.	State-reported requirements for performance measures for principal evaluations (other than student achievement growth)	.B-50
B.45.	Rating levels for overall principal performance	.B-51
B.46.	State uses of principal evaluation results	.B-52
B.47.	Actions taken by states to identify areas of teacher shortages	.B-53
B.48.	Full-time equivalent staff and actions taken by states to address current areas of teacher shortages	.B-54
B.49.	State analyses of shifts in teacher distribution	.B-55
B.50.	State strategies for promoting equitable distribution of effective teachers	.B-56
B.51.	Actions taken by states to identify areas of principal shortages	.B-57
B.52.	Actions taken by states to address current areas of principal shortages	.B-58
B.53.	State analyses of shifts in principal distribution	.B-59
B.54.	State strategies for promoting equitable distribution of effective principals	.B-60
B.55.	Organizational structures intended to improve state capacity to support school turnaround	.B-61
B.56.	Flexibility granted by states to persistently lowest-achieving schools	.B-63
B.57.	State teacher assignment laws and policies for persistently lowest-achieving schools	.B-64
B.58.	State authority to take over failing schools	.B-65
B.59.	State restrictions on new charter authorization and charter enrollment	.B-66
B.60.	Charter school authorizers	.B-68
B.61.	State monitoring of charter schools	.B-69
B.62.	Charter school applications and authorizations	.B-70
B.63.	Charter school closures	.B-71
C.1.	Interview questions addressing the state capacity (SC) topic area policies and practices	C-2
C.2.	Interview questions addressing the standards and assessments (SA) topic area policies and practices	C-4
C.3.	Interview questions addressing the data systems (DA) topic area policies and practices	C-6
C.4.	Interview questions addressing the teacher and principal certification and evaluation (TL) topic area policies and practices	C-8

C.5.	Interview questions addressing the school turnaround (TA) topic area policies and practices	C-15
C.6.	Interview questions addressing the charter schools (CH) topic area policies and practices	
C.7.	Interview questions addressing the ELL-focused policies and practices	C-18

### FIGURES

ES.1.	Use of policies and practices promoted by RTT, by topic area	xxi
IV.1.	Use of policies and practices aligned with RTT objectives on state capacity	26
IV.2.	Use of policies and practices aligned with RTT, articulating state's reform agenda subtopic	28
IV.3.	Use of policies and practices aligned with RTT, building strong statewide capacity subtopic	29
IV.4.	Use of policies and practices aligned with RTT objectives on standards and assessments	31
IV.5.	Use of policies and practices aligned with RTT, developing and adopting common standards subtopic and developing and implementing common, high-quality assessments subtopic	33
IV.6.	Use of policies and practices aligned with RTT, supporting the transition to enhanced standards and high-quality assessments subtopic	34
IV.7.	Use of policies and practices aligned with RTT objectives on data systems	36
IV.8.	Use of policies and practices aligned with RTT objectives on data systems	37
IV.9.	Use of policies and practices aligned with RTT objectives on teacher and principal certification and evaluation	40
IV.10.	Use of teacher-focused policies and practices aligned with RTT, providing high-quality pathways to certification for aspiring teachers and principals subtopic	42
IV.11.	Use of principal-focused policies and practices aligned with RTT, providing high-quality pathways to certification for aspiring teachers and principals subtopic	43
IV.12.	Use of teacher-focused policies and practices aligned with RTT, improving teacher and principal effectiveness based on performance subtopic	44
IV.13.	Use of principal-focused policies and practices aligned with RTT, improving teacher and principal effectiveness based on performance subtopic	45
IV.14.	Use of policies and practices aligned with RTT, ensuring equitable distribution of effective teachers and principals subtopic	46
IV.15.	Use of policies and practices aligned with RTT, improving the effectiveness of teacher and principal preparation programs subtopic	47
IV.16.	Use of policies and practices aligned with RTT objectives on school turnaround	49
IV.17.	Use of policies and practices aligned with RTT objectives on school turnaround	51
IV.18.	Use of policies and practices aligned with RTT objectives on charter schools	53
IV.19.	Use of policies and practices aligned with RTT objectives on charter schools	55
IV.20.	Use of policies and practices promoted by RTT, by topic area	57
V.1.	Use of ELL-focused policies and practices aligned with RTT objectives	62
V.2.	Use of the first six ELL-focused policies and practices aligned with RTT objectives	63

V.3.	Use of the last six ELL-focused policies and practices aligned with RTT objectives	64
V.4.	Use of ELL-focused policies and practices aligned with RTT objectives, by ELL population	65
V.5.	Use of ELL-focused policies and practices aligned with RTT objectives, by ELL achievement gap	66
A.1.	Use of policies and practices aligned with RTT, articulating state's reform agenda subtopic	A-5
A.2.	Use of policies and practices aligned with RTT, building strong statewide capacity subtopic	A-6
A.3.	Use of policies and practices aligned with RTT, developing and adopting common standards subtopic	A-7
A.4.	Use of policies and practices aligned with RTT, developing and implementing common, high-quality assessments subtopic	A-8
A.5.	Use of policies and practices aligned with RTT, supporting the transition to enhanced standards and high-quality assessments subtopic	A-9
A.6.	Use of policies and practices aligned with RTT, fully implementing an SLDS subtopic	A-10
A.7.	Use of policies and practices aligned with RTT, accessing state data and using it to inform key stakeholders subtopic	A-11
A.8.	Use of policies and practices aligned with RTT, using data to improve instruction subtopic	A-12
A.9.	Use of policies and practices aligned with RTT, providing high-quality pathways to certification for aspiring teachers and principals subtopic	A-13
A.10.	Use of policies and practices aligned with RTT, improving teacher and principal effectiveness based on performance subtopic	A-14
A.11.	Use of policies and practices aligned with RTT, ensuring equitable distribution of effective teachers and principals subtopic	A-15
A.12.	Use of policies and practices aligned with RTT, improving the effectiveness of teacher and principal preparation programs subtopic	A-16
A.13.	Use of policies and practices aligned with RTT, intervening in the lowest-achieving schools and LEAs subtopic	A-17
A.14.	Use of policies and practices aligned with RTT, turning around the lowest-achieving schools subtopic	A-18
A.15.	Use of policies and practices aligned with RTT, eliminating restrictions on charter school creation and enrollment subtopic	A-19
A.16.	Use of policies and practices aligned with RTT, refining authorization and monitoring processes for charter schools subtopic	A-20
D.1.	Change between 2007–2008 and 2012–2013 in use of policies and practices aligned with RTT objectives on teacher and principal certification and evaluation	. D-3
D.2.	Change between 2007–2008 and 2012–2013 in use of policies and practices aligned with RTT objectives on school turnaround	. D-4

D.3.	Change between 2007–2008 and 2012–2013 in use of policies and practices aligned with RTT objectives on charter schools	D-5
D.4.	Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on state capacity	D-6
D.5.	Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on standards and assessments	D-7
D.6.	Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on data systems	D-8
D.7.	Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on teacher and principal certification and evaluation	D-9
D.8.	Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on school turnaround	D-10
D.9.	Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on charter schools	D-11
D.10.	Change between 2011–2012 and 2012–2013 in use of ELL-focused policies and practices aligned with RTT objectives	D-12
E.1.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-4
E.2.	Per-pupil expenditures for early, later, and non-RTT states, before and after the award of RTT grants	E-6
E.3.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-7
E.4.	8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-8
E.5.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-9
E.6.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, male subgroup	E-10
E.7.	4th grade math NAEP scores for early, later and non-RTT states, before and after the award of RTT grants, female subgroup	E-11
E.8.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup	E-12
E.9.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup	E-13
E.10.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup	E-14
E.11.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup	E-15
E.12.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, male subgroup	E-16

E.13.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, female subgroup	E-17
E.14.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup	E-18
E.15.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup	E-19
E.16.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup	E-20
E.17.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup	E-21
E.18.	8th grade math NAEP scores for early, later, and non-RTT States, before and after the award of RTT grants, male subgroup	E-22
E.19.	8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, female subgroup	E-23
E.20.	8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup	E-24
E.21.	8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup	E-25
E.22.	8th grade math NAEP Scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup	E-26
E.23.	8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup	E-27
E.24.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, male subgroup	E-28
E.25.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, female subgroup	E-29
E.26.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup	E-30
E.27.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup	E-31
E.28.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup	E-32
E.29.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup	E-33
E.30.	4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup	E-34
E.31.	4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup	E-35
E.32.	8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup	E-36

E.33.	8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup	E-37
E.34.	ELL achievement gap in 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-38
E.35.	ELL achievement gap in 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-39
E.36.	ELL achievement gap in 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-40
E.37.	ELL achievement gap in 8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants	E-41

### **EXECUTIVE SUMMARY**

In response to a severe recession that began in 2007, the U.S. Congress passed, and President Barack Obama signed into law, the American Recovery and Reinvestment Act of 2009 (Pub. Law 111-5). At an estimated cost of \$831 billion, this economic stimulus package sought to save and create jobs; provide temporary relief to those adversely affected by the recession; and invest in education, health, infrastructure, and renewable energy. States and school districts received \$100 billion to secure teachers' jobs and promote innovation in schools. This funding included \$4.35 billion for Race to the Top (RTT), one of the Obama administration's signature programs and one of the largest federal government investments in an education grant program. RTT awarded three rounds of grants to states that agreed to implement a range of education policies and practices designed to improve student outcomes. In particular, the program sought to improve student outcomes for high-need students, including English language learners (ELLs) (U.S. Department of Education 2010).

Given the importance and size of the RTT grant program, the U.S. Department of Education (ED) commissioned this evaluation to address the following broad issues:

- Whether states that received an RTT grant used the policies and practices promoted by RTT and how that compares to other states
- Whether use of these policies and practices included a focus on ELLs and whether that focus on ELLs differed between RTT and other states
- Whether receipt of an RTT grant was related to improvement in student outcomes

No new funds were appropriated for RTT in the most recent federal budget (for fiscal year 2016), so the future of the activities and policies that began under RTT is uncertain. However, findings on the first and second issues presented in this report remain useful to (a) policymakers who are interested in broader lessons learned from the program's implementation and (b) educators who are considering how to proceed with education policy in light of the additional flexibility that the Every Student Succeeds Act of 2015 provides to states in terms of school turnaround, accountability, assessment, and educator evaluation systems. Findings on the first and second issues also provide useful context for interpreting the findings on the third issue. For example, if use of the policies and practices promoted by RTT is similar between states that received grants and states that did not, then it seems less likely that we would observe a relationship between RTT grant receipt and student outcomes. Findings on the third issue remain of interest to policymakers and educators who would like to better understand whether and how the large RTT investment might be related to changes in student outcomes.

This is the final report on RTT for this evaluation. An earlier brief focused specifically on whether states adopted teacher evaluation policies promoted by RTT in spring 2012, and whether adoption of these policies varied across states that did and did not receive RTT grants (Hallgren et al. 2014). An earlier report covered all major policy and practice areas that RTT promoted, examining the extent to which states reported using these policies and practices in spring 2012, and whether usage differed across states that did and did not receive RTT grants (Dragoset et al. 2015). This final report builds on the earlier brief and report by including an additional year of data (spring 2013) and by examining how receipt of RTT grants was related to student achievement over time.

### **Main findings**

We examined the extent to which RTT grantees and other states reported using policies and practices in six main areas: (1) improving state capacity to support school improvement efforts; (2) adopting standards and assessments that prepare students to succeed in college and the workplace; (3) building state data systems that measure student growth and inform instruction; (4) recruiting, developing, rewarding, and retaining effective teachers and principals; (5) turning around low-performing schools; and (6) encouraging conditions in which charter schools can succeed. We conducted two sets of comparisons: (1) we compared Round 1 and 2 RTT states (termed *early RTT states* in this report) with states that did not receive RTT grants (termed *non-RTT states* in this report) and (2) we compared Round 3 RTT states (termed *later RTT states* in this report) with non-RTT states. We distinguish between Rounds 1 or 2 and Round 3 because of differences in the grants' timing, funding levels, and scope for these groups of states. We found the following:

- In four of the six areas examined, *early* RTT states reported using more policies and practices promoted by RTT than non-RTT states in spring 2013. The four areas were (1) adopting standards and assessments that prepare students to succeed in college and the workplace; (2) recruiting, developing, rewarding, and retaining effective teachers and principals; (3) turning around low-performing schools; and (4) encouraging conditions in which charter schools can succeed.
- Later RTT grantees reported using more RTT-promoted policies and practices related to teacher and principal certification and evaluation than non-RTT states in spring 2013.
- Across all states, use of RTT-promoted policies and practices was most common for data systems and least common for teacher and principal certification and evaluation. In the data systems area, states reported using, on average, 76 percent of the RTT-promoted practices examined. In the teacher and principal certification and evaluation area, states reported using, on average, 26 percent of RTT-promoted practices examined.
- Across the six areas, early RTT states reported using more English language learner (ELL)-focused policies and practices promoted by RTT than non-RTT states. No differences were found between later RTT states and non-RTT states.
- Findings from spring 2012 and spring 2013 on states' use of RTT-promoted policies and practices were similar. For the most part, the spring 2013 findings presented in this report were the same as the spring 2012 findings presented in an earlier report from this evaluation (Dragoset et al. 2015).
- There were no significant differences between RTT and other states in use of RTTpromoted practices over time. When we examined changes over time in states' use of RTT-promoted practices, we found no significant differences between RTT and other states.
- The relationship between RTT and student outcomes was not clear. Trends in student outcomes could be interpreted as providing evidence of a positive effect of RTT, a negative effect of RTT, or no effect of RTT.

In sum, it is not clear whether the RTT grants influenced the policies and practices used by states or whether they improved student outcomes. RTT states differed from other states prior to receiving the grants, and other changes taking place at the same time as RTT reforms may also have affected student outcomes. Therefore, differences between RTT states and other states may be due to these other factors and not to RTT. Furthermore, readers should use caution when interpreting the results because the findings are based on self-reported use of policies and practices.

### Background

The first three rounds of the RTT grant competition sought to encourage states to implement a range of policies and practices designed to affect all levels of the education system, with the ultimate goal of improving student outcomes.<sup>1</sup> The six topic areas described in the RTT application were (1) improving state capacity to support school improvement efforts; (2) adopting standards and assessments that prepare students to succeed in college and the workplace; (3) building state data systems that measure student growth and inform instruction; (4) recruiting, developing, rewarding, and retaining effective teachers and principals; (5) turning around low-performing schools; and (6) encouraging conditions in which charter schools can succeed. The RTT objectives in each topic area and the subtopics within each topic are detailed in Table ES.1.

The RTT grants were awarded to states that both demonstrated a solid record of reform (for example, states that had improved student outcomes overall and by student subgroup and that had made progress in the past in the RTT reform areas) and presented strong plans in their RTT applications for furthering policies in these areas. Across the first three rounds of competition, 46 states and the District of Columbia applied for RTT grants, and 19 applicants received grants.<sup>2</sup> The Round 1 awards were made in March 2010, Round 2 awards in August 2010, and Round 3 awards in December 2011. The 12 states selected in the first two rounds received awards ranging from \$75 million to \$700 million.<sup>3</sup> In the third round, which was open only to the nine finalists from the second round who had not yet received an RTT grant, awards were made to 7 states. Because these awards were smaller (ranging from \$17 million to \$43 million), ED required these states to focus on only a portion of the policies described in their Round 2 applications.

<sup>&</sup>lt;sup>1</sup> Additional rounds of the RTT program focused on improving early learning and development programs for young children and supporting district-developed plans to improve student achievement. Those rounds were not a focus of this study.

<sup>&</sup>lt;sup>2</sup> Alaska, North Dakota, Texas, and Vermont did not apply for RTT grants in any round.

<sup>&</sup>lt;sup>3</sup> States' award amounts varied based on their share of the nation's school-age population and the budget they proposed in their application for accomplishing their specific plans.

#### Table ES.1. Objectives of the RTT grants, by topic area

Improving state capacity to support school improvement efforts

Articulating the state's education reform agenda and local education agencies' participation in it

Building strong statewide capacity to implement, scale up, and sustain the proposed plans

Demonstrating significant progress in raising achievement and closing gaps

Adopting standards and assessments that prepare students to succeed in college and the workplace

Developing and adopting common standards

Developing and implementing common, high-quality assessments

Supporting the transition to enhanced standards and high-quality assessments

Building state data systems that measure student growth and inform instruction

Fully implementing a statewide longitudinal data system

Accessing state data and using it to inform key stakeholders

Using data to improve instruction

Recruiting, developing, rewarding, and retaining effective teachers and principals

Providing high-quality pathways to certification for aspiring teachers and principals

Improving teacher and principal effectiveness based on performance

Ensuring equitable distribution of effective teachers and principals

Improving the effectiveness of teacher and principal preparation programs

Providing effective support to teachers and principals

#### Turning around low-performing schools

Authority to intervene in the lowest-achieving schools and local education agencies

Turning around the lowest-achieving schools

Encouraging conditions in which charter schools can succeed

Eliminating restrictions on charter school creation and enrollment

Refining authorization and monitoring processes

Source: RTT application.

### **Research questions and study design**

This report was guided by the following research questions:

- Are RTT states using the educational policies and practices promoted by RTT, and how does that use compare to the use of those policies and practices by other states?
- Does use of these policies and practices include a focus on ELLs, and does that focus on ELLs differ between RTT and other states? Does use of these ELL-focused educational policies and practices differ based on characteristics that might affect the relevance of using these policies and practices, such as the percentage of ELL students in the state or the achievement gap between ELLs and other students?
- Is receipt of an RTT grant related to improvement in student outcomes?

The theory of action for RTT is that policy changes at the state level represent the first step in the process of changing the education system. Changes must occur at the state level before occurring at other levels, such as in districts, schools, and classrooms. For example, for a district to change its teacher evaluation system, a state might have to first make changes to its teacher evaluation policies and requirements. The changes made at all levels of the education system could then improve student achievement. The RTT study design is summarized in the box below.

### Prior to receiving a grant, RTT states differed somewhat from other states

The RTT program sought to reward states that not only proposed strong reform plans but that also had a solid record of reform, so it is possible that RTT states differed from other states before they were awarded their grants. We compared these groups before receipt of the grants to better isolate changes that may have been due to the grant and found:

• States that received an RTT grant were already using more of some RTT-promoted policies and practices before the grants were awarded. States that received an RTT grant received higher scores from grant application reviewers than other states that applied for RTT on pre-existing state policy conditions. In addition, RTT states reported using more of the policies and practices aligned with the RTT program at baseline than other states in the teacher and principal certification and evaluation area. Finally, later RTT states also reported using more policies and practices aligned with RTT at baseline in the area of school turnaround.

#### **RTT study design**

**Sample.** The sample for the RTT evaluation included 50 states and the District of Columbia (DC).

**Data on educational policies and practices.** To collect information on states' use of the policies and practices promoted by RTT, we conducted structured telephone interviews with representatives from state education agencies. We interviewed 49 states and DC in spring 2012 (for a 98 percent response rate) and 50 states and DC in spring 2013 (for a 100 percent response rate). There were six interview modules (one for each RTT topic area). Respondents were state administrators most knowledgeable about each area. To facilitate comparisons between RTT and other states, we asked all states the same questions. During the spring 2012 interviews, we not only collected data on the current school year (2011–2012), we also collected data on three of the six reform areas in the year before the announcement and implementation of RTT (2007–2008). These three areas included (1) teacher and principal certification and evaluation, (2) school turnaround, and (3) charter schools. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting the data, particularly from 2007–2008.

**Data on student achievement.** To examine the relationship between receipt of an RTT grant and student outcomes, we obtained publicly available data on state-level test scores from the National Assessment of Educational Progress (NAEP), a nationally representative assessment of U.S. students.

**Analysis of RTT implementation.** To examine how use of policies and practices promoted by RTT compares between RTT states and non-RTT states, we conducted two types of comparisons: (1) early RTT states (Round 1 and 2) with non-RTT states and (2) later RTT states (Round 3) with non-RTT states. We distinguished between early and later RTT states because of differences in the grants' timing, funding levels, and scope between these groups of RTT states. To summarize the large amount of data collected, we identified state interview guestions that aligned with the policies and practices that RTT sought to affect. We determined how many policies and practices each state reported using and then calculated the average number of policies and practices for early RTT states, later RTT states, and non-RTT states. We then tested whether differences were statistically significant between each of the RTT groups and the non-RTT group in the average number of policies and practices reported. Because the goal of this analysis was to provide descriptive information about the actual levels of policies and practices used by RTT and non-RTT states in spring 2012 and spring 2013, the results were reported as raw (unadjusted) means; they were not regression-adjusted to account for any pre-existing differences between RTT and non-RTT states. Readers should exercise caution when interpreting findings from this analysis because any differences in states' use of policies and practices were not necessarily caused by RTT. Differences could be due to other factors, such as pre-existing differences between RTT and non-RTT states or other changes that took place at the same time as RTT.

**Analysis of relationship between RTT and student outcomes.** Because it was not possible to provide credible estimates of the effect of RTT on student outcomes, we conducted a descriptive analysis of student outcomes before and after the award of RTT grants. This analysis plotted the average outcomes for early RTT states, later RTT states, and non-RTT states in each year. As with the analysis of RTT implementation, readers should exercise caution when interpreting these findings because any differences in student outcomes were not necessarily caused by RTT.

# In spring 2013, early RTT states reported using more policies and practices promoted by RTT than non-RTT states in four of the six areas examined

In spring 2013, early RTT states, on average, reported using more policies and practices than non-RTT states in four areas (Figure ES.1):<sup>4</sup>

- Standards and assessments (72 percent of policies and practices reported by early RTT states compared to 46 percent for non-RTT states)
- Teacher and principal certification and evaluation (37 percent of policies and practices reported by early RTT states compared to 20 percent for non-RTT states)
- School turnaround (65 percent of policies and practices reported by early RTT states compared to 53 percent for non-RTT states)
- Charter schools (61 percent of policies and practices reported by early RTT states compared to 41 percent for non-RTT states)

The magnitude of these differences was between one and three practices for all but one area (teacher and principal certification and evaluation), where the difference was larger (about seven practices). Therefore, some of the differences may not be meaningful in terms of how they affected education policy and outcomes in the states.

The differences between RTT and other states observed in 2013 may not be due to the RTT grant but rather to differences in state education policy prior to grant award. In the teacher and principal certification and evaluation area, for example, early RTT states reported using more of the policies and practices promoted by RTT than non-RTT states in spring 2013, but also in the 2007–2008 school year, before the RTT grants were awarded. This pre-existing difference suggests that RTT grants were awarded to states that were already using some of the promoted policies and practices rather than RTT awards causing the use of those policies and practices.<sup>5</sup>

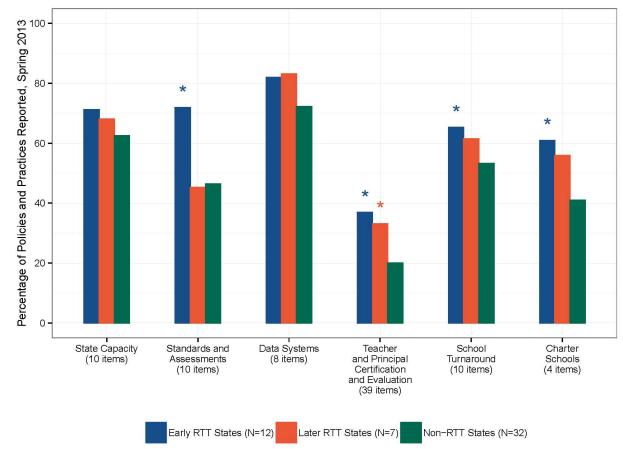
### In one of the six areas examined, teacher and principal certification and evaluation, later RTT states reported using more policies and practices promoted by RTT than non-RTT states in spring 2013

In spring 2013, later RTT states reported using more policies and practices than non-RTT states in one of six areas promoted by RTT (the area of teacher and principal certification and evaluation) (Figure ES.1).<sup>6</sup> Later RTT states reported using 33 percent of policies and practices in this area, on average, compared to 20 percent for non-RTT states. The magnitude of this

<sup>&</sup>lt;sup>4</sup> Chapter IV contains results for the individual policies and practices within each of these areas.

<sup>&</sup>lt;sup>5</sup> For three areas (state capacity, standards and assessments, data systems), we do not have information on use of policies and practices prior to the awarding of RTT grants. Therefore, we cannot determine whether the observed differences between early RTT states and non-RTT states in these areas predated receipt of the RTT grant.

<sup>&</sup>lt;sup>6</sup> Because Round 3 grants were narrower in scope, not all later RTT states focused on every area targeted by RTT. In addition, less time had elapsed between receipt of RTT awards and our spring 2013 interviews for the later RTT states than for the early RTT states. Because of these reasons and the smaller sample size (7 later RTT states, as opposed to 12 early RTT states), statistically significant differences are less likely to be found between later RTT states and non-RTT states than between early RTT states and non-RTT states.





Source: Interviews with state administrators in spring 2013.

Note: The total number of policies and practices (shown in parentheses below each bar) differs by topic area. The number of policies and practices that we examined for each area was directly related to the amount of emphasis placed on each area in the RTT application criteria. This figure reads as follows (using the first bar on the left as an example): early RTT states reported using 71 percent of the policies and practices in the state capacity area.

\* Significantly different from non-RTT states at the 0.05 level, two-tailed test.

difference was slightly more than five practices. As with the early RTT states, baseline data suggest a difference between these groups in this area existed before RTT grants were awarded.

### Across all states, use of policies and practices promoted by RTT was highest for data systems and lowest for teacher and principal certification and evaluation

Use of RTT-promoted policies and practices was highest in the data systems area, in which states reported using, on average, 76 percent of the RTT-promoted practices examined (not shown). Use of RTT-promoted policies and practices was lowest in the teacher and principal certification and evaluation area. In that area, states reported using, on average, 26 percent of the RTT-promoted practices examined (not shown). When focusing on use of individual policies and practices, nearly all states reported (1) having a state longitudinal data system (SLDS), and (2) identifying teacher shortage areas (not shown). In contrast, no states reported using the following policies and practices: (1) using results from evaluations of certification programs to provide

additional funds for, expand, or promote certification programs that were shown to be effective for teachers; (2) doing the same for certification programs that were shown to be effective for principals; and (3) publicly reporting results from evaluations of certification program effectiveness for principals.

# Across the six areas, early RTT states reported using more ELL-focused policies and practices promoted by RTT than non-RTT states in spring 2013, but there were no differences between later RTT and non-RTT states

Early RTT states reported using more ELL-focused policies and practices promoted by RTT than non-RTT states. Out of the 12 ELL-focused policies and practices, early RTT states reported using 58 percent (7.0 practices) compared to 45 percent (5.4 practices) for non-RTT states. Later RTT states reported using 53 percent of these policies and practices (6.4 practices), which did not significantly differ from non-RTT states.

### Findings from spring 2012 and spring 2013 on states' use of RTT-promoted policies and practices were similar

For the most part, the spring 2013 findings presented in this report were the same as the spring 2012 findings presented in an earlier report from this evaluation (Dragoset et al. 2015). Two key differences were (1) early RTT states reported using more policies and practices than non-RTT states in five out of six areas in spring 2012 (with school turnaround being the exception), compared to four out of the six areas in spring 2013 (with state capacity and data systems being the exceptions); and (2) in spring 2012, there were no differences between RTT states and other states in use of ELL-focused policies and practices, but in spring 2013, early RTT states reported using more of these policies and practices than non-RTT states.

### There were no significant differences between RTT and other states in use of RTT-promoted policies and practices over time

When we examined changes over time in states' use of RTT-promoted policies and practices, we found no significant differences between RTT and other states. This finding was the same for each of the six topic areas examined and for the ELL-focused policies and practices.

### The relationship between RTT and student outcomes was not clear

The trends in outcomes that we observed could be interpreted as providing evidence of a positive effect of RTT, a negative effect of RTT, or no effect of RTT. Therefore, it is not clear whether receipt of an RTT grant was related to changes in student outcomes. This uncertainty is partly due to the difficulty in separating the effect of RTT from overall trends in student outcomes and partly due to the limited amount of data available for the analysis.

### Conclusions

It is not clear whether the RTT program influenced the use of policies and practices promoted by the program in RTT states. Although some differences between RTT and other states were observed, other factors could explain those differences. In particular, some differences in use of policies and practices promoted by RTT existed prior to states' receipt of RTT grants. Similarly, it is not clear whether RTT influenced student outcomes. This uncertainty exists because (a) other changes taking place at the same time as RTT reforms might also have affected student outcomes, and (b) the findings could be interpreted as providing evidence of RTT having a positive effect, negative effect, or no effect.

### I. INTRODUCTION

The American Recovery and Reinvestment Act of 2009 (ARRA) provided an unprecedented amount of federal funding for education in an effort to mitigate the effects of the nation's economic downturn and to make a lasting investment in education. Through \$97.4 billion in ARRA funds, the federal government sought to save education jobs, fund a new wave of innovation in education, and support comprehensive efforts to turn around low-performing schools. Race to the Top (RTT), a new competitive state grant program authorized under ARRA, received \$4.35 billion to spur states to use a broad array of policies and practices designed to affect all levels of public school education with the ultimate goal of improving student outcomes. The RTT application criteria described six primary topic areas: (1) improving state capacity to support school improvement efforts; (2) adopting standards and assessments that prepare students to succeed in college and the workplace; (3) building state data systems that measure student growth and success and inform instruction; (4) recruiting, developing, rewarding, and retaining effective teachers and principals; (5) turning around low-performing schools; and (6) encouraging conditions in which charter schools can succeed.

The U.S. Department of Education's (ED's) Institute of Education Sciences (IES) commissioned an evaluation of the RTT program. The RTT evaluation is based on a descriptive analysis of state-level education policies and practices in the six areas listed above, and a descriptive analysis that compares student outcomes in states that received RTT grants with student outcomes in states that did not.

At the request of ED's Office of English Language Acquisition (OELA), part of the evaluation also focuses on how states have addressed the needs of English language learners (ELLs) as they used the policies and practices promoted by RTT. ELLs are of particular interest to this evaluation because: (1) they are historically lower-achieving than non-ELLs,<sup>7</sup> and (2) the RTT program sought to prioritize the academic achievement of high-needs students, including ELLs (U.S. Department of Education 2010).<sup>8</sup> This report examines states' use of ELL-focused policies and practices overall, as well as among subgroups of states for which ELL-focused education reforms might have been a particularly high priority: states with higher ELL populations and those with higher achievement gaps between ELLs and other students. Examining these subgroups could illuminate important differences between RTT and other states that only exist among states with a greater need for ELL-focused education reforms.

This is the final report on RTT for this evaluation. An earlier brief focused specifically on whether states adopted teacher evaluation policies promoted by RTT in spring 2012, and whether adoption of these policies varied across states that did and did not receive RTT grants (Hallgren et al. 2014). An earlier report covered all six primary policy and practice areas that RTT promoted, examining the extent to which states reported using these policies and practices in

<sup>&</sup>lt;sup>7</sup> Since 2002, ELLs' reading test scores have been below those of non-ELLs on the National Assessment of Educational Progress test (National Center for Education Statistics 2014).

<sup>&</sup>lt;sup>8</sup> In particular, the RTT application criteria asked states to (1) make data on ELLs available to evaluate the effectiveness of instructional materials, strategies, and approaches for ELLs, and (2) provide supports and professional development to teachers and principals to ensure that ELLs acquire language skills to master academic content (U.S. Department of Education 2010).

spring 2012, and whether usage differed across states that did and did not receive RTT grants (Dragoset et al. 2015). This final report builds on the earlier brief and report by including an additional year of data (spring 2013) and by examining how receipt of RTT grants was related to student achievement over time.

In this chapter we provide background information about the RTT program, summarize prior research on RTT, and provide an overview of our evaluation and the contents of this report.

### A. Scope, purpose, timing, and size of RTT grants

RTT was designed to promote systemic change in the U.S. educational system, with the ultimate goal of improving student achievement. ED awarded three types of RTT grants between 2010 and 2013: Round 1, 2, and 3 grants funded by ARRA; RTT-Early Learning Challenge grants; and RTT-District grants.<sup>9</sup> This evaluation focuses on the Round 1, 2, and 3 grants to states that were funded by ARRA. In the remainder of this report, when we refer to RTT, we are referencing the Round 1 to 3 RTT grants and not the other two types.

RTT aims to facilitate policies and practices in the six areas listed above. RTT grants were designed to encourage and reward states that had strong records of using these policies and practices and that presented plans in their RTT applications for furthering policies and practices in these areas (U.S. Department of Education 2010).

The Race to the Top Executive Summary (U.S. Department of Education 2009) summarizes the program's priorities and theory of action. The general theory of action underlying RTT is that policy changes at the state level represent the first step toward changing the education system with the ultimate goal of improving student outcomes. Changes would be expected to occur at the state level before occurring at lower levels, such as districts, schools, and classrooms. The changes made at all levels of the education system could then improve student achievement.

RTT grants were awarded through a competition open to all states, the District of Columbia, and Puerto Rico. To maximize the program's likelihood of fostering systemic reforms, ED required states applying for RTT grants to demonstrate substantial commitment to implement their proposed plans at the local level. In their RTT applications, states had to identify the local education agencies (LEAs) committing to implement all or the vast majority of the policies and practices proposed by the state—that is, *participating* LEAs. In contrast, *involved* LEAs were those committing to participate in specific portions of RTT policies and practices that would necessitate statewide or nearly statewide implementation (for example, adopting common standards). ED required RTT states to distribute no less than half of their grant funds to

<sup>&</sup>lt;sup>9</sup> RTT-Early Learning Challenge grants totaling \$913 million were made to 20 states in 2011, 2012, and 2013, with the goal of improving early learning and development programs so that children entering kindergarten would be ready to succeed. The program focuses on improving early learning and development for young children in two ways: (1) by supporting states' efforts to increase the number and percentage of disadvantaged children enrolled in high-quality early learning and development programs and (2) by designing and implementing an integrated system of high-quality early learning and development programs and services. RTT-District grants totaling \$520 million were made to 21 school districts in December 2012 and 2013 to support locally developed plans with four goals: (1) to personalize and deepen student learning, (2) to directly improve student achievement and educator effectiveness, (3) to close achievement gaps, and (4) to prepare every student to succeed in college and their careers.

participating LEAs, apportioned to them according to the LEAs' share of Title I funds.<sup>10</sup> RTT states were allowed substantial flexibility regarding the use of the balance of their grants. They could use the remaining funds to support statewide activities (such as enhancements to data, evaluation, or support systems), as supplementary awards to participating LEAs, as sub-grants to involved LEAs, or for other activities.

Across the three rounds of competition, 46 states and the District of Columbia applied for RTT grants. (The exceptions were Alaska, North Dakota, Texas, and Vermont.) The timing of awards, number of states selected, range of award amounts, and other descriptive information about each round are shown in Table I.1. States' award amounts varied based on their share of the nation's school-age population and the budget they proposed in their application for accomplishing the specific plans they proposed. In this report, we refer to the 12 states selected in the first two rounds as early RTT states. We refer to the 7 states selected in the third round as *later RTT states.* The early and later states were judged by ED to have articulated comprehensive plans to improve education policies and practices and to have demonstrated the capacity for, and significant past progress in, implementing policies and practices in the program's topic areas. The RTT applicants, their application scores from Rounds 1 and 2, the award amounts, and the percentage of LEAs participating for each grantee are listed in Table I.2.<sup>11</sup> States have four years from the time of the award to implement their plans and spend the grant funds, although states that anticipate needing additional time to complete certain projects were permitted to request a no-cost extension (as of September 2015, Delaware, the District of Columbia, Florida, Georgia, Maryland, Massachusetts, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, and Tennessee had received approval for no-cost extensions). Note that when we refer to RTT states, we are including the District of Columbia.

	Round 1	Round 2	Round 3
Eligible applicants	Open to all states, the District of Columbia, and Puerto Rico	Open to all states other than Round 1 grantees and to the District of Columbia and Puerto Rico	Open to only the nine finalists from Round 2 that did not receive a grant in Round 2
Policies and practices	ED asked states to address policies and practices in all six areas listed in the RTT application criteria	ED asked states to address policies and practices in all six areas listed in the RTT application criteria	ED required states to focus on only a portion of the policies and practices in their Round 2 applications <sup>a</sup>
Budget	ED provided suggested budget ranges for each state	States required to stay within the Round 1 budget ranges provided	ED provided suggested budget amounts for each state
Timing of awards	March 2010	August 2010	December 2011
Number of states selected	2	10	7

### Table I.1. Information about RTT competition rounds 1, 2, and 3

<sup>&</sup>lt;sup>10</sup> Title I, Part A (Title I) of the Elementary and Secondary Education Act provides financial assistance to LEAs and schools with many children from low-income families. Title I funds are allocated using formulas that are based primarily on census poverty estimates and the cost of education in each state.

<sup>&</sup>lt;sup>11</sup> Application scores provide important context about ways in which RTT states and non-RTT states may have differed before RTT awards were announced. In Chapter III, we present additional analysis of the average scores for each group of states. ED did not calculate scores in Round 3.

Round 1	Round 2	Round 3	
\$100 million–\$500 million	\$75 million-\$700 million	\$17 million-\$43 million	
f Education.			
		\$100 million—\$500 million     \$75 million—\$700 million	

Note: Alaska, North Dakota, Texas, and Vermont did not apply for RTT grants in any round. ED = U.S. Department of Education.

<sup>a</sup> All seven Round 3 states focused on policies and practices in the areas of state capacity and standards and assessments. Six states also focused on policies and practices in the areas of data systems (Colorado was the exception) and teachers and principals (Arizona was the exception). One state (Louisiana) also focused on policies and practices in the area of school turnaround. Two states (New Jersey and Pennsylvania) also focused on policies and practices in the area of charter schools.

### Table I.2. Information about RTT applicants and grantees

State	Round of award	Round 1 score	Round 2 score	Award amount	Percentage of LEAs participating
Delaware	1	455	a	\$100 million	100
Tennessee	1	444	a	\$500 million	100
Georgia	2	434	446	\$400 million	14
Florida	2	431	452	\$700 million	96
Rhode Island	2	419	451	\$75 million	96
Ohio	2	419	441	\$400 million	53
North Carolina	2	414	442	\$400 million	100
Massachusetts	2	411	471	\$250 million	70
New York	2	409	465	\$700 million	86
District of Columbia	2	402	450	\$75 million	63
Hawaii	2	365	462	\$75 million	100
Maryland	2	a	450	\$250 million	92
Illinois	3	424	427	\$43 million	c
Pennsylvania	3	420	418	\$41 million	c
Kentucky	3	419	412	\$17 million	c
Louisiana	3	418	434	\$17 million	72
Colorado	3	410	420	\$18 million	51
New Jersey	3	387	438	\$38 million	28
Arizona	3	240	435	\$25 million	c
South Carolina	b	423	431	b	b
Arkansas	b	394	389	b	b
Utah	b	379	379	b	b
Minnesota	b	375	a	b	b
Michigan	b	366	382	b	b
Indiana	b	356	a	b	b
lowa	b	346	383	b	b
Connecticut	b	345	379	b	b
Wisconsin	b	341	368	b	b
California	b	337	424	b	b
Idaho	b	331	a	b	b
Kansas	b	330	a	b	b
New Mexico	b	325	366	b	b
Virginia	b	325	a	b	b
Wyoming	b	319	a	b	b
Missouri	b	301	316	b	b
Oklahoma	b	295	392	b	b
Oregon	b	293	a	b	b
West Virginia	b	292	a	b	b
Alabama	b	292	212	b	b
New Hampshire	b	271	335	b	b
Nebraska	b	247	296	b	b
South Dakota	b	136	290 <sup>a</sup>	b	b
Maine	b	130 a	283	b	b
			203		*

State	Round of award	Round 1 score	Round 2 score	Award amount	Percentage of LEAs participating
Mississippi	b	a	263	b	b
Montana	b	a	238	b	b
Nevada	b	a	381	b	b
Washington	b	a	291	b	b

Source: U.S. Department of Education.

Note: States are listed within rounds by their Round 1 score. Alaska, North Dakota, Texas, and Vermont did not apply for RTT grants in any round. The U.S. Department of Education did not calculate scores in Round 3.

<sup>a</sup> Delaware and Tennessee do not have Round 2 scores because they received grants in Round 1. Maryland, Maine, Mississippi, Montana, Nevada, and Washington do not have Round 1 scores because they did not apply for an RTT grant in Round 1. Minnesota, Indiana, Idaho, Kansas, Virginia, Wyoming, Oregon, West Virginia, and South Dakota do not have a Round 2 score because they did not apply for an RTT grant in Round 2.

<sup>b</sup> These states did not receive a grant in any round.

<sup>c</sup> These states did not report the percentage of LEAs participating or provide a list of participating LEAs in their RTT Round 3 applications.

LEA = local education agency.

### **B.** Prior research on RTT reported both progress and challenges

Given that RTT is a relatively new program, to our knowledge no studies have examined the impact of RTT on student outcomes or other measures of educational improvement. Several studies, however, have examined RTT implementation progress in RTT states. Three main themes emerged from these studies:

- RTT states made progress in implementing RTT policies and practices (Boser 2012; Fain and Haxton 2014; Government Accountability Office 2011; Government Accountability Office 2015; Miller and Hanna 2014; Troppe et al. 2015; U.S. Department of Education 2015; U.S. Department of Education 2016b).<sup>12</sup>
- RTT states encountered challenges in their implementation of RTT policies and practices, including some delays and difficulties implementing certain types of policies and practices. In particular, many states experienced difficulties implementing teacher and principal evaluation systems and developing data systems (Boser 2012; Government Accountability Office 2011; Government Accountability Office 2013; Government Accountability Office 2015; Miller and Hanna 2014; Russell et al. 2015; Troppe et al. 2015; U.S. Department of Education 2016b; Weiss 2013).
- 3. RTT states were more likely than other states to use RTT-promoted policies and practices (Dragoset et al. 2015; Government Accountability Office 2011; Howell 2015; National Council on Teacher Quality 2011). There was also some evidence that policy adoption rates increased more for RTT states than other states in the years after RTT grants were awarded (Howell 2015).

### **C.** Prior research on the relationship between RTT-promoted policies and student outcomes is not conclusive

A vast literature examining the effectiveness of the types of policies promoted by RTT provides no conclusive evidence on whether they improve student outcomes. In two of the six

<sup>&</sup>lt;sup>12</sup> U.S. Department of Education (2016b) provides RTT annual performance reports for each state.

areas described in the RTT application criteria (school turnaround and standards and assessments), to our knowledge, no experimental studies have examined the relationship between RTT-promoted policies and practices and student outcomes, and non-experimental studies found mixed results. (Some studies found that RTT-promoted policies and practices were associated with improved student outcomes, while other studies found no relationship between these policies and practices and student outcomes.)<sup>13,14</sup> In three areas (data systems, teacher and principal certification and evaluation, and charter schools), the evidence from both experimental and non-experimental studies was mixed.<sup>15</sup> In the area of state capacity, to our knowledge, no studies examined the relationship between the types of policies and practices promoted by RTT and student outcomes.

### **D.** Evaluation focus

As noted above, there is no conclusive evidence on whether the RTT program (or the policies and practices promoted by the program) improves student outcomes. In addition, few studies on the implementation of RTT-promoted policies and practices comprehensively examine all the areas described in the RTT application, and few examine whether the policies and practices used by RTT states differ from those used by other states. This evaluation seeks to address these gaps in the literature. It is designed to examine the relationship between receipt of an RTT grant and student achievement, whether RTT grant recipients report using the policies and practices promoted by the program, and whether they are doing so to a different extent than states that have not received such grants. This report focuses on the following research questions:

- Are RTT states using the educational policies and practices promoted by RTT, and how does that compare to the use of those policies and practices by other states?
- Does use of these policies and practices include a focus on ELLs, and does that focus on ELLs differ between RTT and other states? Does use of these ELL-focused educational policies and practices differ based on characteristics that might affect the relevance of using these policies and practices, such as the percentage of ELL students in the state or the achievement gap between ELLs and other students?
- Is receipt of an RTT grant related to improvement in student outcomes?

<sup>&</sup>lt;sup>13</sup> Experimental studies are those that examine treatment and comparison groups from a randomized controlled trial. The results from experimental studies (if such studies are conducted appropriately) can be used to make causal statements about the effect of a practice, policy, program, or intervention on an outcome of interest. The results from non-experimental studies cannot be used to make such causal statements because these studies cannot rule out the possibility that other differences between the groups—besides the intervention itself—caused any observed differences in outcomes.

<sup>&</sup>lt;sup>14</sup> To cite a few examples of these non-experimental studies: Ballou and Springer 2008; Bandeira de Mello 2011; Bifulco et al. 2003; Booker et al. 2009; Borman et al. 2003; Dee 2012; Dee and Jacob 2011; de la Torre and Gwynne 2009; Figlio et al. 2009; Fryer 2014; Fuller et al. 2007; Hanushek and Raymond 2005; Lee 2006; Player and Katz 2013; and Strunk et al. 2012.

<sup>&</sup>lt;sup>15</sup> To cite a few examples: Abdulkadiroglu et al. 2011; Allen et al. 2011; Carlson et al. 2011; Clark et al. 2013; Constantine et al. 2009; Decker et al. 2004; Dobbie and Fryer 2011; Fryer et al. 2012; Garet et al. 2008; Garet et al. 2010; Glazerman et al. 2006; Glazerman et al. 2013; Gleason et al. 2010; Henderson et al. 2007; Henderson et al. 2008; Hoxby et al. 2009; Hoxby and Rockoff 2005; May and Robinson 2007; Quint et al. 2008; Slavin et al. 2011; Tuttle et al. 2013; Zimmer and Buddin 2006; and Zimmer et al. 2012.

To address the first two research questions in this report, we conducted interviews with state-level administrative staff in 50 states and the District of Columbia in spring 2013. To answer the third research question, we examined data on student outcomes for the time periods before and after the award of RTT grants. A prior report from this evaluation (Dragoset et al. 2015) examined the first two research questions based on data from spring 2012.

### E. Report structure

In Chapter II, we describe the study sample, design, and data collected to address these research questions. In Chapter III, we provide baseline information on the RTT sample. In Chapter IV, we present findings on the extent to which RTT states reported using the policies and practices promoted by RTT in spring 2013 and how that compares to the use of those policies and practices by other states. In Chapter V, we present findings on the extent to which RTT and other states reported focusing on ELLs in their use of the policies and practices promoted by RTT, and how that varies by the percentage of students who are ELLs and the achievement gap between ELLs and other students. In Chapter VI, we discuss the findings from this report. In Appendices A through E, we provide additional results, including responses to individual interview questions (Appendix B) and a descriptive analysis of the relationship between receipt of an RTT grant and student achievement (Appendix E).

### **II. STUDY SAMPLE, DATA COLLECTION, AND ANALYIS**

In this chapter, we describe the study sample, the data collected, and the method of analyzing the data for the evaluation of RTT.

### A. Study sample and data collection

The sample for the evaluation of RTT includes 50 states and the District of Columbia (DC). The evaluation used several sources of data:

State interviews. To collect information about educational policies, practices, and supports in the six RTT topic areas, we conducted structured telephone interviews with representatives from state education agencies. We interviewed 49 states and DC in spring 2012 (for a 98 percent response rate; Texas did not participate in the interviews) and 50 states and DC in spring 2013 (for a 100 percent response rate). The spring 2012 and 2013 interviews took place roughly 25 and 37 months after Round 1 grants were received, 20 and 32 months after Round 2 grants were received, and 4 and 16 months after Round 3 grants were received. The RTT objectives in each area and the policies and practices within each area for which we had state interview data are detailed in Table II.1.<sup>16,17,18</sup> The state interview included questions addressing 12 ELL-focused policies and practices aligned with RTT objectives (Table II.2). There were six interview modules (one for each RTT topic area). The emphasis (that is, the number of interview questions) for each area directly related to how much emphasis was provided in the RTT application criteria for each area. We typically interviewed different respondents from each state for each module. Respondents were state administrators most knowledgeable about each area. To facilitate comparisons between RTT and other states, we asked all states the same questions.

<sup>&</sup>lt;sup>16</sup> Mathematica Policy Research (2012) and Mathematica Policy Research (2014) contain the state interview protocols for spring 2012 and 2013.

<sup>&</sup>lt;sup>17</sup> The interview questions specified particular time periods of interest. For example, some questions asked, "Currently, are you...?" and others asked "In the 2012–2013 school year, did you...?" Therefore, the results in this report represent a point-in-time measure of the policies and practices used by states. Throughout the report, we use phrases such as "In spring 2013, states reported using policies and practices" to reflect that these are point-in-time measures. In particular, the results from spring 2013 represent only the policies and practices used between spring 2012 and spring 2013, not the total set of policies and practices used at any point after receipt of an RTT grant. Some policies and practices (such as creating a new office or department to support the implementation of state education reform priorities) might be one-time events. In such cases, a state that used the policy or practice in the 2011–2012 school year and did not use it again in the following school year (for example, because the new office/department was already created in 2011–2012) might have responded "yes" to the question on the spring 2012 interview and "no" on the spring 2013 interview. Therefore, any observed decreases between 2011–2012 and 2012– 2013 in the number of policies and practices used may be because certain policies and practices that were one-time events were used in 2011–2012 and did not need to be used again the following year. Finally, it is important to keep in mind that because the use of policies and practices is a dynamic process, some policies and practices used by states at the time of the interview may no longer be in use after the interview. For example, some states that had adopted Common Core standards at the time of the interview may have repealed them later.

<sup>&</sup>lt;sup>18</sup> To limit the interview length, we sought input from IES and the RTT program office on which questions were of greatest interest.

# Table II.1. RTT objectives and policies and practices addressed by stateinterview questions, by topic area

Topic area	RTT objective	Policies and practices addressed by state interview questions
Improving state capacity to support school improvement efforts	Articulating the state's education reform agenda and local education agencies' participation in it <sup>a</sup>	<ul> <li>Have reform plan in place</li> <li>Prioritize college and career-ready standards or assessments</li> <li>Prioritize development of state longitudinal data system (SLDS) or data use</li> <li>Prioritize teacher and principal evaluation and effectiveness</li> <li>Prioritize school turnaround</li> </ul>
	Building strong statewide capacity to implement, scale up, and sustain the proposed plans	<ul> <li>Support implementation of reform plan</li> <li>Work with districts to replicate best practices statewide</li> <li>Provide effective and efficient grant oversight</li> <li>Involve teachers, unions, or administrators to define priorities</li> <li>Involve other stakeholders to define priorities</li> </ul>
	Demonstrating significant progress in raising achievement and closing gaps	No items in state interview aligned with this objective <sup>b</sup>
Adopting standards and assessments that prepare students to succeed in college and the workplace	Developing and adopting common standards	Adopt Common Core State Standards (CCSS)
	Developing and implementing common, high-quality assessments	<ul><li>Participate in CCSS Consortium</li><li>Fully implement assessments developed by consortium</li></ul>
	Supporting the transition to enhanced standards and high- quality assessments	<ul> <li>Provide funds for new staff or new technology to implement CCSS</li> <li>Provide new technology for CCSS assessments</li> <li>Require new curricula or provide materials to implement CCSS</li> <li>Require or support development or implementation of interim assessments</li> <li>Change high school exit exam, credit, or college entrance requirements</li> <li>Provide support or professional development to teachers or principals to implement CCSS</li> <li>Support CCSS implementation for ELLs</li> </ul>
Building state data systems that measure student growth and inform instruction	Fully implementing an SLDS	<ul> <li>Have SLDS</li> <li>SLDS has program participation data</li> <li>SLDS linked to early childhood data system</li> <li>SLDS linked to higher education data system</li> </ul>
	Accessing state data and using it to inform key stakeholders	<ul><li>Allow SLDS to be accessed by stakeholders</li><li>Use SLDS to support decision makers</li></ul>
	Using data to improve instruction	<ul><li>Require districts to implement data system</li><li>Provide supports to districts for using data</li></ul>
Recruiting, developing, rewarding, and retaining effective teachers and principals	Providing high-quality pathways to certification for aspiring teachers and principals	<ul> <li>Authorize qualified alternative-route program operators<sup>c</sup></li> <li>Increase alternative-route program selectivity</li> <li>Increase time in school-based learning experiences</li> <li>Allow alternative-route programs to award same certification as traditional-route programs<sup>d</sup></li> <li>Have alternative-route programs currently operating</li> <li>Have process to identify teacher and principal shortage areas</li> <li>Take steps to address teacher and principal shortage areas</li> </ul>

Topic area	RTT objective	Policies and practices addressed by state interview questions
	Improving teacher and principal effectiveness based on performance	<ul> <li>Require student achievement growth</li> <li>Require multiple evaluation measures</li> <li>Specify required minimum number of rating levels</li> <li>Conduct annual teacher evaluations<sup>e</sup></li> <li>Require that evaluation results be used for professional development</li> <li>Require that evaluation results be used for compensation decisions</li> <li>Require that evaluation results be used for career advancement decisions</li> <li>Require that evaluation results be used for dismissal decisions</li> </ul>
	Ensuring equitable distribution of effective teachers and principals	<ul> <li>Require use of strategies for more equitable distribution of effective teachers and principals</li> <li>Conduct analyses of shifts in distribution of effective teachers and principals</li> </ul>
	Improving the effectiveness of teacher and principal preparation programs	<ul> <li>Use effectiveness ratings to assess certification programs</li> <li>Publicly report certification program effectiveness</li> <li>Support effective certification programs</li> </ul>
	Providing effective support to teachers and principals	No items in state interview aligned with this objective <sup>b</sup>
Turning around low- performing schools	Having authority to intervene in the lowest-achieving schools and local education agencies	Have authority to take over failing schools
	Turning around the lowest- achieving schools	<ul> <li>Provide training in analyzing data to improve instruction</li> <li>Help align curricula to state standards</li> <li>Provide training on school improvement plans, effective curricula, instructional strategies, or intervention models</li> <li>Provide training on strategies for ELLs</li> <li>Provide technical assistance on improving professional development</li> <li>Provide operational flexibility for staffing and budgeting</li> <li>Provide technical assistance on recruiting and retaining teachers or financial incentives</li> <li>Have teacher tenure rules that address placement in or removal from lowest-achieving schools</li> <li>Have administrative structures for supporting turnaround efforts, monitoring, or providing support</li> </ul>
Encouraging conditions in which charter schools can	Eliminating restrictions on charter school creation and enrollment	Have no restrictions on new charter schools or charter enrollment
succeed	Refining authorization and monitoring processes	<ul> <li>Prioritize schools that address needs of ELLs</li> <li>Monitor academic performance of charter schools</li> <li>Monitor nonacademic performance of charter schools</li> </ul>

Source: RTT application; interviews with state administrators in spring 2012 and spring 2013.

ELL = English language learner.

<sup>a</sup> Regular school districts are the most common type of local education agency.

<sup>b</sup> The number of questions included in the state interview was purposefully limited to reduce the time it took to complete the interview. We initially developed the interview questions based on an examination of the RTT application criteria. To ensure that the interview was of a reasonable length, we then pared down the initial list of questions through a deliberative process with the Institute of Education Sciences and the RTT Program Office, to assess their priorities for the types of questions to include. The interview did not include any questions about this objective.

<sup>c</sup> Alternative-route programs are those that offer an alternative route to certification.

<sup>d</sup> Traditional-route programs are those that offer a traditional route to certification.

<sup>e</sup> The state interview did not ask about this policy or practice for principals.

### Table II.2. RTT objectives and the ELL-focused policies and practices aligned with those objectives that were addressed by state interview questions, by topic area

Topic area	RTT objective	ELL-focused policies and practices addressed by state interview questions
Improving state capacity to support school improvement efforts	Articulating the state's education reform agenda and local education agencies' participation in it <sup>a</sup>	Prioritize support to ELLs
	Building strong statewide capacity to implement, scale up, and sustain the proposed plans	<ul> <li>Provide targeted support to ELLs</li> <li>Implement organizational or administrative changes to improve capacity to support ELLs</li> </ul>
	Demonstrating significant progress in raising achievement and closing gaps	No items in state interview aligned with this objective for $ELLs^b$
Adopting standards and assessments that prepare students to succeed in college and the workplace	Developing and adopting common standards	No items in state interview aligned with this objective for $ELLs^{b}$
	Developing and implementing common, high-quality assessments	No items in state interview aligned with this objective for $ELLs^{\flat}$
	Supporting the transition to enhanced standards and high- quality assessments	Support Common Core State Standards implementation for ELLs
Building state data systems that measure student growth and inform instruction	Fully implementing a statewide longitudinal data system	State longitudinal data system has program participation data about ELLs
	Accessing state data and using it to inform key stakeholders	Use state longitudinal data system to support decision makers in improvement efforts for ELLs
	Using data to improve instruction	Provide supports to districts for using ELL-related data
Recruiting, developing, rewarding, and retaining effective teachers and principals	Providing high-quality pathways to certification for aspiring teachers and principals	No items in state interview aligned with this objective for $ELLs^b$
	Improving teacher and principal effectiveness based on performance	No items in state interview aligned with this objective for $ELLs^{\mathtt{b}}$
	Ensuring equitable distribution of effective teachers and principals	No items in state interview aligned with this objective for $ELLs^{\mathtt{b}}$
	Improving the effectiveness of teacher and principal preparation programs	No items in state interview aligned with this objective for $ELLs^{\flat}$
	Providing effective support to teachers and principals	No items in state interview aligned with this objective for $ELLs^{b}$
Turning around low- performing schools	Having authority to intervene in the lowest-achieving schools and local education agencies	No items in state interview aligned with this objective for $ELLs^{\mathtt{b}}$
	Turning around the lowest- achieving schools	<ul> <li>Offer financial incentives for teachers with ELL expertise</li> <li>Provide training on strategies for ELLs</li> <li>Have state-level staff to support turnaround schools and districts in working with ELLs</li> </ul>
Encouraging conditions in which charter schools can	Eliminating restrictions on charter school creation and enrollment	No items in state interview aligned with this objective for $ELLs^b$
succeed	Refining authorization and monitoring processes	<ul> <li>Prioritize schools that address needs of ELLs</li> <li>Monitor charter school performance based on the student populations (such as ELLs) served</li> </ul>

Source: RTT application; interviews with state administrators in spring 2012 and spring 2013.

ELL = English language learner.

<sup>a</sup> Regular school districts are the most common type of local education agency.

<sup>b</sup> The number of questions included in the state interview was purposefully limited to reduce the time it took to complete the interview. We initially developed the interview questions based on an examination of the RTT application criteria. To ensure that the interview was of a reasonable length, we then pared down the initial list of questions through a deliberative process with the Institute of Education Sciences and the RTT Program Office, to assess their priorities for the types of questions to include. The interview did not include any questions about this objective.

• National Assessment of Education Progress (NAEP) scores. To examine the link between test scores and RTT, we obtained publicly available data from NAEP, a nationally representative assessment of U.S. students. We obtained state-level mean NAEP scores for the full NAEP sample as well as for the following subgroups: males, females, ELL students, Hispanic students, Asian students, black students, Native American students, white students, and students eligible for free or reduced-price lunch. The NAEP scores were available for grades 4 and 8, for both math and reading, every other year. In 2001, participation in state NAEP tests was made mandatory for states receiving Title I funds. Therefore, for early RTT states, we used four years of data before RTT grants (2003, 2005, 2007, and 2009) and three years of post-RTT data (2011, 2013, and 2015). For later RTT states, we used five years of pre-RTT data (2003, 2005, 2007, 2009, 2011), and two years of post-RTT data (2013 and 2015). For all states, we also used NAEP scores to examine baseline differences in states' achievement prior to RTT.

We chose NAEP scores as our primary outcome for examining the link between RTT and student outcomes because they were measured consistently across all states over the time frame our study covered. Other outcomes, such as scores on state assessments, high school graduation rates, and college enrollment rates, were not. For example, many states changed their state assessments in the years following RTT awards. Many states did not measure high school graduation rates consistently. Few states collected college enrollment rates. We did collect data on both high school graduation rates and college enrollment rates but were unable to use them due to these limitations. The NAEP scores have two key limitations: (1) they were available for all states for only four years in the pre-RTT period, which made it difficult to accurately determine the pattern of outcomes in the pre-RTT period, and (2) the composition of students who took NAEP tests within each state varied from year to year, which meant that differences in outcomes due to RTT. However, scores on state assessments also suffer from this second limitation, since they are also repeated cross-sectional samples for each particular grade, as opposed to longitudinal samples.

• Common Core of Data (CCD). For baseline data on student and school characteristics and outcome data on state-level per-pupil spending, we obtained publicly available data from the CCD, which includes annual data about each public school, LEA, and state in the country. We obtained 2007–2008 state-level characteristics such as the percentage of students in each race or ethnicity category, the percentage of students who are ELLs, the percentage of students eligible for free or reduced-price lunch (an indicator of economic need), and the percentage of schools eligible for Title I (a program that provides financial assistance to LEAs with at least 10 children from low-income families and with at least 2 percent of the LEA's school-age population from low-income families). We also obtained state-level perpupil spending for each year from 2004 to 2012. For early RTT states, we used seven years of pre-RTT data on per-pupil spending (2004 to 2010) and two years of post-RTT data

(2011 and 2012). For later RTT states, we used eight years of pre-RTT data on per-pupil spending (2004 to 2011) and one year of post-RTT data (2012).

#### **B.** Analysis methods

In this section, we describe the methods we used to compare the policies and practices reported by RTT and other states, and to compare the student achievement outcomes experienced by these two groups of states. The purpose of these comparisons is not to determine whether receipt of an RTT grant *caused* states to use particular policies and practices or to experience changes in student outcomes, but simply to determine:

- 1. Whether states that received an RTT grant used the policies and practices promoted by RTT, and how that compares to other states; and
- 2. Whether receipt of an RTT grant was related to improvement in student outcomes.

In interpreting the results from the state interviews, please note the following caveats: (1) the findings are based on self-reported use of policies and practices, <sup>19</sup> (2) 2 out of 18 RTT objectives were not addressed by interview questions, (3) the application wording left it to the states to decide many of the details about how to implement particular policies and practices, and (4) we did not collect information about the quality or fidelity with which the policies and practices were implemented.<sup>20</sup> Thus, readers should use caution when interpreting the results.

<sup>&</sup>lt;sup>19</sup> The study team conducted pilot tests of the interview instrument and provided training to the data collection team to ensure the uniformity and consistency of the data collected. The interview consisted of mostly closed-ended questions—that is, questions with yes or no responses or with a set of specific response categories from which to choose. The study team carefully reviewed all responses for completeness and consistency, and followed up with respondents about missing and inconsistent responses to ensure their accuracy.

<sup>&</sup>lt;sup>20</sup> Here we provide several potential explanations for how these limitations might affect the data. Our data do not allow us to determine whether any of these explanations are correct, but we offer them here as starting points for thinking about how the results might be affected by the limitations. Self-reported levels of policy and practice use might be overestimated (relative to actual use) if states provided socially desirable responses, which would likely lead to overestimated levels for all states. The study team took several steps to ensure that states provided accurate responses, including telling states that the interview was not an audit and that we would report aggregated responses across states, rather than singling out any individual state. The fact that self-reported levels of policy and practice use (as presented in Chapter IV) are not all 100 percent, and in many cases are much lower than 100 percent, suggests that the issue of providing socially desirable responses is not a rampant problem in our data. However, it is possible that RTT states might be more likely than non-RTT states to provide socially desirable responses, given that they received RTT grants to implement the policies and practices we examined. Therefore, the results for RTT states might be more inflated than the results for non-RTT states, so readers should use caution when interpreting the results. Regarding the fact that our study instruments did not address 2 out of 18 RTT objectives, this factor is unlikely to have a large effect on the overall results because very few objectives were not addressed. Regarding the quality or fidelity with which the policies and practices were implemented, and the fact that the application wording left it to the states to decide many of the details about how to implement particular policies and practices, our data might overestimate use levels if states tended to report that they used a policy or practice when they had begun to use it, but hadn't necessarily implemented it fully. This factor would lead to overestimated levels for all states, rather than affecting the differences between RTT and non-RTT states. In addition, as noted above, the fact that many of the self-reported levels of policy and practice use (as presented in Chapter IV) are well below 100 percent suggests that these levels might not be overestimated by a substantial amount.

We first describe how we formed the groups that are the basis for the comparisons presented in the report. We then describe how we summarized the large number of findings from state interviews, how we analyzed the extent to which states focused on ELLs in their use of policies and practices promoted by RTT, and how we examined the relationship between receipt of an RTT grant and student achievement.

#### 1. RTT comparisons

We conducted two sets of RTT comparisons: (1) Round 1 and 2 RTT states (termed *early RTT states* in this report) with states that did not receive RTT grants (termed *non-RTT states* or *other states* in this report) and (2) Round 3 RTT states (termed *later RTT states* in this report) with non-RTT states.<sup>21</sup> We distinguish between Rounds 1 or 2 and Round 3 because of differences in the grants' timing, funding levels, and scope for these groups of states (described in Chapter I). We combined Round 1 and 2 RTT states for several reasons: the funding amounts and scope of the grants in those rounds were similar, only two states received Round 1 RTT grants, and the first two rounds of grants were awarded within roughly five months of each other.

When the interview data for this report were collected in spring 2012 and 2013, Round 1 and 2 states had been implementing their grants substantially longer than Round 3 states (approximately 20 to 37 months for Round 1 and 2 states versus approximately 4 to 16 months for Round 3 states). In addition, less funding was available for Round 3 states, so they were asked to focus on a subset of areas. All seven Round 3 states focused on the areas of state capacity and standards and assessments, six focused on data systems and teacher and principal certification and evaluation, two focused on charter schools, and one focused on school turnaround. For these reasons, one might expect different progress from Round 3 states than from Round 1 and 2 states, both in terms of their use of RTT-promoted policies and practices and in terms of student outcomes.

#### 2. Summarizing findings from the state interviews

Given the large number of questions in the interviews, it is difficult to discern broad patterns or form overall conclusions by only separately examining responses to individual questions. Therefore, we analyzed data from the interviews using methods (described below) designed to provide information about broad patterns observed in the data. Readers interested in the responses to specific interview questions can refer to Appendix B.

**Examining use of policies and practices in spring 2013.** To summarize the large amount of data collected, we identified state interview questions that aligned with the policies and practices that RTT sought to affect. Throughout the report, we use the term "RTT-promoted policies and practices" to mean "policies and practices aligned with the RTT application criteria." We determined how many policies and practices for early RTT states, later RTT states, and non-RTT states. We then tested whether differences were statistically significant between each of the RTT groups and the non-RTT group in the average number of policies and practices reported. Throughout the report, when we say that one group of states (such as early RTT states) reported using more/less practices than another group (such as non-RTT states) within a

<sup>&</sup>lt;sup>21</sup> We did not compare Round 1 and Round 2 states to Round 3 states because this report is focused on comparing states that received RTT grants to those that did not.

particular topic or subtopic area, we are always reporting findings that were statistically significant. In contrast, we did not conduct statistical tests to assess whether differences in individual practices between RTT and other states were statistically significant. See Appendix A for more details on the analysis methods.

**Examining use of policies and practices prior to RTT awards.** In addition to examining the differences in policies and practices for all six areas in spring 2013, for three areas (teacher and principal certification and evaluation, school turnaround, charter schools) we examined whether states' use of policies and practices differed during the 2007–2008 school year. This was possible because the spring 2012 interviews collected data not only on policies and practices used during the 2011–2012 school year but also baseline data about selected policies and practices in these areas during 2007–2008 before the announcement and implementation of RTT.<sup>22</sup> For the other three areas, it was not possible to examine baseline data because the interview did not include any questions about the 2007–2008 school year.<sup>23</sup> We focused the baseline data collection on the 2007–2008 school year because after the American Recovery and Reinvestment Act was announced in February 2009, states may have started taking steps to increase the competitiveness of their RTT applications in the focus areas described in the law.

The policies and practices for which we could measure use during the 2007–2008 school year are a subset of those for which we could measure use in the 2011–2012 and 2012–2013 school years. In Chapter IV, we list the policies and practices for which we could measure use in 2011–2012 and 2012–2013 and indicate those for which we could also measure use in 2007–2008. It is important to keep this factor in mind when interpreting the baseline results. For example, finding no statistically significant difference at baseline between early RTT and non-RTT states for a particular area means that baseline differences did not exist for *some* of the policies and practices in that area, but we do not know whether that was the case for *all* of the policies and practices in that area because we did not measure use of all policies and practices at baseline.

**Examining changes over time in use of policies and practices.** We examined changes over time in two ways (findings presented in Appendix D):

<sup>&</sup>lt;sup>22</sup> Interview responses to questions pertaining to earlier school years (such as 2007–2008) might suffer from recall error. That is, responses about earlier school years might differ from those about the current year simply because of the respondent's inability to recall accurately the earlier time period rather than because of actual changes from year to year. This error could be systematic, resulting in bias, or random, resulting in less precise estimates. To address this concern, we sent our interview protocols to each respondent prior to the interview. In addition to drawing attention to items that required respondents to look up information prior to the interview, we directed their attention to questions that covered the 2007–2008 school year to make sure that they were prepared to answer those questions during the interview. For example, they may have needed to obtain the information about that period from a colleague or ask that a colleague with more knowledge of that time period also participate in the interview. We pilot tested this process to assess the extent to which respondents were able to report information on the 2007–2008 school year, specifically asking whether respondents found it difficult or had any problems recalling that period. All respondents reported that they were not in their current position during the earlier time period tended to ask colleagues who were knowledgeable about policies or practices at the earlier time to join the interview or to provide responses prior to the interview.

<sup>&</sup>lt;sup>23</sup> When developing the interview protocol, we included baseline questions for particular policies and practices based on U.S. Department of Education guidance about those in which it had interest in assessing change.

- 1. **Comparing use of policies and practices in 2011–2012 and 2012–2013.** For all six areas, we examined whether use of RTT-promoted policies and practices changed between 2011–2012 and 2012–2013 and whether those changes differed between groups of states (early RTT, later RTT, non-RTT). To conduct this analysis, we averaged the number of policies and practices within each group of states, separately for each school year. We then subtracted the mean number of policies and practices for 2011–2012 from the mean number for 2012–2013, and tested whether the resulting number differed between early RTT and non-RTT states, and between later RTT and non-RTT states. In other words, this analysis tested whether the changes over time in the number of policies and practices used differed between RTT and other states.
- 2. Comparing use of policies and practices in 2007–2008 and 2012–2013. Finally, for the three areas for which we had baseline data, we examined whether use of RTT-promoted policies and practices changed between 2007–2008 and 2012–2013 and whether those changes differed between the three group of states. This analysis includes only the subset of policies and practices for which we measured use in both 2007–2008 and 2012–2013. Specifically, we averaged the number of those policies and practices within each group of states, separately for each school year. We then subtracted the mean number of policies and practices for 2007–2008 from the mean number for 2012–2013, and tested whether the resulting number differed between early RTT and non-RTT states, and between later RTT and non-RTT states. In other words, this analysis tested whether the changes between 2007–2008 and 2012–2013 in the number of policies and practices used differed between RTT and other states. The results do not provide information on whether there was a change over time for the policies and practices for which we did *not* measure use in 2007–2008.

### 3. ELL-focused analyses of the state interviews

We examined the extent to which states focused on ELLs in their use of RTT-promoted policies and practices using the same processes that we described above to analyze data from the state interviews; however, the summary measures included only policies and practices that explicitly focused on ELLs. We also examined whether use of these ELL-focused policies and practices differed by the size of the ELL population and the ELL/non-ELL achievement gap (which we refer to in this report as the ELL achievement gap for simplicity). We took the following steps to conduct these analyses:

- We first identified ELL-focused state interview questions that aligned with the policies and practices that RTT sought to affect. We then determined how many ELL-focused policies and practices each state reported using.
- We then categorized each state according to whether it had an above-median or belowmedian ELL population and an above- or below-median ELL achievement gap, where ELL population is defined as the percentage of students who are ELLs. We classified states as having higher (above-median) or lower (below-median) ELL populations using CCD data on the percentage of public school students participating in programs for ELLs in 2007– 2008. We classified states as having higher or lower ELL achievement gaps based on their

gaps on the spring 2007 NAEP 4th grade math exam.<sup>24</sup> Specifically, we calculated the ELL achievement gap as average achievement for non-ELLs minus average achievement for ELLs. We used CCD data from 2007–2008 and NAEP data from spring 2007 because in later years, the American Recovery and Reinvestment Act had been announced, and it may have motivated states to start taking steps to increase the competitiveness of their RTT applications, possibly affecting their ELL population or ELL achievement gap.

- We then examined the use of ELL-focused policies and practices for each of those groups (above-median ELL population, below-median ELL population, above-median gap, below-median gap). Throughout this report, we use "states with higher ELL populations" to refer to states with above-median ELL populations, "states with higher ELL achievement gaps" to refer to states with above-median ELL achievement gaps, "states with lower ELL populations" to refer to states with below-median ELL populations, and "states with lower ELL achievement gaps" to refer to states with below-median ELL achievement gaps.
- Finally, we conducted two types of statistical tests:
  - The first to determine whether there were differences in the number of ELL-focused policies and practices used *between* each of the RTT groups and non-RTT states. For example, we compared early RTT states with lower ELL populations and ELL achievement gaps to non-RTT states that also had lower populations and gaps.
  - The second to determine whether there were differences in the number of ELL-focused policies and practices *within* each group of states. For example, we compared early RTT states with lower populations and gaps to early RTT states with higher populations and gaps.

# 4. Examining the relationship between receipt of an RTT grant and student outcomes

To examine the relationship between receipt of an RTT grant and student outcomes, we conducted a descriptive analysis of student outcomes before and after the award of RTT grants by plotting outcomes over time for the three groups of states described above (early RTT states, later RTT states, and non-RTT states). For each group, we plotted the average outcome across all states in that group for each year.

Recognizing that RTT represents a significant investment in education reform, we carefully considered, in consultation with our expert panel,<sup>25</sup> whether it was possible to credibly estimate the effect of RTT on student outcomes using a comparative short interrupted time series design. This design compared how actual post-RTT outcomes in RTT and other states differed from

<sup>&</sup>lt;sup>24</sup> We focused on the NAEP 4th grade math exam because compared with NAEP exams for other grades and subjects, the 4th grade math exam had the fewest states with a missing value for this achievement gap in 2007. The ELL achievement gaps on these exams were all highly correlated (the correlations ranged from 0.7 to 0.9), so the choice of subject and grade was unlikely to make a large difference in the composition of the lower and higher groups.

<sup>&</sup>lt;sup>25</sup> Our expert panel consisted of experts in school reform and program evaluation. The group met three times during the evaluation, and also provided input through conference calls throughout the evaluation.

projected outcomes based on pre-RTT patterns (Somers et al. 2013). We tried this approach and decided not to present any results from it, for two reasons:

- 1. When we used this approach, we found that conclusions about the effect of RTT differed depending on what assumptions we made about the pattern of outcomes in the pre-RTT period, and it was difficult to determine the true pattern of outcomes during that period because NAEP data were available for all states for only four years in that period;<sup>26</sup> and
- 2. Even if it were possible to determine the true pattern of outcomes during the pre-RTT period, we could not conclude that receipt of an RTT grant caused any observed changes in student outcomes because other changes taking place at the same time as RTT reforms might also have affected student outcomes.<sup>27</sup>

To avoid misinterpretation of results that could result from using the interrupted time series method, we conducted a purely descriptive analysis. Appendix E presents these results.

<sup>&</sup>lt;sup>26</sup> In particular, we tried fitting three different models to the pre-RTT data: a mean model (i.e., a flat line), a linear model, and a quadratic model. The estimates of the effect of RTT on student outcomes differed substantially depending on which model was used for the pre-RTT period, so we ultimately concluded—in consultation with IES and our expert panel members—that we could not draw any definitive conclusions from this approach.

<sup>&</sup>lt;sup>27</sup> We also carefully considered, in consultation with our expert panel, using two other approaches: (1) a regression discontinuity design, and (2) a difference-in-differences approach with only one year of pre-RTT data. A regression discontinuity design would compare outcomes from states with values above the RTT application score cutoff (the treatment group) to outcomes from states with values below that cutoff (the comparison group). We decided not to use this approach for two reasons: (1) the number of states above the cutoff was too small to support reliable estimation of the relationship between the outcome and the application score and (2) the cutoff changed over time as more states were awarded RTT grants, exacerbating the small sample size problem. A difference-in-differences approach with only one year of pre-RTT data would compare outcomes for RTT and other states before and after the award of RTT grants. We decided not to use this approach because it suffers from the same weaknesses listed above for the comparative short interrupted time series design.

#### **III. UNDERSTANDING THE CONTEXT FOR RACE TO THE TOP**

As described in Chapter I, RTT sought to promote and facilitate systemic changes at all levels of the U.S. educational system by supporting policies in six broad areas: (1) state capacity for reform; (2) rigorous standards and aligned assessments; (3) comprehensive data systems; (4) effective teachers and principals; (5) turnaround of low-performing schools; and (6) charter schools. The RTT grant competition, which was open to all states, the District of Columbia, and Puerto Rico, was designed to encourage and reward states that demonstrated past improvements in student achievement and presented comprehensive plans in their applications for implementing reforms in the areas outlined in the application. Only four states (Alaska, North Dakota, Texas, Vermont) did not compete for RTT in any round, and it is well documented that after RTT was announced, many states took steps to become eligible for the grants and to make their applications more competitive.<sup>28</sup> Therefore, when examining RTT implementation and the relationship between receipt of an RTT grant and student achievement, it is essential to understand the education policies and practices that existed in RTT states and other states before the RTT program was announced.<sup>29</sup> This is important to ensure that we do not draw misleading conclusions from our study's findings. For example, any differences found between RTT and other states in spring 2013 could be due to the effect of RTT, but they also could reflect preexisting differences between these groups of states.

In this chapter, we compare RTT states and other states to examine their similarities and differences prior to RTT. Baseline characteristics of the three groups of states—(1) early RTT states, (2) later RTT states, and (3) non-RTT states—are shown in Table III.1. As discussed in Chapter II, the RTT analyses in this report were based on comparisons between groups (1) and (3) and between groups (2) and (3). Therefore, in the text that follows, we focus on contrasts between these groups of states.

<sup>&</sup>lt;sup>28</sup> For instance, Illinois lifted caps on the number of charter schools it would allow, and Massachusetts made it easier for students in low-performing schools to switch to charters (National Alliance for Public Charter Schools, 2009); West Virginia proposed a merit pay system that included student achievement in compensation calculations (Council of State Governments 2010, 2011). To be eligible to apply for RTT, states could not have laws prohibiting the linking of student achievement and teacher administrative records, and some states (for example, California and Maine) changed their laws to be eligible (Government Accountability Office 2011). Most states also adopted the Common Core State Standards.

<sup>&</sup>lt;sup>29</sup> RTT was first announced in July 2009, with the first round of state grant applications due to ED in January 2010. Therefore, for most of the state characteristics examined, we focus on information from the 2007–2008 school year. One exception to this rule is that we examine whether states had received any State Longitudinal Data Systems (SLDS) Grants between 2005 and 2009, and the cumulative amount of funding received during this period. Because states would have had to apply for these grants prior to July 2009, this grant funding would have reflected state efforts to improve their longitudinal data systems before RTT was first announced. Another state characteristic of interest is the number of states that had Elementary and Secondary Education Act flexibility waivers, which promoted similar policies as RTT. States applied for these waivers after August 2011, so information on the number of states that had waivers is not included in Table III.1, which focuses on information from 2007–2008 (prior to RTT). However, RTT could have affected the likelihood that states received these waivers; 91.7 percent of early RTT states and 85.7 percent of later RTT states received these waivers for the 2012–2013 school year (the first school year in which the waivers began), compared to 59.4 percent of non-RTT states.

# Table III.1. Baseline characteristics of early RTT states, later RTT states, and non-RTT states

	Early RTT states	Later RTT states	Non-RTT states		
RTT Round 1 Application Scores, Among States That Applied in Round 1 <sup>a</sup>					
Average RTT Round 1 application scores	419*	388*	323		
Average RTT Round 1 application scores on state reform conditions criteria	218*	205*	173		
Average RTT Round 1 application scores on reform plan criteria	200*	184*	149		
National Assessment of Educational Progress (NAEP) Scores, 2007					
Average scores: math, 4th grade	238	238	240		
Average scores: math, 8th grade	278	281	282		
Average scores: reading, 4th grade	220	220	221		
Average scores: reading, 8th grade	260	262	263		
State Longitudinal Data System (SLDS) Grant Information					
Percentage of states that received SLDS grants in 2005, 2007, or 2009	91.7	85.7	78.1		
Average number of SLDS grants received from 2005 to 2009 among states that did and did not receive these grants <sup>b</sup>	1.2	1.1	1.0		
Average total SLDS funding received from 2005 to 2009 among states that did and did not receive these grants	\$5.4 million	\$6.0 million	\$4.8 million		
State Fiscal Stabilization Fund (SFSF) Grant Information					
Percentage of states that received SFSF grants in 2009	100	100	100		
Average 2009 SFSF grant amount	\$1.16 billion	\$1.20 billion	\$0.79 billion		
State-Reported Usage of Policies and Practices, from Interv	iew Responses (	2007–2008) <sup>c</sup>			
Average number of RTT-promoted policies and practices in the area of teacher and principal certification and evaluation (out of 12)	4.6*	4.5*	2.7		
Average number of RTT-promoted policies and practices in the area of school turnaround (out of 5)	1.3	1.6*	0.8		
Average number of RTT-promoted policies and practices in the area of charter schools (out of 3)	2.0	2.1	1.3		
State Education Characteristics, from the Common Core of			1.0		
Student's race/ethnicity (average percentage)	,				
White, non-Hispanic	50.9*	60.6	69.2		
Black, non-Hispanic	26.6*	16.9	11.1		
Hispanic	11.6	17.3	12.3		
Asian Other	9.2 1.7	3.4 1.9	3.1 4.3		
Average percentage of students eligible for free or reduced-					
price lunch	40.6	40.4	39.9		
Average percentage of schools eligible for Title I	68.8	70.4	63.4		
State's region (percentage) Northeast	25.0	28.6	12.5		
Midwest	8.3	14.3	31.3		
South	58.3*	28.6	25.0		
West	8.3	28.6	31.3		
School level (average percentage)					
Elementary	61.0	61.2	57.8		
Middle High	18.8 15.9*	18.0 17.4	18.0 19.6		
· ''&''	10.0	17.7	10.0		

	Early RTT states	Later RTT states	Non-RTT states
Other	4.4	3.5	4.6
Average number of full-time staff <sup>d</sup>	153,000	153,000	104,000
Number of States	11–12	7	23–32

Sources: U.S. Department of Education; NAEP scores; interviews with state administrators in spring 2012; Common Core of Data.

Note: The characteristics reported in this table are unweighted state averages. A range is provided for the sample sizes because nonresponse varied across items. The results for non-RTT states shown in this table differ slightly from the results for non-RTT states shown in Table III.1 of an earlier report from this evaluation (Dragoset et al. 2015) because Texas did not participate in the spring 2012 interviews and was therefore excluded from Table III.1 in the earlier report.

<sup>a</sup> Alaska, North Dakota, Texas, and Vermont did not apply for RTT grants in any round and are excluded from this section of the table because they have no application scores.

<sup>b</sup> States were able to receive more than one SLDS grant across the three rounds of SLDS awards in 2005, 2007, and 2009.

<sup>c</sup>We identified the spring 2012 state interview questions that asked about RTT-promoted policies and practices used during 2007–2008. A higher number indicates that the state reported using more policies and practices promoted by RTT in school year 2007–2008. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008. Texas did not participate in the spring 2012 interviews and is excluded from this section of the table.

<sup>d</sup> This value represents the average number of full-time equivalent staff; a staff member who works part time is counted as a proportion of, rather than a whole, staff member. For example, two half-time employees are counted as one full-time equivalent staff member. The average numbers of full-time equivalent staff were rounded to the nearest thousand.

\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

The groups of states differed by a statistically significant margin at baseline on the following characteristics:

• **RTT Round 1 application scores.** As one might expect, the average total scores received from grant application reviewers for the Round 1 applications of both early and later RTT states (419 and 388) were higher than the average scores for non-RTT states that applied for but did not win RTT grants (323).<sup>30</sup> A maximum score of 500 points was possible (see U.S. Department of Education [2016a] for the scoring rubric). More than half of the points that a state's application could receive (260) were based on demonstrated accomplishments *prior* to applying—for example, increasing student achievement, enlisting statewide support for proposed plans, or creating legal conditions conducive to policy changes. Compared to non-RTT states that applied for RTT, both early and later RTT states had higher scores on these accomplishments (referred to as "state reform conditions" in the application citeria) prior to applying. The higher scores suggest potentially important preexisting differences between these groups of states. The balance of points that a state's application could receive was awarded based on the state's proposed policy plans. Both early and later RTT states had higher scores than non-RTT states that applied for RTT on these plans (referred to as "state reform plans" in the application criteria).

<sup>&</sup>lt;sup>30</sup> We focus on Round 1 scores to use scores from the greatest number of applicants. We would be missing 11 states if we used Round 2 scores (i.e., the 2 winning states from Round 1 and the 9 states that applied in Round 1 only but did not win a grant), whereas using Round 1 scores eliminates 6 states that only applied in Round 2.

- Policies and practices for teacher and principal certification and evaluation and for school turnaround. Both early and later RTT states reported using more RTT-promoted policies and practices in the 2007–2008 baseline year in the area of teacher and principal certification and evaluation (4.6 for early RTT states, 4.5 for later RTT states, 2.7 for non-RTT states). Later RTT states reported using more RTT-promoted policies and practices in the 2007–2008 baseline year in the school turnaround area (1.6 for later RTT states, 0.8 for non-RTT states).
- State education characteristics. Compared to non-RTT states at baseline, according to the Common Core of Data for 2007–2008, early RTT states had a higher percentage of students who were black (26.6 vs. 11.1 percent), a lower percentage of students who were white (50.9 vs. 69.2 percent), were more likely to be located in the south (58.3 vs. 25.0 percent), and had a smaller percentage of high schools (15.9 vs. 19.6 percent).

The groups of states did not differ to a statistically significant degree on the following baseline characteristics:

- Average 2007 NAEP scores for students in 4th grade and 8th grade in both reading and mathematics.
- Percentage of states that received at least one SLDS grant between 2005 and 2009, average number of SLDS grants received over that time period, and average amount of total SLDS grant funding received over that time period.<sup>31</sup>
- Percentage of states that received an SFSF grant and average amount of SFSF grant funding received.<sup>32</sup>
- Average number of RTT-promoted policies and practices in the 2007–2008 baseline year in the area of charter schools.
- State education characteristics. Later RTT states and non-RTT states did not differ by a statistically significant margin on any of the variables examined from the Common Core of Data for 2007–2008. Early RTT states and non-RTT states did not differ by a statistically significant margin in terms of the percentage of students who were Hispanic, Asian, or other race; the percentage of students eligible for free or reduced-price lunch; the percentage of schools eligible for Title I; the percentage of states from the Northeast, Midwest, and West; the percentage of elementary, middle, and other schools; or the number of full-time staff.

<sup>&</sup>lt;sup>31</sup> States were able to receive more than one SLDS grant across the three rounds of SLDS awards in 2005, 2007, and 2009.

<sup>&</sup>lt;sup>32</sup> It is important to understand whether RTT and other states differed in their receipt of SFSF grants and the amount of SFSF grant funding received because the SFSF grants were large (the average 2009 SFSF grant amount for early RTT states was \$1.16 billion) and were awarded to governors in exchange for a commitment to advance many of the same types of education reforms that were promoted by RTT, such as college- and career-ready standards and highquality, valid, and reliable assessments for all students; development and use of pre-K through post-secondary and career data systems; increasing teacher effectiveness and ensuring an equitable distribution of qualified teachers; and turning around the lowest-performing schools.

These results suggest that some important baseline differences existed between the groups of states before RTT efforts got underway. When interpreting this study's RTT findings, it will be important to keep these differences in mind. Any differences in policies and practices or student achievement in post-RTT years may not necessarily be attributable to the RTT program and instead may reflect pre-existing differences between the groups.

# IV. STATES' USE OF POLICIES AND PRACTICES PROMOTED BY RACE TO THE TOP

To understand the ultimate effectiveness of a grant program like RTT in improving student achievement, it is important first to understand the extent to which the policies and practices it promotes are being used by states. If none (or very few) of the RTT states used these policies and practices, it is unlikely that any changes in outcomes—positive or negative—could be attributed to the program. In this chapter, we assess the extent to which RTT and other states reported using policies and practices promoted by RTT.

As noted previously, RTT promoted specific policies in six topic areas. In this chapter, we summarize the extent to which state administrators reported in spring 2013 using RTT-promoted policies and practices in each of these topic areas and their subtopics. Appendix A presents more detailed findings for the subtopics. Appendix D presents changes over time in the use of these policies and practices.

### A. No significant differences between RTT and other states in use of practices in the state capacity area

A premise of RTT is that state education agencies can play a direct role in advancing statewide education policies. Thus, RTT aims to improve state capacity to support education policy. Section A of the RTT application, State Success Factors, focused on three subtopics: (1) articulating the state's education reform agenda and LEAs' participation in it; (2) building strong statewide capacity to implement, scale up, and sustain the proposed plans; and (3) demonstrating significant progress in raising achievement and closing achievement gaps. We collected data on the first two; no state interview questions aligned to the third subtopic, so it was excluded from the analysis.<sup>33</sup> The evaluation's state interviews asked about 10 policies and practices aligned with RTT objectives in this topic area (Table IV.1).

In spring 2013, there were no statistically significant differences between RTT and other states in the state capacity area. Early RTT states, later RTT states, and non-RTT states reported using an average of 7.1, 6.8, and 6.2 of the 10 RTT-promoted policies and practices in this area (Figure IV.1). Results for the two subtopics are shown in Appendix A, Figures A.1 and A.2.

<sup>&</sup>lt;sup>33</sup> To limit the interview length, we sought input from IES and the RTT program office on which questions were of greatest interest.

# Table IV.1. Policies and practices aligned with RTT objectives on state capacity, by subtopic

Articulating the State's education reform agenda and LEAs' participation in It

Having a comprehensive education reform plan in place

Prioritizing the adoption and implementation of college- and career-ready standards or assessments

Prioritizing the development of comprehensive, student-level, longitudinal data systems or using data to improve instruction

Prioritizing the recruiting, developing, rewarding, and retaining of effective teachers and principals, especially where they are needed most (including developing and implementing evaluation systems)

Prioritizing the turnaround of its lowest-achieving schools

Building strong statewide capacity to implement, scale up, and sustain the proposed plans

Providing leadership or teams to support the implementation of reform plans

- Working with districts that have the highest achievement levels and seeking to replicate their practices statewide to implement the education reform plan
- Providing effective and efficient operations and processes for grant oversight and performance measure tracking and reporting
- Involving teachers, teachers unions or associations, or school administrators in defining its education reform initiatives or priorities

Involving other stakeholders in defining its education reform initiatives or priorities

- Source: Section A of the RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and 2013.
- Note: The spring 2012 and spring 2013 state interviews asked whether these policies and practices were used during the current school year (either 2011–2012 or 2012–2013). See Appendix C for a list of the specific interview questions that were aligned with the RTT policies and practices in this table. See the RTT application for a detailed description of each subtopic.

LEA = local education agency.

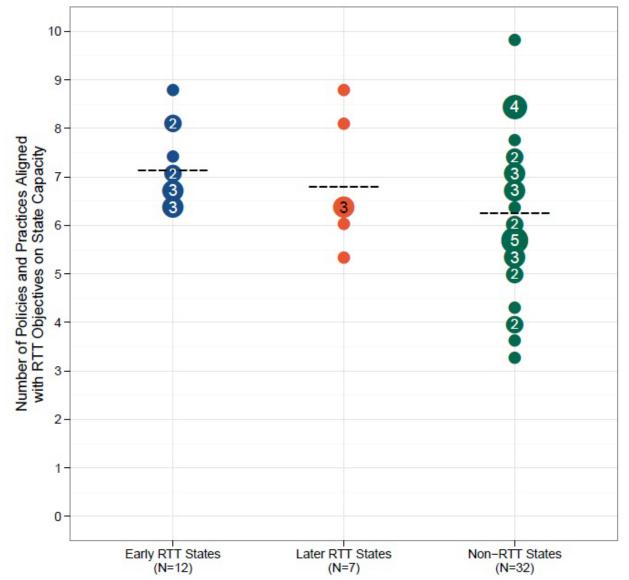


Figure IV.1. Use of policies and practices aligned with RTT objectives on state capacity

Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table IV.1. Each dot in this figure represents the number of states that reported using a particular number of policies and practices (out of 10 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, two non-RTT states reported using 5 of the 10 state capacity policies and practices aligned with the RTT application criteria. For 3 of the policies and practices, a "yes" response received one point. In the other 7 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of policies and practices for each state. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

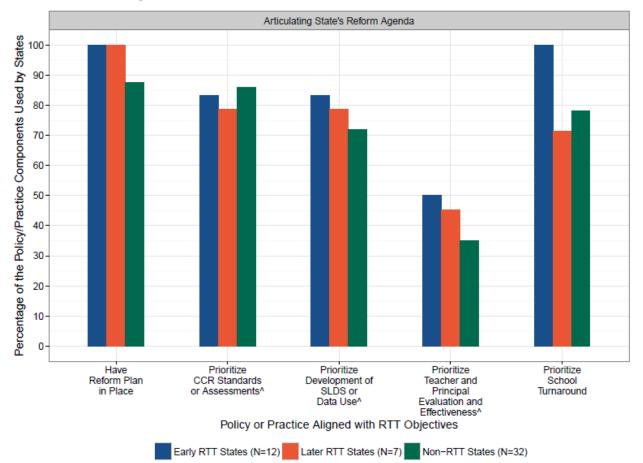
The two practices with the largest differences between early RTT and non-RTT states in the state capacity area were: (1) prioritizing school turnaround, with 100 percent of early RTT states and 78 percent of non-RTT states using this practice (Figure IV.2), and (2) working with districts that have the highest achievement levels and seeking to replicate their practices statewide to implement the education reform plan (with 83 percent of early RTT states and 57 percent of non-RTT states using this practice) (Figure IV.3).<sup>34,35</sup>

The practice with the largest difference between later RTT and non-RTT states in this area was providing effective and efficient operations and processes for grant oversight and performance measure tracking and reporting. On average, later RTT states used 81 percent of the components of this practice and non-RTT states used 62 percent (Figure IV.3).

There were several practices in this area for which states reported using most of the components of the practice: (1) having a comprehensive education reform plan in place, (2) prioritizing the adoption and implementation of college- and career-ready standards or assessments, (3) prioritizing school turnaround, and (4) providing leadership or teams to support the implementation of reform plans (Figures IV.2 and IV.3). The practice in this area with the fewest components used was involving other stakeholders in defining education reform initiatives or priorities (Figure IV.3).

<sup>&</sup>lt;sup>34</sup> Descriptive findings on individual practices with the largest differences between RTT and other states are shown for readers who may be interested in specific practices where large differences were reported. We did not conduct statistical tests to assess whether differences in individual practices between RTT and other states were statistically significant.

<sup>&</sup>lt;sup>35</sup> As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more relevant interview questions, we used those questions to calculate the percentage of questions to which the state responded "yes." This variable measures the percentage of the components of the policy or practice that each state used. We then calculated the average percentage across all states. For example, suppose a particular practice was addressed by a single interview question. If half of the states used that practice and the other half did not, then we would say that 50 percent of states used that practice. Some policies and practices were based on multiple interview questions (rather than a single interview question), so each state could use less than 100 percent of the components of these policies and practices. For example, the application criteria specified that the state use support from a broad group of stakeholders to implement its education policy plans. The interview included eight separate questions about whether each of eight types of stakeholders (such as local school boards and community organizations) were involved in defining the state's education policy plans. In this example, a state received 12.5 percent, or one-eighth of 100 percent, for each "yes" response. If half of the states responded "yes" to all eight questions and the other half responded "yes" to none of the eight questions, we would say that states, on average, used 50 percent of the components of this practice. As demonstrated by these two examples, in the report, for practices that were addressed by a single interview question, we indicate the *percentage of states* that used each practice. For practices that were addressed by multiple interview questions, we indicate the average percentage of the components of each practice that states used.



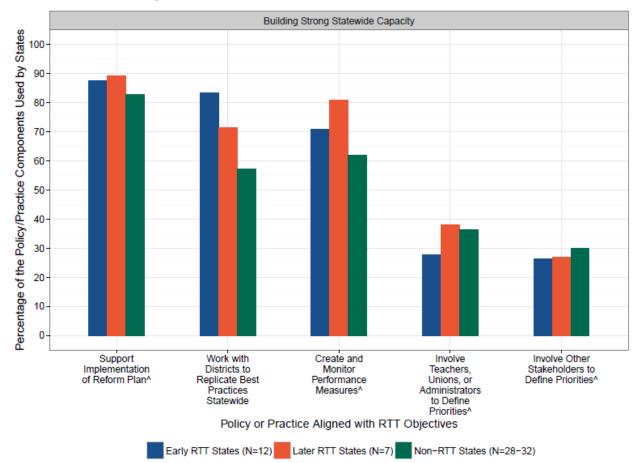
# Figure IV.2. Use of policies and practices aligned with RTT, articulating state's reform agenda subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used.

<sup>^</sup> Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

CCR = college and career ready; SLDS = state longitudinal data system.



# Figure IV.3. Use of policies and practices aligned with RTT, building strong statewide capacity subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

## **B.** Early RTT states reported using more standards and assessments practices than non-RTT states

One goal of RTT is for states to use standards and assessments that prepare students to succeed in college and the workplace, and to compete in the global economy. The Standards and Assessments section of the RTT application (section B) focused on three subtopics: (1) developing and adopting common standards; (2) developing and implementing common, high-quality assessments; and (3) supporting the transition to enhanced standards and high-quality assessments. The study's state interviews asked about 10 policies and practices aligned with RTT objectives in this topic area (Table IV.2).

## Table IV.2. Policies and practices aligned with RTT objectives on standards and assessments, by subtopic

Developing and adopting common standards

Adopting the Common Core State Standards (CCSS) in both English/language arts and math

Developing and implementing common, high-quality assessments

Participating in a consortium of states to develop assessments aligned to CCSS

Specifying the school year by which state plans to fully implement summative assessments being developed by the consortium

Supporting the transition to enhanced standards and high-quality assessments

Supporting the implementation of CCSS by providing funds for additional staff or making new technology investments

Supporting the implementation of the assessments associated with the CCSS by making new technology investments

Requiring or supporting the use of new instructional materials for implementing the CCSS

Developing, supporting, or requiring new interim assessments associated with the CCSS

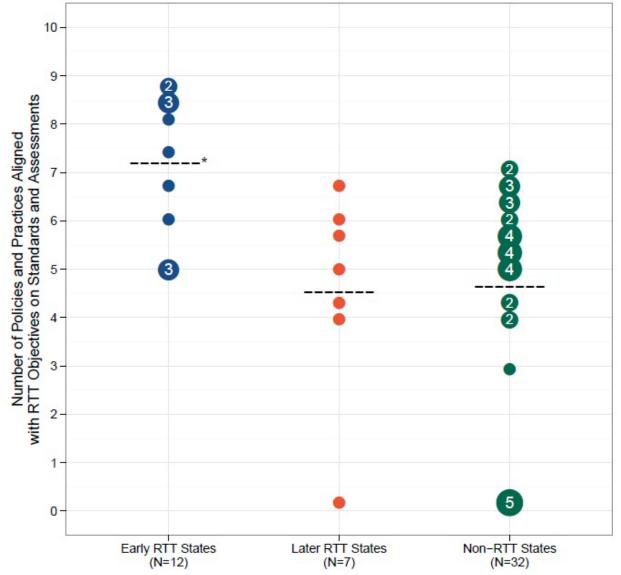
Changing high school exit requirements or college entrance requirements

Changing policies about or providing funds for professional development, training, and technical assistance for teachers or school principals to support implementation of CCSS

Supporting districts or schools in implementing the CCSS with English language learners

- Source: Section B of the RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and 2013.
- Note: The spring 2012 and spring 2013 state interviews asked whether these policies and practices were used during the current school year (either 2011–2012 or 2012–2013). See Appendix C for a list of interview questions that were aligned with the RTT policies and practices in this table. See the RTT application for a detailed description of each subtopic.

In spring 2013, early RTT states reported using more RTT-promoted policies and practices in the standards and assessments area than non-RTT states. Early RTT states reported using an average of 7.2 out of 10 policies and practices in this area, compared to 4.6 for non-RTT states (Figure IV.4). Baseline data on policies and practices in this area were not collected, so we could not determine whether this difference existed before RTT grants were awarded.



# Figure IV.4. Use of policies and practices aligned with RTT objectives on standards and assessments

Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table IV.2. Each dot in this figure represents the number of states that reported using a particular number of policies and practices (out of 10 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, three early RTT states reported using 5 of the 10 standards and assessment policies and practices aligned with the RTT application criteria. For 5 of the policies and practices, a "yes" response received one point. In the other 5 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of policies and practices for each state. The dashed line denotes the average number of policies and practices for each group of states.

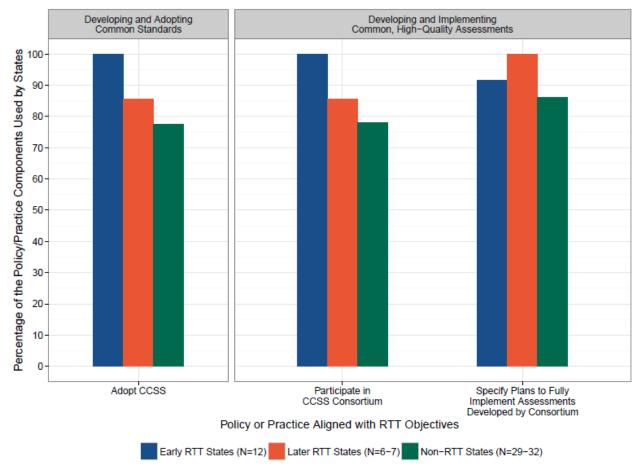
\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

In spring 2013, for one of the three standards and assessment subtopics, early RTT states reported using more RTT-promoted policies and practices than non-RTT states. Results for the three subtopics are shown in Appendix A, Figures A.3 through A.5, and results for individual policies and practices are shown below in Figures IV.5 and IV.6. Early RTT states reported using an average of 4.3 out of 7 policies and practices in the subtopic focused on supporting the transition to enhanced standards and high-quality assessments, compared to 2.3 for non-RTT states (Appendix A, Figure A.5). Therefore, it may not be surprising to find that the practice with the largest difference between the two groups of states was a practice in this subtopic—supporting the implementation of the CCSS by providing funds for additional staff or making new technology investments. On average, early RTT states used 71 percent of the components of this practice and non-RTT states used 16 percent (Figure IV.6).

The practice with the largest difference between later RTT and non-RTT states in this area was supporting districts or schools in implementing the CCSS with English language learners. On average, a smaller percentage of later RTT states than non-RTT states used this practice (43 versus 69 percent) (Figure IV.6).

There were some practices that most states reported using in this area: (1) adopting the CCSS in both English/language arts and math, (2) participating in a consortium of states to develop assessments aligned to CCSS, and (3) specifying the school year by which the state plans to fully implement summative assessments developed by the consortium in which the state participated (Figure IV.5). In contrast, states reported using few of the components of the following practices: (1) developing, supporting, or requiring new interim assessments associated with the CCSS and (2) changing high school exit requirements or college entrance requirements (Figure IV.6).

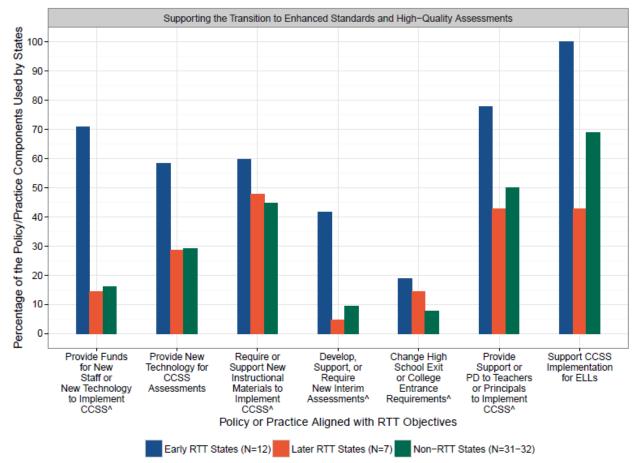
# Figure IV.5. Use of policies and practices aligned with RTT, developing and adopting common standards subtopic and developing and implementing common, high-quality assessments subtopic



Source: Interviews with state administrators in spring 2013.

Note: This figure has a separate panel for each subtopic. As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.





# Figure IV.6. Use of policies and practices aligned with RTT, supporting the transition to enhanced standards and high-quality assessments subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

CCSS = Common Core State Standards; ELLs = English language learners; PD = professional development.

# C. No significant differences between RTT and other states in use of practices in the data systems area

One aim of RTT is for states to develop data systems that measure student achievement growth and success and to use those systems to inform teachers' and principals' efforts to improve instruction. Section C of the RTT application, Data Systems to Improve Instruction, focused on three subtopics: (1) fully implementing an SLDS, (2) accessing state data and using it to inform key stakeholders, and (3) using data to improve instruction. The evaluation's state interviews asked about eight policies and practices aligned with RTT objectives in this area (Table IV.3).

# Table IV.3. Policies and practices aligned with RTT objectives on data systems, by subtopic

Fully implementing an SLDS

Having an SLDS

SLDS contains program participation information<sup>a</sup>

SLDS is linked to an early childhood data system

SLDS is linked to a higher education data system

Accessing state data and using it to inform key stakeholders

SLDS can be accessed by stakeholders

SLDS is used to inform and engage stakeholders and support decision makers in continuous improvement efforts

Using data to improve instruction

Requiring districts to implement district data systems<sup>b</sup>

- Providing funding, materials, training, technical assistance, or other supports to districts to encourage the use of data to improve instruction
- Source: Section C of the RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and 2013.
- Note: The spring 2012 and spring 2013 state interviews asked whether these policies and practices were used during the current school year (either 2011–2012 or 2012–2013). See Appendix C for a list of interview questions that were aligned with the RTT policies and practices in this table. See the RTT application for a detailed description of each subtopic.

<sup>a</sup> The interview questions comprising this policy or practice focused primarily on ELLs. See Appendix C for the interview questions that comprised each policy or practice.

<sup>b</sup> District data systems, which also are called local instructional improvement systems, are defined by the U.S. Department of Education in the RTT application materials as technologically based tools or strategies that provide educators with data to manage continuous instructional improvement efforts.

There were no differences in spring 2013 between RTT and other states in the data systems area. Early RTT states, later RTT states, and non-RTT states reported using averages of 6.6, 6.6, and 5.8 of the 8 RTT-promoted policies and practices in this area (Figure IV.7). Results for the three subtopics are shown in Appendix A, Figures A.6 through A.8.

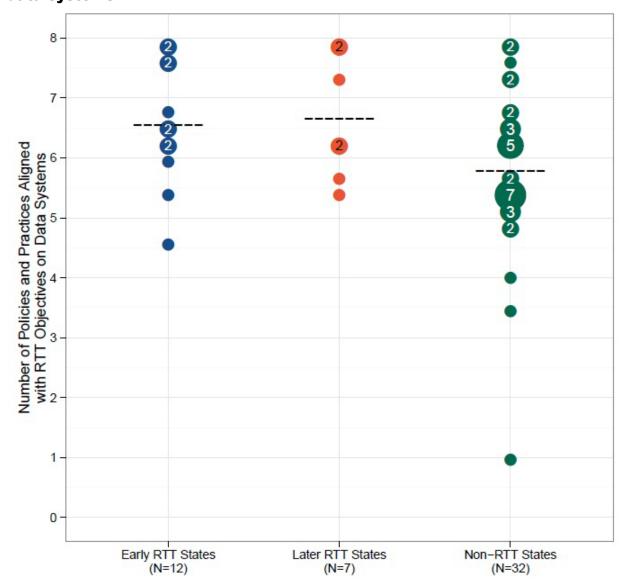


Figure IV.7. Use of policies and practices aligned with RTT objectives on data systems

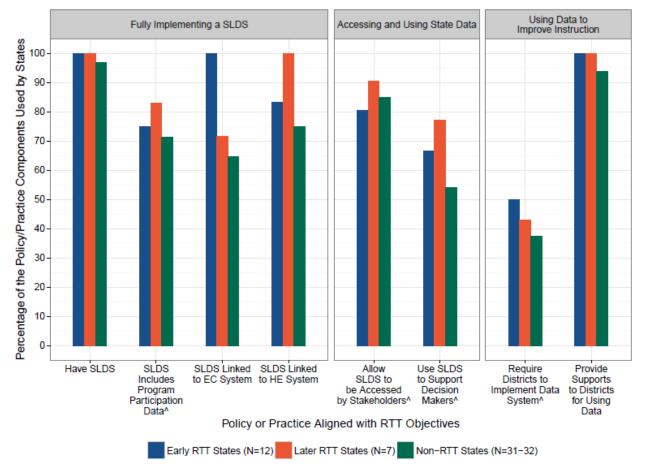
Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table IV.3. Each dot in this figure represents the number of states that reported using a particular number of policies and practices (out of eight examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, one non-RTT state reported using four of the eight data systems policies and practices aligned with the RTT application criteria. For five of the policies and practices, a "yes" response received one point. In the other three cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of policies and practices for each state. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

The largest difference between early RTT and non-RTT states in this area was having an SLDS linked to an early childhood data system. On average, 100 percent of early RTT states used this practice, compared with 65 percent of non-RTT states (Figure IV.8). The two practices with the largest differences between later RTT and non-RTT states in this area were (1) having an SLDS

linked to a higher education data system (with 100 percent of later RTT states and 75 percent of non-RTT states using this practice), and (2) using the SLDS to inform and engage stakeholders and support decision makers in continuous improvement efforts (with later RTT states and non-RTT states using, on average, 77 and 54 percent of the components of this practice) (Figure IV.8). There were several practices that nearly all states reported using including: (1) having an SLDS, and (2) providing funding, materials, training, technical assistance, or other supports to districts to encourage the use of data to improve instruction (Figure IV.8).





Source: Interviews with state administrators in spring 2013.

Note: This figure has a separate panel for each subtopic. As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

EC = early childhood; HE = higher education; SLDS = statewide longitudinal data system.

# **D.** RTT states reported using more teacher and principal certification and evaluation practices than other states

Recruiting, developing, rewarding, and retaining effective teachers and principals, especially in high-poverty schools and districts where they are needed most, is one key objective of RTT. The teacher and principal certification and evaluation section of the RTT application (section D) placed specific emphasis on five subtopics: (1) providing high-quality pathways to certification for aspiring teachers and principals, (2) improving teacher and principal effectiveness based on performance, (3) ensuring equitable distribution of effective teachers and principals, (4) improving the effectiveness of teacher and principal preparation programs, and (5) providing effective support to teachers and principals. We collected data on the first four subtopics, through state interview questions about 39 policies and practices aligned with RTT objectives in this area (Table IV.4). No state interview questions aligned to the fifth subtopic, so it was excluded from the analysis.

**RTT states reported using more RTT-promoted policies and practices in the teacher and principal certification and evaluation area in spring 2013 than other states.** Early and later RTT states reported using 14.4 and 12.9 of the 39 policies and practices in this area, on average, compared to 7.8 for other states (Figure IV.9). However, for both early and later RTT states, baseline data on 12 of these 39 policies and practices show that a difference between the RTT and other states existed prior to the awarding of RTT grants for some policies and practices. In particular, in 2007–2008, early and later RTT states reported, on average, using 4.6 and 4.5 of these 12 policies and practices, compared to 2.7 for other states. (Baseline data were not collected for the other 27 policies and practices, so we could not determine whether there were baseline differences for the topic area as a whole.)

In spring 2013, for three of the four teacher and principal certification and evaluation subtopics, early RTT states reported using more RTT-promoted policies and practices than non-RTT states (results for the four subtopics are shown in Appendix A, Figures A.9 through A.12, and results for individual policies and practices are shown below in Figures IV.10 through IV.15):

- **Providing high-quality pathways to certification for aspiring teachers and principals.** Early RTT states reported using an average of 6.0 out of 14 policies and practices in this area, compared to 4.1 for non-RTT states (Appendix A, Figure A.9).
- Improving teacher and principal effectiveness based on performance. Similarly, early RTT states reported using 7.6 out of 15 policies and practices in this area on average, compared to 3.4 for non-RTT states (Appendix A, Figure A.10). The practice with the largest difference between early RTT and non-RTT states—specifying a required minimum number of rating categories to be used when evaluating principals—fell in this subtopic. On average, 92 percent of early RTT states used this practice, compared with 43 percent of non-RTT states (Figure IV.13).
- Ensuring equitable distribution of effective teachers and principals. In this subtopic, early RTT states indicated that they used an average of 0.7 out of 4 policies and practices, relative to 0.2 for non-RTT states (Appendix A, Figure A.11).

## Table IV.4. Policies and practices aligned with RTT objectives on teacher and principal certification and evaluation

Providing high-quality pathways to certification for aspiring teachers and principals

Authorizing or expanding institutions qualified to operate alternative-route programs for teachers or principals<sup>a</sup> Increasing the selectivity of alternative-route programs for teachers or principals

Increasing the amount of mentoring for participants in certification programs or the time such participants spend in school-based learning experiences for teachers or principals

Allowing alternative-route programs to award the same type of certification as traditional preparation programs for teachers or principals

Operating alternative-route programs for teachers or principals<sup>a</sup>

Identifying areas of shortages for teachers or principals

Addressing areas of shortage for teachers or principals

Improving teacher and principal effectiveness based on performance

Requiring districts to use student growth in evaluations and specifying the extent to which student achievement growth must factor into evaluations of teachers or principals<sup>a</sup>

Requiring multiple performance measures for evaluations of teachers or principals<sup>a</sup>

Specifying a required minimum number of rating categories to be used when evaluating teachers or principals<sup>a</sup> Conducting annual evaluations of teachers<sup>a,b</sup>

Requiring evaluations to inform decisions about professional development and support for teachers or principals Requiring evaluations to inform decisions about compensation for teachers or principals

Requiring evaluations to inform decisions about career advancement for teachers or principals

Requiring evaluations to inform decisions about dismissal of teachers or principals

Ensuring equitable distribution of effective teachers and principals

Requiring districts or schools to use strategies to promote a more equitable distribution of effective teachers or principals

Analyzing effectiveness based on student achievement growth to determine whether the distribution of effective teachers or principals has shifted

Improving the effectiveness of teacher and principal preparation programs

Using effectiveness ratings (based in part on student achievement growth) to assess the effectiveness of certification programs for teachers or principals<sup>a</sup>

Publicly reporting results from evaluations of certification program effectiveness for teachers or principals Using results from evaluations of certification programs to provide additional funds for, expand, or promote certification programs that were shown to be effective for teachers or principals

- Source: Section D of the RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and spring 2013.
- Note: The phrase "teachers or principals" indicates that we analyzed two separate practices: one focused on teachers and one focused on principals. The spring 2012 and 2013 state interviews asked whether these policies and practices were used during the current school year (either 2011–2012 or 2012–2013). The spring 2012 state interview asked whether a subset of these policies and practices were used during the 2007–2008 school year. See Appendix C for a list of interview questions that were aligned with the RTT policies and practices in this table. See the RTT application for a detailed description of each subtopic. Most of the rows in this table describe two separate practices (one for teachers, one for principals).

<sup>a</sup> The spring 2012 state interview asked whether this policy or practice was used during the 2007–2008 school year.

<sup>b</sup> The state interview did not ask about this policy or practice for principals.

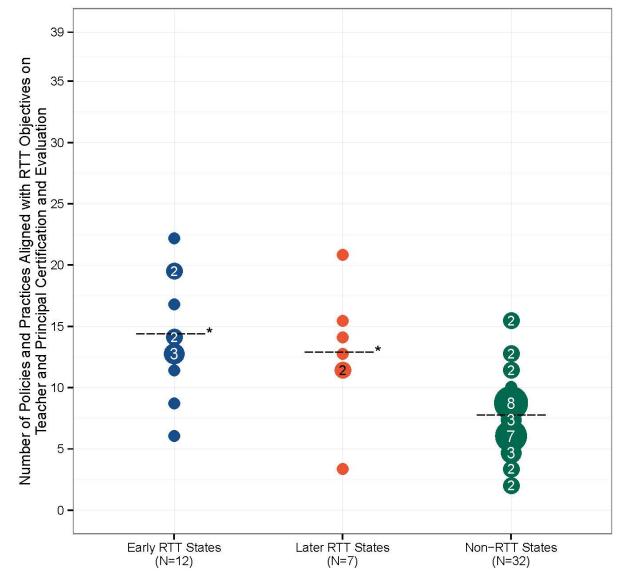


Figure IV.9. Use of policies and practices aligned with RTT objectives on teacher and principal certification and evaluation

Source: Interviews with state administrators in spring 2013.

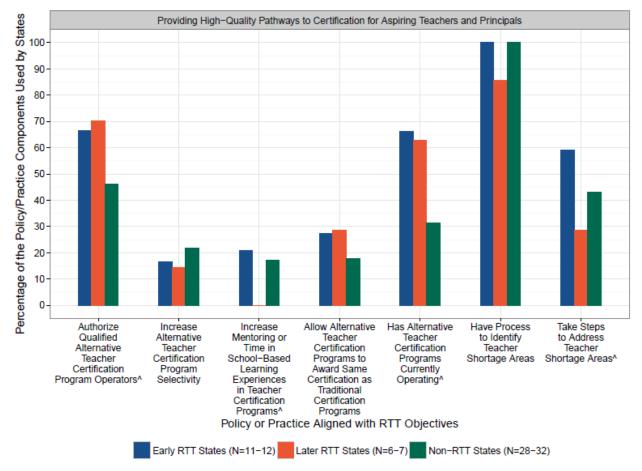
Note: The policies and practices summarized in this figure are presented in Table IV.4. Each dot in this figure represents the number of states that reported using a particular number of policies and practices (out of 39 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, two non-RTT states reported using slightly more than 15 of the 39 teacher and principal certification and evaluation policies and practices aligned with the RTT application criteria. For 25 of the policies and practices, a "yes" response received one point. In the other 14 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of policies and practices for each state. The dashed line denotes the average number of policies and practices for each group of states.

\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

For one of the four teacher and principal certification and evaluation subtopics, later RTT states reported using more RTT-promoted policies and practices in spring 2013 than non-RTT states. In particular, later RTT states reported using an average of 7.4 out of 15 policies and practices in the subtopic focused on improving teacher and principal effectiveness based on performance, compared to 3.4 for non-RTT states (Appendix A, Figure A.10). Given the significant findings for this subtopic, perhaps it is not surprising that the two practices with the largest differences between later RTT and non-RTT states fell in this area. They were: (1) requiring evaluations to inform decisions about dismissal of teachers (with 71 percent of later RTT states and 22 percent of non-RTT states using this practice), and (2) requiring evaluations to inform decisions about dismissal of principals (with 57 percent of later RTT states and 10 percent of non-RTT states using this practice) (Figures IV.12 and IV.13).

We found that nearly all states reported using one practice—identifying teacher shortage areas (Figure IV.10). In contrast, there were several practices that no states reported using including: (1) using results from evaluations of certification programs to provide additional funds for, expand, or promote certification programs that were shown to be effective for teachers; (2) doing the same for certification programs that were shown to be effective for principals; and (3) publicly reporting results from evaluations of certification program effectiveness for principals (Figure IV.15).

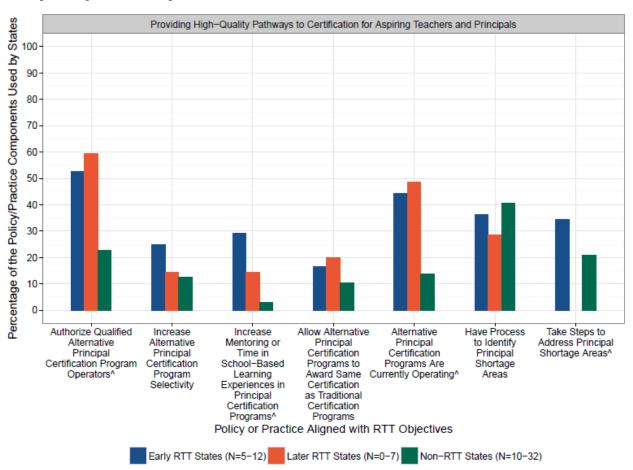




Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.



# Figure IV.11. Use of principal-focused policies and practices aligned with RTT, providing high-quality pathways to certification for aspiring teachers and principals subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items. The questions selected for the last practice in this figure (taking steps to address principal shortage areas) were only asked of states that reported having principal shortage areas. None of the later RTT states reported having a principal shortage area, so this group is missing a bar for this practice.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

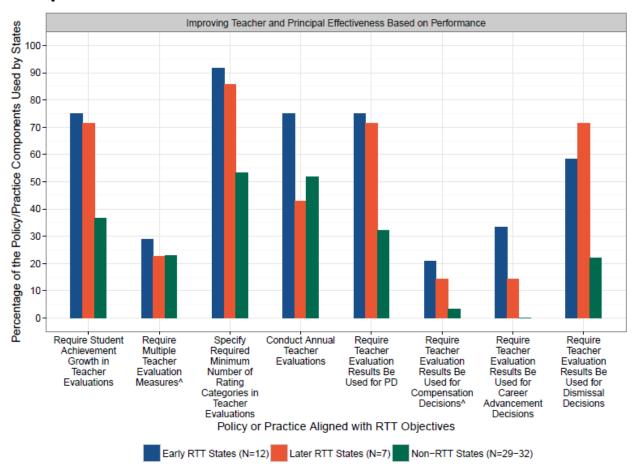


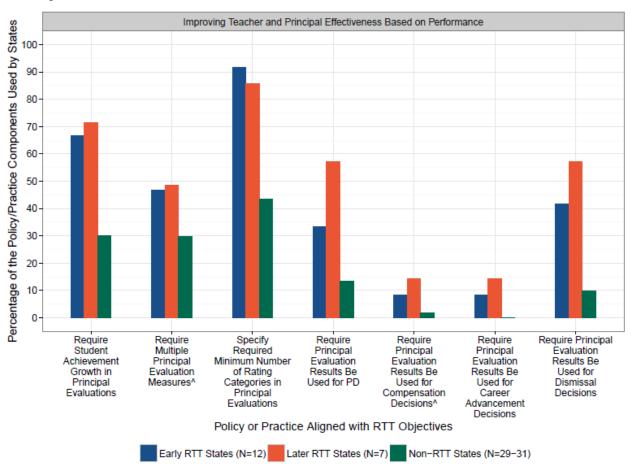
Figure IV.12. Use of teacher-focused policies and practices aligned with RTT, improving teacher and principal effectiveness based on performance subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

PD = professional development.



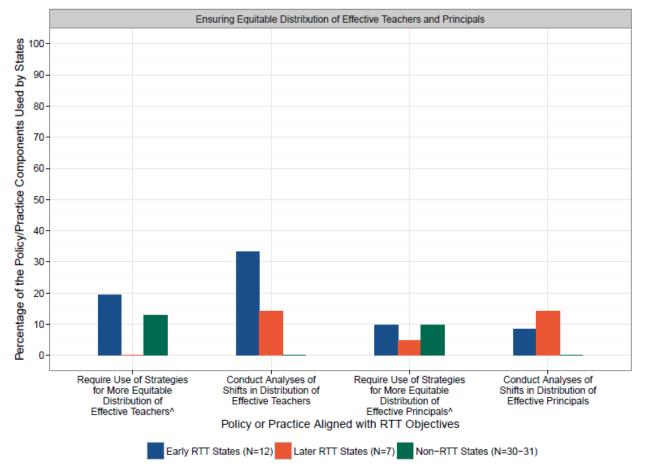
# Figure IV.13. Use of principal-focused policies and practices aligned with RTT, improving teacher and principal effectiveness based on performance subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

<sup>^</sup> Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

PD = professional development.

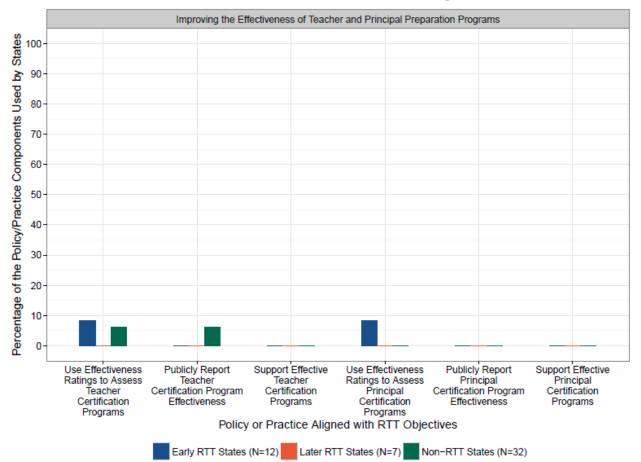


# Figure IV.14. Use of policies and practices aligned with RTT, ensuring equitable distribution of effective teachers and principals subtopic

Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

<sup>^</sup> Multiple interview questions were used to assess whether states used all of the components of this policy or practice.



# Figure IV.15. Use of policies and practices aligned with RTT, improving the effectiveness of teacher and principal preparation programs subtopic

- Source: Interviews with state administrators in spring 2013.
- Note: As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used.

## E. Early RTT states reported using more school turnaround practices than non-RTT states

Turning around the nation's persistently lowest-achieving schools is another goal of RTT. Two subtopics were included in the turnaround section of the RTT application (section E): (1) authority to intervene in the lowest-achieving schools and LEAs, and (2) turning around the lowest-achieving schools. The evaluation's state interviews asked about 10 policies and practices aligned with RTT objectives in this area (Table IV.5).

### Table IV.5. Policies and practices aligned with RTT objectives on school turnaround, by subtopic

Authority to intervene in the lowest-achieving schools and LEAs

Having the authority to take over failing schools<sup>a</sup>

Turning around the lowest-achieving schools

Providing training to the lowest-achieving schools or LEAs on analyzing student assessment data to improve instruction

Helping the lowest-achieving schools or LEAs align curricula to state standards

- Providing training to the lowest-achieving schools or LEAs on identifying and implementing effective curricula, instructional strategies, or school intervention models, or developing and implementing a school improvement plan
- Providing training to the lowest-achieving schools or LEAs on identifying and implementing strategies to address the needs of ELLs
- Providing technical assistance to the lowest-achieving schools or LEAs on improving the quality of professional development
- Providing operational flexibility and support to lowest-achieving schools or LEAs with regard to staffing and budgeting<sup>a</sup>
- Implementing or providing technical assistance on strategies to recruit and retain effective teachers (such as financial incentives)

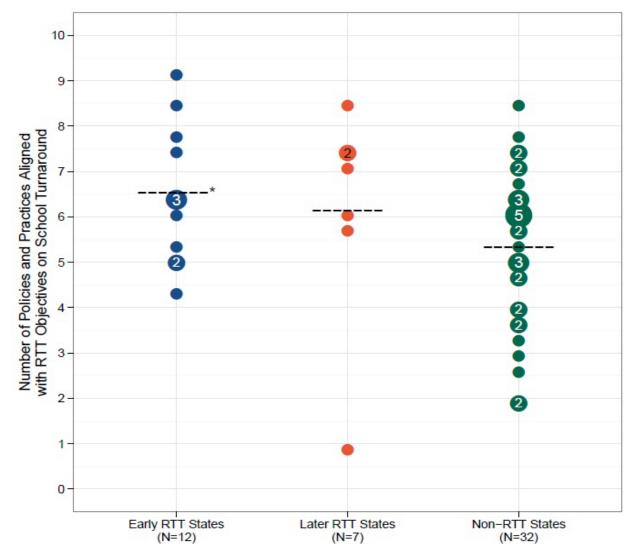
Having teacher tenure rules that affect placement in or removal from the lowest-achieving schools<sup>a</sup>

Having state-level administrative structures intended to support school turnaround efforts<sup>a</sup>

- Source: Section E of the RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and spring 2013.
- Note: The spring 2012 and spring 2013 state interviews asked whether these policies and practices were used during the current school year (either 2011–2012 or 2012–2013). The spring 2012 state interview asked whether a subset of these policies and practices were used during the 2007–2008 school year. See Appendix C for a list of interview questions that were aligned with the RTT policies and practices in this table. See the RTT application for a detailed description of each subtopic.

<sup>a</sup> The spring 2012 state interview asked whether this policy or practice was used during the 2007–2008 school year. ELL = English language learner; LEA = local education agency.

In spring 2013, early RTT states reported using more RTT-promoted policies and practices in the school turnaround area than non-RTT states. Early RTT states reported using an average of 6.5 of the 10 policies and practices in this area, compared to 5.3 for non-RTT states (Figure IV.16). For 5 of these 10 policies and practices, no significant difference between early and non-RTT states existed before the awarding of RTT grants. (Baseline data were not collected for the other 5 policies and practices in this area, so we could not determine whether there were baseline differences for this topic area as a whole.)



## Figure IV.16. Use of policies and practices aligned with RTT objectives on school turnaround

Source: Interviews with state administrators in spring 2013.

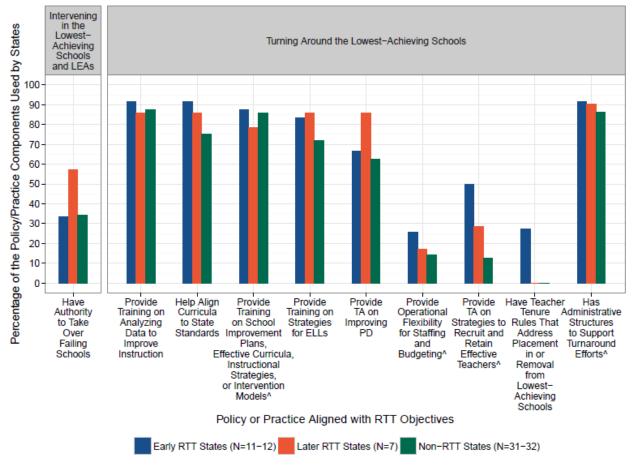
Note: The policies and practices summarized in this figure are presented in Table IV.5. Each dot in this figure represents the number of states that reported using a particular number of policies and practices (out of 10 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, three non-RTT states reported using 5 of the 10 school turnaround policies and practices aligned with the RTT application criteria. For 6 of the policies and practices, a "yes" response received one point. In the other 4 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of policies and practices for each state. The dashed line denotes the average number of policies and practices for each group of states.

\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

For one of the two school turnaround subtopics, early RTT states reported using more RTT-promoted policies and practices than non-RTT states in spring 2013. Results for the two subtopics are shown in Appendix A, Figures A.13 and A.14, and results for individual policies and practices are shown below in Figure IV.17. Early RTT states reported using an average of 6.2 out of 9 policies and practices in the subtopic focused on turning around the lowest-achieving schools, compared to 5.0 for non-RTT states (Appendix A, Figure A.14). Therefore, it may not be surprising that the practice in this area with the largest difference between the two groups of states fell in this subtopic—implementing or providing technical assistance on strategies to recruit and retain effective teachers (such as financial incentives). On average, early RTT states used 50 percent of the components of this practice and non-RTT states used 13 percent (Figure IV.17).

The two practices in this area with the largest differences between later and non-RTT states were: (1) providing technical assistance to the lowest-achieving schools or LEAs on improving the quality of professional development (with 86 percent of later RTT states and 63 percent of non-RTT states using this practice) and (2) having the authority to take over failing schools (with 57 percent of later RTT states and 34 percent of non-RTT states using this practice) (Figure IV.17).

We found several practices in this area for which states reported using most of each practice's components: (1) providing training on analyzing data to improve instruction, (2) providing training to the lowest-achieving schools or LEAs on identifying and implementing effective curricula, instructional strategies, or school intervention models, or developing and implementing a school improvement plan, and (3) having administrative structures to support turnaround efforts (Figure IV.17). In contrast, very few states reported having teacher tenure rules that affect placement in or removal from the lowest-achieving schools (Figure IV.17).



## Figure IV.17. Use of policies and practices aligned with RTT objectives on school turnaround

Source: Interviews with state administrators in spring 2013.

Note: This figure has a separate panel for each subtopic. As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

<sup>^</sup> Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

ELLs = English language learners; LEA = local education agency; PD = professional development; TA = technical assistance.

### F. Early RTT states reported using more charter school practices than non-RTT states

RTT intends to foster an environment in which charter and other innovative schools can grow and thrive. One part of Section F of the RTT application, State Reform Conditions, focused on ensuring successful conditions for high-performing charter schools and other innovative schools.<sup>36</sup> The application focused on two subtopics related to charter schools: (1) eliminating restrictions on charter school creation and enrollment, and (2) refining charter school authorization and monitoring processes. The state interviews for the evaluation asked about four policies and practices aligned with RTT objectives in this area (Table IV.6).

## Table IV.6. Policies and practices aligned with RTT objectives on charter schools, by subtopic

Eliminating restrictions on charter school creation and enrollment

Having no restrictions on the creation of new charter schools or charter enrollment<sup>a</sup>

Refining charter school authorization and monitoring processes

In considering applications for new charter schools, giving priority to schools that propose to address the needs of ELLs or that target ELLs

Monitoring the academic performance of charter schools<sup>a</sup>

Monitoring the non-academic performance of charter schools<sup>a</sup>

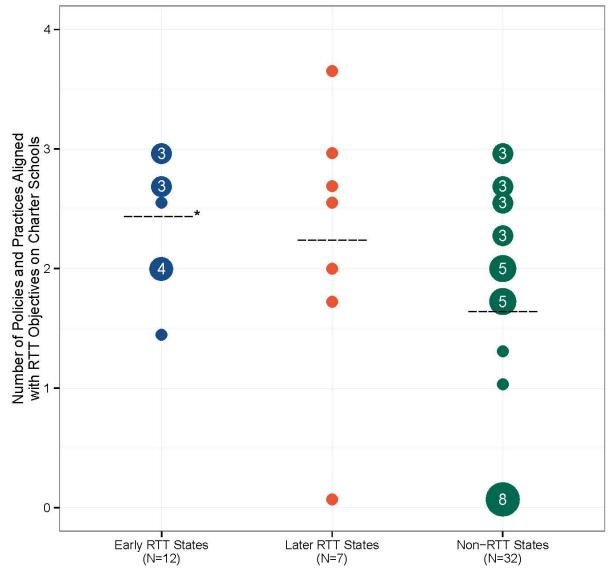
Source: Section F of the RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and spring 2013.

Note: The spring 2012 and 2013 state interviews asked whether these policies and practices were used during the current school year (either 2011–2012 or 2012–2013). The spring 2012 state interview asked whether a subset of these policies and practices were used during the 2007–2008 school year. See Appendix C for a list of interview questions that were aligned with the RTT policies and practices in this table. See the RTT application for a detailed description of each subtopic.

<sup>a</sup> The spring 2012 state interview asked whether this policy or practice was used during the 2007–2008 school year. ELLs = English language learners.

In spring 2013, early RTT states reported using more RTT-promoted policies and practices in the charter school area than non-RTT states. Early RTT states reported using an average of 2.4 out of 4 policies and practices in this area, compared to 1.6 for non-RTT states (Figure IV.18). For three of these four charter school policies and practices, no significant difference between the groups existed before the awarding of RTT grants. (Baseline data were not collected for the fourth practice, so we could not determine whether there were baseline differences for this topic area as a whole.)

<sup>&</sup>lt;sup>36</sup> The other reform areas mentioned in Section F of the RTT application (Making Education Funding a Priority and Demonstrating Other Significant Reform Conditions) did not focus on charter schools and are excluded from this analysis.



### Figure IV.18. Use of policies and practices aligned with RTT objectives on charter schools

Source: Interviews with state administrators in spring 2013.

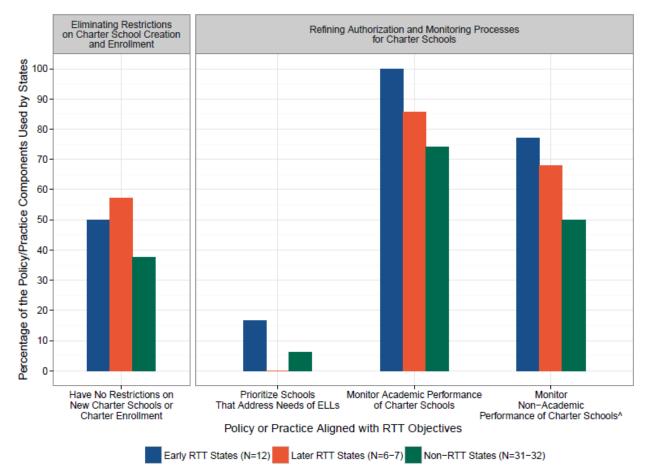
Note: The policies and practices summarized in this figure are presented in Table IV.6. Each dot in this figure represents the number of states that reported using a particular number of policies and practices (out of four examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, five non-RTT states reported using two of the four charter school policies and practices aligned with the RTT application criteria. For three of the policies and practices, a "yes" response received one point. In the fourth case, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of policies and practices for each state. The dashed line denotes the average number of policies and practices for each group of states.

\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

In spring 2013, for one of the two charter school subtopics, early RTT states reported using more RTT-promoted policies and practices than non-RTT states. Results for the two subtopics are shown in Appendix A, Figures A.15 and A.16, and results for individual policies and practices are shown below in Figure IV.19. Early RTT states reported using an average of 1.9 out of 3 policies and practices in the subtopic focused on refining authorization and monitoring processes, compared to 1.3 for non-RTT states (Appendix A, Figure A.16). Therefore, it may not be a surprise that the two practices in this area with the largest differences between these groups of states were from this subtopic: (1) monitoring the non-academic performance of charter schools (with early RTT states using, on average, 77 percent of the components of this practice and non-RTT states using 50 percent), and (2) monitoring the academic performance of charter schools (with 100 percent of early RTT states and 74 percent of non-RTT states using this practice) (Figure IV.19).

The two practices with the largest differences between later RTT and non-RTT states in this area were: (1) having no restrictions on the creation of new charter schools or charter enrollment (with 57 percent of later RTT states and 38 percent of non-RTT states using this practice), and (2) monitoring the non-academic performance of charter schools (with later RTT states using, on average, 68 percent of the components of this practice and non-RTT states using 50 percent) (Figure IV.19).

We found that most states reported monitoring the academic performance of charter schools (Figure IV.19). However, very few states reported giving priority to schools that proposed to address the needs of ELLs or that targeted ELLs when considering applications for new charter schools (Figure IV.19).



### Figure IV.19. Use of policies and practices aligned with RTT objectives on charter schools

Source: Interviews with state administrators in spring 2013.

Note: This figure has a separate panel for each subtopic. As described in Appendix A, for each policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

<sup>^</sup> Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

ELLs = English language learners.

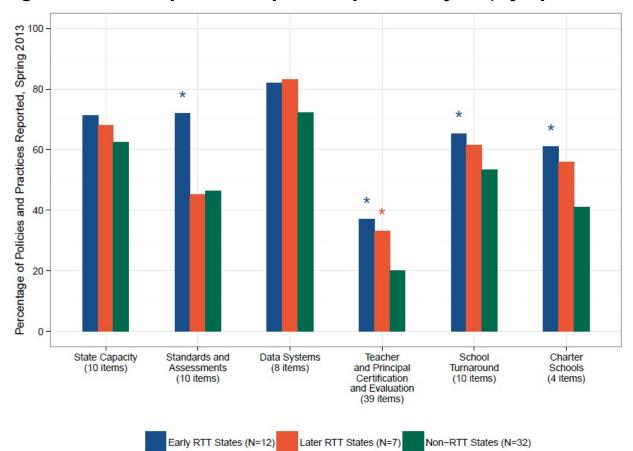
#### G. Summary

This chapter examined the extent to which RTT and other states reported using RTTpromoted policies and practices in spring 2013 in six areas.

Early RTT states reported using more RTT-promoted policies and practices than non-RTT states in four of six areas (the areas of state capacity and data systems were the exceptions), with differences ranging from 0.8 to 6.6 policies and practices per area (Figure IV.20). Later RTT states also reported using more RTT-promoted policies and practices than non-RTT states, but only in one of the six areas (the area of teacher and principal certification and evaluation), with a difference of 5.1 policies and practices (Figure IV.20). These differences were not necessarily caused by RTT. In fact, among the three areas for which we collected baseline data on a subset of policies and practices, we found that, for one area, a difference between early RTT and non-RTT states existed at baseline prior to the RTT program, and for two areas, a difference between later RTT and non-RTT states existed prior to the RTT program (Table III.1).

Although the findings in this chapter focus on averages for the three groups of states (early RTT, later RTT, non-RTT), it is important to keep in mind that there was substantial variation in use of RTT-promoted policies and practices within each group. As a result, there was considerable overlap across groups in all six areas. In other words, some non-RTT states used more RTT-promoted policies and practices than the average number used by RTT states (Figures IV.1, IV.4, IV.7, IV.9, IV.16, and IV.18); in the figures, these states are the ones in the third column of (green) dots that are above the dashed average lines that are shown for the first and second columns of (red and blue) dots. In addition, some RTT states (Figures IV.1, IV.4, IV.7, IV.9, IV.16, and IV.18); in the figures, these states used fewer RTT-promoted policies that the average number used in non-RTT states (Figures IV.1, IV.4, IV.7, IV.9, IV.16, and IV.18); in the figures, these states used fewer RTT-promoted policies and practices that the average number used in non-RTT states (Figures IV.1, IV.4, IV.7, IV.9, IV.16, and IV.18); in the figures, these states are the ones in the third columns of (red and blue) dots that are below the dashed average line that is shown for the third column of (green) dots.

Across all states, use of RTT-promoted policies and practices was highest in the data systems area, because states used the most policies and practices relative to what was promoted by RTT for this area. Across all states, use of RTT-promoted policies and practices was lowest in the teacher and principal certification and evaluation area, because states used the fewest policies and practices relative to what was promoted by RTT for this area. States reported using, on average, 76 percent of RTT-promoted policies and practices in the data systems area, and 26 percent of RTT-promoted policies and practices in the teacher and principal certification and evaluation area (Figure IV.20).





Source: Interviews with state administrators in spring 2013.

Note: The total number of policies and practices (shown in parentheses under each bar) differs by topic area. The number of policies and practices that we examined for each area was directly related to the amount of emphasis placed on each area in the RTT application criteria. This figure reads as follows (using the first bar on the left as an example): early RTT states reported using 71 percent of the policies and practices in the state capacity area, or 7.1 out of 10 policies and practices examined in that area.

\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

Across all policies and practices, the practice with the largest difference between early RTT and non-RTT states was supporting the implementation of the CCSS by providing funds for additional staff or making new technology investments. On average, early RTT states used 71 percent of the components of this practice and non-RTT states used 16 percent (Figure IV.6). The two practices with the largest differences between later RTT and non-RTT states were: (1) requiring evaluations to inform decisions about dismissal of teachers (with 71 percent of later RTT states and 22 percent of non-RTT states using this practice) (Figure IV.12), and (2) requiring evaluations to inform decisions about dismissal of principals (with 57 percent of later RTT states and 10 percent of non-RTT states using this practice) (Figure IV.13).

Nearly all states reported using the following practices (1) having an SLDS, and (2) identifying teacher shortage areas (Figures IV.8 and IV.10). No states reported (1) using results from evaluations of certification programs to provide additional funds for, expand, or promote certification programs that were shown to be effective for teachers; (2) doing the same for

certification programs that were shown to be effective for principals; and (3) publicly reporting results from evaluations of certification program effectiveness for principals (Figure IV.15).

### H. Comparing and contrasting spring 2013 and spring 2012 findings

For the most part, the spring 2013 findings presented in this chapter were the same as the spring 2012 findings presented in an earlier report from this evaluation (Dragoset et al. 2015). There was one key difference between the two sets of findings, which was that the areas for which early RTT states reported using more RTT-promoted policies and practices than non-RTT states differed between the two years. In particular:

• In spring 2012, early RTT states reporting using more RTT-promoted policies and practices than non-RTT states in five of six areas (the area of school turnaround was the exception). In contrast, in spring 2013, early RTT states reporting using more RTT-promoted policies and practices than non-RTT states in four of six areas (the areas of state capacity and data systems were the exceptions).

Our data do not allow us to determine the reason for this difference in findings across years. However, Chapter VI provides potential explanations for the pattern of findings that we observed.

### V. EXTENT TO WHICH STATES FOCUS ON ENGLISH LANGUAGE LEARNERS IN THEIR USE OF POLICIES AND PRACTICES PROMOTED BY RACE TO THE TOP

English language learners (ELLs) are of particular interest to this evaluation for two reasons. First, they have historically had lower academic achievement than other students. Since 2002, ELLs have scored lower than other students on the NAEP reading exam (National Center for Education Statistics 2014). Second, the RTT program emphasized prioritizing the academic achievement of high-needs students, including ELLs, as a way to address this achievement gap. In particular, the RTT application criteria asked states to (1) make data on ELLs available to evaluate the effectiveness of instructional materials, strategies, and approaches for ELLs, and (2) provide supports and professional development to teachers and principals to ensure that ELLs acquire language skills to master academic content (U.S. Department of Education 2010). For these reasons, ED's Office of English Language Acquisition requested that part of this evaluation focus on how states used the policies and practices promoted by RTT to address the needs of ELLs.

In this chapter, we assess the extent to which RTT and other states reported focusing on ELLs in their use of policies and practices promoted by RTT. We present results from four types of analyses:

1. We compared RTT and other states' use of ELL-focused policies and practices aligned with the RTT application criteria.

It is possible that states with higher ELL populations and higher achievement gaps between ELLs and other students prioritized ELL-focused education reforms more than other states. Because of this, comparing RTT and other states' use of ELL-focused policies and practices overall might obscure important differences between RTT and other states that exist only in states with higher ELL populations or ELL achievement gaps. For this reason, we conducted the following analyses:

- 2. We compared RTT and other states' use of ELL-focused policies and practices within each of the following four groups:
  - a. States with higher ELL populations (defined as states with percentages of ELLs above the median). For example, within the group of states with higher ELL populations, we compare early RTT states to non-RTT states;
  - b. States with lower ELL populations (defined as states with percentages of ELLs below the median);
  - c. States with higher ELL achievement gaps (defined as states with achievement gaps above the median); and
  - d. States with lower ELL achievement gaps (defined as states with achievement gaps below the median).

To examine whether states with higher ELL populations and higher ELL achievement gaps prioritized ELL-focused education reforms more than other states, we conducted the following analyses:

- 3. Within each of the following groups of states—early RTT, later RTT, and non-RTT—we compared use of ELL-focused policies and practices for states that had higher and lower ELL populations. For example, within the group of early RTT states, we compared states with higher ELL populations to states with lower ELL populations.
- 4. Within each of the following groups of states—early RTT, later RTT, and non-RTT—we compared use of ELL-focused policies and practices for states that had higher and lower ELL achievement gaps.

Readers interested in specific examples of the individual ELL-focused policies and practices included in these analyses may consult Appendix C.

Table V.1 shows descriptive statistics on the ELL population and ELL achievement gap for each group of states (early RTT, later RTT, and non-RTT). On average across all states, ELLs made up 6.2 percent of the student body and scored 22.4 points lower than other students on the NAEP exam. Early, later, and non-RTT states had similar ELL populations on average (6.1 or 6.2 percent of students), but there was more variation among later RTT states than other states. There were no significant differences between early RTT and non-RTT states, or between later RTT and non-RTT states, with respect to the average ELL achievement gap. However, later RTT states had a higher average ELL achievement gap (28.8) than early RTT states (20.2). As a result, most later RTT states (five of seven) were classified as having a higher ELL achievement gap.

	All states	Early RTT states	Later RTT states	Non-RTT states
Distribution of ELL population				
10th percentile 50th percentile 90th percentile Mean	1.9 5.4 10.9 6.2	2.7 6.5 8.9 6.1	1.3 3.9 14.6 6.1	1.8 5.2 11.0 6.2
Number of states that had higher and lower ELL populations				
Higher Lower	26 25	7 5	3 4	16 16
Distribution of ELL achievement gap				
10th percentile 50th percentile 90th percentile Mean	13.0 24.0 32.0 22.4	14.0 22.0 29.0 20.2	14.0 32.5 34.0 28.8	10.0 23.0 30.0 22.0
Number of states that had higher and lower ELL achievement gaps				
Higher Lower	25ª 21	6	5 1	14 14
Number of states	45–51	12	6–7	27–32

### Table V.1. Distribution of ELL population and ELL achievement gap

Source: Common Core of Data (CCD); National Assessment of Educational Progress (NAEP) scores.

Note: We calculated the ELL population using CCD data on the percentage of public school students participating in programs for ELLs in 2007–2008. We calculated ELL achievement gaps as the average score for non-ELLs minus the average score for ELLs on the 2007 NAEP 4th grade math exam. As a point of reference, a 20-point difference on this exam is equivalent to the difference between a student who scored at the 25th percentile nationally (a score of 222) and one who scored at the 50th percentile (a score of 242). A 20-point difference on this exam is also equivalent to an effect size of 0.7 (the standard deviation was 29 points). States were classified into higher and lower groups based on whether their value (for either the ELL population or the ELL achievement gap) was above or below the median value across all states. See Chapter II for more details on how we classified states into groups. A range is provided for the sample size

because missing data varied across items. There were no statistically significant differences in 2007–2008 between early RTT and non-RTT states, or between later RTT and non-RTT states.

<sup>a</sup> The number of states with a higher achievement gap is not equal to the number of states with a lower gap because five states had the median value (and were assigned to the above-median group).

ELL = English language learner.

The evaluation's state interviews asked about 12 ELL-focused policies and practices aligned with RTT objectives (Table V.2).

#### Table V.2. ELL-focused policies and practices aligned with RTT objectives

Providing districts with funding, materials, training, technical assistance, or other supports to aid in the use of ELLrelated data

- Having teacher assignment laws or policies that include financial incentives to recruit and retain teachers with ELL expertise
- Training the lowest-achieving schools or local education agencies in identifying and implementing strategies to address the need of ELLs

Having state-level staff or consultants to support turnaround schools and districts in working with ELLs

In considering applications for new charter schools, prioritizing schools that propose to address the needs of ELLs or that target ELLs

Monitoring charter school performance based on the student populations (such as ELLs) served

Prioritizing the adoption and implementation of supports to ELLs

Providing targeted support to ELLs or working with intermediaries to provide support to ELLs

Implementing organizational or administrative changes to improve capacity to support ELLs

Supporting districts or schools in implementing the Common Core State Standards with ELLs

Ensuring state longitudinal data system contains program participation information about ELLs

Using state longitudinal data system to inform and engage stakeholders and support decision makers in continuous improvement efforts for ELLs

- Source: RTT application (U.S. Department of Education 2010); interviews with state administrators in spring 2012 and spring 2013.
- Note: See Appendix C for a list of the interview questions that were aligned with the ELL-focused policies and practices in this table. All the policies and practices listed in this table were included in the main analyses described in Chapter IV, but some of them are not listed in the Chapter IV tables because they were included in a broader policy or practice that is listed in those tables.

ELL = English language learner.

In spring 2013, early RTT states reported using more ELL-focused policies and practices promoted by RTT than non-RTT states. Early RTT states reported using an average of 7.0 of 12 ELL-focused policies and practices, compared to 5.4 for non-RTT states (Figure V.1). The ELL-focused practice with the largest difference between early RTT and non-RTT states was providing districts with funding, materials, training, technical assistance, or other supports to aid in the use of ELL-related data. On average, 91 percent of early RTT states used this practice, compared with 45 percent of non-RTT states (Figure V.2) (Figure V.3 shows similar information for other ELL-focused practices.)

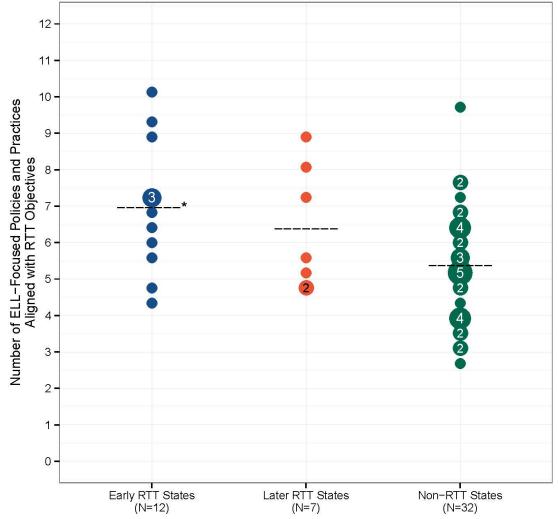


Figure V.1. Use of ELL-focused policies and practices aligned with RTT objectives

Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table V.2. Each dot in this figure represents the number of states that reported using a particular number of ELL-focused policies and practices (out of 12 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, two non-RTT states reported using 6 of 12 ELL-focused policies and practices aligned with the RTT application criteria. For 6 of the policies and practices, a "yes" response received one point. In the other 6 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of ELL-focused policies and practices for each state. The dashed line denotes the average number of ELL-focused policies and practices for each group of states.

\*Significantly different from non-RTT states at the 0.05 level, two-tailed test.

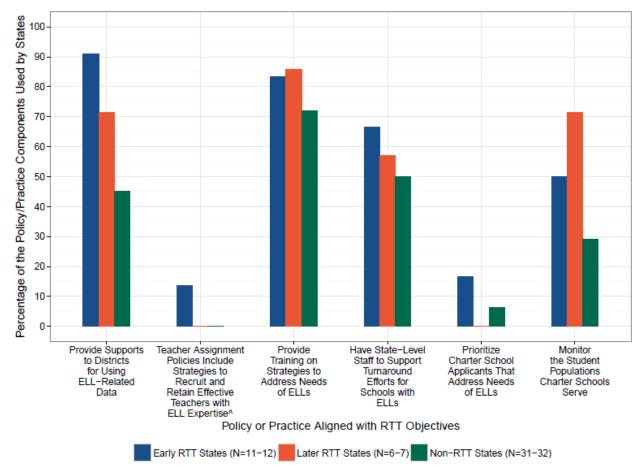
The ELL-focused practice with the largest difference between later RTT and non-RTT states was monitoring charter school performance based on the student populations (such as ELLs) served. On average, 71 percent of later RTT states and 29 percent of non-RTT states used this practice (Figure V.2).

States reported using most components of two ELL-focused practices: (1) providing targeted support to ELLs or working with intermediaries to provide support to ELLs, and (2) training the

lowest-achieving schools or local education agencies in identifying and implementing strategies to address the need of ELLs (Figures V.2 and V.3).

In contrast, states reported using very few components of the following ELL-focused practices: (1) having teacher assignment laws or policies that include financial incentives to recruit and retain teachers with ELL expertise and (2) prioritizing charter school applications that proposed to address the needs of ELLs (Figure V.2).





Source: Interviews with state administrators in spring 2013.

Note: As described in Appendix A, for each ELL-focused policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used. A range is provided for the sample sizes because nonresponse varied across items.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice.

ELL = English language learner.

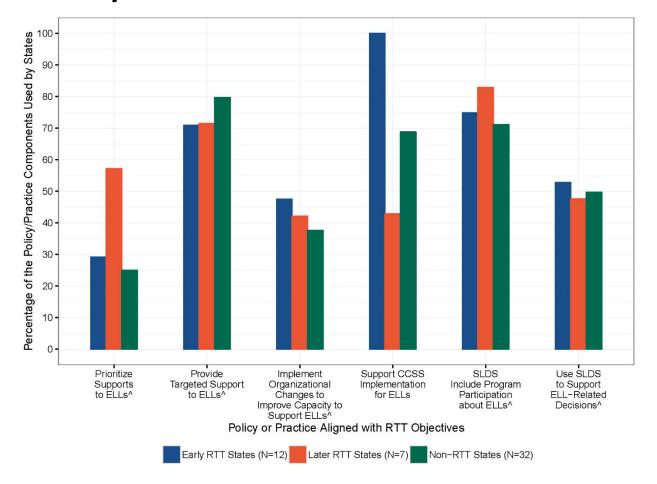


Figure V.3. Use of the last six ELL-focused policies and practices aligned with RTT objectives

Source: Interviews with state administrators in spring 2013.

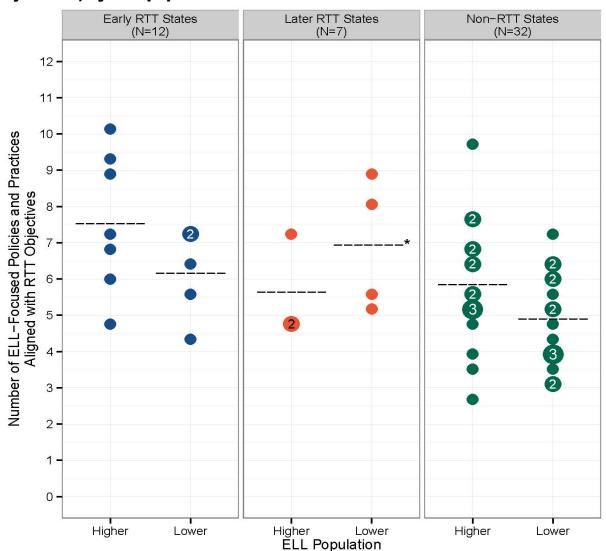
Note: As described in Appendix A, for each ELL-focused policy or practice in the RTT application criteria for which we identified one or more interview questions aligned with the policy or practice, we calculated the percentage of interview questions with a "yes" response as a measure of the percentage of components each state used. The height of each bar represents the average percentage of the components of the policy or practice that each group of states used.

^ Multiple interview questions were used to assess whether states used all of the components of this policy or practice. ELL = English language learner; CCSS = Common Core State Standards; SLDS = State longitudinal data system.

Among states with lower ELL populations, later RTT states reported using more ELLfocused policies and practices promoted by RTT than non-RTT states. Later RTT states with lower ELL populations reported using an average of 6.9 of 12 ELL-focused policies and practices, compared to 4.9 for non-RTT states with lower ELL populations (Figure V.4).

Among states with lower ELL achievement gaps, early RTT states reported using more ELL-focused policies and practices promoted by RTT than non-RTT states. Early RTT states with lower ELL achievement gaps reported using an average of 6.9 of 12 ELL-focused policies and practices, compared to 5.4 for non-RTT states with lower ELL achievement gaps (Figure V.5).

Within each group of states—early RTT, later RTT, and non-RTT—there were no differences in use of ELL-focused policies and practices promoted by RTT between states with higher and lower ELL populations or between states with higher and lower ELL achievement gaps. Early RTT, later RTT, and non-RTT states with higher ELL populations reported using 7.5, 5.6, and 5.9 of 12 ELL-focused policies and practices, while those states with lower ELL populations reported using 6.2, 6.9, and 4.9 policies and practices (Figure V.4). Early RTT, later RTT, and non-RTT states with higher ELL achievement gaps reported using 7.0, 6.0, and 5.2 of 12 ELL-focused policies and practices, while those states with lower ELL achievement gaps reported using 6.9, 8.7, and 5.4 policies and practices (Figure V.5).





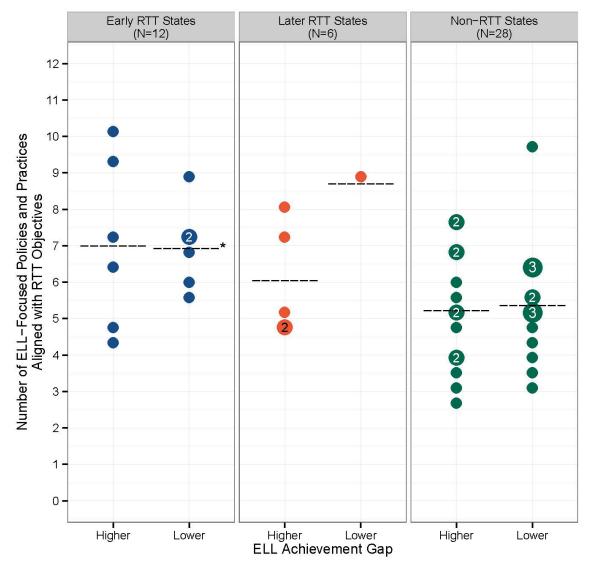
Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table V.2. Each column in the figure shows the number of ELL-focused policies and practices that states in each group (early RTT, later RTT, non-RTT) reported using, by states that had higher and lower ELL populations. Each dot in this figure represents the number of states that reported using a particular number of ELL-focused policies and practices (out of 12 examined) that were aligned with the RTT application criteria. The number inside each

dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, two non-RTT states that had lower ELL populations reported using 6 of 12 ELL-focused policies and practices aligned with the RTT application criteria. For 6 of the policies and practices, a "yes" response received one point. In the other 6 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of ELL-focused policies and practices for each state. The dashed line denotes the average number of ELL-focused policies and practices for each group of states. There were no statistically significant differences at the 0.05 level using a two-tailed test between higher and lower ELL population states with the same RTT status. Among states with higher ELL populations, there were no statistically significant differences at the 0.05 level using a two-tailed test between RTT and non-RTT states.

\*Significantly different from non-RTT states with lower ELL populations at the 0.05 level, two-tailed test.

## Figure V.5. Use of ELL-focused policies and practices aligned with RTT objectives, by ELL achievement gap



Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table V.2. Each column in the figure shows the number of ELL-focused policies and practices that states in each group (early RTT, later RTT, non-RTT) reported using, by states that had higher and lower achievement gaps between ELLs and other students. Each dot in this figure represents the number of states that reported using a particular number of ELL-focused policies and practices (out of 12 examined) that were aligned with the RTT application criteria.

The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For example, two non-RTT states that had a higher ELL achievement gap reported using about 4 of 12 ELL-focused policies and practices aligned with the RTT application criteria. For 6 of the ELL-focused policies and practices, a "yes" response received one point. In the other 6 cases, it was possible for a state to receive a fraction of one point. See Appendix A for details on how we determined the number of ELL-focused policies and practices for each state. The dashed line denotes the average number of ELL-focused policies and practices for each group of states. There were no statistically significant differences at the 0.05 level using a two-tailed test between higher and lower ELL achievement gap states with the same RTT status. Among states with higher ELL achievement gaps, there were no statistically significant differences at the 0.05 level using a two-tailed test between RTT and non-RTT states.

\*Significantly different from non-RTT states with lower ELL achievement gaps at the 0.05 level, two-tailed test.

Thus, it does not appear to be the case that states with higher ELL populations and higher achievement gaps between ELLs and other students prioritized ELL-focused education reforms more than other states. However, there is some evidence that RTT states used ELL-focused policies and practices more than other states.

For the most part, the spring 2013 findings presented in this chapter were similar to the spring 2012 findings presented in an earlier report from this evaluation (Dragoset et al. 2015). In a few cases, the spring 2013 findings were statistically significant while the spring 2012 findings were not, but in both years, the differences between groups of states with respect to the number of ELL-focused practices used were small (one to two practices).

#### **VI. DISCUSSION OF MAIN FINDINGS**

Despite the substantial resources devoted to RTT and its importance as an initiative seeking to spur nationwide changes to educational policies and practices, no studies have examined the relationship between the RTT program and student outcomes. In addition, few studies have examined (a) the implementation of RTT-promoted policies and practices in all of the topic areas described in the RTT application and (b) whether the policies and practices used by RTT states differ from those used by other states. This evaluation sought to address these gaps in the existing literature by attempting to examine the relationship between RTT grant receipt and student outcomes and examining the extent to which RTT and other states reported using RTT-promoted policies and practices in all of the topic areas described in the RTT application. We also assessed the extent to which RTT and other states reported focusing on English language learners (ELLs) in their use of policies and practices promoted by RTT. We focused on policies and practices that states reported using in spring 2013, and also examined changes in use between 2011–2012 and 2012–2013. For certain policies and practices, we also examined changes between 2007–2008 (before the RTT program was announced) and 2012–2013.

In this chapter, we summarize our findings on RTT implementation and on the relationship between RTT grant receipt and student outcomes. We then lay out several questions of possible interest and potential explanations for these findings.

### A. RTT implementation findings

In spring 2013, early RTT states reported using more policies and practices promoted by RTT, on average, than non-RTT states in four of the six areas considered (state capacity and data systems were the exceptions). This finding is consistent with previous studies of RTT implementation that suggested that RTT states were more likely to use RTT-promoted policies and practices than other states (Dragoset et al. 2015; Government Accountability Office 2011; National Council on Teacher Quality 2011; Howell 2015). The difference between early RTT and non-RTT states in the average number of RTT-promoted policies and practices used ranged from 0.8 to 6.6 across the four areas. However, some of these differences predated award of the RTT grants. In particular, early RTT states reported having already used more of some teacher and principal certification and evaluation policies and practices promoted by RTT than non-RTT states as of 2007–2008, *before receiving their RTT grants*. For several areas—state capacity, standards and assessments, data systems—we did not have information on states' use of RTT-promoted policies and practices prior to the awarding of RTT grants; therefore, for those areas, we could not determine whether some of these differences predated receipt of the RTT grants.

In spring 2013, later RTT states reported using more policies and practices promoted by RTT, on average, than non-RTT states in only one of the six reform areas (teacher and principal certification and evaluation), with a difference of 5.1 policies and practices. As with the early RTT states, there was some evidence of differences for the teacher and principal certification and evaluation area between later RTT and non-RTT states as of 2007–2008, before RTT grants were awarded.

Although the findings reported above focus on averages for each group of states (early RTT, later RTT, non-RTT), there was substantial variation in the reported number of RTT-promoted practices used within each group.

In spring 2013, across all states, use of RTT-promoted practices was highest in the data systems area and lowest in the teacher and principal certification and evaluation area. States reported using, on average, 76 percent of RTT-promoted practices in the data systems area and 26 percent of RTT-promoted practices in the teacher and principal certification and evaluation area. Nearly all states reported: (1) having an SLDS, and (2) identifying teacher shortage areas. In contrast, no states reported: (1) using results from evaluations of certification programs to provide additional funds for, expand, or promote certification programs that were shown to be effective for teachers; (2) doing the same for certification programs that were shown to be effective for principals; and (3) publicly reporting results from evaluations of certification program effectiveness for principals.

In spring 2013, the practice with the largest difference between early RTT and non-RTT states was supporting the implementation of the CCSS by providing funds for additional staff or making new technology investments. The two practices with the largest differences between later RTT and non-RTT states were: (1) requiring evaluations to inform decisions about dismissal of teachers, and (2) requiring evaluations to inform decisions about dismissal of principals.

When we focused on changes over time in states' use of policies and practices, we found no significant differences between RTT and other states (see Appendix D).

In spring 2013, early RTT states reported using more ELL-focused policies and practices promoted by RTT than did non-RTT states. There was no difference between later RTT and non-RTT states in the number of ELL-focused policies and practices used.

Many of the spring 2013 findings presented in this report were the same as the spring 2012 findings presented in an earlier report from this evaluation (Dragoset et al. 2015). Two key differences were:

- In spring 2012, early RTT states reported using more RTT-promoted policies and practices than non-RTT states in five of six areas (the area of school turnaround was the exception). In contrast, in spring 2013, we found differences in four of six areas (the areas of state capacity and data systems were the exceptions).
- 2. In spring 2012, we found no significant difference in use of ELL-focused policies and practices between RTT and other states, whereas in spring 2013, we found that early RTT states used more ELL-focused policies and practices than non-RTT states.

# **B.** Findings on the relationship between RTT grant receipt and student outcomes

The effect of RTT on student outcomes was not clear because trends in outcomes could be interpreted as providing evidence of a positive, a negative, or no effect of RTT (see Appendix E). Conclusions about the relationship between RTT grant receipt and outcomes depend on assumptions made about the pattern of outcomes in the pre-RTT period. In addition, other changes happening at the same time as RTT reforms might have affected outcomes.

#### C. Questions of interest and potential explanations for findings

Readers may have questions about potential explanations for the observed pattern of findings. Below, we lay out questions of possible interest and potential explanations for these findings.

Why did early RTT states report using more RTT-promoted policies and practices than non-RTT states in spring 2013 in four of six areas examined? We focus here on two potential explanations. First, this finding could reflect the effect of the RTT grants on state policies and practices. RTT grants aimed to increase use of the policies and practices examined, so this pattern of findings could reflect progress toward that goal. Second, this finding could reflect differences in use of these policies and practices between the groups of states prior to the awarding of the RTT grants. For the three areas for which we could examine the prevalence of RTT-promoted policies and practices both before and after RTT grants were awarded, evidence suggests that some differences existed prior to the RTT awards. Further, the RTT application criteria gave explicit priority to states that had already used policies consistent with the RTT goals: "Over half the points that reviewers may award to states are based on states' accomplishments prior to applying" (U.S. Department of Education 2010). Therefore, it is possible that the higher use of RTT-promoted practices observed among early RTT states is at least partly an artifact of the selection process rather than a result of the RTT grant awards, but this does not mean that RTT had no effect on state policies and practices. Rather, RTT may have affected policies and practices in many states simply by holding the competition; in other words, many states (including both those that eventually received RTT awards and those that did not) may have increased their use of RTT-promoted policies and practices after 2007-2008 to better position themselves to receive an RTT award. Our finding that use of RTT-promoted policies and practices increased between 2007–2008 and 2011–2012 for all states (not just RTT states) in three areas is consistent with this hypothesis.

Why did early RTT states not report using more RTT-promoted policies and practices than non-RTT states in the state capacity and data systems areas in spring 2013? We focus here on two potential explanations for this finding. First, it is possible that RTT did not have an effect on states' practices in these areas. Second, it is possible that particular state capacity policies and practices (such as creating a new office or department to support the implementation of state education reform priorities) were one-time events that occurred in 2011–2012 and thus, did not need to occur again in 2012–2013. As mentioned in Chapter II, the results from spring 2013 represent only the policies and practices used during the specific time period between spring 2012 and spring 2013, not the full set of policies and practices used at any point after receipt of an RTT grant. Our finding that use of state capacity policies and practices by early and later RTT states decreased between 2011-2012 and 2012-2013 is consistent with this hypothesis. Third, it is possible that use of data systems practices are on the rise more broadly (even in states that did not receive RTT grants), so that we did not observe the RTT program resulting in higher levels of use among RTT states relative to non-RTT states. Data systems practices may be rising nationally, in part, due to the Statewide Longitudinal Data Systems (SLDS) grant program which supports development, implementation, and expansion of K-12 longitudinal data systems. Non-RTT states reported using more policies and practices in the data systems area in 2013 than in 2012, suggesting greater usage of data systems practices even in states that did not receive RTT grants.

Why did later RTT states not report using more RTT-promoted policies and practices than non-RTT states in five of the six areas examined in spring 2013? There are several potential explanations for this finding. First, later RTT grants were smaller and more limited in focus. Later RTT states generally focused on a subset of the six areas addressed by early RTT states. All seven later RTT states focused on the areas of state capacity and standards and assessments, six focused on data systems and teacher and principal certification and evaluation, two focused on charter schools, and one focused on school turnaround. This more limited focus might make it less likely for differences between later RTT states reported using more RTT-promoted teacher and principal certification and evaluation practices than did non-RTT states is consistent with the fact that six of the seven later RTT states focused on this area.

Second, since the later RTT states did not receive grants in the first or second rounds of competition (despite having applied in earlier rounds), our findings may reflect limitations in these states' capacity for policy changes.

Finally, our statistical power (that is, our ability to detect differences between the groups of states) was lower for the comparisons of later RTT and non-RTT states than for the comparisons of early RTT and non-RTT states, due in part to the smaller sample size. Therefore, even if there were differences between later RTT and non-RTT states of a similar size as the significant differences we found between early RTT and non-RTT states, they might not have been statistically significant. However, in five of six areas, the differences between later RTT and non-RTT states.

Why did the areas for which early RTT states reported using more RTT-promoted policies and practices than non-RTT states in spring 2013 differ from those reported in spring 2012? We focus here on two potential explanations. First, it is possible that RTT states may have intentionally focused on certain policy and practice areas in some years and emphasized other areas in subsequent years. Our finding that early RTT states used more school turnaround policies and practices than non-RTT states in spring 2013 but not spring 2012, and our finding that early RTT states used more state capacity and data systems policies and practices than non-RTT states and practices (such as creating a new office or department to support the implementation of state education reform priorities) were one-time events that RTT states used in 2011–2012 and thus, were not needed again in 2012–2013. Our finding that use of state capacity policies and practices by early and later RTT states decreased between 2011–2012 and 2012–2013 is consistent with this hypothesis.

Although we cannot definitively accept or reject any of these possible explanations for these findings, we offer them as starting points for future investigations into the implementation of policies and practices that RTT promoted.

Why isn't it possible to provide credible estimates of the effect of RTT on student outcomes? Recognizing that RTT represents a significant investment in education reform, we carefully considered whether it was possible to credibly estimate the effect of RTT on student outcomes. We concluded that it was not, for the following reasons: (1) conclusions about the effect of RTT differed depending on what assumptions we made about the pattern of outcomes in the pre-RTT period, and it was difficult to determine the true pattern of outcomes during that

period because NAEP data were available for all states for only four years in that period; and (2) even if it were possible to determine the true pattern of outcomes during the pre-RTT period, we could not conclude that receipt of an RTT grant caused changes in student outcomes because other changes taking place at the same time as RTT reforms might also have affected student outcomes.

#### REFERENCES

- Abdulkadiroglu, A., J. D. Angrist, S. M. Dynarski, T. J. Kane, and P. Pathak. "Accountability and Flexibility in Public Schools: Evidence from Boston's Charters and Pilots." *Quarterly Journal of Economics*, vol. 126, no. 2, 2011, pp. 699–748.
- Allen, J. P., R. C. Pianta, A. Gregory, A. Y. Mikami, and J. Lun. "An Interaction-Based Approach to Enhancing Secondary School Instruction and Student Achievement." *Science*, vol. 333, no. 6045, 2011, pp. 1034–1037.
- Ballou, D., and M. G. Springer. "Achievement Trade-Offs and No Child Left Behind." Working paper. New York, NY: Urban Institute, 2008.
- Bandeira de Mello, V. "Mapping State Proficiency Standards onto the NAEP Scales: Variation and Change in State Standards for Reading and Mathematics, 2005–2009." NCES 2011-458.
  Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2011.
- Bifulco, R., W. Duncombe, and J. Yinger. "Does Whole-School Reform Boost Student Performance? The Case of New York City." Paper 108. Syracuse, NY: Center for Policy Research, 2003. Available at http://surface.syr.edu/cpr/108. Accessed February 13, 2013.
- Booker, K., B. T. Gross, and D. Goldhaber. "Boosting Student Achievement: The Effect of Comprehensive School Reform on Student Achievement." *Educational Evaluation and Policy Analysis*, vol. 31, no. 2, 2009, pp. 111–126.
- Borman, G. D., G. M. Hewes, L. T. Overman, and S. Brown. "Comprehensive School Reform and Achievement: A Meta-Analysis." *Review of Educational Research*, vol. 73, no. 2, 2003, pp. 125–230.
- Boser, U. "Race to the Top: What Have We Learned from the States So Far? A State-by-State Evaluation of Race to the Top Performance." Washington, DC: Center for American Progress, March 2012.
- Carlson, D., G. D. Borman, and M. Robinson. "A Multistate District-Level Cluster Randomized Trial of the Impact of Data-Driven Reform on Reading and Mathematics Achievement." *Educational Evaluation and Policy Analysis*, vol. 33, no. 3, 2011, pp. 378–398.
- Clark, M. A., H. S. Chiang, T. Silva, S. McConnell, K. Sonnenfeld, A. Erbe, and M. Puma. "The Effectiveness of Secondary Math Teachers from Teach For America and the Teaching Fellows Programs." NCEE 2013-4015. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, 2013.
- Constantine, J., D. Player, T. Silva, K. Hallgren, M. Grider, and J. Deke. "An Evaluation of Teachers Trained Through Different Routes to Certification. Final Report." Princeton, NJ: Mathematica Policy Research, 2009.

- Council of State Governments. "Changing Teacher Compensation Methods: Moving Toward Performance Pay." Washington, DC: The Council of State Governments, March 2010.
- Council of State Governments. "Does Merit Pay for Teachers Have Merit? Pros and Cons of New Models for Teacher Compensation." Washington, DC: The Council of State Governments, October 2011.
- Decker, P. T., D. P. Mayer, and S. Glazerman. "The Effect of Teach For America on Students: Findings from a National Evaluation." Princeton, NJ: Mathematica Policy Research, 2004.
- Dee, T. "School Turnarounds: Evidence from the 2009 Stimulus." Cambridge, MA: National Bureau of Economic Research, 2012. Available at http://www.nber.org/papers/w17990.pdf. Accessed February 13, 2013.
- Dee, T. S., and B. Jacob. "The Impact of No Child Left Behind on Student Achievement." *Journal of Policy Analysis and Management*, vol. 30, no. 3, 2011, pp. 418–446.
- de la Torre, M., and J. Gwynne. "When Schools Close: Effects on Displaced Students in Chicago Public Schools." Chicago, IL: Consortium on Chicago School Research at the University of Chicago, 2009.
- Dobbie, W., and R. G. Fryer. "Are High-Quality Schools Enough to Increase Achievement Among the Poor? Evidence from the Harlem Children's Zone." *American Economic Journal: Applied Economics*, vol. 3, no. 3, 2011, pp. 158–187.
- Dragoset, L., S. James-Burdumy, K. Hallgren, I. Perez-Johnson, M. Herrmann, C. Tuttle, C., M. H. Angus, R. Herman, M. Murray, C. Tanenbaum, and C. Graczewski. "Usage of Policies and Practices Promoted by Race to the Top." NCEE 2015-4018. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, 2015.
- Fain, G., and C. Haxton. "Evaluation of Hawaii's Race to the Top: Year 3 Report." San Mateo, CA: American Institutes for Research, 2014.
- Figlio, D. N., C. E. Rouse, and A. Schlosser. "Leaving No Child Behind: Two Paths to School Accountability." Paper presented at the NCLB: Emerging Findings Research Conference at the Urban Institute, Washington, DC, August 12, 2009.
- Fryer, R. G. "Injecting Charter School Best Practices into Traditional Public Schools: Evidence from Field Experiments." Cambridge, MA: Harvard University, 2014. Available at http://scholar.harvard.edu/files/fryer/files/2014\_injecting\_charter\_school\_best\_practices\_int o\_traditional\_public\_schools.pdf. Accessed November 20, 2014.
- Fryer, R., S. Levitt, J. List, and S. Sadoff. "Enhancing the Efficacy of Teacher Incentives Through Loss Aversion: A Field Experiment." Working paper no. 18237. Cambridge, MA: National Bureau of Economic Research, July 2012.
- Fuller, B., J. Wright, K. Gesicki, and E. Kang. "Gauging Growth: How to Judge No Child Left Behind?" *Educational Researcher*, vol. 36, no. 5, 2007, pp. 268–278.

- Garet, M. S., S. Cronen, M. Eaton, A. Kurki, M. Ludwig, W. Jones, K. Uekawa, A. Falk, H. Bloom, F. Doolittle, P. Zhu, and L. Sztejnberg. "The Impact of Two Professional Development Interventions on Early Reading Instruction and Achievement." NCEE 2008-4030. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, 2008.
- Garet, M. S., A. J. Wayne, F. Stancavage, J. Taylor, K. Walters, M. Song, S. Brown, S. Hurlburt, P. Zhu, S. Sepanik, and F. Doolittle. "Middle School Mathematics Professional Development Impact Study: Findings After the First Year of Implementation." NCEE 2010-4009. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, 2010.
- Glazerman, S., D. Mayer, and P. Decker. "Alternative Routes to Teaching: The Impacts of Teach For America on Student Achievement and Other Outcomes." *Journal of Policy Analysis and Management*, vol. 25, no. 1, 2006, pp. 75–96.
- Glazerman, S., A. Protik, B. Teh, J. Bruch, and J. Max. "Transfer Incentives for High-Performing Teachers: Final Results from a Multisite Randomized Experiment." NCEE 2014-4003. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, 2013.
- Gleason, P., M. Clark, C. C. Tuttle, and E. Dwoyer. "The Evaluation of Charter School Impacts: Final Report." NCEE 2010-4029. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, June 2010.
- Government Accountability Office. "Race to the Top: Reform Efforts Are Under Way and Information Sharing Could Be Improved." GAO-11-658, Report to Congressional Committees. Washington, DC: GAO, June 2011. Available at http://www.gao.gov/assets/330/320580.pdf. Accessed February 19, 2013.
- Government Accountability Office. "Race to the Top: States Implementing Teacher and Principal Evaluation Systems Despite Challenges." GAO-13-777. Washington, DC: GAO, September 2013.
- Government Accountability Office. "Race to the Top: Education Could Better Support Grantees and Help Them Address Capacity Challenges." GAO-15-295. Washington, DC: GAO, April 2015.
- Gwet, K. L. Handbook of Inter-Rater Reliability, Fourth Edition. Gaithersburg, MD: Advanced Analytics, LLC, 2014.
- Hallgren, K., S. James-Burdumy, and I. Perez-Johnson. "State Requirements for Teacher Evaluation Policies Promoted by Race to the Top." NCEE 2014-4016. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, April, 2014.

- Hanushek, E. A., and M. E. Raymond. "Does School Accountability Lead to Improved Student Performance?" *Journal of Policy Analysis and Management*, vol. 24, no. 2, 2005, pp. 297– 327.
- Henderson, S., A. Petrosino, S. Guckenburg, and S. Hamilton. "Measuring How Benchmark Assessments Affect Student Achievement." REL technical brief, REL 2007–No. 039.
  Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands, 2007. Available at http://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL\_2007039.pdf. Accessed February 13, 2013.
- Henderson, S., A. Petrosino, S. Guckenburg, and S. Hamilton. "A Second Follow-Up Year for Measuring How Benchmark Assessments Affect Student Achievement." REL technical brief, REL 2008–No. 002. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands, 2008. Available at http://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/techbrief/tr\_00208.pdf. Accessed February 13, 2013.
- Howell, W. G. "Results of President Obama's Race to the Top." *Education Next*, vol. 15, no. 4, 2015.
- Hoxby, C. M., and J. E. Rockoff. "Findings from the City of Big Shoulders." *Education Next*, vol. 5, no. 4, 2005, pp. 52–58.
- Hoxby, C. M., S. Murarka, and J. Kang. "How New York City's Charter Schools Affect Student Achievement: August 2009 Report." Cambridge, MA: New York City Charter Schools Evaluation Project, September 2009.
- Lee, J., "Tracking Achievement Gaps and Assessing the Impact of NCLB on the Gaps: An In-Depth Look into National and State Reading and Math Outcome Trends." Cambridge, MA: The Civil Rights Project, Harvard University, June 2006.
- Mathematica Policy Research. "Impact Evaluation of Race to the Top and School Improvement Grants: Final State Interview Protocol, Spring 2012." Princeton, NJ: Mathematica Policy Research, 2012. Available at https://www.mathematica-mpr.com/-/media/publications/pdfs/spring\_2012\_state\_interview\_protocol.pdf. Accessed September 6, 2016.
- Mathematica Policy Research. "Impact Evaluation of Race to the Top and School Improvement Grants: Final State Interview Protocol, Spring 2013." Princeton, NJ: Mathematica Policy Research, 2014. Available at https://www.mathematica-mpr.com/-/media/publications/pdfs/education/spring\_2013\_state\_interview\_protocol.pdf. Accessed September 6, 2016.
- May, H., and M. A. Robinson. "A Randomized Evaluation of Ohio's Personalized Assessment Reporting System (PARS)." Philadelphia, PA: Consortium for Policy Research in Education, 2007.

- Miller, T. D., and R. Hanna. "Four Years Later, Are Race to the Top States on Track?" Washington, DC: Center for American Progress, March 2014.
- National Alliance for Public Charter Schools. "State Legislative Session Highlights." Washington, DC: National Alliance for Public Charter Schools, 2009.
- National Alliance for Public Charter Schools. "Dashboard: A Comprehensive Data Resource from the National Alliance for Public Charter Schools." Washington, DC: National Alliance for Public Charter Schools, 2013. Available at http://dashboard2.publiccharters.org/Home/. Accessed June 3, 2013.
- National Center for Education Statistics. "The Condition of Education." Washington, DC: National Center for Education Statistics, 2014. https://nces.ed.gov/programs/coe/indicator\_cgf.asp. Accessed February 17, 2014.
- National Council on Teacher Quality. "State of the States: Trends and Early Lessons on Teacher Evaluation and Effectiveness Policies." Washington, DC: National Council for Teacher Quality, October 2011.
- Player, D., and V. Katz. "School Improvement in Ohio and Missouri: An Evaluation of the School Turnaround Specialist Program." Working Paper. Charlottesville, VA: Center on Education Policy and Workforce Competitiveness, 2013.
- Quint, J. C., S. Sepanik, and J. K. Smith. "Using Student Data to Improve Teaching and Learning: Findings from an Evaluation of the Formative Assessments of Student Thinking in Reading (FAST-R) Program in Boston Elementary Schools." New York, NY: MDRC, 2008. Available at http://www.mdrc.org/sites/default/files/full\_601.pdf. Accessed February 13, 2013.
- Russell, J. L., J. Meredith, J. Childs, M. K. Stein, and D. W. Prine. "Designing Inter-Organizational Networks to Implement Education Reform: An Analysis of State Race to the Top Applications." *Educational Evaluation and Policy Analysis*, vol. 37, no. 1, 2015, pp. 92–112.
- Slavin, R., A. Cheung, G. Holmes, N. A. Madden, and A. Chamberlain. "Effects of a Data-Driven District Reform Model." Baltimore, MD: Success for All Foundation, 2011.
- Somers, M. A., P. Zhu, R. Jacob, and H. Bloom. "The Validity and Precision of the Comparative Interrupted Time Series Design and the Difference-in-Difference Design in Educational Evaluation." New York, NY: MDRC, 2013.
- Strunk, K. O., J. A. Marsh, A. Hashim, S. Bush, and T. Weinstein. "The Efficacy of the Los Angeles Unified School District Public School Choice Initiative for Student Achievement Outcomes: Early Evidence from the First Year." Los Angeles: University of Southern California, 2012. Available at http://69.195.124.65/~uaedrefo/site-der/wpcontent/uploads/2012/08/strunk\_et\_al-the\_efficacy\_of\_the\_lausd\_psci\_for\_ student\_achievement\_outcomes-early\_evidence\_from\_the\_first\_year.pdf. Accessed November 20, 2014.

- Troppe, P., A. Milanowski, R. Garrison-Mogren, A. Webber, B. Gutmann, F. Reisner, and M. Goertz. "State, District, and School Implementation of Reforms Promoted Under the Recovery Act: 2009-10 through 2011-12." NCEE 2015-4016. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, 2015.
- Tuttle, C. C., B. P. Gill, P. Gleason, V. Knechtel, I. Nichols-Barrer, and A. Resch. "KIPP Middle Schools: Impacts on Achievement and Other Outcomes." Washington, DC: Mathematica Policy Research, February 2013.
- U.S. Department of Education. "Race to the Top Program Executive Summary." Washington, DC: U.S. Department of Education, November 2009. Available at http://www2.ed.gov/programs/racetothetop/executive-summary.pdf. Accessed September 6, 2016.
- U.S. Department of Education. "Race to the Top Application for Phase 2 Funding." Washington, DC: U.S. Department of Education, 2010. Available at http://www2.ed.gov/programs/racetothetop/phase2-application.doc. Accessed February 19, 2013.
- U.S. Department of Education. "Fundamental Change: Innovation in America's Schools Under Race to the Top." Washington, DC: U.S. Department of Education, Office of Elementary and Secondary Education, Office of State Support, 2015.
- U.S. Department of Education. "Appendix B. Scoring Rubric." Washington, DC: U.S. Department of Education, 2016a. Available at http://www2.ed.gov/programs/racetothetop/scoringrubric.pdf. Accessed September 6, 2016.
- U.S. Department of Education. "Programs: Race to the Top Funds." Washington, DC: U.S. Department of Education, 2016b. Available at http://www2.ed.gov/programs/racetothetop/performance.html. Accessed September 6, 2016.
- U.S. Department of Education. "Race to the Top—Equity and Opportunity Grants: Support to Close Achievement and Opportunity Gaps." Washington, DC: U.S. Department of Education, n.d. Available at http://www.ed.gov/racetothetop-equity-opportunity. Accessed September 6, 2016.
- Weiss, E. "Mismatches in Race to the Top Limit Educational Improvement." Washington, DC: Broader, Bolder Approach to Education, September 2013.
- Zimmer, R., and R. Buddin. "Charter School Performance in Urban Districts." *Journal of Urban Economics*, vol. 60, no. 2, 2006, pp. 307–326.
- Zimmer, R., B. Gill, K. Booker, S. Lavertu, and J. Witte. "Examining Charter Student Achievement Effects Across Seven States." *Economics of Education Review*, vol. 31, no. 2, 2012, pp. 213–224.

### APPENDIX A

#### ADDITIONAL FIGURES BASED ON STATE INTERVIEWS

In Chapter IV, we summarized the extent to which states reported using the policies and practices promoted by RTT. In Section A of this appendix, we describe how we analyzed the state interview data. In Sections B through G, we present additional figures that are directly related to the analyses presented in Chapter IV. We focus on the same six topic areas addressed in Chapter IV. For each area, we present a series of figures, one for each subtopic, showing states' use of the policies and practices aligned with the RTT application criteria for that subtopic, similar to the figures shown in Chapter IV for each topic area.

### A. Analysis methods

Given the large number of questions in the interviews, it is difficult to discern broad patterns or form overall conclusions by separately examining responses to individual questions. Therefore, we analyzed data from the interviews using methods (described below) designed to provide information about broad patterns in the data. Readers interested in the responses to specific interview questions can refer to Appendix B.

The process of summarizing findings involved several steps:

- 1. Selecting subtopics. For each of the six topic areas in the RTT application, we selected subtopics of interest using the RTT application criteria as a guide. For example, the standards and assessments section of the application criteria included subsections on (1) developing and adopting common standards; (2) developing and implementing common, high-quality assessments; and (3) supporting the transition to enhanced standards and high-quality assessments. We used each of those three subsections as subtopics in our analysis.
- 2. Selecting questions aligned with the RTT application criteria. For each subtopic, we used a systematic approach to select interview questions that aligned with the policies and practices that RTT sought to affect in that area. First, two Mathematica researchers independently selected questions corresponding to each policy or practice based on whether he or she determined them to be aligned with the RTT application (the agreement rate was 97 percent).<sup>37</sup> A third Mathematica researcher resolved any differences of opinion. We determined the topic area and subtopic into which each interview question fell based on the section of the RTT application with which it aligned. By design, the modules in the state interviews directly map to sections of the application. We did not use an interview question for more than one subtopic because doing so would have resulted in the question being overweighted in the overall topic area. When a question could be used for more than one subtopic, we assigned it to the subtopic (and corresponding section of the application) with which it was best aligned. The interview questions addressed all six topic areas and all but 2 of 18 subtopics from the application criteria.
- 3. **Constructing policy and practice variables from interview questions.** For each policy or practice in the RTT application criteria for which we identified one or more relevant

<sup>&</sup>lt;sup>37</sup> It was important to have two researchers independently select questions to ensure that the questions selected for each subtopic were aligned with the RTT application criteria. Measurement of the extent to which the first and second researchers agreed on which questions were aligned with the RTT application criteria is called "inter-rater reliability" in statistics. Inter-rater reliability is traditionally measured using the percentage agreement rate, calculated as the number of questions for which the first and second researchers agreed on whether the question was aligned with the RTT application criteria, divided by the total number of interview questions (Gwet 2014).

questions, we calculated the percentage of questions to which the state responded "yes." This variable measures the percentage of components of the policy or practice that each state used. For instance, states that responded "yes" to all of the questions aligned with the policy or practice used 100 percent of the components, states that responded "yes" to none of the questions used 0 percent of the components, and states that responded "yes" to some of the questions used between 0 and 100 percent.<sup>38</sup> This process resulted in 10 policies and practices for state capacity, 10 for standards and assessments, 8 for data systems, 39 for teacher and principal certification and evaluation, 10 for school turnaround, and 4 for charter schools. The emphasis (that is, the number of policies and practices) given to each area and the specificity of the policies and practices within each area directly relates to how much emphasis and specificity was provided in the RTT application criteria for these areas.<sup>39</sup>

4. **Summing the policies and practices for each state.** To determine each state's progress in using policies and practices aligned with RTT, we summed the variables created in step 3. This sum was calculated separately for each subtopic. We then summed across subtopics to create a sum for each topic area.<sup>40</sup> If a particular state was missing values for a particular policy or practice, we took the mean of the non-missing policies and practices and multiplied it by the total number of policies and practices, if a state had data available for 5 policies and practices, and reported using 2 of them, the number of the state's reported used policies and practices would be equal to (2/5)\*10. Across all states and all subtopics, the average percentage of policies and practices that were missing was low, just 2.4 percent.<sup>41</sup>

<sup>&</sup>lt;sup>38</sup> Many questions were originally structured with two response options: "yes" (recoded to a value of 100 percent) indicating that the state reported using the policy or practice, and "no" (recoded to a value of 0 percent) indicating that the state did not report using the policy or practice. In some cases, however, it was necessary to combine multiple questions to determine whether a state reported fully using a particular policy or practice. For example, one criterion in the application is that teachers be evaluated annually, but the interview asked separate questions about the frequency of evaluation for several types of teachers. In this case, we required that a state respond "yes" to all these questions to receive a value of 100 for the variable corresponding to this policy or practice. In other cases, any one of several questions could be counted as partial evidence of a state's use of a policy or practice aligned with the RTT application criteria. For example, the application criteria specified that the state use support from a broad group of stakeholders to implement its education policy plans. The interview included eight separate questions) were involved in defining the state's education policy plans. In these cases, a state received less than 100 percent (in this example, 12.5 percent, or one-eighth of 100 percent) for each "yes" response. This approach helped to ensure that we did not overweight some interview questions relative to how they were represented in the application criteria.

<sup>&</sup>lt;sup>39</sup> For example, the teacher and principal certification and evaluation area was more heavily emphasized in the RTT application criteria than any other area. This emphasis is demonstrated by the number of pages devoted to this area in the RTT application (11.5 pages, versus 8, 3.5, 3, 2.5, and 2 pages for state capacity, standards and assessments, data systems, school turnaround, and charter schools), the percentage of points received by this section of the application (28 percent, versus 15, 14, 9, 10, and 8 percent for the other areas), and the number of criteria in this section of the application (9 criteria, versus 7, 4, 3, 3, and 1 for the other areas). Correspondingly, our state interview was designed to contain more questions aligned with the teacher and principal certification and evaluation section of the application than with the other sections.

<sup>&</sup>lt;sup>40</sup> Thus, one or more interview questions were used to create a variable for each policy or practice, one or more policies or practices formed a subtopic, and one or more subtopics formed a topic area (or area, for short).

<sup>&</sup>lt;sup>41</sup> To assess how our coding of missing data might have affected our results, we conducted a bounding exercise in which we re-calculated the results twice: once setting all missing responses to "no" (that is, assuming all missing

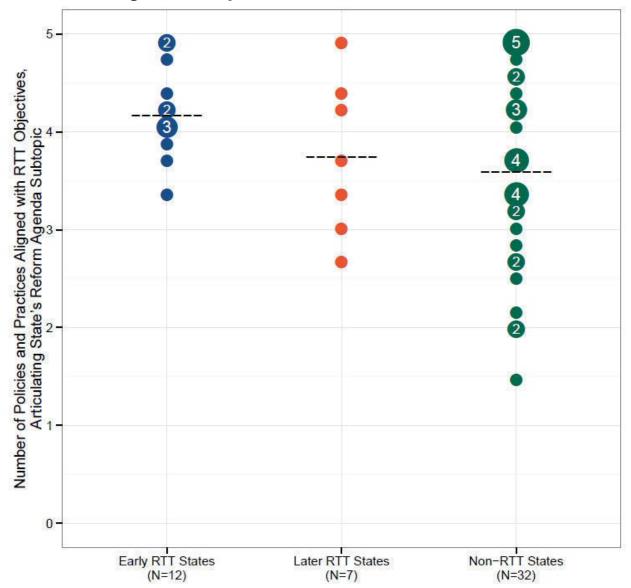
- 5. Averaging the number of policies and practices across states. For each group of states (early RTT, later RTT, non-RTT), we averaged the numbers calculated in step 4. We calculated this average number of policies and practices for the three groups of states separately for each topic area and subtopic.
- 6. **Testing differences between groups of states.** We conducted statistical tests to assess whether the average number of policies and practices reported differed between the early RTT and non-RTT states.<sup>42</sup> We also tested whether the average number differed between the later RTT and non-RTT states. Because the goal of this analysis was to provide descriptive information about the actual levels of policies and practices used by RTT and other states in spring 2012 and 2013, the results are reported as raw (that is, unadjusted) means; they are not regression-adjusted to account for any pre-existing differences between RTT and other states. When reporting findings from this analysis, we focused on the statistical significance of differences between RTT and other states (rather than the magnitude of differences) to ensure that consistent, objective, and transparent criteria were used for reporting findings. One caveat with this approach is that some statistically significant differences might not be substantively important; we indicated in the report where this might be the case.

This method of summarizing findings is one way to analyze broad patterns observed in the data, and compare use of policies and practices across different groups of states. If variables had been constructed differently (for example, if multiple questions that addressed the same policy or practice had not been combined into a single variable, but had each been included in the analysis as separate variables), the results might change. Therefore, it is important to keep these methods in mind when interpreting the results, along with the caveats mentioned above about the interview instrument and the wording of the RTT application criteria.

responses indicated that the policy or practice was not used) and once setting all missing responses to "yes" (that is, assuming all missing responses indicated that the policy or practice was used). The results were largely unchanged. The magnitude of differences between RTT and other states with respect to the number of RTT-promoted policies and practices used were very similar to the magnitudes reported in Chapter IV. In addition, across the 24 statistical significance tests conducted as part of this bounding exercise (two for each of the six topic areas when comparing early RTT to non-RTT states, and two for each of the six topic areas when comparing later RTT to non-RTT states), no results differed from what is shown in Chapter IV.

<sup>&</sup>lt;sup>42</sup> Although we have the entire population of states in our analysis (as opposed to a sample of states), hypothesis testing is still a useful way to account for the possibility that differences in outcomes between the two groups are due to randomness rather than due to a "true," systematic difference. Although there is no source of randomness inherent in our study design (such as random sampling or random assignment), there may be other reasons for differences in outcomes between the two groups that are functionally random (that is, orthogonal to RTT status and other observable covariates). For this analysis, we used a permutation test, which is the non-parametric counterpart to a t-test. The statistical power of this test differed by topic area and subtopic because it depended on several factors, including the number of interview questions aligned with the RTT application criteria, the number of variables constructed from those questions, and the degree to which the variables were correlated with each other.

### **B. State capacity**



# Figure A.1. Use of policies and practices aligned with RTT, articulating state's reform agenda subtopic

Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table IV.1. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of five examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For two of the policies and practices, a "yes" response received one point. In the other three cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

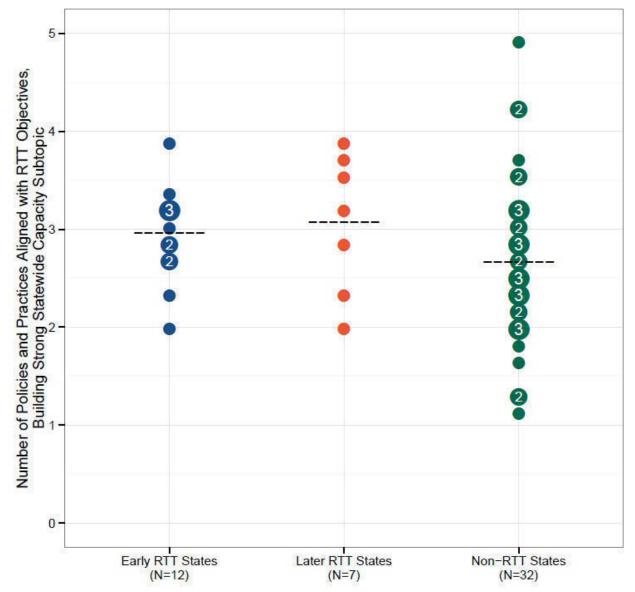
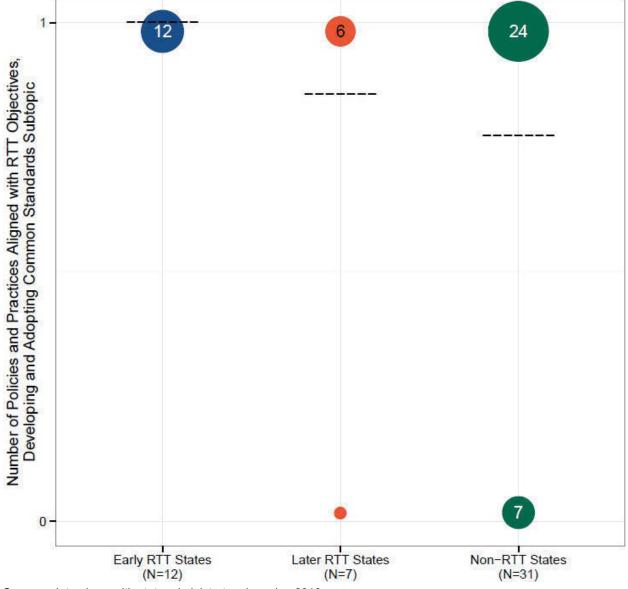


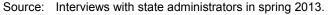
Figure A.2. Use of policies and practices aligned with RTT, building strong statewide capacity subtopic

Note: The policies and practices summarized in this figure are presented in Table IV.1. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of five examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For one policy or practice, a "yes" response received one point. In the other four cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

#### C. Standards and assessments







Note: The policies and practices summarized in this figure are presented in Table IV.2. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of one examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For this policy or practice, a "yes" response received one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

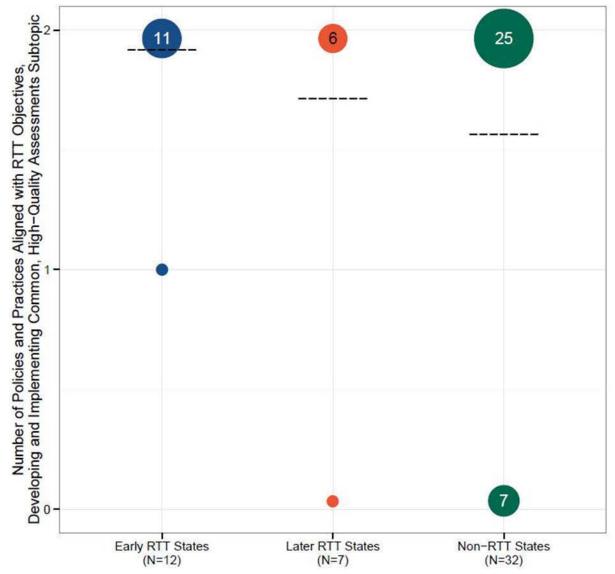
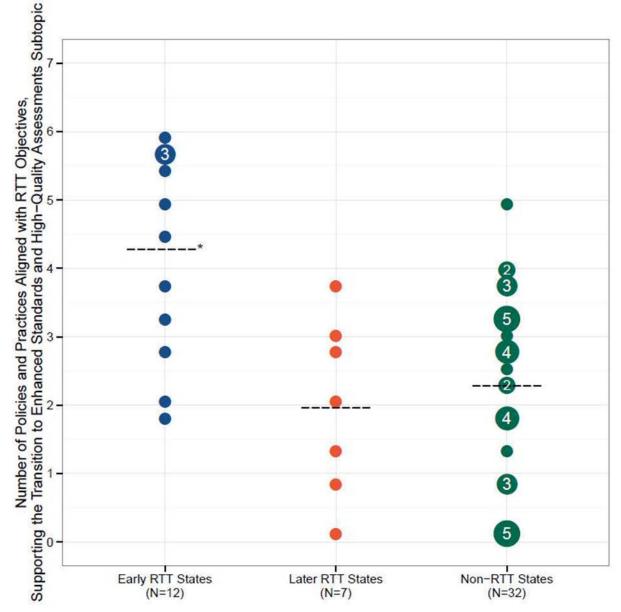


Figure A.4. Use of policies and practices aligned with RTT, developing and implementing common, high-quality assessments subtopic

Source: Interviews with state administrators in spring 2013.

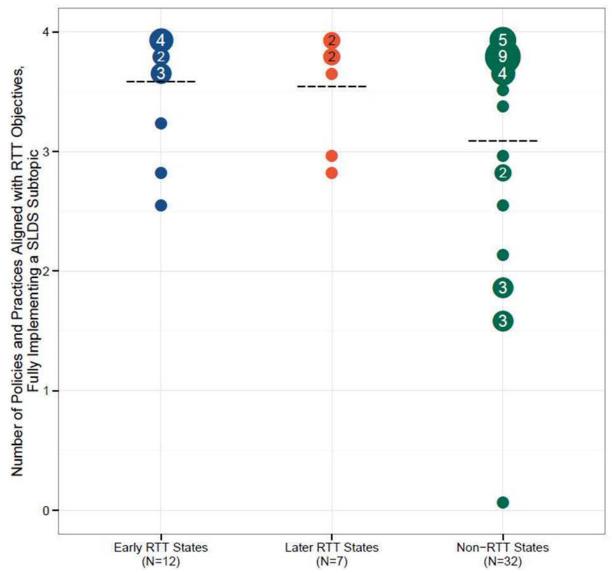
Note: The policies and practices summarized in this figure are presented in Table IV.2. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of two examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For these policies and practices, a "yes" response received one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.



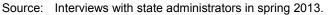


Note: The policies and practices summarized in this figure are presented in Table IV.2. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of seven examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For three of the policies and practices, a "yes" response received one point. In the other four cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states.

#### D. Data systems

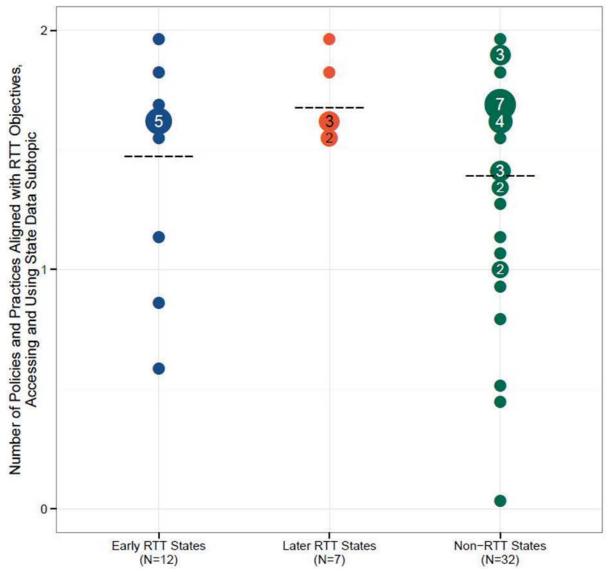


### Figure A.6. Use of policies and practices aligned with RTT, fully implementing an SLDS subtopic



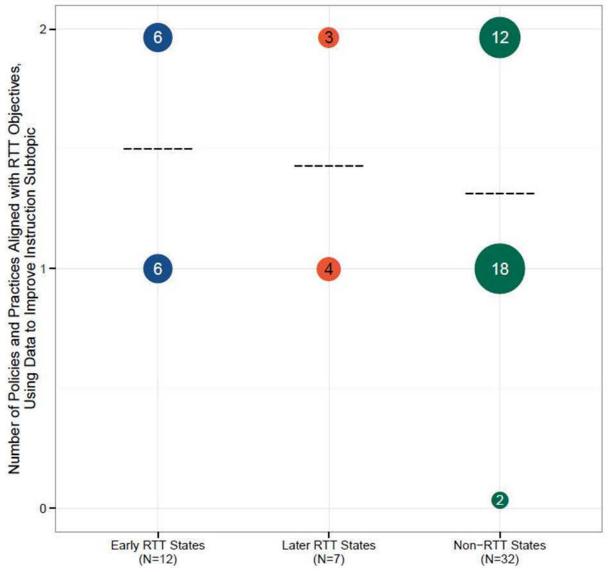
Note: The policies and practices summarized in this figure are presented in Table IV.3. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of four examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For these policies and practices, a "yes" response received one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

SLDS = state longitudinal data system.





Note: The policies and practices summarized in this figure are presented in Table IV.3. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of two examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For these policies and practices, a "yes" response received a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.



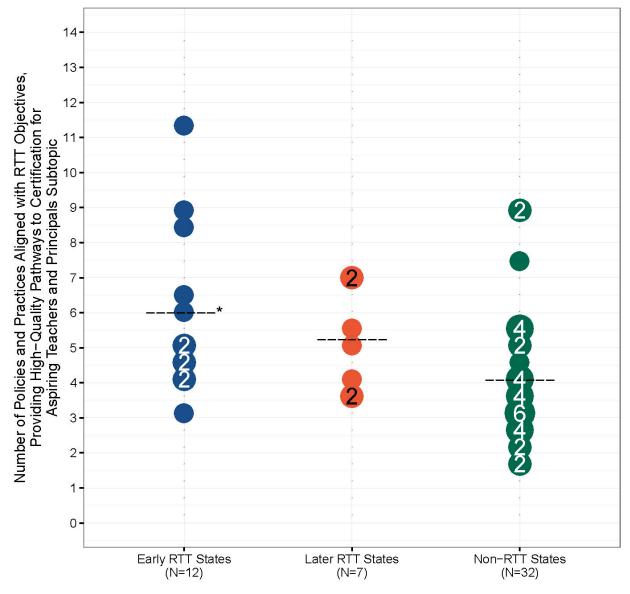


Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table IV.3. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of two examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For these policies and practices, a "yes" response received one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

#### E. Teacher and principal certification and evaluation





Source: Interviews with state administrators in spring 2013.

Note: The policies and practices summarized in this figure are presented in Table IV.4. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of 14 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For 6 of the policies and practices, a "yes" response received one point. In the other 8 cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states.

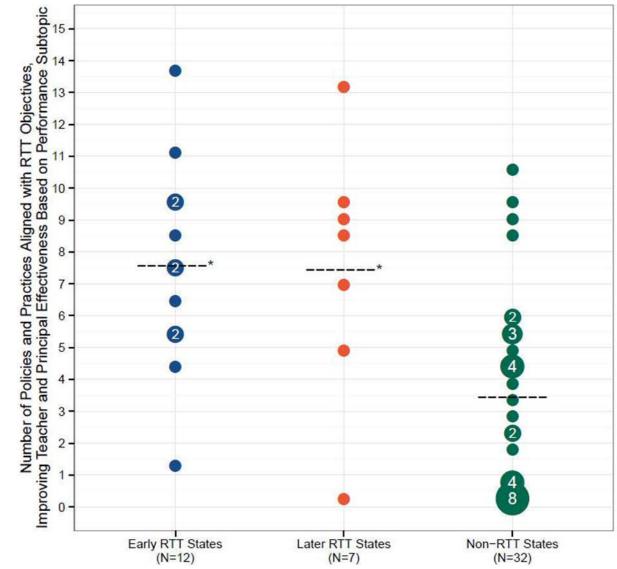


Figure A.10. Use of policies and practices aligned with RTT, improving teacher and principal effectiveness based on performance subtopic

Note: The policies and practices summarized in this figure are presented in Table IV.4. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of 15 examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For 11 of the policies and practices, a "yes" response received one point. In the other 4 cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states.

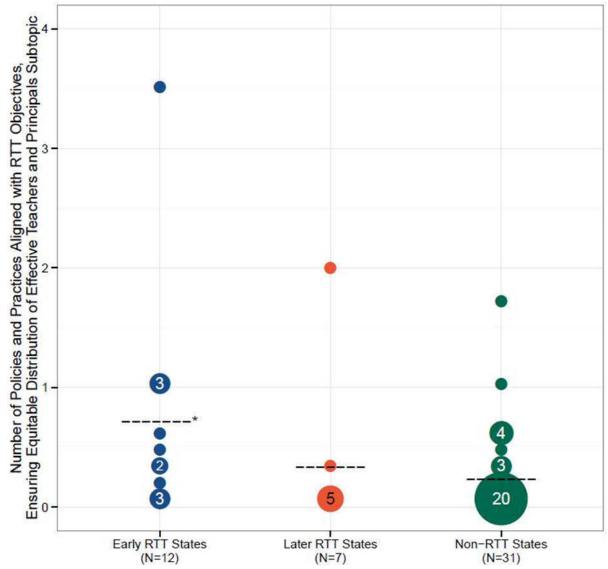


Figure A.11. Use of policies and practices aligned with RTT, ensuring equitable distribution of effective teachers and principals subtopic

Note: The policies and practices summarized in this figure are presented in Table IV.4. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of four examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For two of the policies and practices, a "yes" response received one point. In the other two cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states.

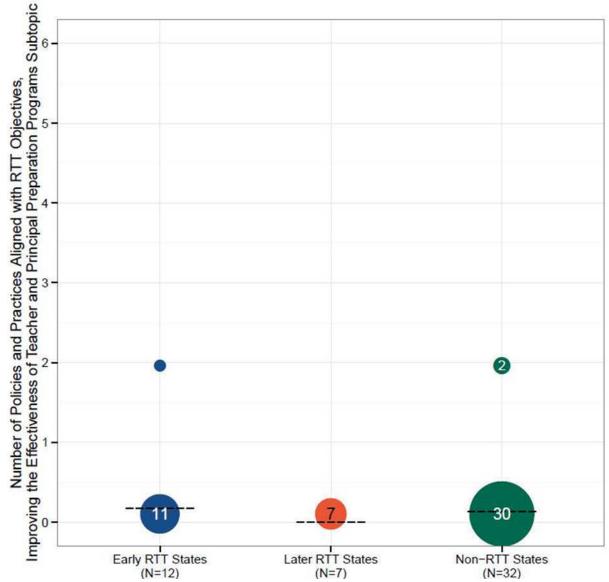
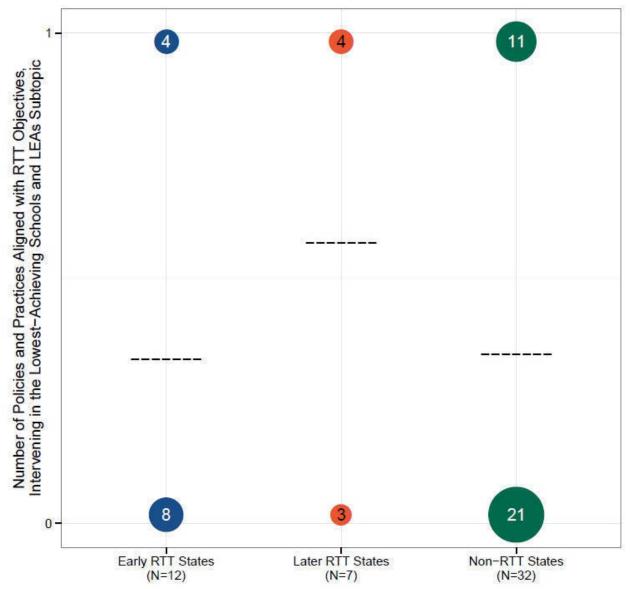


Figure A.12. Use of policies and practices aligned with RTT, improving the effectiveness of teacher and principal preparation programs subtopic

Note: The policies and practices summarized in this figure are presented in Table IV.4. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of six examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For these policies and practices, a "yes" response received one point. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

#### F. School turnaround

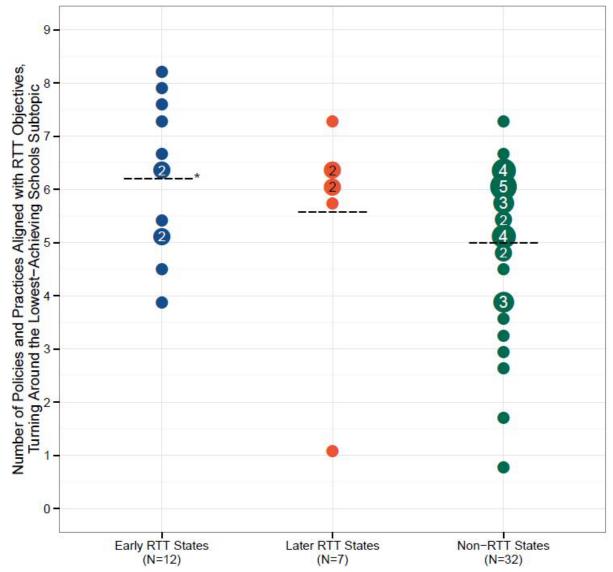


### Figure A.13. Use of policies and practices aligned with RTT, intervening in the lowest-achieving schools and LEAs subtopic

Source: Interviews with state administrators in spring 2013.

Note: The policy or practice summarized in this figure is presented in Table IV.5. Each dot in this figure represents the states that reported using the one policy or practice that was aligned with the criterion in the RTT application about intervening in the lowest-achieving schools. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

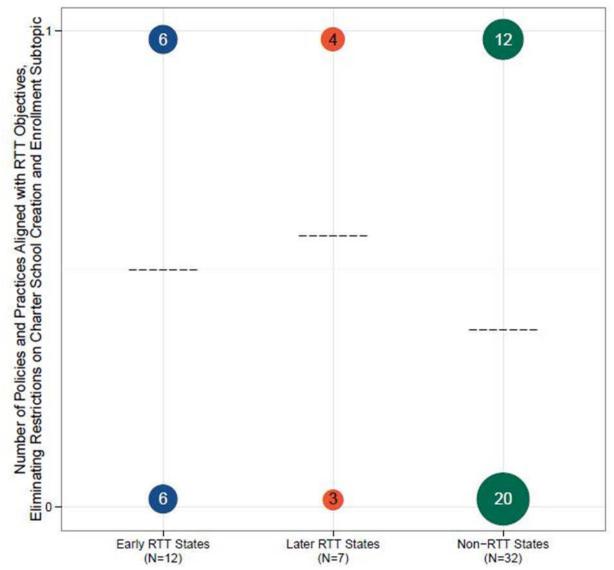
LEA = local education agency.





Note: The policies and practices summarized in this figure are presented in Table IV.5. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of nine examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For five of the policies and practices, a "yes" response received one point. In the other cases, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states.

### G. Charter schools





Source: Interviews with state administrators in spring 2013.

Note: The policy or practice summarized in this figure is presented in Table IV.6. Each dot in this figure represents the states that reported using the one policy or practice that was aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. The dashed line denotes the average number of policies and practices for each group of states. There were no statistically significant differences between RTT and non-RTT states at the 0.05 level using a two-tailed test.

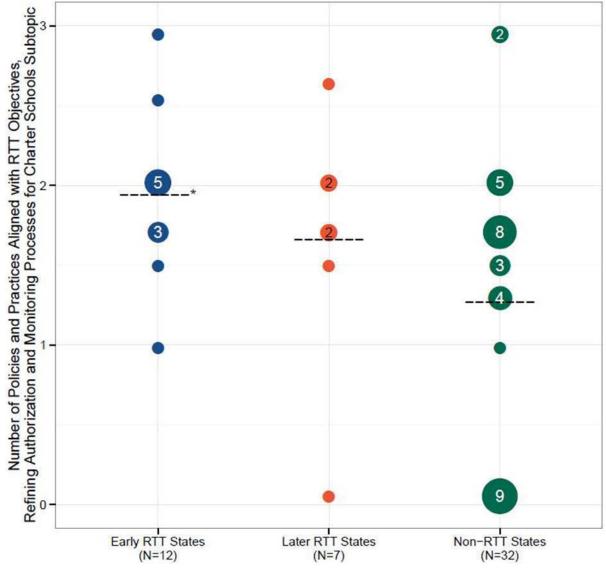


Figure A.16. Use of policies and practices aligned with RTT, refining authorization and monitoring processes for charter schools subtopic

Note: The policies and practices summarized in this figure are presented in Table IV.6. Each dot in this figure represents the states that reported using a particular number of policies and practices (out of three examined) that were aligned with the RTT application criteria. The number inside each dot is the number of states represented by the dot; dots that represent only one state have no number inside. For two of the policies and practices, a "yes" response received one point. In the third case, it was possible for a state to receive a fraction of one point. The dashed line denotes the average number of policies and practices for each group of states.

**APPENDIX B** 

**DETAILED FINDINGS FROM STATE INTERVIEWS** 

In the main body of the report, we summarized the extent to which states reported using the policies and practices promoted by RTT, including the individual policies and practices within each topic area and subtopic. As described in Appendix A, some policies or practices were comprised of multiple interview questions. In this appendix, we present detailed findings from particular individual interview questions and describe how we analyzed those data. Specifically, we show the number of early RTT states, later RTT states, and non-RTT states that responded "yes" to each interview question examined as part of this report. Readers interested in states' responses to individual interview questions may find this appendix useful.

In Section A, we discuss how we analyzed data from closed- and open-ended questions and how we handled missing values. In Section B, we present findings from the interview questions in a series of tables, the titles of which are shown in the list of tables at the beginning of this report. The tables in Section B show data from both the spring 2012 and spring 2013 interviews. Because Texas did not participate in the spring 2012 interview, it is excluded from the tables so that the number of states is comparable across the two years. This means the spring 2013 results in this appendix are not directly comparable to the spring 2013 results presented in Chapters IV and V (which include Texas). Two of the tables in Section B involve data from sources other than the state interviews described in Chapter II: in Table B.48, we present data from the Common Core of Data; and in Table B.59, we present data from the National Alliance for Public Charter Schools.

### A. Analysis methods

Analyzing data from closed-ended questions. The evaluation's protocol for interviews with state administrators comprised mostly closed-ended questions—that is, questions with "yes" or "no" responses or with a set of specific response categories from which to choose. As a result, these variables were already in a format that is suitable, or nearly suitable, for analysis.

Closed-ended questions sometimes included an "other-specify" response option so the interview could progress smoothly when a respondent was uncertain about the response option that applied or could not find a response option that adequately captured the response he or she wished to provide. When a respondent chose this option, the interviewer asked the respondent to specify his or her response and recorded it. These "other-specify" responses were reviewed and either recoded into one of the existing structured response categories or coded into a new response category, as appropriate. Following reporting requirements established by the U.S. Department of Education's National Center for Education Statistics, we created a new response category only if at least three respondents (that is, states) provided the same or similar response. If fewer than three respondents provided a particular response, the response remained part of the broad "other" category.

Analyzing data from open-ended questions. Whenever possible, we categorized the responses to open-ended questions into nominal categories (based on the themes that emerged) that could then be treated as quantitative, categorical data. This strategy enabled us to systematically identify and report on recurring themes mentioned frequently by respondents.

**Handling missing values.** Values can be missing for various reasons: (1) because the respondent did not complete the interview; (2) because the respondent completed the interview but did not complete the question; (3) because the respondent chose "don't know," "refused," or

"not applicable"; or (4) because the question was logically skipped based on earlier responses. Generally, we excluded all missing values from our calculations regardless of the reason that the question was missing (that is, we did not recode a missing as a zero). In the tables, we report the sample sizes for states with nonmissing values on the given item. Frequencies generally total 50 (the number of states that completed the interview; Texas did not participate in the spring 2012 interview and is therefore excluded from this appendix).

Selecting interview questions aligned with the RTT application criteria. As described in Chapter II and Appendix A, we reviewed the interview questions and assigned those that aligned with the policies and practices described in the RTT application selection criteria to specific topic areas and subtopics. We determined the subtopic into which each interview question fell based on the section of the RTT application criteria with which it aligned. In the tables presented in Section B, the last column of each table indicates whether each question was selected, and if it was selected, for which subtopic, by using the abbreviations shown in Table B.1.

Subtopic	Abbreviation
Topic Area: State Capacity	
Articulating the state's education reform agenda and LEAs' participation in it Building strong statewide capacity to implement, scale up, and sustain the proposed plans	SC-1 SC-2
Topic Area: Standards and Assessments	
Developing and adopting common standards Developing and implementing common, high-quality assessments Supporting the transition to enhanced standards and high-quality assessments	SA-1 SA-2 SA-3
Topic Area: Data Systems and Use of Data to Improve Instruction	
Fully implementing a statewide longitudinal data system Accessing state data and using it to inform key stakeholders Using data to improve instruction	DA-1 DA-2 DA-3
Topic Area: Teacher and Principal Certification and Evaluation	
Providing high-quality pathways to certification for aspiring teachers and principals Improving teacher and principal effectiveness based on performance Ensuring equitable distribution of effective teachers and principals Improving the effectiveness of teacher and principal preparation programs	TL-1 TL-2 TL-3 TL-4
Topic Area: School Turnaround	
Authority to intervene in the lowest-achieving schools and LEAs Turning around the lowest-achieving schools	TA-1 TA-2
Topic Area: Charter Schools	
Eliminating restrictions on charter school creation and enrollment Refining authorization and monitoring processes for charter schools	CH-1 CH-2

#### **Table B.1. Abbreviations for subtopics**

Source: Interviews with state administrators in spring 2012 and spring 2013.

LEAs = local education agencies.

#### **B.** Detailed findings from interview questions

In this section we present findings from particular interview questions based on U.S. Department of Education guidance about those in which it had the most interest. The tables are organized to follow the order of the modules in the state interview protocol, which was: (1) state capacity, (2) standards and assessments, (3) data systems, (4) teachers and leaders, (5) school turnaround, and (6) charter schools.

		Number of states	s	Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported having a comprehensive education				Yes (SC-1)
reform plan in place				
2011–2012	12	7	27	
2012–2013	12	7	27	
Reported using the following strategies to				
implement this reform plan:				Nia
Working with districts that have the lowest				No
achievement levels to improve their performance				
2011–2012	12	7	26	
.2012–2013	12	7 7	20	
Working with districts that have the highest	12	1	20	Yes (SC-2)
achievement levels and seeking to replicate				103 (00 2)
their practices statewide				
2011–2012	11	4	12	
2012–2013	10	5	15	
Working with a specific set of districts that are		Ū		No
not necessarily the highest- or lowest-achieving				
in the state				
2011–2012	12	6	20	
2012–2013	11	7	20	
Other strategy				No
2011–2012	3	3	12	
2012–2013	3	6	13	
Number of States	12	7	31	

### Table B.2. State implementation of comprehensive education reform plans

Source: Interviews with state administrators in spring 2012 and spring 2013.

SC-1 = Articulating the State's education reform agenda and LEAs' participation in it; SC-2 = Building strong statewide capacity to implement, scale up, and sustain the proposed plans.

### Table B.3. States' education reform priorities

	N	s	Item aligned — with RTT	
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported prioritizing the following education				
reform initiatives to a great extent: Adopting and implementing college- and career-				Yes (SC-1)
ready standards and/or assessments 2011–2012	10	7	29	
2012–2013	12	6	29	
Building comprehensive, student-level, longitudinal data systems				Yes (SC-1)
2011–2012	10	5	24	
2012–2013 Using data to improve instruction	10	5	23	Yes (SC-1)
2011–2012	12	6	23	
2012–2013 Recruiting and/or retaining effective teachers and	10	6	21	Yes (SC-1)
school leaders	-	0		( )
2011–2012 2012–2013	7 6	2 3	14 10	
Rewarding effective teachers and school leaders	- -		2	Yes (SC-1)
2011–2012 2012–2013	3 1	1	6 3	
Developing and preparing effective teachers and				Yes (SC-1)
school leaders 2011–2012	9	4	19	
2012–2013	11	4	10	
Developing and implementing a teacher and principal evaluation system that is based on				Yes (SC-1)
student growth	4.4	7	24	
2011–2012 2012–2013	11 10	7 7	24 22	
Improving the distribution of effective teachers and				Yes (SC-1)
principals 2011–2012	5	2	6	
2012–2013 Turning around the lowest-achieving schools	3	2	3	Yes (SC-1)
2011–2012	12	6	24	Tes (30-1)
2012–2013 Providing supports for ELLs	12	5	24	No
2011–2012	4	2	14	NO
2012–2013	5	5	11	
Reported that ELLs fit into their current education reform priorities in the following				
ways:				N
ELLs are an explicit, central priority of statewide reform efforts				No
2011–2012	1	0	5	
2012–2013 ELLs are an emerging priority of statewide reform	2	3	4	No
efforts	0	4	0	
2011–2012 2012–2013	2 0	1 1	8 9	
Statewide reform efforts are designed to address				No
the needs of all students, including ELLs 2011–2012	9	6	17	
2012–2013	10	3	17	
Number of States	11-12	6-7	28-31	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

ELLs = English language learners; SC-1 = Articulating the State's education reform agenda and LEAs' participation in it.

	1	Item aligned — with RTT application		
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported that the SEA played the following				
roles to a great extent:				
Creator of a statewide vision for reforms				Yes (SC-2)
2011–2012	11	7	24	(
2012–2013	12	7	26	
Creator and monitor of performance measures				Yes (SC-2)
2011–2012	11	6	28	()
2012–2013	11	7	26	
Compliance monitor of reform				Yes (SC-2)
2011–2012	11	7	28	( )
2012–2013	11	6	27	
Facilitator between districts/schools and external				Yes (SC-2)
support				( )
2011–2012	1	3	8	
2012–2013	6	2	8	
Provider of direct support to districts/schools				Yes (SC-2)
2011–2012	4	4	15	( )
2012–2013	6	3	14	
Provider of information about federal policies				No
2011–2012	9	7	29	
2012–2013	10	5	26	
Other roles				No
2011–2012	1	1	2	
2012–2013	0	1	2	
Number of States	12	7	30-31	

#### Table B.4. Role of state education agency in education reform

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SEA = State Education Agency; SC-2 = Building strong statewide capacity to implement, scale up, and sustain the proposed plans.

	Number of states			Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported providing targeted support to any				Yes (SC-2)
type of districts or schools				
2011–2012	12	7	31	
2012–2013	12	7	30	
Reported providing targeted support to the				
following groups:				
Urban districts or schools				No
2011–2012	12	5	21	
2012–2013	10	5	18	
Rural districts or schools				No
2011–2012	11	5	25	
2012–2013	7	5	22	
Districts or schools with ELLs		-		No
2011–2012	11	4	28	
2012–2013	10	5	24	
High-minority districts or schools	10	Ũ	21	No
2011–2012	11	5	20	NO
2012–2013	9	5	23	
High-poverty districts or schools	5	5	25	No
2011–2012	12	7	27	NU
2012–2013	10	5	26	
	10	5	20	Ne
Districts or schools that received SIG funds	40	7	04	No
2011–2012	12	7	31	
2012–2013	12	7	30	
Districts or schools "participating" in RTT <sup>a</sup>		_		No
2011–2012	12	6	n.a.	
2012–2013	11	6	n.a.	
Districts or schools "involved" in RTT <sup>a</sup>				No
2011–2012	9	5	n.a.	
2012–2013	9	4	n.a.	
Districts or schools identified for improvement or				No
corrective action				
2011–2012	10	7	29	
2012–2013	10	7	26	
Other types of districts or schools				No
2011–2012	5	3	14	
2012–2013	5	5	13	
Number of States	10-12	5-7	28-31	

### Table B.5. State provision of targeted supports for implementing statewide education reforms

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> These items were asked only in RTT states.

ELLs = English language learners; SIG = School Improvement Grant; SC-2 = Building strong statewide capacity to implement, scale up, and sustain the proposed plans.

n.a. = not applicable.

### Table B.6. State monitoring of districts' implementation of state education reforms

	N	umber of state	s	Item aligned
				with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported using the following strategies to				
monitor districts' implementation of main state				
education reforms:				
Review of district-submitted reports				No
2011–2012	11	6	31	
2012–2013	12	7	29	
Review of third-party reports				No
2011–2012	11	6	24	
2012–2013	11	4	24	
Monitoring site visits by State Department of				No
Education staff				
2011–2012	12	7	31	
2012–2013	12	7	31	
Examination of student assessment data by State				No
Department of Education staff				
2011–2012	12	7	30	
2012–2013	12	7	31	
Other strategies	.=	•	01	No
2011–2012	2	2	8	
2012–2013	4	4	8	
	7	7	U	
Reported taking the following actions in				
response to monitoring results				
Provided additional resources				No
2011–2012	11	7	28	
2012–2013	12	7	28	
Revised plans for/expectations of districts				No
2011–2012	11	7	31	
2012–2013	11	7	29	
Removed state funding/supports	-	-	-	No
2011–2012	5	2	8	
2012–2013	4	2	4	
Provided targeted support		<u> </u>	I	No
2011–2012	12	7	31	
2012–2013	12	6	30	
Other actions	12	U	50	No
2011–2012	2	2	7	NU
2012–2012	2	2 4	4	
	-			
Number of States	12	7	31	

Source: Interviews with state administrators in spring 2012 and spring 2013.

	N	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported working with intermediaries to support the implementation of statewide education reforms 2011–2012	12	7	31	Yes (SC-2)
2012–2013	10	6	30	
Reported working with the following types of intermediaries to support the implementation of statewide education reforms:				
Federally supported comprehensive center, regional educational laboratory, equity assistance				No
center, or content center 2011–2012	11	6	31	
2012–2013	8	5	30	
Institution of higher education	c	C		No
2011–2012	11	6	30	
2012–2013	10	5	28	
Regional/county offices				No
2011–2012	7	4	14	
2012–2013	5	4	13	
Educators contracted by the state, such as distinguished educators				No
2011–2012	9	6	25	
2012–2013	8	2	18	
Other external organizations				No
2011–2012	8	3	21	
2012–2013	7	4	17	
Other types of intermediary				No
2011–2012	1	1	6	
2012–2013	3	4	5	
Number of States	8-12	6-7	19-31	

### Table B.7. State work with intermediaries to support implementation of statewide education reforms

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SC-2 = Building strong statewide capacity to implement, scale up, and sustain the proposed plans.

	1	Item aligned — with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported intermediaries were expected to				
work with the following groups:				
State-level staff				No
2011–2012	12	7	30	
2012–2013	10	6	30	
All districts				No
2011–2012	7	4	18	
2012–2013	6	5	14	
Districts identified for improvement or corrective				No
action under NCLB				
2011–2012	8	5	25	
2012–2013	5	5	22	
Schools identified for improvement, corrective				No
action, or restructuring under NCLB and/or the				
districts in which these schools are located				
2011–2012	10	5	25	
2012–2013	7	4	25	
Schools that received SIG or RTT funds to	•		_0	No
implement one of the four U.S. Department of				
Education-specified school intervention models				
and/or the districts in which these schools are				
located				
2011–2012	12	6	28	
2012–2013	10	5	27	
Districts and/or schools that are formally	10	0	21	No
defined as "participating" in RTT <sup>a</sup>				NO
2011–2012	12	3	n.a.	
2012–2013	10	3	n.a.	
Districts and/or schools that are formally	10	5	n.a.	No
defined as being "involved" in RTT <sup>a</sup>				INU
2011–2012	7	2	no	
2011–2012 2012–2013	7	3	n.a.	
	1	2	n.a.	No
Other groups of districts and/or schools 2011–2012	2	2	F	No
	2	2	5	
2012–2013	4	2	6	
Number of States	9-12	4-7	28-31	

#### Table B.8. Groups with which states expected intermediaries to work

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> These items were asked only in RTT states.

NCLB = No Child Left Behind; SIG = School Improvement Grant.

n.a. = not applicable.

	N	umber of state	s	Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported implementing the following structural changes at the SEA since July 2008/spring 2012 o support implementation of state education				
eforms:				
Created new office(s) or department(s)				No
2011–2012	11	5	15	
2012–2013	4	3	9	
Created new staff positions				No
2011–2012	12	7	25	
2012–2013	11	6	15	
Reorganized the structure of existing				No
offices/departments				
2011–2012	11	7	24	
2012–2013	6	7	18	
Changed laws, policies, or regulations	0	1	10	No
2011–2012	11	7	26	NO
2012–2013	8	5	21	
Other structural changes to support the	0	5	21	No
mplementation of reforms				INU
	2	0	10	
2011–2012 2012–2013	3 0	2 2	10 8	
Reported the following changes since July 2008/spring 2012 to improve the SEA's capacity o address the needs of ELLs:				
ncreased SEA staff with ELL expertise				No
2011–2012	2	2	11	
2012–2013	3	3	8	
Reorganized structure of existing offices/	5	5	U U	No
lepartments				
2011–2012	12	4	23	
2012–2013	7	5	19	
ncreased use of consultants with ELL expertise	1	0	10	No
2011–2012	9	3	20	110
2012–2013	6	3	10	
ncreased ELL expertise within regional offices	0	5	10	No
2011–2012	6	3	13	NO
2012–2012	3	2	4	
	5	2	4	No
Redefined policies to better meet ELLs' needs 2011–2012	7	0	21	INU
2011–2012 2012–2013	7 7	3		
	1	1	11	No
Other types of changes	A	0	0	No
2011–2012	4	2	6	
2012–2013	2	2	4	

### Table B.9. Structural changes at the state education agency

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SEA = State Education Agency; ELL = English language learners.

	1	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported coordinating RTT and/or SIG with other federal programs in the following ways since July 2008/spring 2012:				
Encouraged cofunding of initiatives using				No
funds from different federal programs				
2011–2012	12	7	27	
2012–2013	12	7	28	
Established common planning activities for				No
state Department of Education staff				
responsible for different federal programs				
2011–2012	11	7	27	
2012–2013	10	7	29	
Increased communication across state				No
Department of Education staff responsible for				
different federal programs				
2011–2012	12	7	28	
2012–2013	12	7	31	
Other steps to coordinate RTT and/or SIG and				No
other federal programs				
2011–2012	5	4	14	
2012–2013	7	3	13	
Number of States	12	7	31	

### Table B.10. State coordination of RTT and/or SIG with other federal programs

Source: Interviews with state administrators in spring 2012 and spring 2013.

SIG = School Improvement Grant.

	Number of states			Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported gaps in the following areas of expertise:				
Monitoring districts and/or schools				No
2011–2012	1	1	6	
2012–2013	2	1	7	
Providing targeted support or technical assistance to districts and/or schools		·		No
2011–2012	2	2	11	
2012–2013	2 3	2 3	14	
Developing and working with districts to				No
implement teacher evaluation models				
2011–2012	0	3	10	
2012–2013	3	1	16	
Developing state longitudinal data systems	-			No
2011–2012	1	2	6	
2012–2013	3	1	9	
Working with districts and/or schools on the use of				No
data to improve instruction				
2011–2012	3	2	9	
2012–2013	5	2 3	12	
Supporting districts and/or schools in the process				No
of turning around low-achieving schools				
2011–2012	3	2	13	
2012–2013	4	3	15	
Other types of expertise				No
2011–2012	2	1	4	
2012–2013	4	2	10	
Number of States	12	7	29-31	

### Table B.11. State-level gaps in expertise to support education reforms

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

	Number of states			Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported the following factors as most constraining SEA's capacity to implement statewide education reforms:				
Too few SEA staff				No
2011–2012	3	0	9	
2012–2013	4	1	8	
SEA staff working in silos				No
2011–2012	2	0	1	
2012–2013	1	0	2	
Limited expertise in reform topics				No
2011–2012	0	1	2	
2012–2013	0	0	2	
Staff turnover				No
2011–2012	1	0	2	
2012–2013	1	0	3	
Limited state funding				No
2011–2012	1	2	10	
2012–2013	0	3	5	
Limited federal funding				No
2011–2012	0	1	0	
2012–2013	0	1	1	
Need for better technology to support reform efforts				No
2011–2012	0	0	0	
2012–2013	2	1	0	
Provisions within collective bargaining agreements				No
2011–2012	2	0	1	
2012–2013	1	0	1	
State regulations/laws				No
2011–2012	1	1	2	
2012–2013	1	0	4	
Federal regulations/laws				No
2011–2012	0	0	1	
2012–2013	1	1	0	
Governance structure of state		-	_	No
2011–2012	0	0	0	
2012–2013	1	0	2	N L
Level of support from governor	~	<u> </u>	•	No
2011–2012	0	0	0	
2012–2013	0	0	0	NI-
Level of state legislature support	0	0	4	No
2011–2012	0	0	1	
2012–2013 Other factors	0	0	1	No
Other factors	0	0	0	No
2011–2012	2 0	2 0	2 2	
2012–2013	-			
Number of States	12	7	31	

## Table B.12. Barriers constraining state educational agency capacity to implement statewide education reforms

Source: Interviews with state administrators in spring 2012 and spring 2013.

SEA = State Education Agency.

	Number of states			Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported adopting the CCSS in the following subject areas:				
Both ELA and math				Yes (SA-1)
2011–2012	11	7	25	
2012–2013	12	6	27	
Math only		_		Yes (SA-1)
2011–2012	0	0	0	
2012–2013	0	0	0	
ELA only 2011–2012	4	0	2	Yes (SA-1)
2012–2012	1 0	0 1	3 1	
Reported supplementing the CCSS with state- specific standards in the following subject areas: <sup>a</sup> Both ELA and math				Yes (SA-1)
2011–2012	2	2	5	
2012–2013	1	2	7	
Math only	·	-	,	Yes (SA-1)
2011–2012	0	0	0	100 (0/11)
2012–2013	0	0	0	
ELA only	0	Ŭ	Ũ	Yes (SA-1)
2011–2012	1	1	2	
2012–2013	1	1	2	
Number of States	12	7	31	

### Table B.13. State adoption of the Common Core State Standards

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> States that reported they did not adopt the CCSS in either Math or English are included in the analysis of this question as no responses.

CCSS = Common Core State Standards; ELA = English/language arts; SA-1 = Developing and adopting common standards.

	Among the states that adopted the CCSS in ELA and/or math, number of states			Item aligned with RTT - application
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported the following changes to state policies and practices in response to adopting the CCSS:				
Required use of new curricula or textbooks				Yes (SA-3)
2011–2012	0	0	4	
2012–2013	3	1	4	
Required use of new, state-approved interim				Yes (SA-3)
assessments 2011–2012	1	0	0	
2011–2012 2012–2013	1 2	0 0	0 2	
Changed credit or course requirements	2	0	2	Yes (SA-3)
2011–2012	3	1	3	163 (GA-5)
2012–2013	2	2	4	
Changed the content of the state's high school exit	-	-		Yes (SA-3)
exam				
2011–2012	0	1	1	
2012–2013	1	1	1	
Changed the performance standard on the high				Yes (SA-3)
school exit exam				. ,
2011–2012	0	0	1	
2012–2013	1	0	0	
Changed the college entrance requirements for the state college/university system				Yes (SA-3)
2011–2012	0	0	2	
2012–2013	1	0	1	
Changed policies related to teachers and/or school leaders, such as licensure, certification, or annual professional development requirements				Yes (SA-3)
2011–2012	5	0	6	
2012–2012	5	3	9	
Other changes	ľ	5	3	No
2011–2012	5	2	10	
2012–2013	3	1	8	
Number of States	6-12	4-7	12-28	

### Table B.14. Changes to state policies and practices in response to adoptingthe Common Core State Standards

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

	Among the s in ELA and	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported participating in a consortium to develop assessments aligned to these standards 2011–2012 2012–2013	12 12	7 7	27 25	Yes (SA-2)
Reported participating in the following consortia: Partnership for Assessment of Readiness for				No
College and Careers (PARCC) only 2011–2012	9	5	5	
2012–2013 SMARTER Balanced Assessment Consortium (SBAC) only	9	6	5	No
2011–2012 2012–2013	3 3	0	19 17	
Both PARCC and SBAC 2011–2012	0	2	2	No
2012–2012 2012–2013 Other consortium	0	1	1	No
2011–2012 2012–2013	0	0	1 2	INU
Number of States	12	7	28	

### Table B.15. State participation in consortia to develop assessments alignedto Common Core State Standards

Source: Interviews with state administrators in spring 2012 and spring 2013.

CCSS = Common Core State Standards; ELA = English/language arts; SA-2 = Developing and implementing common, high-quality assessments.

		Among the states that adopted the CCSS in ELA and/or math, number of states			
	Early RTT	Later RTT	Non-RTT	application (subtopic)	
Reported providing funds to districts and/or schools to support implementation of the CCSS since adopting them				Yes (SA-3)	
2011–2012	8	1	7		
2012–2013	9	1	10		
Reported designating such funds for:					
Professional development				Yes (SA-3)	
2011–2012	8	1	5		
2012–2013	9	1	10		
Curriculum/textbook purchase				Yes (SA-3)	
2011–2012	3	0	2 2		
2012–2013	5	0	2		
Development or purchase of interim				Yes (SA-3)	
assessments or item banks					
2011–2012	5	0	1		
2012–2013	7	1	5		
Purchase of hardware or software needed to				Yes (SA-3)	
implement standards or assessments					
2011–2012	4	0	3		
2012–2013	6	0	2		
Fund additional staff either externally				Yes (SA-3)	
contracted or hired internally				. ,	
2011–2012	6	0	2		
2012–2013	7	0	2		
Other purpose				No	
2011–2012	4	0	1		
2012–2013	3	1	2		
Number of States	12	7	26		

### Table B.16. Funds provided by states to districts and/or schools to support implementation of Common Core State Standards

Source: Interviews with state administrators in spring 2012 and spring 2013.

	Among the states that adopted the CCSS in ELA and/or math, number of states			Item aligned with RTT application	
	Early RTT	Later RTT	Non-RTT	(subtopic)	
Reported investing in new technology to assist with implementation of the CCSS since adopting them				Yes (SA-3)	
2011–2012 2012–2013	7 10	3 2	7 8		
	10	2	0		
Reported the following technology investments for this purpose: Hardware				No	
2011–2012	6	0	4	NO	
2012–2013	8	1	5		
Software				No	
2011–2012	6	2	4		
2012–2013	9	2	4		
Connectivity, such as increased bandwidth or Internet speed for school systems				No	
2011–2012	5	1	4		
2012–2013	6	1	5		
Other investments				No	
2011–2012	2	2	4		
2012–2013	2	0	4		
Number of States	12	7	27		

### Table B.17. State investments in new technology to assist with implementation of the Common Core State Standards

Source: Interviews with state administrators in spring 2012 and spring 2013.

# Table B.18. State investments in new technology to assist withimplementation of the assessments associated with the Common Core StateStandards

	Among the states that adopted the CCSS in ELA and/or math, number of states			Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported investing in new technology to assist with implementation of the assessments associated with the CCSS since adopting them 2011–2012 2012–2013	6 7	2 2	4 9	Yes (SA-3)
Reported the following technology investments for this purpose: Hardware				No
2011–2012 2012–2013	5 6	0 1	2 4	
Software 2011–2012	6	2	3	No
2012–2013	5	2	5	No
Connectivity, such as increased bandwidth or Internet speed for conducting assessments				INU
2011–2012 2012–2013	5 5	0 1	3 5	
Other investments 2011–2012	0	1	1	No
2012–2013	2	0	1	
Number of States	12	6-7	27	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

# Table B.19. Materials provided by states to help practitioners understand theCommon Core State Standards and/or change instruction based on thestandards

	Among the s in ELA and	Item aligned with RTT application		
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported providing materials to help practitioners understand the CCSS and/or change instruction based on the standards since adoption of these standards 2011–2012 2012–2013	12 12	7 7	28 27	Yes (SA-3)
Reported providing the following types of materials for this purpose: Documents showing alignment between the				No
previous state standards and the new standards 2011–2012	10	7 5	26 21	
2012–2013 Documents showing the alignment between summative assessments and new standards, such as blueprints	8	5	21	No
2011–2012 2012–2013 Tools or guidance on providing instruction aligned	4 8	4 7	11 18	No
with the new standards, such as scope and sequence, curriculum maps, or frameworks 2011–2012	11	7	21	
2012–2013 Examples of instruction consistent with new standards	11	7	23	No
2011–2012 2012–2013	10 11	5 4	22 26	Ne
Sample lesson plans consistent with new standards 2011–2012	6	3	18	No
2012–2013 Sample performance tasks for formative assessment purposes, including rubrics or	9	5	20	No
scoring guides 2011–2012 2012–2013 Sample student work	7 11	2 3	11 18	No
2011–2012 2012–2013 Banks of interim assessment items aligned to	4 6	2 2	7 10	No
standards 2011–2012 2012–2013	2 6	3 4	4 10	
Walk-through or observation protocols to aid in monitoring alignment of instruction to new standards				No
2011–2012 2012–2013 Other types of materials	7 9	2 4	5 10	No
2011–2012 2012–2013	6 6	0 3	17 10	
Number of States	12	6-7	27-28	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

CCSS = Common Core State Standards; ELA = English/language arts; SA-3 = Supporting the transition to enhanced standards and high-quality assessments.

	Among the s in ELA and	Item aligned with RTT application		
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported providing professional development, training, or technical assistance to districts and/or schools to support implementation of the CCSS since adoption of these standards 2011–2012	12	7	27	Yes (SA-3)
2012–2013	12	7	28	
Reported providing the following types of support for this purpose: Training on building awareness/understanding of the standards		_		No
2011–2012 2012–2013	12 12	7 7	27 28	
Training on teaching strategies, activities, or methods aligned with the standards				No
2011-2012	12	5	25	
2012–2013 Training on the assessments aligned to the standards	12	5	27	No
2011–2012 2012–2013	6 7	4 5	17 21	
Other types of support		2		No
2011–2012 2012–2013	4 6	0 3	7 9	
Number of States	12	7	28	

# Table B.20. State support to districts and/or schools for implementation of Common Core State Standards

Source: Interviews with state administrators in spring 2012 and spring 2013.

CCSS = Common Core State Standards; ELA = English/language arts; SA-3 = Supporting the transition to enhanced standards and high-quality assessments.

	Among the st in ELA and	Item aligned with RTT application		
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported providing supports to districts and/or schools specifically designed to aid in the implementation of the CCSS with ELLs since adopting these standards 2011–2012	11	5	18	Yes (SA-3)
			-	
2012–2013	12	4	23	
Reported providing the following support for this purpose:				
Funds				No
2011–2012	4	1	5	
2012–2013	7	0	8	
Materials to support understanding and use of			-	No
new standards with ELLs				
2011–2012	7	4	15	
2012–2013	11	3	19	
Professional development, training, or technical		U	10	No
assistance to support the instruction of ELLs				110
2011–2012	8	5	15	
2012–2013	12	4	23	
Mapped new ELA standards to state English	12	-	20	No
language proficiency standards or revised state				NO
English language proficiency standards for better				
alignment				
2011–2012	5	4	15	
2012–2012	6	4	12	
Other support	0	I	14	No
2011–2012	1	0	4	INU
2012–2012	1	0	4	
		-		
Number of States	11-12	7	26-27	

## Table B.21. State support to districts and/or schools to aid in implementation of Common Core State Standards with English language learners

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

CCSS = Common Core State Standards; ELA = English/language arts; ELLs = English language learners; SA-3 = Supporting the transition to enhanced standards and high-quality assessments.

		Number of states		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported having an SLDS				Yes (DA-1)
2011–2012	12	7	28	
2012–2013	12	7	30	
Reported that the following data systems are linked to the state's K–12 education longitudinal data system:				
Early childhood				Yes (DA-1)
2011–2012	10	5	15	. ,
2012–2013	11	5	19	
Higher education				Yes (DA-1)
2011–2012	9	5	18	· · · ·
2012–2013	10	7	23	
Teacher preparation programs				No
2011–2012	4	2	13	
2012–2013	7	4	8	
Health (e.g., access to medical or mental				No
health services)				
2011–2012	3	2	5	
2012–2013	4	1	4	
Welfare/foster care/child protective services				No
2011–2012	3	0	12	
2012–2013	5	3	10	
Workforce (e.g., employment data)				No
2011–2012	3	0	9	
2012–2013	4	2	9	
Juvenile justice				No
2011–2012	3	3	10	
2012–2013	4	4	8	
Other data systems	-	-	-	No
2011–2012	3	1	8	
2012–2013	2	1	10	
Number of States	11-12	7	30-31	

### Table B.22. State implementation of Statewide Longitudinal Data Systems

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SLDS = Statewide Longitudinal Data System; DA-1 = Fully implementing a statewide longitudinal data system.

	١	Item aligned		
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Reported requiring districts to implement district				Yes (DA-3)
data systems <sup>a</sup>				
2011–2012	6	1	8	
2012–2013	6	3	11	
Number of States	12	7	31	

### Table B.23. State requirements related to district data systems

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> District data systems (also identified as local instructional improvement systems) are defined in the RTT application as technology-based tools or other strategies that provide teachers, principals, and administrators with meaningful support and actionable data to systemically manage continuous instructional improvement, including such activities as instructional planning; gathering information (for example, through formative, interim, and summative assessments, and looking at student work and other student data); analyzing information with the support of rapidtime reporting; using this information to inform decisions on appropriate next instructional steps; and evaluating the effectiveness of the actions taken. Such systems promote collaborative problem solving and action planning; they may also integrate instructional data with student-level data, such as attendance, discipline, grades, credit accumulation, and student survey results, to provide early-warning indicators of a student's risk of educational failure.

DA-3 = Using data to improve instruction.

	Item aligned with RTT application		
Early RTT	Later RTT	Non-RTT	(subtopic)
0	-	40	Yes (DA-2)
ŏ	O	20	
o	1	14	Yes (DA-2)
1	Э	19	Yes (DA-2)
7	3	10	165 (DA-2)
1	5	10	Yes (DA-2)
5	3	8	163 (DA-2)
5	5		
I	+	10	Yes (DA-2)
Δ	2	7	163 (DA-2)
0	-	10	Yes (DA-2)
6	2	7	103 (07-2)
Ū	0	17	No
1	1	6	
5	1		
8	5-6	18-20	
	Statewide Longi Early RTT 8 8 8 8 8 8 8 7 7 7 8 7 7 5 7 7 5 7 7 4 7 6 6 6 8 6 8 6 1 5 5 5	Statewide Longitudinal Data Systes           Early RTT         Later RTT           8         5           8         6           8         6           8         4           8         5           7         5           7         5           7         5           7         5           7         5           7         5           7         5           7         5           7         5           7         5           6         4           6         2           8         6           6         6           1         1           5         2           5         1	Early RTTLater RTTNon-RTT85198620862084148520751973108518751853875167415427751264156278614661711652125113

### Table B.24. Access to State Longitudinal Data Systems

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

SLDS = Statewide Longitudinal Data System; DA-2 = Accessing State data and using it to inform key stakeholders.

	N	umber of state	S	Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Among the states that reported having an SLDS as of spring 2012/2013, reported tracking overall usage of their SLDS				No
2011–2012	8	4	15	
2012–2013	8	4	16	
Among states that reported having an SLDS as of spring 2012/2013, reported tracking usage of the SLDS by user type				No
2011–2012	4	2	5	
2012–2013	4	3	4	
Among the states that reported tracking usage of their SLDS by user type, mean percentage of users of each type who accessed the system in each of the following school years: State Department of Education staff 2010–2011 2011–2012	20.2 26.8	12.2 11.8	46.6 52.2	No
District staff				No
2010–2011	20.0	NA	43.8	
2011–2012	62.7	NA	65.7	
Principals				No
2010–2011	57.0	66.9	43.8	
2011–2012	62.7	59.6	56.3	
Teachers				No
2010–2011	35.9	100.0	22.8	
2011–2012	29.4	66.8	19.1	
Number of States	2-12	0-7	1-27	

### Table B.25. Usage of State Longitudinal Data Systems

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SLDS = Statewide Longitudinal Data System.

NA = not available.

	N	umber of stat	es	Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Among states that reported having an SLDS,				Yes (DA-2)
reported state-level staff use of data in the SLDS				
for the following purposes:				
To track overall school performance and identify				
areas for improvement		0		
2011–2012	11	6	24	
2012–2013	12	7	25	
To evaluate instructional programs, such as				Yes (DA-2)
measuring program effectiveness	10	5	10	
2011–2012 2012–2013	10 11	5 7	16 23	
	11	1	23	
To inform professional development offerings, such as				Yes (DA-2)
identifying specific content or skills where teachers need assistance or support				
	C	1	10	
2011–2012 2012–2013	6 7	1 4	10 11	
	1	4	11	
To evaluate the success of professional development				Yes (DA-2)
offerings for teachers or principals	2	1	6	
2011–2012 2012–2013	3 3	1 3	6 5	
To inform resource allocation, such as which schools	3	3	5	
				Yes (DA-2)
and students receive which programs or which staff work with which students				
2011–2012	7	4	13	
2011–2012 2012–2013	10	4 5	16	
To provide information to teachers about their	10	5	10	Yes (DA-2)
students' progress				res (DA-2)
2011–2012	8	5	17	
2012–2013	5	7	18	
To provide information to parents about the school or	5	1	10	Yes (DA-2)
their children				Tes (DA-2)
2011–2012	7	5	14	
2012–2013	6	5	14	
To provide information to students about their own	0	5	10	Yes (DA-2)
progress				163 (DA-2)
2011–2012	3	3	6	
2012–2013	2	1	5	
To track students' postsecondary enrollment and	2	I	5	Yes (DA-2)
progress after high school graduation, such as credits				163 (DA-2)
earned in public colleges or universities in the state				
2011–2012	7	5	14	
2012–2013	9	6	14	
To provide information to federal agencies (e.g.,	5	0	10	Yes (DA-2)
EDFacts)				103 (DA-2)
2011–2012	10	6	23	
2012–2013	10	7	23	
Other purposes	12	ſ	20	No
2011–2012	3	2	8	INU
2012–2013	3	1	9	
Number of States	11-12	6-7	26-27	

### Table B.26. Uses of statewide longitudinal data by state staff

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SLDS = Statewide Longitudinal Data System; DA-2 = Accessing State data and using it to inform key stakeholders.

	N	umber of states	S	Item aligne
-	Early RTT	Later RTT	Non-RTT	with RTT applicatior (subtopic)
Provided funding, materials, training, technical assistance, or other supports to districts to encourage use of data to improve instruction				Yes (DA-3)
2011–2012 2012–2013	12 12	4 7	29 29	
Provided the following supports to districts to encourage use of data to improve instruction:				
Funds		_		No
2011–2012	10	3	12	
2012–2013	11	5	11	
Materials or documents on use of data to improve instruction				No
2011–2012	11	4	23	
2012–2013	12	7	26	
Technical assistance				No
2011–2012	10	3	29	
2012–2013	12	6	27	
Professional development or training		-	_·	No
2011–2012	10	3	24	
2012–2013	12	7	26	
Other types of support	14	ſ	20	No
2011–2012	F	4	0	INU
	5 3	1	9	
2012–2013	3	0	6	NI-
Provided funding, materials, training, technical assistance, or other supports to districts specifically to aid in use of data related to ELLs 2011–2012 2012–2013	7 10	6 5	17 13	No
Provided following supports to districts to aid				
in use of data related to ELLs				
Funds				No
2011–2012	2	2	7	
2012–2013	5	2	5	
Materials or resources such as documents or	5	2	5	No
software				NU
	Λ	F	15	
2011–2012	4	5	15	
2012–2013	6	3	10	NI-
Professional development, training, or technical				No
assistance	-	-	. –	
2011–2012	7	6	17	
2012–2013	10	5	11	
Other types of support				No
2011–2012	1	3	3	
2012–2013	1	0	3	
Number of States	10-12	7	29-31	

### Table B.27. State support for district data use

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

ELLs = English language learners; DA-3 = Using data to improve instruction.

-				
	Among states	Item aligned - with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported that the following groups have access to individual student-level data for students in the state from the SLDS:				
State Department of Education staff				No
2011–2012	12	7	24	
2012–2013	12	6	24	
District staff	12	Ŭ	21	No
2011–2012	12	7	26	
2012–2013	10	6	24	
Principals	10	Ŭ	21	No
2011–2012	10	5	23	
2012–2013	8	6	22	
Teachers	Ū	Ŭ		No
2011–2012	9	4	18	
2012–2013	7	4	19	
Colleges and universities		•	10	No
2011–2012	3	2	5	
2012–2013	3	3	9	
External researchers	Ū	Ū	U U	No
2011–2012	6	5	11	
2012–2013	7	6	20	
Other groups		5	_0	No
2011–2012	0	1	7	
2012–2013	5	0	5	
Number of States	12	7	25-27	

# Table B.28. Access to individual student-level data in State Longitudinal DataSystems

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

SLDS = Statewide Longitudinal Data System.

	Number of states			Item aligned — with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported authorizing AC programs for				Yes (TL-1)
teachers in:				
2007–2008 <sup>a</sup>	11	6	25	
2011–2012	12	7	30	
2012–2013	12	7	29	
Reported authorizing the following groups to operate AC programs for teachers:				
Institutions of higher education in:				Yes (TL-1)
2007–2008ª	11	6	21	
2011–2012	12	7	26	
2012–2013	12	7	25	
School districts in:				Yes (TL-1)
2007–2008 <sup>a</sup>	7	2	6	
2011–2012	10	3	12	
2012–2013	10	4	11	
Educational service districts or cooperatives in:				Yes (TL-1)
2007–2008 <sup>a</sup>	3	2	5	
2011–2012	5	3	9	
2012–2013	3	3	10	
Nonprofit organizations in:	-	-		Yes (TL-1)
2007–2008ª	6	3	10	
2011–2012	10	7	18	
2012–2013	10	7	16	
Partnerships or collaborations among above				Yes (TL-1)
groups in:				
2007–2008ª	4	4	11	
2011–2012	9	6	15	
2012–2013	9	5	17	
Other groups or organizations in:	-	-		No
2007–2008ª	0	1	10	
2011–2012	3	2	14	
2012–2013	3	1	12	
Number of States	9-12	6-7	29-31	

# Table B.29. Authorization of alternative-route certification programs for teachers

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

AC = Alternative-route certification; TL-1 = Providing high-quality pathways to certification for aspiring teachers and principals.

	N	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported expanding the types of institutions qualified to operate teacher preparation programs to include providers operating independently of institutions of				Yes (TL-1)
higher education				
2011–2012	4	2	5	
2012–2013	2	2	3	
Reported increasing the selectivity of teacher				Yes (TL-1)
preparation programs within the past year				
2011–2012	3 2	2 1	3	
2012–2013	2	1	8	
Reported increasing the amount of time students in				Yes (TL-1)
teacher preparation programs spend in supervised,				
school-based learning experiences within the past				
year				
2011–2012	3	1	3	
2012–2013	3	0	7	
Reported increasing the amount of mentoring and/or				Yes (TL-1)
coaching that students in teacher preparation				
programs receive within the past year				
2011–2012	2	1	4	
2012–2013	2	0	4	
Reported allowing AC programs for teachers to				Yes (TL-1)
award the same type of certification that traditional				
preparation programs award within the past year <sup>a</sup>				
2011–2012	4	2	4	
2012–2013	3	2	4	
Reported other changes within the past year				No
2011–2012	4	1	8	
2012–2013	3	1	10	
Number of States	10-12	6-7	24-31	

## Table B.30. Changes made to state regulations related to teacher preparation or certification programs

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> States that reported that they do not authorize or permit alternative programs for teacher certification are included in the analysis of this question as no responses.

AC = Alternative-route certification; TL-1 = Providing high-quality pathways to certification for aspiring teachers and principals.

programs				
	Number of states			Item aligned _ with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported having a process for assessing the				Yes (TL-2)
effectiveness of AC programs for teachers in: 2007–2008 <sup>a</sup>	9	5	14	
2011–2008-	10	5 6	14	
2012–2013	9	4	18	
Reported using the following information to assess the effectiveness of AC programs for teachers:				
The percentage of enrollees who earn certification				No
2011–2012	5	3	9	110
2012–2013	2	2	10	
The percentage of enrollees placed in teaching jobs				No
2011–2012	5	0	5	
2012–2013	3	1	9	
Rates of retention in the profession				No
2011–2012	4	0	4	
2012–2013	2	0	7	
The effectiveness ratings (based in part on student				Yes (TL-2)
growth) of credentialed teachers from each program 2011–2012	2	1	1	
2012–2013	2	0	1	
Qualitative program reviews	I	0		No
2011-2012	8	5	13	110
2012–2013	7	4	14	
Feedback from principals, other school staff, or				No
human resources staff on credentialed teachers from				
each program				
2011–2012	7	2	13	
2012–2013	5	2	11	
Other information			_	No
2011–2012	2 4	1	5	
2012–2013	4	1	8	
Reported using results from assessments of AC				
programs for teachers in the following ways:				
Provided results to certification programs				No
2011–2012	9	6	14	
2012–2013 Dravided additional state funding to contification	7	2	14	
Provided additional state funding to certification programs that were shown to be effective				Yes (TL-2)
2011–2012	1	0	0	
2012–2013	1	1	0	
Expanded and/or promoted certification programs	I	•	Ũ	Yes (TL-2)
that were shown to be effective				
2011–2012	3	0	1	
2012–2013	1	1	1	
Eliminated and/or reduced state funding for				No
certification programs that were shown to be				
ineffective	2	6	2	
2011–2012	2	0	0	
2012–2013	1	0	0	

# Table B.31. States' assessment of alternative-route teacher certification programs

	Number of states			Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Closed programs that were shown to be ineffective				No
2011–2012	3	0	0	
2012–2013	2	0	0	
Publically reported results for each program				Yes (TL-2)
2011–2012	4	4	8	
2012–2013	4	0	9	
Other actions				No
2011–2012	2	1	2	
2012–2013	2	0	3	
Number of States	9-12	7	25-31	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

AC = Alternative-route certification; TL-2 = Improving teacher and principal effectiveness based on performance.

	Number of states			Item aligned — with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported authorizing AC programs for				Yes (TL-2)
principals in:				
2007–2008 <sup>a</sup>	6	4	9	
2011–2012	10	6	17	
2012–2013	10	6	15	
Reported authorizing the following groups to operate AC programs for principals:				
Institutions of higher education in:				Yes (TL-2)
2007–2008ª	6	4	8	( /
2011–2012	10	6	13	
2012–2013	10	6	12	
School districts in:				Yes (TL-2)
2007–2008 <sup>a</sup>	5	1	3	
2011–2012	7	2	5	
2012–2013	7	3	7	
Educational service districts or cooperatives in:		C C	•	Yes (TL-2)
2007–2008 <sup>a</sup>	4	1	2	
2011–2012	5	2	4	
2012–2013	3	3	6	
Nonprofit organizations in:	C C	C C	·	Yes (TL-2)
2007–2008 <sup>a</sup>	3	3	2	
2011–2012	6	4	4	
2012–2013	7	5	4	
Partnerships or collaborations among above		C C	·	Yes (TL-2)
groups in:				
2007–2008ª	5	2	3	
2011–2012	9	3	8	
2012–2013	7	4	9	
Other groups or organizations in:	·	•	ũ	No
2007–2008ª	2	1	1	
2011–2012	3	2	4	
2012–2013	2	3	4	
Number of States	9-12	6-7	28-30	

# Table B.32. Authorization of alternative-route certification programs for principals

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

AC = Alternative-route certification; TL-2 = Improving teacher and principal effectiveness based on performance.

	Number of states			Item aligned
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Reported expanding the types of institutions qualified to operate principal preparation programs to include providers operating independently of institutions of higher education				Yes (TL-1)
2011–2012	3	2	2	
2012–2013	2	3	1	
Reported increasing the selectivity of principal preparation programs within the past year				Yes (TL-1)
2011–2012	4	1	2	
2012–2013	3	2	5	
Reported increasing the amount of time students in principal preparation programs spend in supervised, school-based learning experiences within the past year				Yes (TL-1)
2011–2012	2	1	4	
2012–2013	3	2	3	
Reported increasing the amount of mentoring and/or coaching that students in principal preparation programs receive within the past year				Yes (TL-1)
2011–2012	2	2	5	
2012–2013	4	1	3	
Reported allowing AC programs for principals to award the same type of certification that traditional preparation programs award within the past year <sup>a</sup>				Yes (TL-1)
2011–2012	5	1	3	
2012–2013	2	1	2	
Reported other changes within the past year				No
2011–2012	1	2	7	
2012–2013	2	0	5	
Number of States	12	5-7	26-31	

## Table B.33. Changes made to state regulations related to principal preparation or certification programs

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> States that reported that they do not authorize or permit alternative programs for teacher certification are included in the analysis of this question as no responses.

AC = Alternative-route certification; TL-1 = Providing high-quality pathways to certification for aspiring teachers and principals.

	1	Number of states	S	Item aligned with RTT
				application
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported having a process for assessing the				Yes (TL-2)
effectiveness of AC programs for principals				
in: 2007–2008ª	2	2	F	
2007–2008" 2011–2012	3 6	2 4	5 10	
2012–2013	8	3	10	
As of spring 2012/2013, reported using the				
following information to assess the				
effectiveness of AC programs for principals:				
The percentage of enrollees who earn				No
certification				
2011–2012	4	1	7	
2012–2013	4	3	5	N L
The percentage of enrollees placed in school				No
administration jobs 2011–2012	4	0	6	
2012–2013	4	0	6 4	
Rates of retention in the profession	2	0	4	No
2011–2012	4	0	1	
2012–2013	2	Ő	3	
The effectiveness ratings (based in part on				Yes (TL-2)
student growth) of credentialed principals from				. ,
each program				
2011–2012	2	0	1	
2012–2013	2	0	0	
Qualitative program reviews	-	4	0	No
2011–2012 2012–2013	5 7	4 3	9 7	
Feedback from school, district, or human	1	3	I	No
resources staff on credentialed principals from				INO
each program				
2011–2012	5	1	8	
2012–2013	6	1	5	
Other information				No
2011–2012	0	1	2	
2012–2013	1	1	1	
Reported using results from assessments of				
AC programs for principals in the following				
ways within the past year:				
Provided results to certification programs				No
2011–2012	4	3	9	
2012–2013	6	2	6	
Provided additional state funding to certification				Yes (TL-2)
programs that were shown to be effective 2011–2012	1	0	0	
2011–2012 2012–2013	1 2	0 0	0 0	
Expanded and/or promoted certification	2	U	U	Yes (TL-2)
programs that were shown to be effective				
2011–2012	2	0	1	
2012–2013	1	0	0	

# Table B.34. States' evaluation of alternative-route principal certification programs

	N	Number of states		
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Eliminated and/or reduced state funding for				No
certification programs that were shown to be				
ineffective	0	0	0	
2011–2012	0	0	0	
2012–2013	0	0	0	
Closed programs that were shown to be				No
ineffective				
2011–2012	0	0	1	
2012–2013	0	0	1	
Publically reported results for each program				No
2011–2012	1	3	5	
2012–2013	3	1	4	
Other actions	-			No
2011–2012	0	1	2	
2012–2013	1	0	0	
Number of States	11-12	6-7	28-31	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

AC = Alternative-route certification; TL-2 = Improving teacher and principal effectiveness based on performance.

	Number of states			Item aligned
	Early RTT	Later RTT	Non-RTT	with RTT application (subtopic)
Districts must use model prescribed by the state				No
2007–2008 <sup>a</sup>	3	0	4	
2011–2012	3	0	5	
2012–2013	4	1	6	
Districts may adopt state model				No
2007–2008ª	0	0	3	
2011–2012	1	2	2	
2012–2013	0	1	4	
Districts must adopt state model if unable to meet state expectations				No
2007–2008 <sup>a</sup>	0	1	0	
2011–2012	1	2	2 2	
2012–2013	1	2	2	
Districts must administer evaluations that comply with state statutes and the state monitors the evaluation process				No
2007–2008 <sup>a</sup>	1	2	2	
2011–2012	3	2 2	6	
2012–2013	4	3	7	
Districts must administer evaluations that comply with state statutes but the state does not monitor the evaluation process				No
2007–2008 <sup>a</sup>	6	4	18	
2011–2012	2	1	12	
2012–2013	1	0	8	
Number of States	10	7	27	

### Table B.35. State requirements for district adoption of teacher evaluation models

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

	N	lumber of state	s	Item aligned
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Reported that student achievement growth was				Yes (TL-2)
required				
2007–2008 <sup>a</sup>	3	1	4	
2011–2012	7	5	16	
2012–2013	9	6	14	
Reported that student achievement growth was required with a specific weight				Yes (TL-2)
2007–2008 <sup>a</sup>	1	0	0	
2011–2012	7	4	10	
2012–2013	9	5	11	
Required weight: No specific weight required or did not require student achievement growth				No
2011–2012	5	3	19	
2012–2013	3	2	18	
Between 1 and 20 percent				
2011–2012	1	0	1	
2012–2013	3	1	1	
Between 21 and 50 percent	C C	·		
2011–2012	3	4	2	
2012–2013	5	4	5	
51 percent or more	ũ	•	U U	
2011–2012	0	0	0	
2012–2013	0	Õ	Ő	
"Significant," "substantial," or "primary" factor	v	Ŭ	Ŭ	
2011–2012	3	0	7	
2012–2013	1	õ	5	
Number of States	11-12	7	29-31	

### Table B.36. Role of student achievement growth in teacher evaluations

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

# Table B.37. State-reported requirements for performance measures (otherthan student achievement growth) for evaluations of teachers *in tested*grades and subjects

	1	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Classroom observations				Yes (TL-2)
2007–2008 <sup>a</sup>	9	7	16	
2011–2012	11	7	21	
2012–2013	11	7	21	
Self-assessment				Yes (TL-2)
2007–2008 <sup>a</sup>	2	0	3	
2011–2012	4	1	6	
2012–2013	2	0	7	
Portfolios or other artifacts of teacher practice				Yes (TL-2)
2007–2008 <sup>a</sup>	3	1	3	
2011–2012	2	1	6	
2012–2013	1	1	7	
Peer assessments other than classroom				
observations				Yes (TL-2)
2007–2008 <sup>a</sup>	0	1	0	
2011–2012	1	1	1	
2012–2013	0	0	0	
Student work samples				Yes (TL-2)
2007–2008ª	0	0	1	100 (12 2)
2011–2012	2	1	3	
2012–2013	0	0	3	
Student surveys or other feedback				Yes (TL-2)
2007–2008ª	0	0	1	100 (12 2)
2011–2012	1	1	2	
2012–2013	2	1	3	
Parent surveys or other feedback				Yes (TL-2)
2007–2008ª	1	0	0	100 (12 2)
2011–2012	2	1	3	
2012–2013	1	0	3	
Other measures				No
2007–2008ª	0	1	2	
2011–2012	3	0	3	
2012–2013	3	1	2	
Number of States	11	7	26-29	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

# Table B.38. State-reported requirements for performance measures (otherthan student achievement growth) for evaluations of teachers *in nontested*grades and subjects

	1	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Classroom observations				Yes (TL-2)
2007–2008 <sup>a</sup>	9	7	16	
2011–2012 2012–2013	11 11	7 7	21 22	
		7	22	
Self-assessment 2007–2008 <sup>a</sup>	2	0	3	Yes (TL-2)
2011–2012	2	1	6	
2012–2013	3	0	7	
Portfolios or other artifacts of teacher practice				Yes (TL-2)
2007–2008 <sup>a</sup>	3	1	3	103 (12-2)
2011–2012	1	1	6	
2012–2013	2	1	8	
Peer assessments other than classroom				
observations				Yes (TL-2)
2007–2008 <sup>a</sup>	0	1	0	
2011–2012	0	1	1	
2012–2013	1	0	0	
Student work samples				Yes (TL-2)
2007–2008 <sup>a</sup>	0	0	1	
2011–2012 2012–2013	1 1	1 0	3 4	
	I	0	-	
Student surveys or other feedback 2007–2008 <sup>a</sup>	0	0	1	Yes (TL-2)
2007–2008- 2011–2012	0 0	0 1	1 2	
2012–2013	2	1	3	
Parent surveys or other feedback				Yes (TL-2)
2007–2008 <sup>a</sup>	1	0	0	100 (12 2)
2011–2012	1	1	3	
2012–2013	1	0	3	
Other measures				No
2007–2008 <sup>a</sup>	0	1	2	
2011–2012	2	1	4	
2012–2013	4	1	3	
Number of States	11	7	29	

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

	Number of states (unless otherwise specified)			Item aligned with RTT application
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported specifying a required minimum number of rating levels				Yes (TL-2)
2011–2012 2012–2013	8 9	6 6	16 15	
Average minimum number of rating levels <sup>a</sup>				No
2011–2012 2012–2013	2.7 3.8	2.6 3.4	1.8 1.8	
Number of rating levels states reported requiring: 4 or more levels				No
2011–2012 2012–2013	7 8	3 6	10 11	
3 levels 2011–2012	1	0	1	
2012–2013	1	0	1	
2 levels 2011–2012	0	3	5	
2012–2013 Did not specify a minimum <sup>b</sup>	0	0	3	
2011–2012 2012–2013	2 1	1 1	13 14	
Reported specifying a minimum acceptable spread of teachers across rating categories				No
2011–2012 2012–2013	0 0	0 0	0 1	
Number of States	10-12	7	26-31	

### Table B.39. Rating levels for overall teacher performance

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> In the analysis of this question, states that reported not specifying a required minimum number of rating levels were counted as zeroes.

<sup>b</sup> This includes states that responded no to the question of "Do state regulations specify a required minimum number of rating levels to be used when evaluating overall teacher performance? If so, what is the minimum number of rating categories that is required?"

		Number of states (unless otherwise specified)		
	Early RTT	Later RTT	Non-RTT	<ul> <li>application (subtopic)</li> </ul>
Allow teachers to earn tenure <sup>a</sup>				No
2007–2008 <sup>b</sup>	8	6	27	
2011–2012 2012–2013	9 10	6 6	22 25	
Have a probationary period for teachers		C C		Νο
2007–2008 <sup>b</sup>	11	7	29	NO
2011–2012	11	7	26	
2012–2013	11	7	30	
Of states that reported having a probationary				
period, mean duration of probationary period				
<b>(years)</b> 2007–2008 <sup>b</sup>	2.6	3.3	2.8	No
2007–2008- 2011–2012	2.6	3.3 3.3	2.8 3.0	
2012–2013	3.4	3.3	2.9	
	0.1	0.0	2.0	
Evaluated probationary teachers				Yes (TL-2)
At least annually 2007–2008 <sup>b</sup>	10	6	21	res (1L-2)
2011–2012	10	6	23	
2012–2013	8	5	22	
Every other year				No
2007–2008 <sup>b</sup>	0	0	0	
2011–2012	0	0	0	
2012–2013	0	0	0	
Other interval	0	4	4	No
2007–2008 <sup>b</sup> 2011–2012	0 0	1 1	4 2	
2012–2013	2	2	3	
Evaluated non-probationary teachers				
At least annually				Yes (TL-2)
2007–2008 <sup>b</sup>	5	3	11	. /
2011–2012	6	3	13	
2012–2013	8	3	13	
Every other year	0	•		No
2007–2008 <sup>b</sup>	2	0	1	
2011–2012 2012–2013	2 1	1 1	1 1	
Other interval	I	I	I	No
2007–2008 <sup>b</sup>	3	4	13	
2011–2012	2	3	11	
2012–2013	1	3	11	
Number of States	10-12	7	24-31	

### Table B.40. State regulations on tenure and frequency of teacher evaluation

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> This category includes states that provide the equivalent of tenure but do not use the term "tenure."

<sup>b</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

	1	Number of state	S	Item aligned
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT</li> <li>application</li> <li>(subtopic)</li> </ul>
Reported requiring results to guide decisions				
about:				
Professional development and support				Yes (TL-2)
2011–2012	7	4	8	
2012–2013	9	5	10	
Dismissal				Yes (TL-2)
2011–2012	7	6	8	
2012–2013	7	5	7	
Salary increases				Yes (TL-2)
2011–2012	2	1	3	
2012–2013	2	1	1	
Bonuses or performance-based compensation				Yes (TL-2)
other than salary				
2011–2012	1	1	3	
2012–2013	3	1	1	
Career advancement		_		Yes (TL-2)
2011–2012	1	0	0	
2012–2013	4	1	0	
Other decisions				No
2011–2012	1	2	2	
2012–2013	2	2	1	
Reported that evaluation results, rather than seniority, are the primary consideration in reductions in force and excessing decisions 2011–2012 2012–2013	1 1	2 3	5 2	No
Reported collecting information on the percentage of teachers falling in each rating level 2011–2012	0	4	11	No
2012–2012	8 8	4 5	11 9	
	0	5	9	
Reported analyzing the relationship between teacher ratings and student achievement growth				No
2011–2012	1	2	1	
2012–2013	4	4	0	
Reported providing teacher preparation programs with information about effectiveness based on:				No
Overall teacher ratings		_		
2011–2012	1	0	1	
2012–2013	4	0	0	
Classroom observations	-	-		
2011–2012	0	0	1	
2012–2013	3	0	0	
Student achievement growth	0	0	0	
2011–2012	3	0	0	
2012–2013	4	1	0	
Number of States	3-12	3-7	12-31	

### Table B.41. State regulations on the use of teacher evaluation results

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

	١	S	Item aligned	
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Districts must use model prescribed by the state				No
2007–2008ª	3	0	4	
2011–2012	3	0	5	
2012–2013	3	1	6	
Districts may adopt state model				No
2007–2008°	0	0	3	
2011–2012	0	0	3	
2012–2013	1	1	3	
District must adopt state model If unable to meet state expectations				No
2007–2008ª	0	1	0	
2011–2012	0	2	1	
2012–2013	1	1	1	
Districts must administer evaluations that comply with state statutes and the state monitors the evaluation process				No
2007–2008ª	2	3	1	
2011–2012	2	2	4	
2012–2013	3	2	6	
Districts must administer evaluations that comply with state statutes but the state does not monitor the evaluation process				No
2007–2008 <sup>a</sup>	4	1	17	
2011–2012	4	1	12	
2012–2013	1	0	9	
Number of States	9	5	25	

### Table B.42. State requirements for district adoption of principal evaluation models

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

	N	Item aligned		
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Reported that student achievement growth				Yes (TL-2)
was required				( )
2007–2008 <sup>a</sup>	2	1	2	
2011–2012	5	2	11	
2012–2013	7	4	12	
Reported that student achievement growth was required with a specific weight				Yes (TL-2)
2007–2008 <sup>a</sup>	2	0	0	
2011–2012	7	2	5	
2012–2013	8	5	9	
<b>Required weight:</b> No specific weight required or did not require student achievement growth				No
2011–2012	5	5	24	
2012–2013	4	2	20	
Between 1 and 20 percent				
2011–2012	1	0	0	
2012–2013	3	2	2	
Between 21 and 50 percent				
2011–2012	0	0	0	
2012–2013	4	3	4	
51 percent or more				
2011–2012	0	0	0	
2012–2013	0	0	0	
"Significant," "substantial," or "primary" factor				
2011–2012	3	0	3	
2012–2013	1	0	3	
Number of States	9-12	5-7	28-31	

### Table B.43. Role of student achievement growth in principal evaluations

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

		Number of states				
	Early RTT	Later RTT	Non-RTT	application (subtopic)		
Self-assessment				Yes (TL-2)		
2007–2008 <sup>a</sup>	1	0	5	. ,		
2011–2012	1	0	7			
2012–2013	4	2	7			
District administrator input				Yes (TL-2)		
2007–2008ª	4	2	10			
2011–2012	5	3	12			
2012–2013	7	5	16			
Staff surveys or other feedback				Yes (TL-2)		
2007–2008ª	1	0	3			
2011–2012	2 3	0	5			
2012–2013	3	1	5			
Student surveys or other feedback				Yes (TL-2)		
2007–2008 <sup>a</sup>	0	0	1	( )		
2011–2012	0	0	3 3			
2012–2013	2	0	3			
Other measures				No		
2007–2008 <sup>a</sup>	3	1	4			
2011–2012	5	0	9			
2012–2013	4	2	7			
Number of States	10	5	28			

# Table B.44. State-reported requirements for performance measures for principal evaluations (other than student achievement growth)

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

	۱ unles)	Item aligned with RTT ⁻ application		
	Early RTT	Later RTT	Non-RTT	(subtopic
Reported specifying a required minimum number of rating levels				Yes (TL-2)
2007–2008 <sup>a</sup>	5	2	6	
2011–2012	7	3	14	
2012–2013	9	4	13	
Average minimum number of rating levels <sup>b</sup>				No
2007–2008 <sup>a</sup>	1.4	0.6	0.6	
2011–2012	2.7	2.3	1.6	
2012–2013	3.8	3.4	1.5	
Number of rating levels states reported				No
requiring:				
4 or more levels				
2011–2012	7	3	9	
2012–2013	10	6	9	
3 levels				
2011–2012	0	0	3	
2012–2013	1	0	1	
2 levels				
2011–2012	1	2	2	
2012–2013	0	0	3	
Did not specify a minimum <sup>c</sup>				
2011–2012	4	2	15	
2012–2013	1	1	16	
Number of States	10-12	5-7	29-31	

### Table B.45. Rating levels for overall principal performance

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

<sup>b</sup> In the analysis of this question, states that reported not specifying a required minimum number of rating levels were counted as zeroes.

<sup>c</sup> This includes states that responded no to the question of "Do state regulations specify a required minimum number of rating levels to be used when evaluating overall principal performance? If so, what is the minimum number of rating categories that is required?"

	N	umber of state	s	Item aligned with RTT	
	Early RTT	Later RTT	Non-RTT	application (subtopic)	
Reported requiring results to guide decisions					
about:					
Professional development and support			•	Yes (TL-2)	
2011–2012	4	3	3		
2012–2013	4	4	4		
Dismissal			_	Yes (TL-2)	
2011–2012	4	3	5		
2012–2013	5	4	3		
Salary increases				Yes (TL-2)	
2011–2012	1	1	1		
2012–2013	1	1	0		
Bonuses or performance-based compensation other				Yes (TL-2)	
han salary					
2011–2012	1	0	1		
2012–2013	1	1	1		
Career advancement				Yes (TL-2)	
2011–2012	1	0	0		
2012–2013	1	1	0		
Other decisions				No	
2011–2012	0	1	1		
2012–2013	1	3	1		
Reported collecting information on the percentage of principals falling in each rating level 2011–2012 2012–2013	6 7	5 4	7 7	No	
Reported analyzing the relationship between				No	
principal ratings and student achievement growth					
2011–2012	1	0	0		
2012–2013	3	3	2		
Reported providing principal preparation programs with information about effectiveness based on:	-	-			
Overall principal ratings				No	
2011–2012	1	0	1		
2012–2013	1	Ő	0 0		
Student achievement growth	-	-	-	No	
2011–2012	0	0	0		
2012–2013	1	0	õ		
Something else		Ū	Ŭ	No	
2011–2012	0	0	1		
2012–2013	0	0	1		
Number of States	5-12	5-7	22-30		

### Table B.46. State uses of principal evaluation results

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

		Number of states			
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>	
	Early KTT		NOII-RTT	(subtopic)	
Reported having a process to identify areas				Yes (TL-3)	
of teacher shortage					
2011–2012	11	7	29		
2012–2013	12	6	31		
Reported taking actions to identify areas of					
teacher shortage:					
Reviewed the number of vacant positions and/or				No	
teacher attrition by content area, grade, student					
achievement levels, or student demographic					
characteristics					
2011–2012	9	4	20		
2012–2012	9 10	4 5	20 25		
	10	5	20	No	
Reviewed the number of positions filled by				INO	
teachers teaching in subjects outside their					
certification area	4.4		05		
2011–2012	11	4	25		
2012–2013	11	5	26		
Reviewed the projected total number of teacher				No	
preparation program graduates			1.5		
2011–2012	8	0	16		
2012–2013	7	2	21		
Reviewed the projected number of teacher				No	
preparation program graduates in specific					
subject areas					
2011–2012	8	1	14		
2012–2013	7	1	19		
Reviewed the projected number of teacher				No	
preparation program graduates in specific grade					
levels					
2011–2012	6	1	11		
2012–2013	5	0	13		
Surveyed district administrators				No	
2011–2012	3	1	20		
2012–2013	5	1	20		
Surveyed school administrators				No	
2011–2012	1	1	8		
2012–2013	2	0	10		
Other actions		-		No	
2011–2012	5	2	8		
2012–2013	6	1	6		
Number of States	11-12	7	29-31		

### Table B.47. Actions taken by states to identify areas of teacher shortages

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

# Table B.48. Full-time equivalent staff and actions taken by states to addresscurrent areas of teacher shortages

	N	Item aligned		
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Mean number of full-time equivalent staff <sup>a</sup>	151,958	151,862	84,265	No
Reported having a teacher shortage 2011–2012 2012–2013	10 11	7 6	28 28	No
Reported taking actions to address teacher shortage: Enacted policies allowing traditional teacher preparation programs to expand the number of students served				Yes (TL-3)
2011–2012 2012–2013 Enacted policies allowing AC programs for teachers to expand the number of students	1 1	0 0	1 0	Yes (TL-3)
served 2011–2012 2012–2013 Provided incentives for teachers to become	3 2	1 0	2 4	Yes (TL-3)
certified in areas of shortage 2011–2012 2012–2013 Notified teacher preparation programs about	6 6	2 2	10 11	Yes (TL-3)
the areas of shortage 2011–2012 2012–2013 Encouraged teacher preparation programs to	9 10	5 4	19 22	Yes (TL-3)
train more teachers in the areas of shortage 2011–2012 2012–2013 Developed new AC programs for teachers	8 10	4 2	22 22	Yes (TL-3)
focused on the areas of shortage 2011–2012 2012–2013 Increased the amount of induction support for	3 5	4 2	8 7	Yes (TL-3)
novice teachers with the goal of reducing teacher attrition in areas of shortage 2011–2012 2012–2013	6 7	0	7 8	
2012–2013 Other actions 2011–2012 2012–2013	7 1 6	0	8 9 5	No
Number of States	6-11	4-7	16-29	

Source: Interviews with state administrators in spring 2012 and spring 2013, Common Core of Data.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Full-time equivalent (FTE) is the amount of time required to perform an assignment stated as a proportion of a fulltime position. It is computed by dividing the amount of time employed by the amount of time normally required for a full-time position. For example, two half-time employees represent one FTE.

AC = Alternative-route certification, FTE = full-time equivalent; TL-3 = Ensuring equitable distribution of effective teachers and principals.

	N	umber of state	es	Item aligned with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported conducting analyses to determine whether the distribution of effective teachers between high-poverty or high-minority schools and low-poverty or low-minority schools shifted 2011–2012	4	2	0	Yes (TL-3)
2011–2012 2012–2013	4 5	2 2	8 6	
Reported examining factors in the analysis of teacher distribution:	5	Z	0	
Teacher effectiveness based on student achievement growth				Yes (TL-3)
2011–2012	1	0	2	
2012–2013	4	1	0	
Proportions of novice and experienced teachers 2011–2012	2	2	6	No
2012–2013	3	2	5	NI-
Proportion of certified teachers 2011–2012	4	1	7	No
2012–2012	4	2	6	
Proportion of teachers assigned to grades or classes outside of their field of certification	5	Z	0	No
2011–2012	4	1	7	
2012–2013	2	2	6	
Other factors				No
2011–2012	1	2	5	
2012–2013	2	1	0	
Reported that analyses of distribution of effective teachers showed the following pattern:				
A more equitable distribution				No
2011–2012	1	0	3	
2012–2013	1	0	1	
A less equitable distribution	0	4	4	No
2011–2012 2012–2013	0 0	1 0	1 0	
No change in the distribution	U	U	U	No
2011–2012	1	0	4	NO
2012–2013	1	1	5	
Reported sending results from analyses of teacher distribution to the districts included in				No
such analyses				
2011–2012	4	2	7	
2012–2013	3	2	5	
Number of States	8-12	6-7	28-29	

### Table B.49. State analyses of shifts in teacher distribution

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

		Item aligned — with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported offering more compensation for teachers who work in high-poverty or high- minority schools 2011–2012	3	1	3	Yes (TL-3)
2012–2013	4	0	2	
Reported offering performance-based compensation for effective teachers who work in high-poverty or high-minority schools				Yes (TL-3)
2011–2012 2012–2013	2 1	0 0	1	
Reported earlier hiring of staff to work in high- poverty or high-minority schools and districts	·	Ū		Yes (TL-3)
2011–2012 2012–2013	3 2	0 0	0 2	
Reported increasing recruitment activities 2011–2012 2012–2013	4 2	1 0	3 3	Yes (TL-3)
Reported improving teaching and learning environments at high-poverty or high-minority schools				Yes (TL-3)
2011–2012 2012–2013	2 2	1 0	4 8	
Reported offering more professional development, mentoring, or induction for teachers working in high-poverty or high- minority schools				Yes (TL-3)
2011–2012	4	0	4	
2012–2013	3	0	8	
Reported other strategies				No
2011–2012	1	2	6	
2012–2013	2	1	4	
Number of States	12	7	29-30	

# Table B.50. State strategies for promoting equitable distribution of effective teachers

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

	Ν	Item aligned with RTT application		
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported having a process to identify areas of principal shortages				Yes (TL-3)
2011–2012	5	0	7	
2012–2013	4	2	13	
2012 2010	-	2	10	
Reported taking actions to identify areas of				
principal shortages:				Na
Reviewed the number of vacant positions and/or				No
principal attrition by student achievement levels or				
student demographic characteristics	0	0		
2011–2012	3	0	4	
2012–2013	1	0	9	
Reviewed the projected total number of principal				No
preparation program graduates	•	•	•	
2011–2012	3	0	6	
2012–2013	2	1	7	
Surveyed district administrators				No
2011–2012	3	0	4	
2012–2013	2	0	4	
Surveyed school administrators				No
2011–2012	1	0	2	
2012–2013	0	0	2	
Other actions				No
2011–2012	1	0	2	
2012–2013	1	1	2	
Number of States	10-11	7	30-31	

### Table B.51. Actions taken by states to identify areas of principal shortages

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

	١	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported having a principal shortage				No
2011–2012	5	0	7	
2012–2013	4	0	10	
Reported taking actions to address principal				
shortage:				
Enacted policies allowing traditional principal				Yes (TL-3)
preparation programs to expand the number of				. ,
students served				
2011–2012	1	0	1	
2012–2013	1	0	0	
Enacted policies allowing AC programs for				Yes (TL-3)
principals to expand the number of students				
served				
2011–2012	2	0	2	
2012–2013	2	0	0	
Provided incentives for individuals to become				Yes (TL-3)
certified to work as principals				
2011–2012	2	0	1	
2012–2013	2	0	0	
Notified principal preparation programs about the				Yes (TL-3)
areas of shortage				
2011–2012	3	0	3	
2012–2013	2	0	4	
Encouraged principal preparation programs to				Yes (TL-3)
train more principals in the areas of shortage				
2011–2012	3	0	2	
2012–2013	2	0	4	
Developed new AC programs for principals				Yes (TL-3)
focused on the areas of shortage				
2011–2012	4	0	2	
2012–2013	1	0	0	
Increased the amount of support for principals				Yes (TL-3)
with the goal of reducing principal attrition in areas				
of shortage				
2011–2012	4	0	1	
2012–2013	1	0	5	
Other actions				No
2011–2012	0	0	1	
2012–2013	1	0	3	
Number of States	8-10	3	18-25	

# Table B.52. Actions taken by states to address current areas of principal shortages

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

AC = Alternative-route certification; TL-3 = Ensuring equitable distribution of effective teachers and principals.

	1	Number of states	s	Item aligned — with RTT
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported conducting analyses to determine whether the distribution of effective principals between high-poverty or high- minority schools and low-poverty or low- minority schools shifted				Yes (TL-3)
2011–2012 2012–2013	1 1	0 1	1 0	
	I	I	U	
Reported examining factors in the analysis of				
principal distribution: Principal experience				Yes (TL-3)
2011–2012	1	0	1	163 (12-3)
2012–2013	1	1	0	
Principal effectiveness ratings based on student	-	-	-	No
achievement growth				
2011–2012	1	0	0	
2012–2013	1	1	0	
Other factors				No
2011–2012	0	0	1	
2012–2013	1	0	0	
Reported that analyses of distribution of				
effective principals showed the following				
pattern:				
A more equitable distribution	,	<u>^</u>	2	No
2011–2012	1	0	0	
2012–2013	0	0	0	Na
A less equitable distribution	0	0	0	No
2011–2012 2012–2013	0 0	0 0	0 0	
No change in the distribution	U	U	U	No
2011–2012	0	0	1	INU
2012–2013	0	1	0	
Reported sending results from analyses of principal distribution to the districts included in such analyses	-		-	No
2011–2012	1	0	1	
2012–2013	1	0	0	
Number of States	11-12	7	29	

### Table B.53. State analyses of shifts in principal distribution

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

TL-3 = Ensuring equitable distribution of effective teachers and principals.

	Ν	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported offering more compensation for principals who work at high-poverty or high-minority schools 2011–2012 2012–2013	2 2	0 0	0 1	Yes (TL-3)
Reported offering performance-based compensation for effective principals of high- poverty or high-minority schools 2011–2012 2012–2013	2 1	0 0	0 0	Yes (TL-3)
Reported earlier hiring of staff in high-poverty or high-minority schools and districts 2011–2012 2012–2013	2 0	0 0	0 2	Yes (TL-3)
Reported increasing external recruitment activities 2011–2012 2012–2013	1 0	1 0	1 3	Yes (TL-3)
Reported improving teaching and learning environments at high-poverty or high-minority schools 2011–2012	2	1	3	Yes (TL-3)
2012–2013 Reported offering more professional development for principals working at high-poverty or high- minority schools	2	1	6	Yes (TL-3)
2011–2012 2012–2013	3 2	0 1	1 6	
Reported other strategies 2011–2012 2012–2013	1 0	0 0	2 3	No
Number of States	11-12	7	29-30	

# Table B.54. State strategies for promoting equitable distribution of effective principals

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

TL-3 = Ensuring equitable distribution of effective teachers and principals.

	N	Item aligned		
				<ul> <li>with RTT application</li> </ul>
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported having organizational or administrative structures intended to improve state capacity to support school turnaround in:				Yes (TA-2)
2007–2008 <sup>a</sup>	7	6	12	
2011–2012	12 12	7 7	26 26	
2012–2013 Reported having the following organizational or administrative structures:	12	7	20	NI-
State office explicitly designated to support school turnaround in:				No
2007–2008 <sup>a</sup>	3	3	4	
2011–2012	12	5	11	
2012–2013	11	5	16	
Regional offices explicitly designated to support				No
school turnaround in:	1	0	1	
2007–2008 <sup>a</sup> 2011–2012	1 3	0 2	1 3	
2011–2012 2012–2013	3	2	4	
Contracts with external consultants to support	Ũ	-	I.	No
school turnaround in:				
2007–2008 <sup>a</sup>	5	5	8	
2011–2012	8	5	16	
2012–2013	9	3	20	
State Department of Education staff explicitly				No
designated to support school turnaround, but no				
state-level turnaround office in:	0	0	-	
2007–2008 <sup>a</sup>	3	2	5	
2011–2012 2012–2013	1 3	1 2	15 12	
Regional staff explicitly designated to support	5	2	12	No
school turnaround, but no regional state turnaround				
offices, in:				
2007–2008 <sup>a</sup>	1	1	1	
2011–2012	2	3	6	
2012–2013	2	2	8	
State-level staff or consultants to provide support to				No
turnaround schools and districts in working with				
ELLs in: 2007–2008 <sup>a</sup>	3	2	6	
2007–2008–	6	4	13	
2012–2013	8	3	13	
Monitoring or reporting requirements specifically for	C	Ū		No
schools receiving SIG and/or RTT funds to				
implement a school intervention model in:				
2007–2008 <sup>a</sup>	3	3	6	
2011–2012	11	5	26	
2012–2013 Other structures reported in:	11	5	26	No
Other structures reported in: 2007–2008 <sup>a</sup>	1	2	1	No
2007–2008	4	2 5	5	
2012–2013	4	2	5	
Number of States	9-12	5-7	25-30	

# Table B.55. Organizational structures intended to improve state capacity tosupport school turnaround

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

TA-2 = Turning around the lowest-achieving schools; ELLs = English language learners; SIG = School Improvement Grant.

	٢	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported providing their persistently lowest- achieving schools with flexibility from collective bargaining agreements or state policies that guide staffing in: 2007–2008 <sup>a</sup> 2011–2012	1 4	1 1	1 3 3	Yes (TA-2)
2012–2013	2	0	3	
Reported providing flexibility on the following aspects of collective bargaining agreements or state policies:				
Procedures for assigning or removing staff in:				No
2007–2008 <sup>a</sup>	1	1	0	
2011–2012	3	1	1	
2012–2013	2	0	2	
Requirements or policies related to staff hours and responsibilities in:				No
2007–2008 <sup>a</sup>	1	1	0	
2011–2012	3	0	2	
2012–2013	2	0	3	
Procedures related to the distribution of effective staff in:				No
2007–2008 <sup>a</sup>	1	0	0	
2011–2012	2	0	1	
2012–2013	1	Õ	2	
Other flexibility in:		-	—	No
2007–2008 <sup>a</sup>	1	1	1	
2011–2012	2	1	2	
2012–2013	1	0	1	
Number of States	7-8	6	24	

### Table B.56. Flexibility granted by states to persistently lowest-achieving schools

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

TA-2 = Turning around the lowest-achieving schools.

	Number of states			Item aligned — with RTT	
	Early RTT	Later RTT	Non-RTT	application (subtopic)	
Reported having laws, regulations, or policies that specifically address teacher assignment for their persistently lowest- achieving schools in: 2007–2008 <sup>a</sup> 2011–2012 2012–2013	3 4 7	0 2 1	0 0 0	Yes (TA-2)	
Reported that their teacher assignment laws or policies for their persistently lowest- achieving schools have the following features:					
Financial and/or other incentives for teachers to begin or continue to work in the state's lowest- achieving schools in:				Yes (TA-2)	
2007–2008ª 2011–2012	2 4	0 2	0 0		
2012–2013 Financial and/or other incentives for staff with ELL expertise to begin or continue to work in the state's lowest-achieving schools in:	6	1	0	No	
2007–2008ª	0	0	0		
2011–2012	0	0	0		
2012–2013 School discretion or authority to decide which staff to hire for the lowest-achieving schools in:	2	0	0	Yes (TA-2)	
2007–2008ª	1	0	0		
2011–2012	4	2	0		
2012–2013 Teacher tenure rules that affect placement in or removal from the lowest-achieving schools in:	6	1	0	Yes (TA-2)	
2007–2008ª	2	0	0		
2011–2012	2	0	0		
2012–2013	3	0	0	NI-	
Other teacher assignment policies in: 2007–2008 <sup>a</sup>	0	0	0	No	
2007–2008 2011–2012	0	0	0		
2012–2013	1	0	0		
Number of States	11-12	7	29		

# Table B.57. State teacher assignment laws and policies for persistentlylowest-achieving schools

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

TA-2 = Turning around the lowest-achieving schools; ELL = English language learner.

	١	Item Aligned		
	Early RTT	Later RTT	Non-RTT	<ul> <li>with RTT application (subtopic)</li> </ul>
Reported having authority to take over failing schools in:				Yes (TA-1)
2007–2008 <sup>a</sup>	3	4	9	
2011–2012	5	5	11	
2012–2013	3	4	10	
Number of States	10	7	31	

### Table B.58. State authority to take over failing schools

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

TA-1 = Authority to intervene in the lowest-achieving schools and LEAs.

emonnent				
		es (unless other		Item aligned with RTT application
	Early RTT	Later RTT	Non-RTT	(subtopic)
As of spring 2012, number of states that currently permit or have ever permitted the authorization of charter schools 2011–2012 2012–2013	12 12	6 6	23 25	Yes (CH-1)
Among states that currently permit or have ever permitted the authorization of charter schools, percentage of state public schools that are charter schools in: 2007–2008 <sup>a</sup> 2011–2012 2012–2013	7.2 9.6 10.1	7.0 8.7 9.1	3.7 4.5 4.9	No
Among states that currently permit or have ever permitted the authorization of charter schools, percentage of state public students that attend charter schools in: 2007–2008 <sup>a</sup> 2011–2012 2012–2013	5.1 7.1 7.6	4.3 6.5 7.0	2.2 3.5 3.8	No
Among states that currently permit or have ever permitted the authorization of charter schools, number that reported having restrictions on the creation of new charter schools or charter enrollment in: 2007–2008 <sup>a</sup> 2011–2012 2012–2013	8 6 6	2 1 2	15 10 10	Yes (CH-1)
Among states that currently permit or have ever permitted the authorization of charter schools, number that reported the following restrictions on the creation of new charter schools or charter enrollment: Caps on total or maximum number of charter schools operating overall in:				No
2007–2008 <sup>a</sup> 2011–2012 2012–2013 Caps on the number of new charters schools	5 3 4	2 1 2	7 2 3	No
that may be authorized in: 2007–2008 <sup>a</sup> 2011–2012 2012–2013 Restrictions on the number or percentage of	2 2 3	0 0 1	5 2 3	No
students who may enroll in charter schools in: 2007–2008 <sup>a</sup> 2011–2012 2012–2013	1 1 2	0 1 1	1 2 3	

# Table B.59. State restrictions on new charter authorization and charter enrollment

	Number of stat	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Charter schools restricted to specific districts or				No
localities in:				
2007–2008 <sup>a</sup>	1	1	2	
2011–2012	3	1	2	
2012–2013	3	1	4	
Moratorium on new charter schools in:				No
2007–2008 <sup>a</sup>	2	0	3	
2011–2012	1	0	0	
2012–2013	0	0	0	
Other restrictions reported in:				No
2007–2008 <sup>a</sup>	3	1	2	
2011–2012	1	1	2	
2012–2013	0	1	2	
Number of States	12	6-7	20-31	

Source: Interviews with state administrators in spring 2012 and spring 2013; National Alliance for Public Charter Schools (2013).

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

CH-1 = Eliminating restrictions on charter school creation and enrollment.

### **Table B.60. Charter school authorizers**

	Among states t permitted the a	Item aligned with RTT application		
	Early RTT	Later RTT	Non-RTT	(subtopic)
Reported the following entities are permitted by state law to authorize charter schools:				
State department of education and/or state				
board of education in:	-	-	10	No
2007–2008 <sup>a</sup>	7	5	13	
2011–2012	9	4	12	
2012–2013	10	6	14	NL.
Districts in:	0	_	40	No
2007–2008 <sup>a</sup>	8	5	18	
2011–2012	8	5	18	
2012–2013	7	5	18	Nie
Regional educational authority in:	0	0	0	No
2007–2008 <sup>a</sup>	2	0	2	
2011–2012	1	1	2	
2012–2013	1	1	3	NL.
Independent charter school board in:	0	0	•	No
2007–2008 <sup>a</sup>	3	2	3	
2011–2012	2	2	5	
2012–2013	2	1	3	
Municipal government in:		•	•	No
2007–2008ª	3	0	2	
2011–2012	1	1	3	
2012–2013	1	1	2	
Colleges and/or universities in:		,	<u>^</u>	No
2007–2008 <sup>a</sup>	4	1	6	
2011–2012	3	2	10	
2012–2013	4	2	10	
Other non-profit organizations in:				No
2007–2008 <sup>a</sup>	1	0	1	
2011–2012	1	1	1	
2012–2013	1	1	2	
Number of States	12	6	18-22	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

Table B.61	State	monitoring	of	charter	schools
------------	-------	------------	----	---------	---------

	Among states ever permitte schoo	Item aligned with RTT		
	Early RTT	Later RTT	Non-RTT	application (subtopic)
Reported having mechanisms in place to				Yes (CH-2)
monitor the performance of charter schools in:				
2007–2008 <sup>a</sup>	11	6	20	
2011–2012	12	6	20	
2012–2013	12	6	20	
Reported monitoring charter school				
performance on the following dimensions:				
Academic performance in:				Yes (CH-2)
2007–2008ª	11	6	19	( <i>'</i>
2011–2012	12	6	20	
2012–2013	12	6	20	
Enrollment in:				Yes (CH-2)
2007–2008 <sup>a</sup>	9	4	15	
2011–2012	10	4	15	
2012–2013	11	6	13	
Proportion of different student populations served				Yes (CH-2)
in:				
2007–2008 <sup>a</sup>	8	4	9	
2011–2012	10	4	9	
2012–2013	6	5	8	
Finances and budget in:				Yes (CH-2)
2007–2008 <sup>a</sup>	11	6	18	
2011–2012	12	6	19	
2012–2013	11	6	19	
Facilities in:				Yes (CH-2)
2007–2008 <sup>a</sup>	10	4	13	
2011–2012	11	4	12	
2012–2013	9	2	12	
Number of States	12	6	21	

Source: Interviews with state administrators in spring 2012 and spring 2013.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

CH-2 = Refining authorization and monitoring processes for charter schools.

	Among states that currently permit or have ever permitted the authorization of charter schools, mean number (unless otherwise specified)		Item aligned with RTT - application	
	Early RTT	Later RTT	Non-RTT	(subtopic)
Mean number of charter schools operating in the state in the 2011–2012 school year	137.9	168.7	98.8	No
Mean number of charter schools operating in the state in the 2012–2013 school year	155.2	185.8	110.8	No
Mean number of new charter school applications submitted in the state in:				No
2007–2008ª	21.6	24.4	8.2	
2011–2012	49.4	30.8	7.8	
2012–2013	57.9	29.8	7.1	
Mean number of new charter schools authorized in the state in:				No
2007–2008 <sup>a</sup>	11.5	10.0	11.6	
2011–2012	16.1	16.5	11.0	
2012–2013	19.8	9.2	12.4	
Mean percentage of yearly charter school applications that were authorized in:				No
2007–2008ª	34.0	47.5	52.8	
2011–2012	37.6	63.6	42.0	
2012–2013	31.7	33.7	47.4	
Number of States	9-12	4-6	9-23	

#### Table B.62. Charter school applications and authorizations

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

### **Table B.63. Charter school closures**

	Among states that currently permit or have ever permitted the authorization of charter schools, mean number (unless otherwise specified)		Item aligned with RTT − application	
	Early RTT	Later RTT	Non-RTT	(subtopic)
Mean number of charter schools voluntarily closed in the state in:				No
2007–2008ª	1.5	4.8	0.4	
2011–2012	1.3	5.4	1.3	
2012–2013	1.8	1.0	0.6	
Mean number of charter schools whose charters were revoked or not renewed in:				No
2007–2008 <sup>a</sup>	0.5	0.4	1.2	
2011–2012	1.1	1.8	1.9	
2012–2013	1.2	1.8	1.5	
Mean number of charter schools whose charters were revoked or not renewed for academic reasons in:				No
2007–2008ª	0.1	0.3	0.1	
2011–2012	0.7	2.3	0.6	
2012–2013	0.6	2.3	0.8	
Mean percentage of (involuntary) charter school closures that were due to academic reasons in:				No
2007–2008 <sup>a</sup>	0.0	100.0	10.0	
2011–2012	75.0	100.0	10.7	
2012–2013	50.0	100.0	25.0	
Number of States	2-12	1-6	2-23	

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: A range is provided for the sample sizes because nonresponse varied across items.

<sup>a</sup> Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008.

### **APPENDIX C**

### INTERVIEW QUESTIONS ALIGNED WITH RTT POLICIES AND PRACTICES

This appendix provides a crosswalk between each policy or practice aligned with the RTT application criteria and the 2013 state administrator interview questions. For each of the six RTT topic areas addressed in Chapter IV, this appendix presents a table showing the 2013 interview questions that address the policies and practices aligned with the RTT application criteria (Tables C.1 through C.6). This appendix also presents a table showing the 2013 interview questions that addressed the ELL-focused policies and practices aligned with the RTT application criteria (Table C.7). Mathematica Policy Research (2014) contains the 2013 state interview protocol.

### Table C.1. Interview questions addressing the state capacity (SC) topic area policies and practices

Policy or practice	Interview questions addressing the state capacity policy or practice	
<ul> <li>RTT application criterion</li> <li>The state has set forth a comprehensive and coherent reform agenda that clearly articulates its goals for implementing reforms in the four education areas described in the ARRA and improving student outcomes statewide, establishes a clear and credible path to achieving these goals, and is consistent with the specific reform plans that the state proposed throughout its application</li> </ul>		
Having a comprehensive education reform plan in place	SC1. Does your state have a comprehensive education reform plan in place, which means a plan that is intended to result in state-wide improvements in student achievement?	
Prioritizing the adoption and implementation of college and career ready standards or assessments	SC3.To what extent (great extent, moderate extent, little extent, or not at all) is each of the following educational reform initiatives a priority in your state for the current school year? a. Adopting and implementing college and career ready standards; b. Adopting and implementing college and career ready assessments	
Prioritizing the development of comprehensive, student-level, longitudinal data systems or using data to improve instruction	SC3.To what extent (great extent, moderate extent, little extent, or not at all) is each of the following educational reform initiatives a priority in your state for the current school year? c. Building comprehensive, student-level, longitudinal data systems; d. Using data to improve instruction	
Prioritizing the recruiting, developing, rewarding, and retaining of effective teachers and principals, especially where they are needed most (including developing and implementing evaluation systems)	SC3.To what extent (great extent, moderate extent, little extent, or not at all) is each of the following educational reform initiatives a priority in your state for the current school year? e. Recruiting effective teachers and school leaders; f. Retaining effective teachers and school leaders; g. Rewarding effective teachers and school leaders; hor example, by offering bonuses and/or increased compensation to effective teachers; h. Developing and preparing effective teachers and school leaders; i. Developing and implementing a teacher and principal evaluation system that is based on student growth; j. Improving the distribution of effective teachers and principals	
Prioritizing the turnaround of its lowest-achieving schools	SC3.To what extent (great extent, moderate extent, little extent, or not at all) is each of the following educational reform initiatives a priority in your state for the current school year? k. Turning around the lowest-achieving schools	
	apacity required to implement its proposed plans by providing strong ted teams to implement the statewide education reform plans; supporting	

### participating LEAs in successfully implementing the education reform plans the state has proposed Use support from a broad group of stakeholders to better implement its plans, as evidenced by

the strength of the statements or actions of support from the state's teachers and principals and other critical stakeholders

Policy or practice	Interview questions addressing the state capacity policy or practice
Providing leadership or teams to support the implementation of reform plans	SC6. To what extent does the state education agency play each of the following roles (a great extent, moderate extent, little extent, or not at all)? a. Creator of a state-wide vision for reforms such as articulating a vision and direction for educational improvement in the state; d. Facilitator between educational units and external expertise; e. Supporter providing direct support services to districts and schools?
	SC7. Within the past year, has the state education agency provided targeted support to certain types of districts or schools for implementation of statewide education reform priorities? By targeted supports, we mean supports that are provided to a specific group of schools and/or districts for a particular purpose. For example, this might include, but is not limited to, the state providing technical assistance to districts implementing a new teacher evaluation system.
	SC13. Does your state education agency currently work with any intermediaries to support the implementation of statewide education reform priorities in any of the following areas? For each reform area selected, please briefly describe the role assigned to intermediaries in that area. a. Implementing college and career ready standards and assessments; b. Using data to improve instruction; c. Recruiting, developing, rewarding, and retaining effective teachers and school leaders; d. Turning around your state's lowest-achieving schools; e. Providing supports for English language learners; f. Increasing state capacity in any of the areas just mentioned.
Working with districts that have the highest achievement levels and seeking to replicate their practices statewide to implement the education reform plan	SC2. Which of the following strategies is your state using to implement this reform plan? b. Working with districts that have the highest achievement levels and seeking to replicate their practices statewide
Providing effective and efficient operations and processes for grant oversight and performance measure tracking and reporting	SC6. To what extent does the state education agency play each of the following roles (a great extent, moderate extent, little extent, or not at all)? b. Creator and monitor of performance measures including assessing the extent to which districts and/or schools are attaining specific performance goals; c. Compliance monitor of reform priorities such as ensuring compliance with state or federal laws and regulations
	SC18. Since we last interviewed state representatives in spring 2012, has the state education agency implemented any of the following changes to support the implementation of state education reform priorities? These could include reform priorities funded by Race to the Top (if applicable), as well as statewide reform efforts funded in other ways. a. Created a new office(s) or department(s); b. Created new staff positions; c. Reorganized the structure of existing offices/departments; d. Changed laws, policies, or regulations (IF YES, SPECIFY)
Involving teachers, teachers unions or associations, or school administrators in defining its education reform initiatives or priorities	SC5. To what extent (great extent, moderate extent, little extent, or not at all) are each of the following individuals or groups involved in defining your state's education reform initiatives or priorities? c. Teachers; d. State teachers union or association; i. School administrators
Involving other stakeholders in defining its education reform initiatives or priorities	SC5. To what extent (great extent, moderate extent, little extent, or not at all) are each of the following individuals or groups involved in defining your state's education reform initiatives or priorities? a. Governor's office; b. State legislature; e. Businesses; f. Civil rights leaders; g. Local school boards; h. State school board; j. Parent, student and community organizations such as parent teacher organizations, local education foundations, community based organizations, or advocacy groups; k. Institutes of higher education including teacher and principal preparation programs or schools of education

Source: Interviews with state administrators in spring 2013.

# Table C.2. Interview questions addressing the standards and assessments(SA) topic area policies and practices

Policy or practice	Interview questions addressing the standards and assessments policy or practice
	ommon set of high-quality standards, evidenced by participation in a working jointly to develop and adopt a common set of K–12 standards
Adopting the Common Core State Standards (CCSS) in both English/language arts and math	SA1. Did your state adopt the Common Core State Standards in both English/language arts and math, math only, English/language arts only, or neither subject?
	SA3. What proportion of your total English/language arts and math standards are state-specific (meaning they are not part of the Common Core State Standards)? Please report separate percentages for English/language arts and math.
RTT application criterion	
Commitment to improving th	e quality of assessments, evidenced by participation in a consortium of to develop and implement common, high-quality assessments
Participating in a consortium of states to develop assessments aligned to CCSS	SA7. Is your state participating in a consortium to develop assessments aligned to [the Common Core State Standards/your current state standards]?
Has specified the school year by which state plans to fully implement summative assessments being developed by the consortium	SA9. In what school year does your state plan to fully implement, as opposed to pilot test, the summative assessments in English/language arts and math that are being developed by the consortium (a) in which you are participating? Please report the year by which you plan to fully implement the summative assessments being developed by the consortium in both subjects.
RTT application criterion	
Supporting the statewide training the st	nsition to and implementation of K–12 standards that build toward college time of high school graduation and high-quality assessments tied to these
Supporting the implementation of CCSS by providing funds for additional staff or making new technology investments	SA14. For which of the following purposes were these funds designated? e. Fund additional staff either externally contracted or hired internally <sup>a</sup>
	SA15. Since spring 2012, has the state made investments in new technology to assist with implementation of [the Common Core State Standards/your current state standards]?
Supporting the implementation of the assessments associated with the CCSS by making new technology investments	SA17. Since spring 2012, has the state made investments in new technology to assist with implementation of the assessments associated with [the Common Core State Standards/your current state standards]?
Requiring or supporting the use of new instructional materials for implementing the CCSS	SA12. Since we last interviewed state representatives in spring 2012, has your state made any of the following types of changes to state policies and practices in response to the adoption of [the Common Core State Standards/your current state standards]? a. Required use of new curricula or textbooks
	SA14. For which of the following purposes were these funds designated? b. Curriculum/textbook purchase <sup>a</sup>
	SA19. Since spring 2012, has the state provided any materials to help practitioners understand [the Common Core State Standards/your current state standards] and/or change instruction based on the standards?

Policy or practice	Interview questions addressing the standards and assessments policy or practice
Developing, supporting, or requiring new interim assessments associated with the CCSS	SA12. Since we last interviewed state representatives in spring 2012, has your state made any of the following types of changes to state policies and practices in response to the adoption of [the Common Core State Standards/your current state standards]? b. Required use of new, state-approved interim assessments
	SA14. For which of the following purposes were these funds designated? c. Development or purchase of interim assessments or item banks; d. Purchase hardware or software needed to implement standards or assessments <sup>a</sup>
Changing high school exit requirements or college entrance requirements	SA12. Since we last interviewed state representatives in spring 2012, has your state made any of the following types of changes to state policies and practices in response to the adoption of [the Common Core State Standards/your current state standards]? c. Changed credit or course requirements such as adopting use of competency-based credit for courses or subject knowledge; d. Changed the content of the state's high school exit exam; e. Changed the performance standard on the high school exit exam; f. Changed the college entrance requirements for the state college/university system
Changing policies about or providing funds for professional development, training, and technical assistance for teachers or school leaders to support implementation of CCSS	SA12. Since we last interviewed state representatives in spring 2012, has your state made any of the following types of changes to state policies and practices in response to the adoption of [the Common Core State Standards/your current state standards]? g. Changed policies related to teachers and/or school leaders such as licensure, certification, or annual professional development requirements
	SA14. For which of the following purposes were these funds designated? a. Professional development <sup>a</sup>
	SA21. Since spring 2012, has the state provided any professional development, training, or technical assistance (either directly or through an intermediary) to districts and/or schools to support implementation of [the Common Core State Standards/your current state standards]?
Supporting districts or schools in implementing the CCSS with English language learners	SA25. Since we last interviewed state representatives in spring 2012, has the state provided any supports to districts and/or schools specifically designed to aid in the implementation of the state's standards with English language learners? This might include, but is not limited to, funds, professional development, technical assistance, or materials to support use of standards with English language learners.

Source: Interviews with state administrators in spring 2013.

<sup>a</sup> This item followed a screener question that asked "Since spring 2012, has the state provided any funds to districts and/or schools to support implementation of [the Common Core State Standards/your current state standards]?"

### Table C.3. Interview questions addressing the data systems (DA) topic area policies and practices

Policy or practice	Interview questions addressing the data systems policy or practice
<ul><li>RTT application criterion:</li><li>Fully implement a state le Act elements</li></ul>	ongitudinal data system (SLDS) that includes all of the America COMPETES
Having an SLDS	DA1. Does your state currently have a statewide longitudinal data system?
SLDS has student-level enrollment and program participation information	DA16. Which of the following types of data specifically related to English language learner students are currently included in your state's longitudinal data system(s)? a. Students currently identified as English language learners; b. Students formerly identified as English language learners; c. Students' English language proficiency test scores; d. English language learners' proficiency in their native (home) language; e. Student participation in bilingual education programs, defined as programs that focus on developing literacy in two languages, which include non- English speakers and may include English speakers, and which involve instruction in English and another language; f. Student participation in other educational programs specifically designed for English language learners; g. Student's native language; h. Number of years the student has lived in U.S.; k. The number of years that students have received English language instructional services; l. The length of time it took for an English language learner to exit English language learners status
SLDS is linked to an early childhood data system	DA2. We are now going to ask you about data systems other than your state's K– 12 system, and whether they are linked to your state's K–12 education longitudinal data system, which means that data stored in these other systems can be accessed through the K–12 system. For each of the following data systems please indicate if they are currently linked to the state's K–12 longitudinal education data system. a. Early childhood
SLDS is linked to a higher education data system	DA2. We are now going to ask you about data systems other than your state's K– 12 system, and whether they are linked to your state's K–12 education longitudinal data system, which means that data stored in these other systems can be accessed through the K–12 system. For each of the following data systems please indicate if they are currently linked to the state's K–12 longitudinal education data system. b. Higher education

#### RTT application criterion:

• Ensure that key stakeholders (for example, principals, teachers, parents, community members, administrators) have access to and use data from the SLDS to support decision makers in continuous improvement efforts in areas such as policy, instruction, operations, management, resource allocation, and overall effectiveness

SLDS can be accessed by stakeholders DA3. Which of the following groups currently has access to data from the state longitudinal data system? a. State Department of Education staff; b. district staff; c. principals; d. teachers; e. colleges and universities for purposes other than research; f. external researchers

Policy or practice	Interview questions addressing the data systems policy or practice
SLDS is used to inform and engage stakeholders and support decision makers in continuous improvement efforts	DA10. For which of the following purposes are data in the state longitudinal data system currently used by state-level staff? a. To track overall school performance; b. to evaluate instructional programs; c. To inform professional development offerings such as identifying specific content or skills where teachers need assistance or support; d. To evaluate the success of professional development offerings for teachers or principals; e. To inform resource allocation, such as which schools and students receive which programs or which staff work with which students; f. To provide information to teachers about their students' progress; g. To provide information to parents about the school or their children; h. To provide information to students about their own progress; i. To track students' postsecondary enrollment and progress after high school graduation, such as credits earned in public colleges or universities in the state; j. To provide information to federal agencies (for example, EDFacts)
RTT application criteria:	
participating LEAs and sc	adoption, and use of local instructional improvement systems; support hools that use instructional improvement systems in providing effective t to teachers, principals, and administrators on how to use these systems
	nal improvement systems, together with SLDS data, available to researchers ess of instructional materials, strategies, and approaches for educating s
Requiring districts to implement district data systems	DA11. Does the state require districts to implement district state systems as defined above? (we will refer to local instructional improvement systems as district data systems, which are technologically based tools or strategies that provide educators with data to manage continuous instructional improvement efforts)
Providing funding, materials, training, technical assistance, or other supports to districts to encourage the use of data to improve instruction	DA12. Within the past year, has the state provided funding, materials, training, technical assistance, or other supports to districts to encourage the use of data to improve instruction?

Source: Interviews with state administrators in spring 2013.

Policy or practice

Interview questions addressing the teacher and principal certification and evaluation policy or practice

# Table C.4. Interview questions addressing the teacher and principal certification and evaluation (TL) topic area policies and practices

RTT application criteria: <ul> <li>Legal, statutory, or regulato</li> </ul>	ry provisions that allow alternative routes to certification for teachers and
principals, particularly route	is that allow for providers in addition to higher education institutions r and principal certification that are in use
• A process for monitoring, ev	valuating, and identifying areas of teacher and principal shortage and for cipals to fill these areas of shortage
Authorizing or expanding institutions qualified to operate alternative-route programs for teachers	TL2. Currently, which of the following groups are authorized to operate alternative teacher certification programs in your state? a. Institutions of higher education; b. School districts; c. Educational service districts or cooperatives in your state; d. Nonprofit organizations such as Teach for America; e. Partnerships or collaborations between groups listed above
	TL5. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional teacher preparation programs or alternative teacher certification programs in the state? a. Expanded the types of institutions qualified to operate teacher preparation programs to include providers operating independently of institutions of higher education
Adopting policies to increase the selectivity of alternative- route programs for teachers	TL5. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional teacher preparation programs or alternative teacher certification programs in the state? b. Adopted policies or regulations designed to increase the selectivity of teacher preparation programs
Adopting policies to increase the amount of mentoring for participants in teacher certification programs or the time such participants spend in school-based learning experiences	TL5. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional teacher preparation programs or alternative teacher certification programs in the state? c. Adopted policies or regulations designed to increase the amount of time students in teacher preparation programs spend in supervised, school-based learning experiences; d. Adopted policies or regulations to increase the amount of mentoring and/or coaching that students in teacher preparation programs receive
Adopting policies allowing alternative-route programs for teachers to award the same type of certification as traditional preparation programs	TL5. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional teacher preparation programs or alternative teacher certification programs in the state? e. Adopted policies or regulations that allow alternative certification programs to award the same type of certification that traditional preparation programs award
Groups are currently operating alternative-route programs for	TL1. Currently, does the state authorize or permit alternative routes to certification for teachers?
teachers	TL2. Currently, which of the following groups are authorized to operate alternative teacher certification programs in your state?
	TL3. Are they currently operating such programs in your state? a. Institutions of higher education; b. School districts; c. Educational service districts or cooperatives in your state; d. Nonprofit organizations such as Teach for America; e. Partnerships or collaborations between groups listed above
Having a process to identify areas of teacher shortages	TL14. Does the state currently have a process to identify areas of teacher shortages?

Policy or practice	Interview questions addressing the teacher and principal certification and evaluation policy or practice
Taking steps to address areas of teacher shortage	TL17. Within the past year, has the state taken any of the following steps to address these areas of teacher shortage? a. Enacted policies allowing traditional teacher preparation programs to expand the number of students served; b. Enacted policies allowing alternative teacher preparation programs to expand the number of students served; c. Provided incentives for teachers to become certified in areas of shortage (SPECIFY); d. Notified teacher preparation programs to train more teachers in the areas of shortage; f. Developed or began developing new alternative teacher certification programs focused on the areas of shortage; g. Increased the amount of induction support for novice teachers with the goal of reducing teacher attrition in areas of shortage
Authorizing or expanding institutions qualified to operate alternative-route programs for principals	TL19. Currently, which of the following groups are authorized to operate alternative principal certification programs in your state? a. Institutions of higher education; b. School districts; c. Educational service districts or cooperatives in your state; d. Nonprofit organizations such as Teach for America; e. Partnerships or collaborations between groups listed above
	TL22. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional principal preparation programs or alternative principal certification programs in the state? a. Expanded the types of institutions qualified to operate principal preparation programs to include providers operating independently of institutions of higher education
Adopting policies to increase the selectivity of alternative- route programs for principals	TL22. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional principal preparation programs or alternative principal certification programs in the state? b. Adopted policies or regulations designed to increase the selectivity of principal preparation programs
Adopting policies to increase the amount of mentoring for participants in principal certification programs or the time such participants spend in school-based learning experiences	TL22. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional principal preparation programs or alternative principal certification programs in the state? c. Adopted policies or regulations designed to increase the amount of time students in principal preparation programs spend in supervised, school-based learning experiences
Adopting policies allowing alternative-route programs for principals to award the same type of certification as traditional preparation programs	TL22. Within the past year, did the state implement any of the following types of changes to state regulations or policies related to either traditional principal preparation programs or alternative principal certification programs in the state? e. Adopted policies or regulations that allow alternative certification programs to award the same type of certification that traditional preparation programs award
Groups are currently operating alternative-route programs for	TL18. Currently, does the state authorize or permit alternative routes to certification for principals?
principals	TL19. Currently, which of the following groups are authorized to operate alternative principal certification programs in your state?
	TL20. Are they currently operating such programs in your state? a. Institutions of higher education; b. School districts; c. Educational service districts or cooperatives in your state; d. Nonprofit organizations such as Teach for America; e. Partnerships or collaborations between groups listed above
Having a process to identify areas of principal shortages	TL31. Does the state currently have a process to identify areas of principal shortages?

Taking stops to address areas TI 24 Within the past year has	sing the teacher and principal certification uation policy or practice
of principal shortage address these areas of principal traditional principal preparation principal preparation principal preparation preparation preparation programs about the to become certified in areas of significant programs about the preparation programs to train me Developed or began developing focused on the areas of shortag	the state taken any of the following steps to shortage? a. Enacted policies allowing programs to expand the number of students ving alternative principal preparation programs ts served; c. Provided incentives for principals hortage (SPECIFY); d. Notified principal areas of shortage; e. Encouraged principal ore principals in the areas of shortage; f. new alternative principal certification programs e; g. Increased the amount of induction support al of reducing principal attrition in areas of

#### **RTT** application criteria:

- Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor
- Conduct annual evaluations of teachers and principals that include timely and constructive feedback
- Use evaluations, at minimum, to inform decisions regarding: developing teachers and principals, including by providing relevant coaching, induction support, or professional development; compensating, promoting, and retaining teachers and principals, including by providing opportunities for highly effective teachers and principals to obtain additional compensation and be given additional responsibilities; removing ineffective tenured and untenured teachers and principals after they have had ample opportunities to improve and ensuring that such decisions are made using rigorous standards and streamlined, transparent, and fair procedures

Requiring districts to use student growth to evaluate teachers and specifying the extent to which student achievement growth must factor into teacher evaluations	TL38. Currently, do state regulations specify the extent to which evidence of student growth must factor into the overall teacher evaluation? For example, regulations may call for it to be a "significant" factor in evaluations or call for student growth to have a specific weight such as 20 percent. If this is specified in state regulations, please describe those specific regulations.
	[Note: TL36 (shown in the next row) was also used to address the policy in this row. Specifically, this policy was coded as 0 if either the response to TL38 was "no" or the response to TL36 was "no teachers."]
Requiring multiple performance measures for teacher	TL36. Currently, does the state require that districts use student growth as one measure when evaluating all teachers, some teachers, or no teachers?
evaluations	TL42. Which of the following other measures of teacher performance are currently required by the state for teacher evaluations for teachers in tested grades and/or subjects? a. Classroom observations conducted by the principal; b. Classroom observations conducted by a school administrator other than the principal; c. Classroom observations conducted by someone other than a school administrator, such as a peer or mentor teacher; d. self-assessment; e. portfolios or other artifacts of teacher practice; f. Peer assessments other than classroom observations; g. Student work samples; h. Student surveys or other feedback; i. Parent surveys or other feedback
	TL43. Currently, which of the following measures of teacher performance are required by the state for evaluating teachers of non-tested subjects, non-tested grades, or other special circumstances such as team-teaching? a. Classroom observations conducted by the principal; b. Classroom observations conducted by a school administrator other than the principal; c. Classroom observations conducted by someone other than a school administrator, such as a peer or mentor teacher; d. self-assessment; e. portfolios or other artifacts of teacher practice; f. Peer assessments other than classroom observations; g. Student work samples; h. Student surveys or other feedback; i. Parent surveys or other feedback

Policy or practice	Interview questions addressing the teacher and principal certification and evaluation policy or practice
Specifying a required minimum number of rating categories to be used when evaluating teachers	TL44. Do state regulations specify a required minimum number of rating levels to be used when evaluating overall teacher performance? If so, what is the minimum number of rating categories that is required?
Conducting annual evaluations of teachers	TL40. Currently, how often does the state require that teachers be evaluated during their probationary period? For example, every six months, annually, every other year, or at some other interval?
	TL41. Currently, how often does the state require that teachers be evaluated in their non-probationary period? For example, every six months, annually, every other year, or at some other interval?
Requiring teacher evaluations to inform decisions about professional development and support for individual teachers	TL60. Currently, does the state prohibit, permit, or require teacher evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. a. To guide decisions about professional development and support for individual teachers
Requiring teacher evaluations to inform decisions about compensation	TL60. Currently, does the state prohibit, permit, or require teacher evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. c. To guide decisions about annual teacher salary increases; d. To guide decisions about teacher bonuses or performance-based compensation other than salary
Requiring teacher evaluations to inform decisions about career advancement	TL60. Currently, does the state prohibit, permit, or require teacher evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. e. To guide decisions about career advancement opportunities
Requiring teacher evaluations to inform decisions about dismissal of teachers	TL60. Currently, does the state prohibit, permit, or require teacher evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. b. To guide decisions about dismissal of teachers
Requiring districts to use student growth to evaluate principals and specifying the extent to which student achievement growth must factor into principal evaluations	TL75. Do state regulations specify the extent to which evidence of student growth must factor into the principal evaluation? For example, regulations may call for student growth to be a "significant" factor in evaluations or call for student growth to have a specific weight (such as 20 percent) in the principal evaluation. If this is specified in state regulations, please describe those specific regulations.
	[Note: TL74 (shown in the next row) was also used to address the policy in this row. Specifically, this policy was coded as 0 if either the response to TL75 was "no" or the response to TL74 was "no principals."]
Requiring multiple performance measures for principal evaluations	TL74. Currently, does the state require that all districts use student growth as one measure when evaluating all principals, some principals, or no principals?
	TL77. Other than the student growth measure we just discussed, which of the following other measures of principal performance are currently required by the state? a. Self-assessment; b. District administrator input; c. Staff surveys or other feedback; d. Student surveys or other feedback
Specifying a required minimum number of rating categories to be used when evaluating principals	TL78. Do state regulations specify a required minimum number of rating levels to be used when evaluating principal performance? If so, what is the minimum number of rating categories that is required?

Policy or practice	Interview questions addressing the teacher and principal certification and evaluation policy or practice
Requiring principal evaluations to inform decisions about professional development and support for individual principals	TL89. Currently, does the state prohibit, permit, or require principal evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. a. To guide decisions about professional development and support for principals
Requiring principal evaluations to inform decisions about compensation	TL89. Currently, does the state prohibit, permit, or require principal evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. c. To guide decisions about principal salary increases; d. To guide decisions about principal solution other than salary
Requiring principal evaluations to inform decisions about career advancement	TL89. Currently, does the state prohibit, permit, or require principal evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. e. To guide decisions about career advancement opportunities
Requiring principal evaluations to inform decisions about dismissal of principals	TL89. Currently, does the state prohibit, permit, or require principal evaluation results to be used for any of the following purposes? Please select just one answer for each potential use. If your state both permits and requires that evaluation results be used for a particular purpose, please report that purpose as required. b. To guide decisions about dismissal of principals.
RTT application criterion:	
<ul> <li>Ensure the equitable distribution of teachers and principals by developing a plan to ensure that students in high-poverty or high-minority schools have equitable access to highly effective teachers and principals and are not served by ineffective teachers and principals at higher rates than other students</li> </ul>	
Requiring districts or schools to use strategies to promote a more equitable distribution of effective teachers	TL68. Currently, does your state require that districts and/or schools use any of the following strategies aimed at promoting a more equitable distribution of effective teachers between high-poverty or high-minority schools and low-poverty or low-minority schools? a. Offer more compensation for staff who teach at high-poverty or high-minority schools; b. Offer performance-based compensation for effective teachers who teach at high-poverty or high-minority schools; c. Hire staff in high-poverty or high-minority schools and districts earlier; d. Increase external recruitment activities such as open houses, job fairs, presentations, or advertisements; e. Improve teaching and learning environments at high-poverty or high-minority schools such as improved opportunities for collaboration, improved school leadership, or improved facility quality; f. Offer more professional development, mentoring, or induction for teachers working at high-poverty or high-minority schools
Conducting analyses of teacher effectiveness based on student achievement growth to determine whether there has been a shift in the distribution of effective teachers	TL69. Within the past year, has your state conducted analyses to determine whether there has been a shift in the distribution of effective teachers between high-poverty or high-minority schools and low-poverty or low-minority schools? TL70. Which of the following factors were examined in these analyses? a. Teacher effectiveness based on student growth such as average teacher effectiveness ratings in schools, proportion of teachers rated as highly effective in schools, or the distribution of teachers by rating categories in schools

Policy or practice	Interview questions addressing the teacher and principal certification and evaluation policy or practice
Requiring districts or schools to use strategies to promote a more equitable distribution of effective principals	TL94. Currently, does your state require that districts and/or schools use any of the following strategies aimed at promoting a more equitable distribution of effective principals between high-poverty or high-minority schools and low-poverty or low-minority schools? a. Offer more compensation for principals who work at high-poverty or high-minority schools; b. Offer performance-based compensation for effective principals of high-poverty or high-minority schools; c. Hire staff in high-poverty or high-minority schools and districts earlier; d. Increase external recruitment activities such as open houses, job fairs, presentations, or advertisements; e. Improve teaching and learning environments at high-poverty or high-minority school school leadership, or improved facility quality; f. Offer more professional development for principals working at high-poverty or high-minority schools, such as training, coaching, or principal academies
Conducting analyses of principal effectiveness based on student achievement growth to determine whether there has	TL95. Within the past year, has your state conducted analyses to determine whether there has been a shift in distribution of effective principals between high-poverty or high-minority schools and low-poverty or low-minority schools? TL96. Which of the following factors were examined in these analyses? b.
been a shift in the distribution of effective principals	Principal effectiveness ratings based on student growth
<ul> <li>RTT application criteria:</li> <li>Link student achievement and student growth data to the students' teachers and principals and in-state teacher and principal preparation programs and publicly report the data for each credentialing program in the state</li> <li>Expand preparation and credentialing options and programs that are successful at producing effective teachers and principals</li> </ul>	
Using teacher effectiveness ratings (based in part on student achievement growth) to assess the effectiveness of teacher certification programs	TL11. Currently, which of the following types of information does the state use to assess the effectiveness of teacher certification programs? Please indicate if each type of information is used for assessing effectiveness of traditional certification programs only, alternative certification programs only, both traditional and alternative programs, or neither. d. The effectiveness ratings (based in part on student growth) of credentialed teachers from each program
Publicly reporting results from its evaluations of teacher certification program effectiveness	TL12. Within the past year, did the state use the results from its evaluations of teacher certification programs in any of the following ways? For each potential use, please indicate if it was used for traditional certification programs only, alternative certification programs only, both traditional and alternative programs, or neither. f. Publicly reported results for each program
Using results from its evaluations of teacher certification programs to provide additional funds for, expand, or promote certification programs that were shown to be effective	TL12. Within the past year, did the state use the results from its evaluations of teacher certification programs in any of the following ways? For each potential use, please indicate if it was used for traditional certification programs only, alternative certification programs only, both traditional and alternative programs, or neither. b. Provided additional state funding to certification programs that were shown to be effective; c. Expanded and/or promoted certification programs that were shown to be effective
Using principal effectiveness ratings (based in part on student achievement growth) to assess the effectiveness of principal certification programs	TL28. Currently, which of the following types of information does the state use to assess the effectiveness of principal certification programs? Please indicate if each type of information is used for assessing effectiveness of traditional certification programs only, alternative certification programs only, both traditional and alternative programs, or neither. d. The effectiveness ratings (based in part on student growth) of credentialed principals from each program

Policy or practice	Interview questions addressing the teacher and principal certification and evaluation policy or practice
Publicly reporting results from its evaluations of principal certification program effectiveness	TL29. Within the past year, did the state use the results from its evaluations of principal certification programs in any of the following ways? For each potential use, please indicate if it was used for traditional certification programs only, alternative certification programs only, both traditional and alternative programs, or neither. f. Publicly reported results for each program
Using results from its evaluations of principal certification programs to provide additional funds, expand, or promote certification programs that were shown to be effective	TL29. Within the past year, did the state use the results from its evaluations of principal certification programs in any of the following ways? For each potential use, please indicate if it was used for traditional certification programs only, alternative certification programs only, both traditional and alternative programs, or neither. b. Provided additional state funding to certification programs that were shown to be effective; c. Expanded and/or promoted certification programs that were shown to be effective

Source: Interviews with state administrators in spring 2013.

# Table C.5. Interview questions addressing the school turnaround (TA) topic area policies and practices

Policy or practice	Interview questions addressing the school turnaround policy or practice
<ul> <li>RTT application criterion:</li> <li>Intervene directly in the lowest-achieving schools and LEAs that are in improvement or corrective action status</li> </ul>	
Having the authority to take over failing schools	TA43. Does your state currently have the authority to take over failing schools?
<ul> <li>RTT application criterion:</li> <li>Support LEAs whose lowest-achieving schools are implementing one of the four school intervention models: turnaround model, restart model, school closure, or transformation model</li> </ul>	
Providing training to the lowest-achieving schools or LEAs on analyzing student assessment data to improve instruction	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? Please report technical assistance provided directly by state Department of Education staff as well as technical assistance funded by the state but provided by someone other than state Department of Education staff, for example, an external consultant or staff from a regional office. a. Training on analyzing student assessment data to improve instruction
Helping the lowest-achieving schools or LEAs align curricula to state standards	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? e. Help aligning school curricula to state standards
Providing training to the lowest-achieving schools or LEAs on identifying and implementing effective curricula, instructional strategies, or school intervention models, or developing and implementing a school improvement plan	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? c. Training on developing and implementing a school improvement plan; d. Training on identifying and implementing effective curricula, instructional strategies, or school intervention models
Providing training to the lowest-achieving schools or LEAs on identifying and implementing strategies to address the needs of ELLs	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? f. Training on identifying and implementing strategies to address the needs of English language learners
Providing technical assistance to the lowest-achieving schools or LEAs on improving the quality of professional development	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? g. Assistance on improving the quality of professional development

Policy or practice	Interview questions addressing the school turnaround policy or practice
Providing operational flexibility and support to lowest- achieving schools or LEAs with regard to staffing and budgeting	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? h. Assistance on analyzing and revising budgets to use resources more effectively
	TA22. Do the state's current teacher assignment laws or policies for persistently lowest-achieving schools include any of the following features? e. School discretion or authority to decide which staff to hire for the persistently lowest-achieving schools
	TA17. Does the state currently provide persistently lowest-achieving schools any flexibility with, or exemptions from, collective bargaining agreements or policies that guide staffing in your state's schools?
	TA25. Thinking specifically about your state's persistently lowest-achieving schools, does the state, the districts, or individual schools currently have primary responsibility for the following? a. Setting student discipline policies; b. Developing school budgets; c. Establishing the curriculum, including core texts; d. Setting student assessment policies except state mandated tests; e. Staff hiring, discipline, and dismissal; f. Determining the length of the school day; g. Determining the length of the school year; h. Setting requirements for professional development
Implementing or providing technical assistance on strategies to recruit and retain effective teachers (such as financial incentives)	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or the districts in which these schools are located? i. Assistance on developing strategies to recruit and retain more effective teachers
	TA22. Do the state's current teacher assignment laws or policies for persistently lowest-achieving schools include any of the following features? a. Financial incentives for teachers to begin or continue to work in the state's persistently lowest-achieving schools; b. Other retention or recruitment efforts specifically targeted at the state's persistently lowest-achieving schools (SPECIFY)
Having teacher tenure rules that affect placement in or removal from the lowest- achieving schools	TA22. Do the state's current teacher assignment laws or policies for persistently lowest-achieving schools include any of the following features? f. Teacher tenure rules that affect placement in or removal from the persistently lowest-achieving schools
Having state-level administrative structures intended to support school turnaround efforts	TA13. Does the state currently have any organizational or administrative structures specifically intended to improve state capacity to support school turnaround efforts?
	TA32. Which of the following groups are responsible for monitoring the state's persistently lowest-achieving schools? a. State department of education
	TA37. Does the state provide additional reporting or support for persistently lowest-achieving schools that miss improvement targets?

Source: Interviews with state administrators in spring 2013.

# Table C.6. Interview questions addressing the charter schools (CH) topic area policies and practices

Policy or practice	Interview questions addressing the charter school policy or practice
<ul> <li>RTT application criterion:</li> <li>Have a charter school law that does not prohibit or effectively inhibit increasing the number of high-performing charter schools in the state</li> </ul>	
Having no restrictions on the creation of new charter schools or charter enrollment	CH3. Currently, does the state have any restrictions on the creation of new charter schools and/or charter enrollment?
<ul> <li>RTT application criterion:</li> <li>Have laws, statutes, regulations, or guidelines regarding how charter school authorizers approve, monitor, hold accountable, reauthorize, and close charter schools</li> </ul>	
In considering applications for new charter schools, giving priority to schools that propose to address needs of or target ELLs	CH9. In considering applications for new charter schools, does your state give priority to schools that specifically propose to address the needs of and/or explicitly target English language learners?
Monitoring the academic performance of charter schools	CH13. On which of the following dimensions is charter school performance currently monitored by the state or its agent(s)? a. Academic performance
Monitoring the non-academic performance of charter schools	CH13. On which of the following dimensions is charter school performance currently monitored by the state or its agent(s)? b. Enrollment; c. Proportion of different student populations served such as English language learners; d. Finances and budget; e. Facilities

Source: Interviews with state administrators in spring 2013.

ELL-focused policy or practice	Interview questions
Prioritizing the adoption and implementation of supports to ELLs	SC3. To what extent (great extent, moderate extent, little extent, or not at all) is each of the following educational reform initiatives a priority in your state for the current school year? I. Providing supports to ELLs
	SC21. Which of the following statements best characterizes how ELLs fit into your state's current education reform priorities? 1- ELLs are an explicit, central priority of statewide reform efforts, 2- English language learners are an emerging priority of statewide reform efforts, 3- Statewide reform efforts are designed to address the needs of all students, including ELLs
Providing targeted support or working with intermediaries to provide support to ELLs	SC8.To which of the following types of districts and/or schools has the state provided targeted support for implementation of statewide education reforms? By targeted supports, we mean supports that are provided to a specific group so schools and/or districts for a particular purpose. c. Districts and/or schools with high proportions of ELLs
	SC13. Does your state education agency currently work with any intermediaries to support the implementation of statewide education reform priorities in any of the following areas? For each reform area selected, please briefly describe the role assigned to intermediaries in that area. e. Providing supports for ELLs
Implementing organizational or administrative changes to improve capacity to support ELLs	SC22. Since we last interviewed state representatives in spring 2012, has the state education agency implemented any of the following organizational or administrative changes to improve its capacity to address the needs of ELLs? a. Increased number of state Department of Education staff with ELL expertise; b. Reorganized the structure of existing offices or department with ELL responsibility or increased the collaboration of staff across these offices or departments; c. Increased use of external consultants with ELL expertise; d. Increased ELL expertise within regional offices; e. Redefined specific policies to better meet the needs of ELLs
Supporting districts or schools in implementing the Common Core State Standards with ELLs	SA25. Since we last interviewed state representatives in spring 2012, has the state provided any supports to districts and/or schools specifically designed to aid in the implementation of the state's standards with ELLs? This might include, but is not limited to, funds, professional development, technical assistance, or materials to support use of standards with ELLs
State longitudinal data system has program participation information about ELLs	DA16. Which of the following types of data specifically related to ELL students are currently included in your state's longitudinal data system(s)? a. Students currently identified as ELLs; b. Students formerly identified as ELLs; c. Students' English language proficiency test scores; d. ELLs' proficiency in their native (home) language; e. Student participation in bilingual education programs, defined as programs that focus on developing literacy in two languages, which include non-English speakers and may include English speakers, and which involve instruction in English and another language; f. Student's native language; h. Number of years the student has lived in U.S.; k. The number of years that students have received English language instructional services; l. The length of time it took for an ELL to exit ELL status

# Table C.7. Interview questions addressing the ELL-focused policies and practices

ELL-focused policy or practice	Interview questions
State longitudinal data system is used to inform and engage stakeholders and support decision makers in continuous improvement efforts for ELLs	DA17. For which of the following purposes are data in the state longitudinal data system specifically related to ELLs currently used by state-level staff? a. To track the progress of current ELLs; b. To track the progress of former ELLs; c. To track the ELL status of students; d. To identify the needs of specific ELL populations such as refugees, migrant education students, or students who speak low-incidence languages; e. To identify the professional development needs of teachers of ELLs; f. To assess teacher effectiveness with ELLs; g. To provide information to the parents of ELLs about their children's progress; h. To provide information to ELLs about their own progress; i. To make decisions about exiting students from ELL status
Providing funding, materials, training, technical assistance, or other supports to districts to aid in the use of ELL-related data	DA18. Within the past year, has the state provided funding, materials, training, technical assistance, or other supports to districts specifically designed to aid in the use of data related to ELLs?
Teacher assignment laws or policies include financial incentives to recruit and retain teachers with ELL-expertise	TA22. Do the state's current teacher assignment laws or policies for persistently lowest-achieving schools include any of the following features? c. Financial incentives for staff with ELL expertise to begin or continue to work in persistently lowest-achieving schools; d. Other retention or recruitment efforts targeted toward increasing the number of staff with ELL expertise in the persistently lowest-achieving schools (SPECIFY)
Providing training to the lowest-achieving schools or local education agencies on identifying and implementing strategies to address the need of ELLs	TA29. Which of the following types of training and/or technical assistance has the state provided in the current school year to support the improvement efforts of the persistently lowest-achieving schools in your state and/or district in which these schools are located? f. Training on identifying and implementing strategies to address the needs of ELLs
Having state-level staff or consultants to support turnaround schools and districts working with ELLs	TA14. Which of the following organizational or administrative structures are in place in your state for this purpose? f. State-level staff or consultants to provide support to turnaround schools and districts in working with ELLs
In considering applications for new charter schools, giving priority to schools that propose to address needs of or target ELLs	CH9. In considering applications for new charter schools, does your state give priority to schools that specifically propose to address the needs of and/or explicitly target ELLs?
Monitoring charter school performance based on the student populations (such as ELLs) served	CH13. On which of the following dimensions is charter school performance currently monitored by the state or its agent(s)? c. Proportion of different student populations served, such as ELLs

Source: Interviews with state administrators in spring 2013. ELL= English language learner.

### APPENDIX D

### CHANGE OVER TIME IN STATES' USE OF POLICIES AND PRACTICES PROMOTED BY RTT

In this appendix, we present figures showing changes between 2007–2008 and 2012–2013 and between 2011–2012 and 2012–2013 in the extent to which states reported using RTT-promoted policies and practices. We focus on the same six topic areas and policies and practices that were the focus of Chapter IV and the same ELL-focused policies and practices that were the focus of Chapter V. In Section A, we present changes between 2007–2008 and 2012–2013, and in Section B, we present changes between 2011–2012 and 2012–2013.

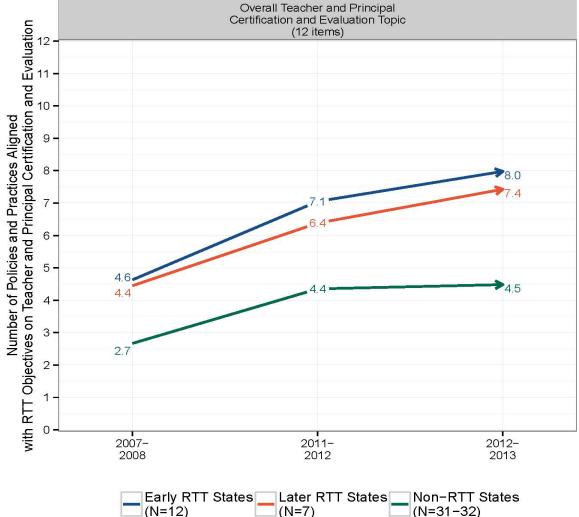
### A. Changes between 2007-2008 and 2012-2013

We examined changes between 2007–2008 and 2012–2013 for the three topic areas for which we had state reports for 2007–2008: (1) teacher and principal certification and evaluation, (2) school turnaround, and (3) charter schools. This analysis sheds light on the extent to which the three groups of states changed their use of policies and practices since baseline. However, this analysis has several caveats: (1) we only had baseline information on policies and practices in three of the six areas, (2) for these three areas, we only had information on a subset of policies and practices, (3) information for 2007–2008 was collected retrospectively in spring 2012 and was not independently verified by the research team, so readers should exercise caution when interpreting data from 2007–2008.

For these three areas, we found no differences between RTT and other states in the changes in the use of RTT-promoted policies and practices between 2007–2008 and 2012–2013:

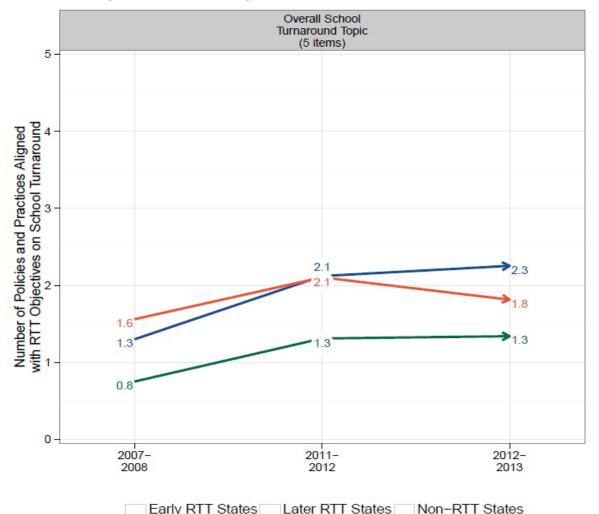
- **Teacher and principal certification and evaluation.** Among the 12 policies and practices for which we had data from 2007–2008, early and later RTT states had already reported using more of these policies and practices than non-RTT states at baseline. Each group increased their use of these policies and practices by 2012–2013, but the increases for early and later RTT states did not differ from the increase for non-RTT states by statistically significant amounts (Figure D.1).
- School turnaround. Among the five policies and practices with baseline data, later RTT states had already reported using more of these policies and practices than non-RTT states at baseline. Each group of states increased their use of these policies and practices by 2012–2013, but the increases did not differ across RTT statuses by statistically significant amounts (Figure D.2).
- **Charter schools.** Among the three policies and practices with baseline data, there were no statistically significant differences between RTT states and other states at baseline or in changes in states' use of policies and practices over time (Figure D.3).





Source: Interviews with state administrators in spring 2012 and spring 2013.

This figure shows change over time for each group of states in the use of policies and practices aligned Note: with the teacher and principal certification and evaluation section of the RTT application criteria. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in 2007–2008 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported that they used 2.7 of the 12 policies and practices aligned with the overall teacher and principal evaluation and certification topic area in 2007–2008. This group of states, on average, reported using 4.4 of these 12 policies and practices in spring 2012 and 4.5 of these 12 policies and practices in spring 2013. The average numbers for spring 2013 differ from those reported in Chapter IV because this figure focuses on just the subset of policies and practices (12 out of 39) that the interviews asked about for 2007–2008, 2011–2012, and 2012-2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2007-2008 and 2012-2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008. A range is provided for the sample sizes because nonresponse varied across years.



### Figure D.2. Change between 2007–2008 and 2012–2013 in use of policies and practices aligned with RTT objectives on school turnaround

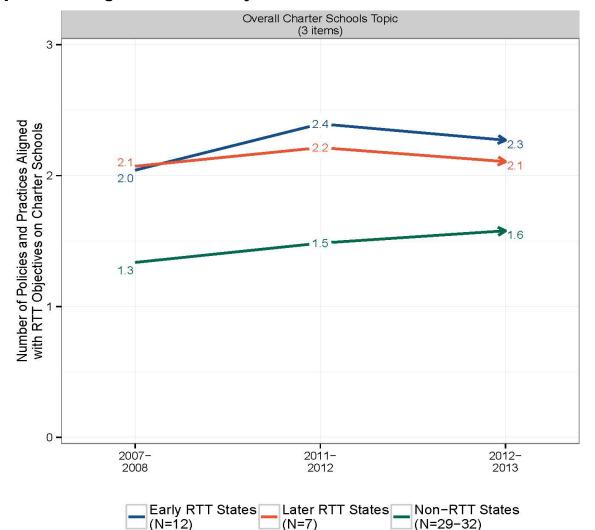
Source: Interviews with state administrators in spring 2012 and spring 2013.

(N=12)

This figure shows change over time for each group of states in the use of policies and practices aligned Note: with the school turnaround section of the RTT application. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in 2007–2008 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported that they had used 0.8 of the 5 policies and practices aligned with the overall school turnaround topic area in 2007-2008. This group of states, on average, reported using 1.3 of these 5 policies and practices in spring 2012 and 1.3 of these policies and practices in spring 2013. The average numbers for spring 2013 differ from those reported in Chapter IV because this figure focuses on just the subset of policies and practices (5 out of 10) that the interviews asked about for 2007-2008, 2011-2012, and 2012-2013. A range is provided for the sample sizes because nonresponse varied across items. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2007-2008 and 2012-2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. Data from 2007-2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008. A range is provided for the sample sizes because nonresponse varied across years.

(N=7)

(N=31-32)



### Figure D.3. Change between 2007–2008 and 2012–2013 in use of policies and practices aligned with RTT objectives on charter schools

Source: Interviews with state administrators in spring 2012 and spring 2013.

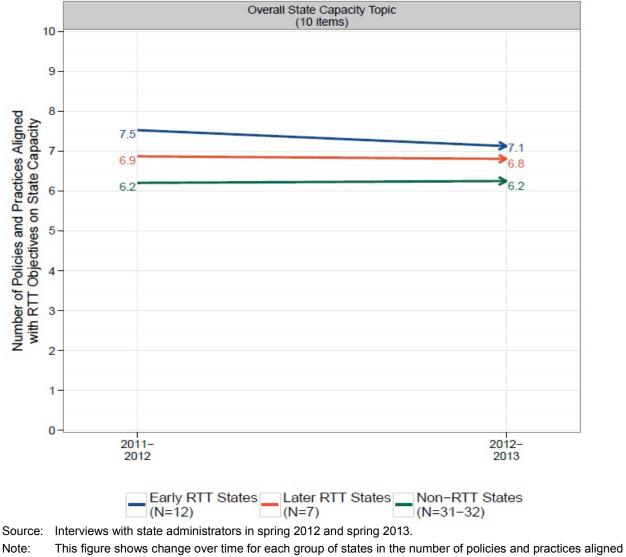
This figure shows change over time for each group of states in the number of policies and practices aligned Note: with the charter school section of the RTT application. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in 2007-2008 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported that they used 1.3 of the 3 policies and practices aligned with the overall charter school topic area in 2007–2008. This group of states, on average, reported using 1.5 of these 3 policies and practices in spring 2012 and 1.6 of these 3 policies and practices in spring 2013. The average numbers for spring 2013 differ from those reported in Chapter IV because this figure focuses on just the subset of policies and practices (3 out of 4) for which we measured usage in 2007-2008, 2011-2012, and 2012-2013. A range is provided for the sample sizes because nonresponse varied across items. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2007–2008 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. Data from 2007–2008 were collected retrospectively in spring 2012. All data provided by states were self-reported and not independently verified by the research team. For these reasons and potential concerns about recall accuracy, readers should exercise caution when interpreting data from 2007–2008. A range is provided for the sample sizes because nonresponse varied across years.

#### B. Changes between 2011–2012 and 2012–2013

We examined changes between 2011–2012 and 2012–2013 for all six topic areas and the ELL-focused policies and practices. Since some policies and practices may have taken time to implement, this analysis sheds light on the extent to which states increased their use of policies and practices during successive years of RTT implementation. On the other hand, if states quickly began using all policies that they intended to use, we might expect to see few changes across years. This analysis used data on all the policies and practices examined in Chapters IV and V.

For all six areas, there were no significant differences between RTT and other states in the changes over time in use of RTT-promoted policies and practices (Figures D.4 through D.9). Similarly, the changes over time in use of ELL-focused policies and practices did not significantly differ between RTT and other states (Figure D.10).

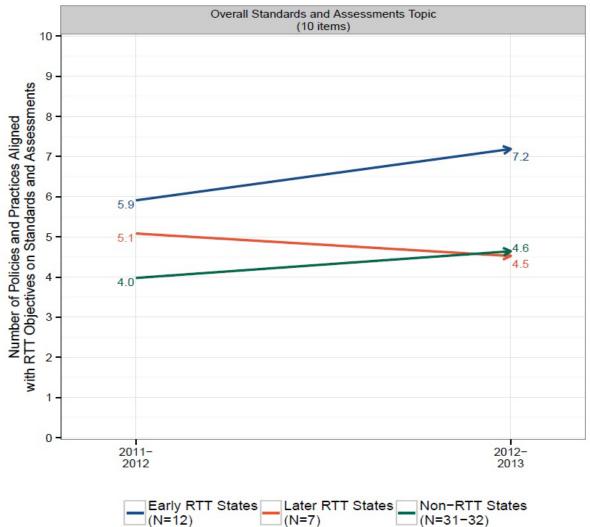
### Figure D.4. Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on state capacity



with the state capacity section of the RTT application. The arrow for each group of states starts at the

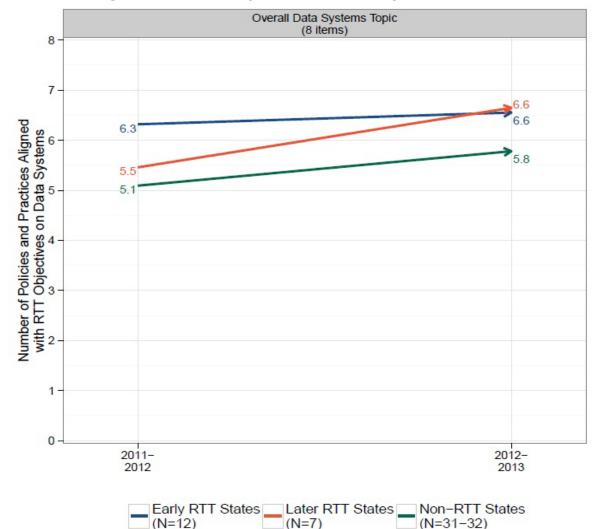
average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, early RTT states reported that they used 7.5 of the 10 policies and practices aligned with the overall state capacity topic area in spring 2012 and 7.1 of these policies and practices in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.





Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: This figure shows change over time for each group of states in the number of policies and practices aligned with the standards and assessments section of the RTT application. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported using 4.0 of the 10 policies and practices aligned with the overall standards and assessments topic area in spring 2012 and 4.6 of these policies and practices in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.

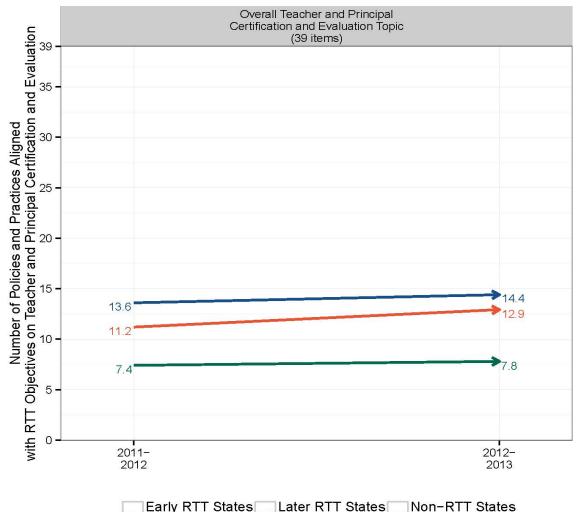


# Figure D.6. Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on data systems

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: This figure shows change over time for each group of states in the number of policies and practices aligned with the data systems section of the RTT application. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported that they used 5.1 of the 8 policies and practices aligned with the overall data systems topic area in spring 2012 and 5.8 of these 8 policies and practices in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.

# Figure D.7. Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on teacher and principal certification and evaluation



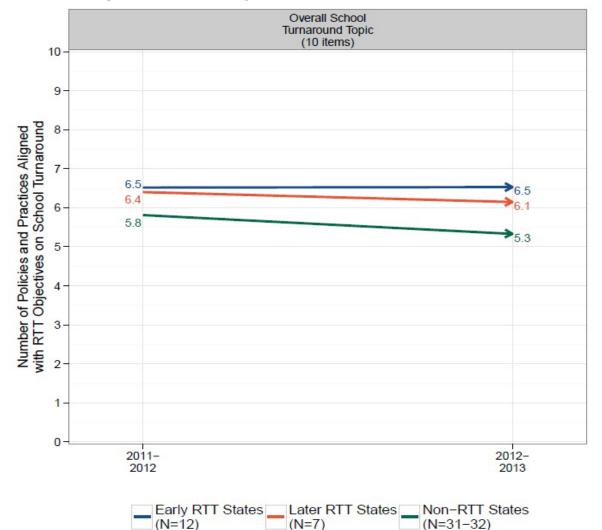
Source: Interviews with state administrators in spring 2012 and spring 2013.

(N=12)

Note: This figure shows change over time for each group of states in the use of policies and practices aligned with the teacher and principal certification and evaluation section of the RTT application criteria. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported that they had used 7.4 of the 39 policies and practices aligned with the overall teacher and principal evaluation and certification topic area in spring 2012 and 7.8 of these policies and practices in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.

(N=7)

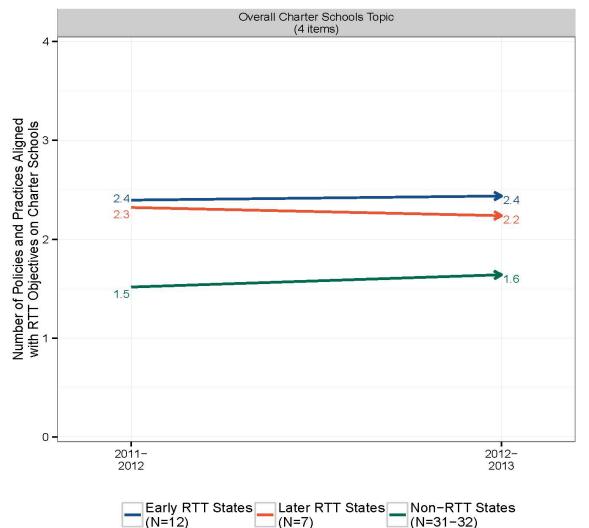
(N=31-32)



# Figure D.8. Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on school turnaround

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: This figure shows change over time for each group of states in the number of policies and practices aligned with the school turnaround section of the RTT application criteria. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported using 5.8 of the 10 policies and practices aligned with the overall school turnaround topic area in spring 2012 and 5.3 of these policies and practices in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.



## Figure D.9. Change between 2011–2012 and 2012–2013 in use of policies and practices aligned with RTT objectives on charter schools

Source: Interviews with state administrators in spring 2012 and spring 2013.

Note: This figure shows change over time for each group of states in the number of policies and practices aligned with the charter school section of the RTT application criteria. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported that they used 1.5 of the 4 policies and practices aligned with the overall charter school topic area in spring 2012 and 1.6 of these policies and practices in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.

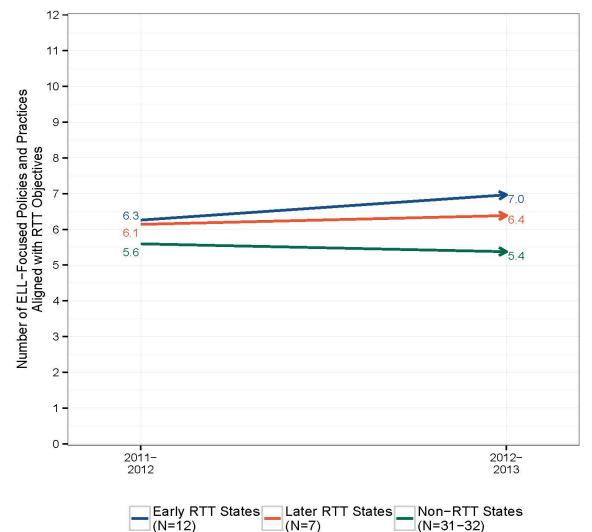


Figure D.10. Change between 2011–2012 and 2012–2013 in use of ELLfocused policies and practices aligned with RTT objectives

Source: Interviews with state administrators in spring 2012 and 2013.

Note: This figure shows change over time for each group of states in the use of ELL-focused policies and practices aligned with the RTT application criteria. The arrow for each group of states starts at the average number of reported policies and practices aligned with the RTT application criteria in spring 2012 and ends at the average number of reported policies and practices aligned with the RTT application criteria in spring 2013. For example, on average, non-RTT states reported using 5.6 of the 12 ELL-focused policies and practices aligned with the RTT application criteria in spring 2013. There were no statistically significant differences between RTT and non-RTT states with respect to changes between 2011–2012 and 2012–2013 in the number of ELL-focused policies and practices used, at the 0.05 level using a two-tailed test. A range is provided for the sample sizes because nonresponse varied across years.

#### APPENDIX E

### RELATIONSHIP BETWEEN RTT REFORMS AND CHANGES IN STUDENT OUTCOMES

As described in Chapter I, RTT was designed to promote systemic change in the U.S. educational system, with the goal of improving student achievement. The general theory of action underlying RTT is that policy changes at the state level (which we examined in Chapters IV and V) represent the first step toward changing the education system. Changes would be expected to occur at the state level before occurring at lower levels—such as districts, schools, and classrooms. One mechanism by which states could implement these policy changes is by using RTT funds to increase spending; for example, on curriculum development and staff training. Student achievement could then improve due to the changes made at all levels of the education system.

Recognizing that RTT represents a significant investment in education reform, we first attempted to estimate the effect of RTT on student outcomes using a comparative short interrupted time series design. This design compared how actual post-RTT outcomes in RTT and other states differed from projected outcomes based on pre-RTT patterns (Somers et al. 2013). However, this approach did not produce credible results (see Chapter II for more discussion). Therefore, to avoid misinterpretation of the results from this approach, we proceeded with a purely descriptive analysis of the relationship between receipt of an RTT grant and student achievement.

In this appendix, we present our descriptive analysis of the relationship between receipt of an RTT grant and student achievement. This analysis displays student- and state-level outcomes before and after the award of RTT grants. Specifically, we plotted outcomes over time for three groups of states (early RTT states, later RTT states, and non-RTT states). For each group of states, we plotted the average outcome across all states in that group for each year.

The primary outcome we examined in this analysis was state-level mean NAEP scores because NAEP scores are consistent across states and over the time frame covered by our study, whereas states may have changed their own achievement measures during the years following RTT awards. As an interim outcome, we examined state per-pupil spending from the Common Core of Data (CCD). We also examined several outcomes focused on English language learner (ELL) students: ELL subgroup NAEP scores and ELL achievement gaps in NAEP scores.

In Section A, we illustrate how to interpret the figures, using the outcomes of 4th grade math NAEP scores and per-pupil spending. In Section B, we present figures for 4th grade reading, 8th grade math, and 8th grade reading NAEP scores. In Section C, we present figures for NAEP scores for particular student subgroups. These subgroups are of interest because one of the goals of the RTT program was to support states and districts in closing achievement gaps between high-need students (for example, those eligible for free or reduced-price lunch) and those who are less disadvantaged (U.S. Department of Education n.d.). Specifically, for each of the NAEP outcomes (4th grade math, 4th grade reading, 8th grade math, and 8th grade reading), we present a series of figures showing the pattern of the outcome over time for the following subgroups:

- Males
- Females
- White students
- Black students

- Hispanic students
- Students eligible for free or reduced-price lunch (FRPL)

In Section D, we present figures for outcomes focused on ELL students. First, for each of the NAEP outcomes, we present a figure showing the pattern of the outcome over time for the subgroup of ELL students. Then, for each of the NAEP outcomes, we present a figure showing the NAEP score achievement gap between ELLs and other students over time.

#### A. The relationship between RTT and student outcomes was not clear

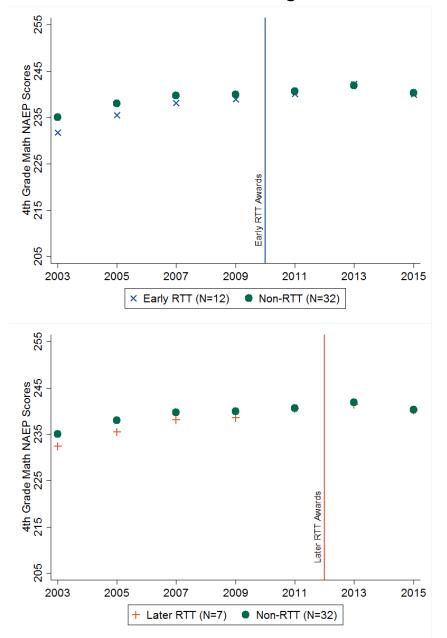
The relationship between RTT and student outcomes was not clear because different, equally valid, interpretations of the pattern of outcomes in the pre-RTT period yielded conflicting findings.

As an example, Figure E.1 shows how findings for 4th grade math NAEP scores for early RTT versus non-RTT states could be interpreted in three ways:

- 1. One interpretation of the pattern of outcomes in the pre-RTT period in Figure E.1 would suggest RTT had a positive impact. In particular, it is possible that early RTT states were catching up to non-RTT states during the 2003–2009 pre-RTT period, but had ceased catching up by 2009. In this case, we would predict that the gap between early RTT and non-RTT states in 2009 would persist after 2009 if the RTT program had not been enacted. Instead, we see that the early RTT states continued to catch up after 2009, resulting in a smaller gap in 2015. This reduction in the gap would be consistent with RTT having a positive impact.
- 2. An alternative interpretation would suggest that RTT had no effect. Specifically, it is possible that early RTT states were steadily catching up to non-RTT states each year from 2003 to 2009, and that they would have continued to catch up at a similar pace even in the absence of RTT. In this case, even without the RTT program, we would expect early RTT states to continue catching up to the non-RTT states. This would be consistent with RTT having no effect.
- 3. Yet another interpretation would suggest that RTT had a negative effect. Specifically, if early RTT states were catching up to non-RTT states at an accelerating pace in the pre-RTT period, and would have continued doing so at that faster pace in the absence of RTT, then one might conclude that RTT had a negative effect.

All of these interpretations were plausible because it was difficult to determine the true pattern of outcomes in the pre-RTT period, due to the fact that NAEP data were only available for all states for four pre-RTT years.

These interpretations illustrate the difficulty in providing credible estimates of the effect of RTT on 4th grade NAEP math scores. Trends in scores during the pre-RTT period could be interpreted as providing evidence of a positive effect of RTT, a negative effect of RTT, or no effect of RTT.





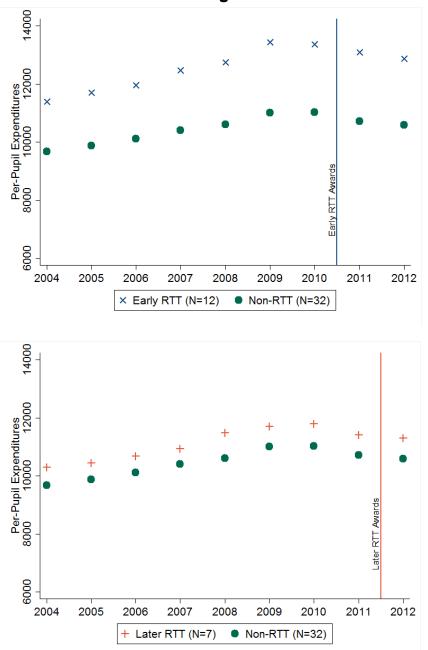
- Source: NAEP scores.
- Notes: This figure shows 4th grade math NAEP scores from 2003–2015 (NAEP tests are administered every other year). A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance. The 2002–2003 school year is represented by 2003, the 2004–2005 school year by 2005, etc. The blue vertical line at 2010 represents the timing of RTT grants to early RTT states. The orange vertical line at 2012 represents the timing of RTT grants to later RTT states.
- NAEP = National Assessment of Educational Progress; RTT = Race to the Top.

In addition, the composition of students who took NAEP tests within each state varied from year to year. In other words, the 4th graders who took the NAEP math test in 2009 were different from the 4th graders who took the test in 2011. Differences in student characteristics could have contributed to differences in outcomes from year to year that may have little to do with the educational system or policies promoted by RTT.

The conclusion for the other student outcomes we analyzed—NAEP 8th grade math scores, NAEP 4th and 8th grade reading scores, and the ELL-focused outcomes listed above—was the same. Namely, based on pre-RTT outcomes, it was not possible to determine what would have happened in the post-RTT period in the absence of RTT. Therefore, the relationship between RTT and each of these student outcomes was not clear.

The same uncertainty applies to estimates of the effect of RTT on the interim per-pupil spending outcome. Readers nevertheless may be interested to see the pattern of per-pupil spending before and after the award of RTT grants (Figure E.2). Before the award of RTT grants, early RTT states had higher per-pupil spending than non-RTT states. However, this gap in per-pupil spending did not appear to substantially widen after the award of RTT grants. We might expect to see a substantial widening of this gap in per-pupil spending if the RTT grants had supplemented state and local education funding. If the grants instead had supplanted state and local education funding (for example, if RTT funds essentially served to replace—but not add to—state and local funding that was lost during the severe recession that began in 2007), we would not expect to see a substantial widening of this gap in per-pupil spending between early RTT states and non-RTT states.

We concluded that the relationship between RTT and student outcomes was not clear. Conclusions about the relationship depend on assumptions made about the pattern of outcomes in the pre-RTT period. However, with only four pre-RTT data points, it was difficult to determine the true pattern of outcomes in that period. Furthermore, even if it were possible to discern this pattern, the results could not be used to determine whether receipt of an RTT grant *caused* changes in outcomes because other changes happening at the same time as RTT reforms might also have affected outcomes. Nevertheless, we present the figures for the remaining outcomes and subgroups in the next three sections of this appendix, so readers can examine the patterns of outcomes on their own.





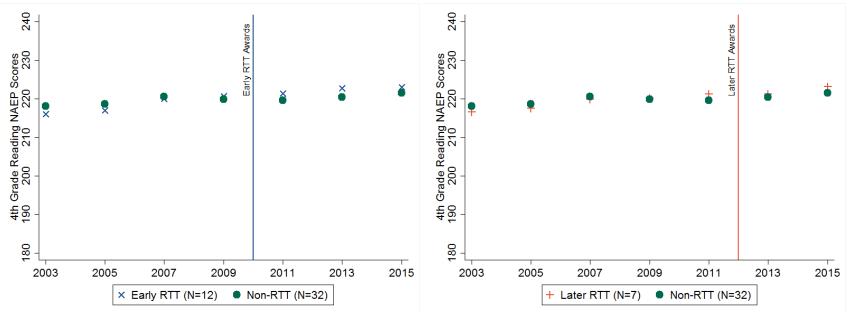
Source: Common Core of Data (CCD).

Notes: This figure depicts per-pupil current expenditures from 2004–2012, expressed in constant 2012 dollars. (Current expenditures, as defined by the CCD, include instruction, student support, instructional staff services, operation and maintenance, administration, transportation, and food services.

RTT = Race to the Top

#### **B.** Figures for NAEP scores





Source: NAEP scores.

Notes: A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

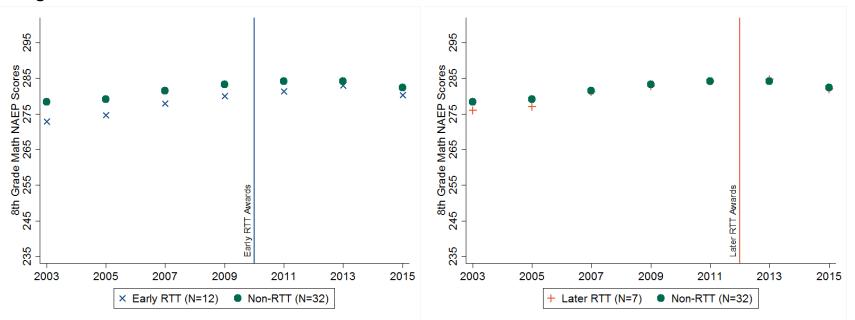


Figure E.4. 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants

Notes: A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

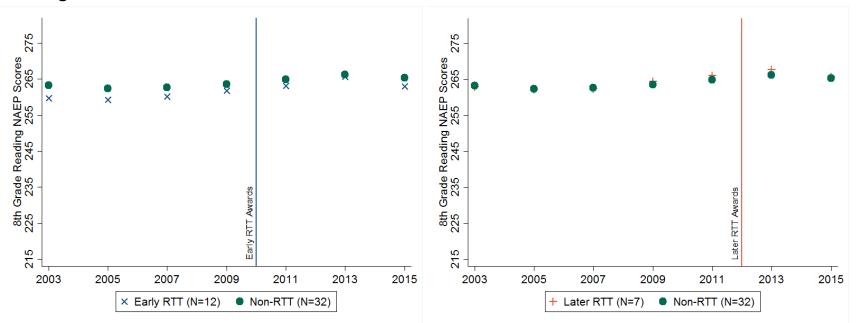
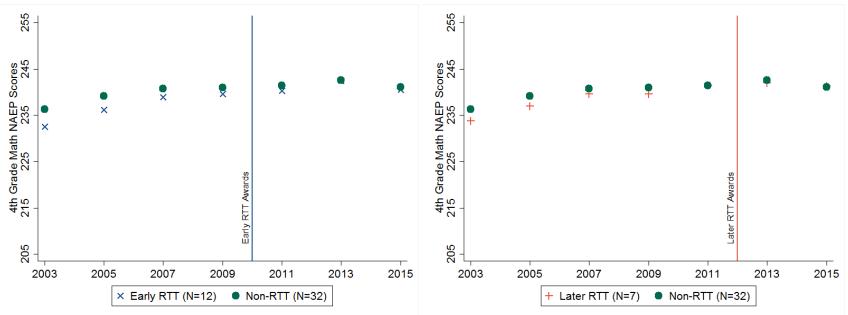


Figure E.5. 8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants

- Notes: A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.
- NAEP = National Assessment of Educational Progress; RTT = Race to the Top.

#### C. Subgroup figures for NAEP scores

Figure E.6. 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, male subgroup



Source: NAEP scores.

Notes: A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

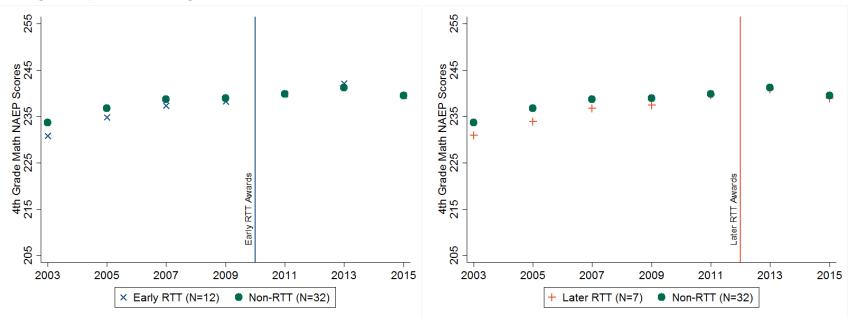


Figure E.7. 4th grade math NAEP scores for early, later and non-RTT states, before and after the award of RTT grants, female subgroup

Notes: A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

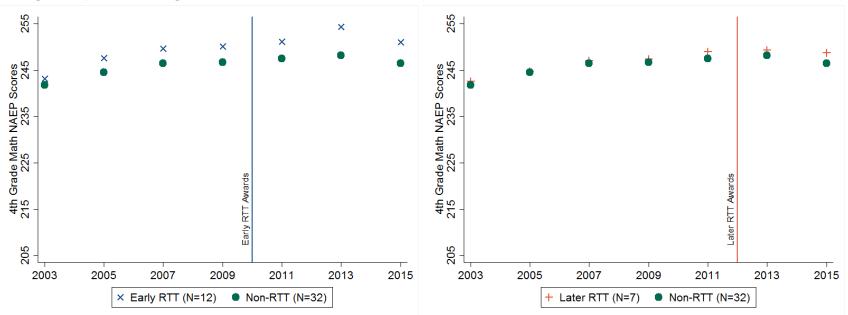


Figure E.8. 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup

Notes: A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

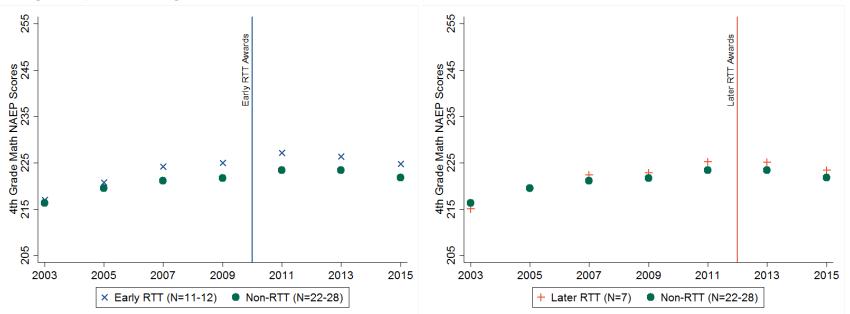


Figure E.9. 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

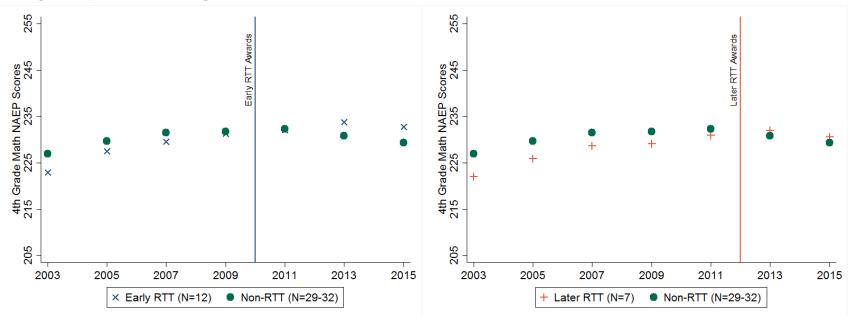


Figure E.10. 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

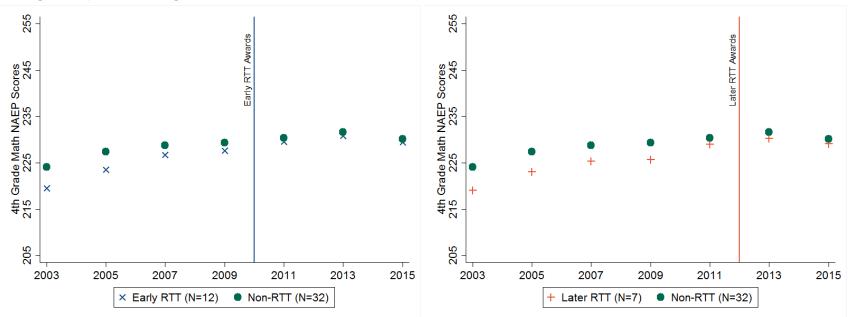


Figure E.11. 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup

Notes: A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

NAEP = National Assessment of Educational Progress; RTT = Race to the Top; FRPL = free or reduced-price lunch.

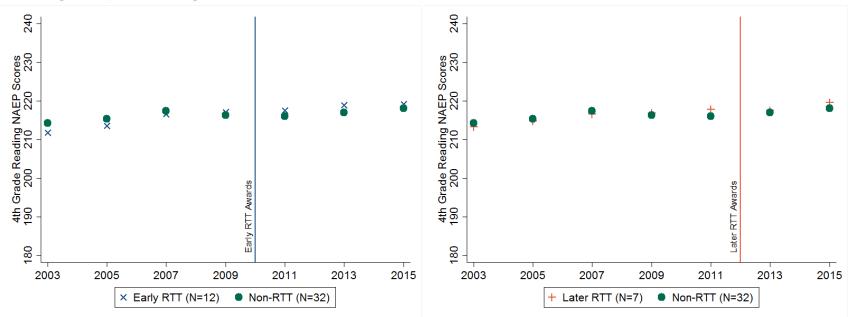


Figure E.12. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, male subgroup

Notes: A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

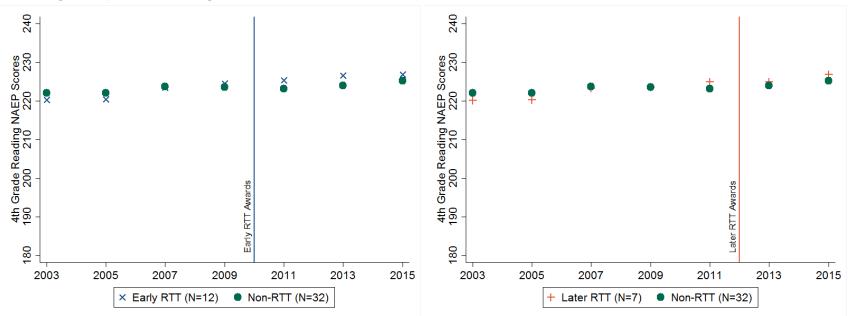


Figure E.13. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, female subgroup

Notes: A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

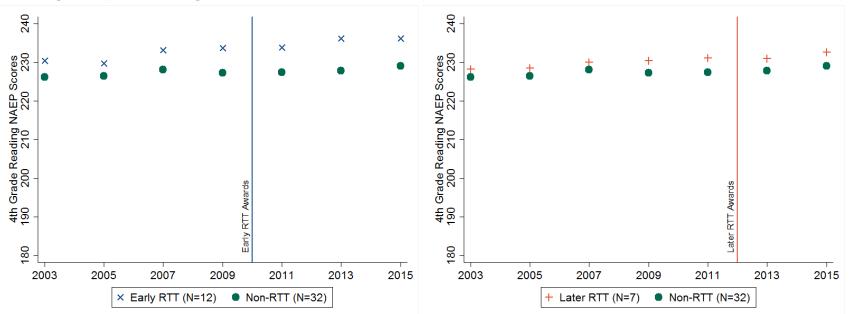


Figure E.14. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup

Notes: A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

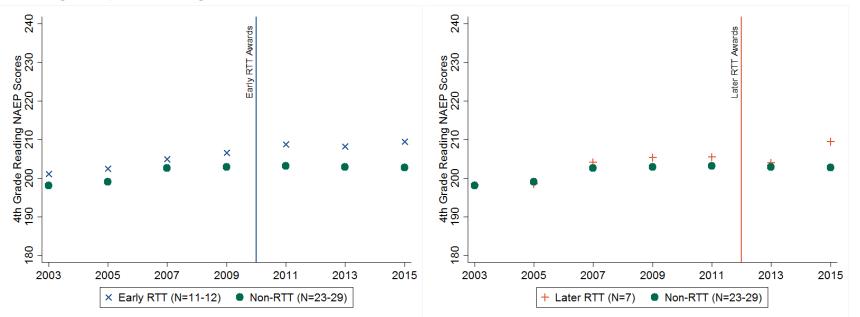
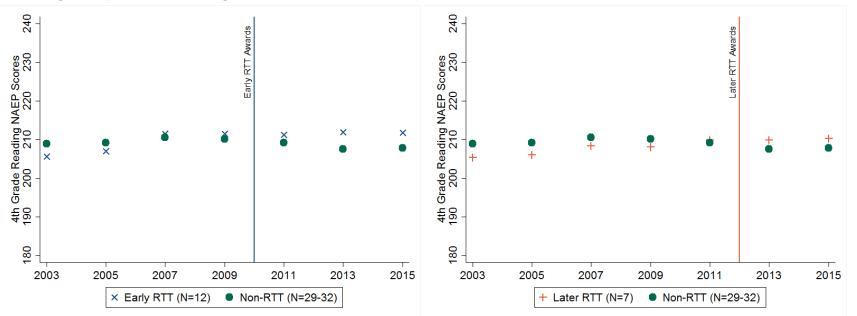


Figure E.15. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.



### Figure E.16. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup

Source: NAEP scores.

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

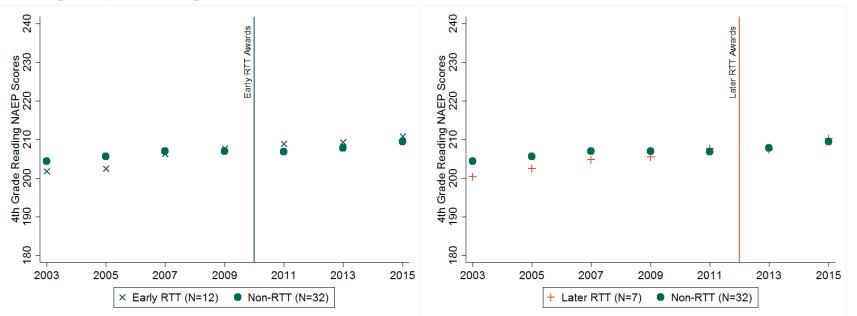
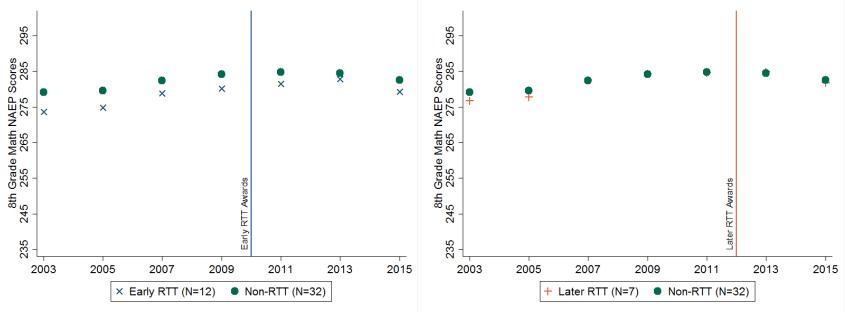


Figure E.17. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup

Notes: A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

NAEP = National Assessment of Educational Progress; RTT = Race to the Top; FRPL = free or reduced-price lunch.





Notes: A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

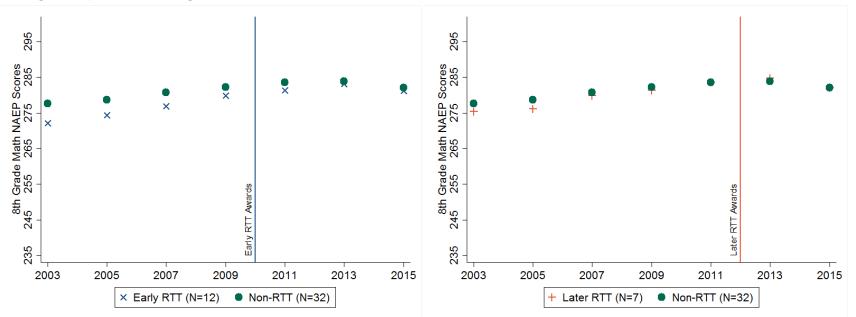


Figure E.19. 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, female subgroup

Notes: A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

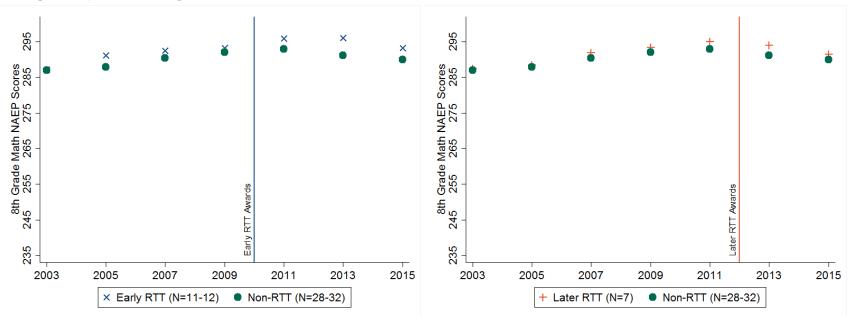


Figure E.20. 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

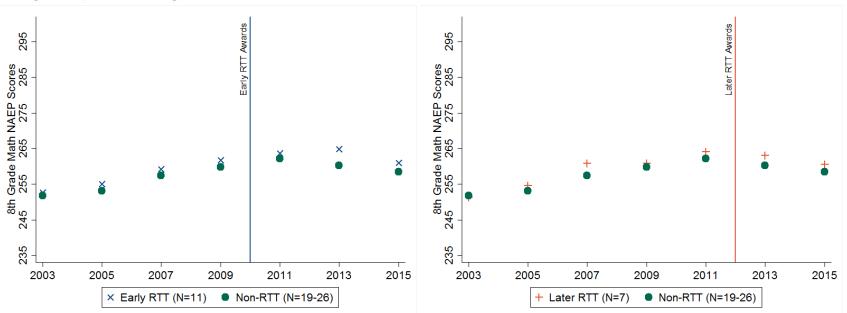


Figure E.21. 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

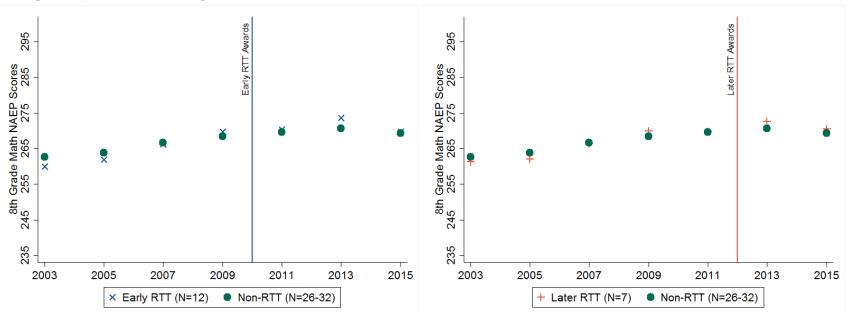


Figure E.22. 8th grade math NAEP Scores for early, later, and non-RTT states, before and after the award of RTT grants, Hispanic subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

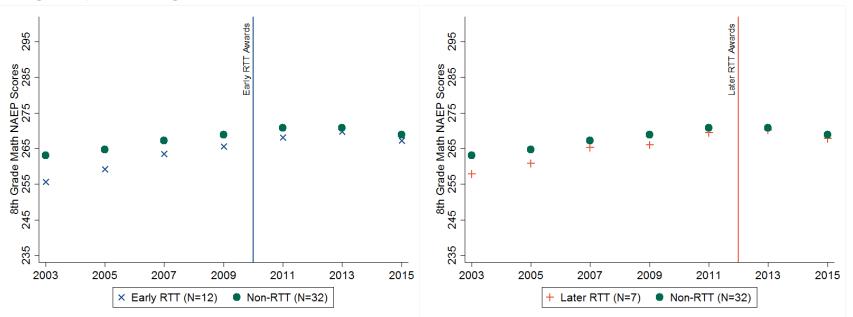


Figure E.23. 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, FRPL subgroup

Notes: A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

NAEP = National Assessment of Educational Progress; RTT = Race to the Top; FRPL = free or reduced-price lunch.

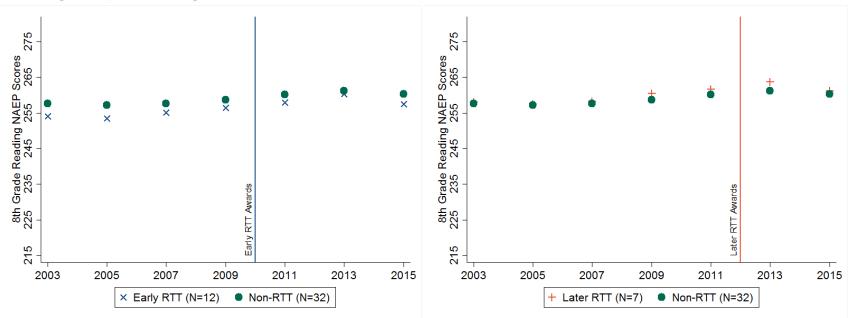
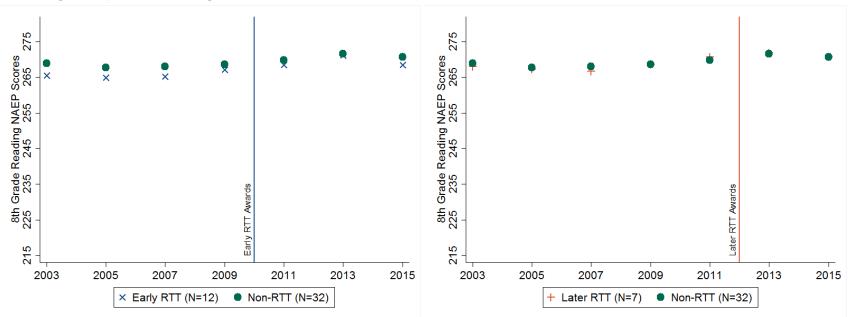
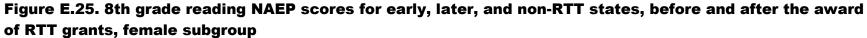


Figure E.24. 8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, male subgroup

Notes: A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.





Notes: A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

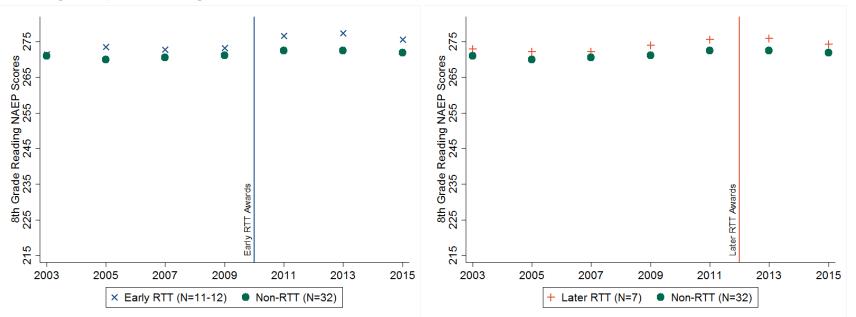


Figure E.26. 8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, white subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

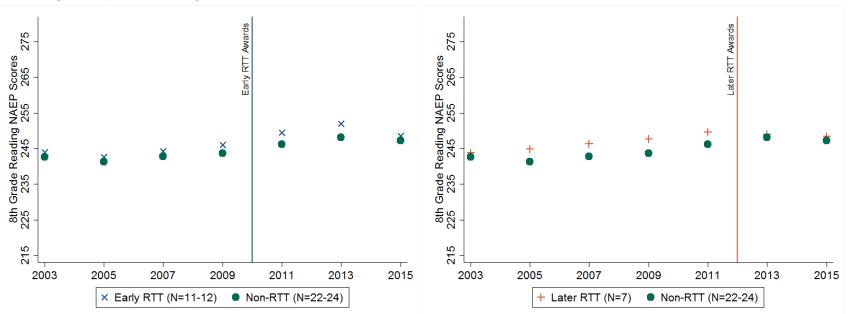
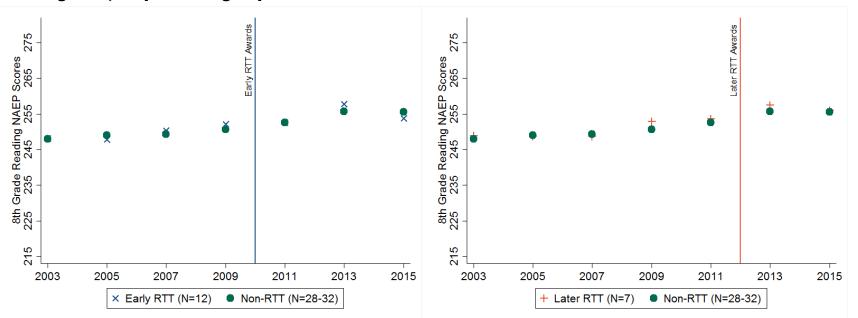
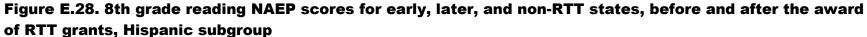


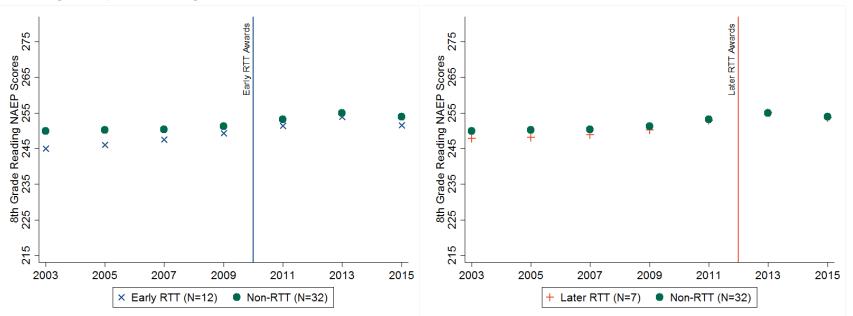
Figure E.27. 8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, black subgroup

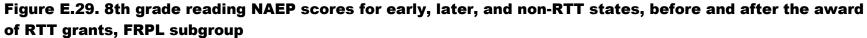
Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.





Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.



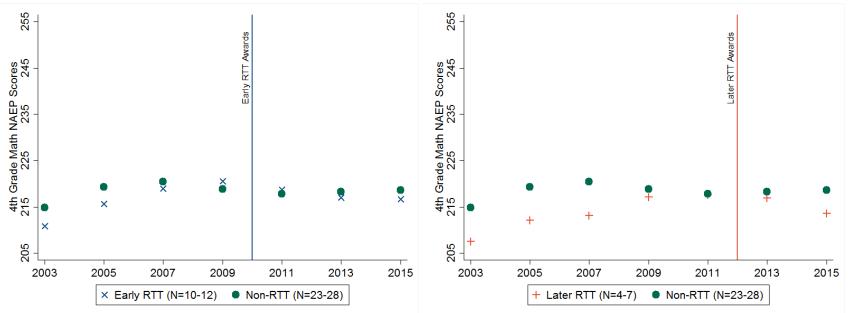


Notes: A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

NAEP = National Assessment of Educational Progress; RTT = Race to the Top; FRPL = free or reduced-price lunch.

## **D. ELL-focused figures**





Source: NAEP scores.

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 214 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 249 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

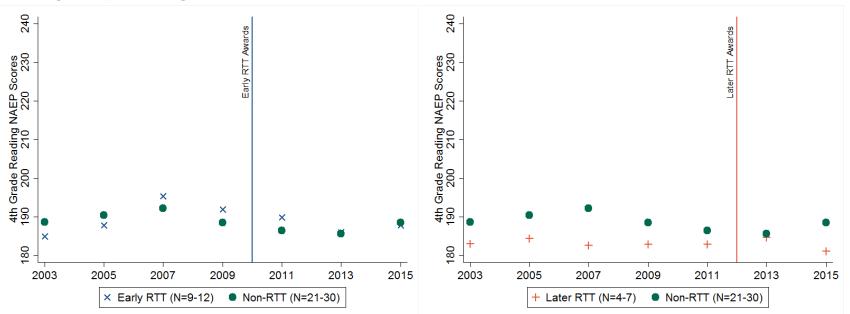


Figure E.31. 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup

Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 208 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 238 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.

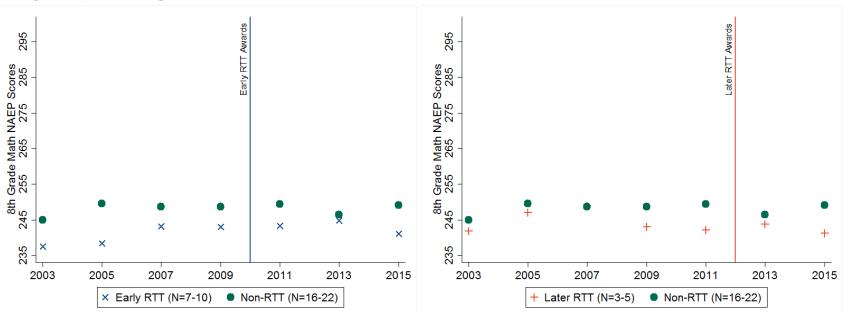


Figure E.32. 8th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup

- Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 262 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 299 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.
- NAEP = National Assessment of Educational Progress; RTT = Race to the Top; ELL = English language learner.

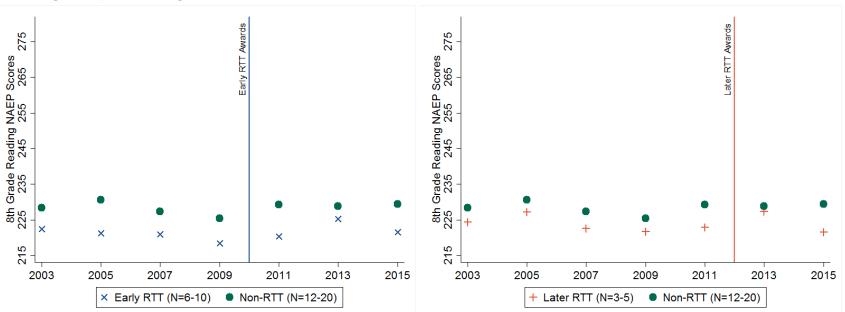


Figure E.33. 8th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants, ELL subgroup

- Notes: A range is provided for the sample sizes because the number of states with missing data varied by year. A score of 243 is the cutoff for the "Basic" achievement level, which denotes partial mastery of required knowledge and skills. A score of 281 is the cutoff for the "Proficient" achievement level, which represents solid academic performance.
- NAEP = National Assessment of Educational Progress; RTT = Race to the Top; ELL = English language learner.

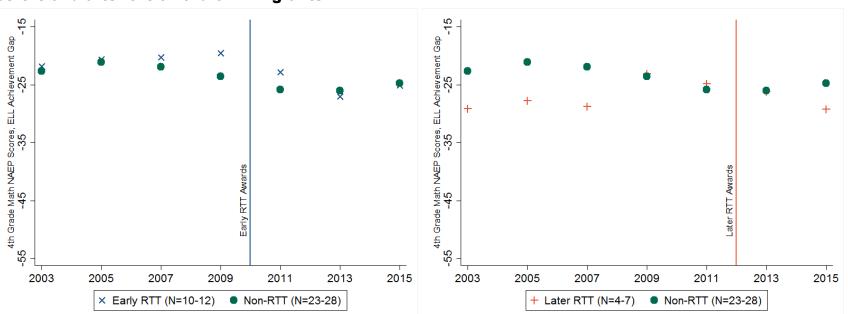


Figure E.34. ELL achievement gap in 4th grade math NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants

- Notes: Each point on the figure represents the average difference between the scores of ELL students and non-ELL students for the group of states indicated. For each state, we computed the difference between the average score for ELL students and the average score for non-ELL students (ELL minus non-ELL). Negative numbers indicate that average scores for ELL students were lower than average scores for non-ELL students. We then took the average of these differences for each group of states (early, later, or non-RTT). A range is provided for the sample sizes because the number of states with missing data varied by year.
- NAEP = National Assessment of Educational Progress; RTT = Race to the Top; ELL = English language learner.

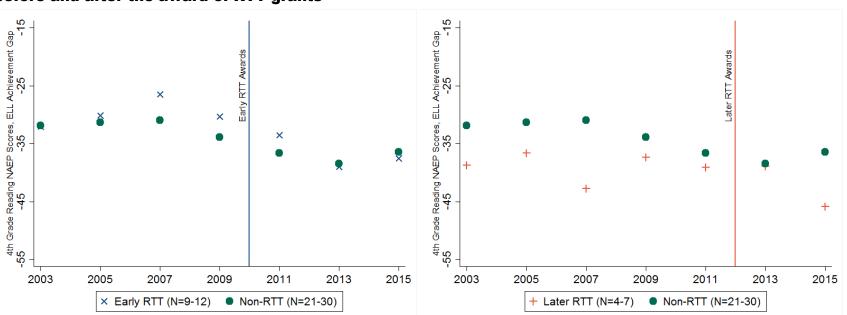
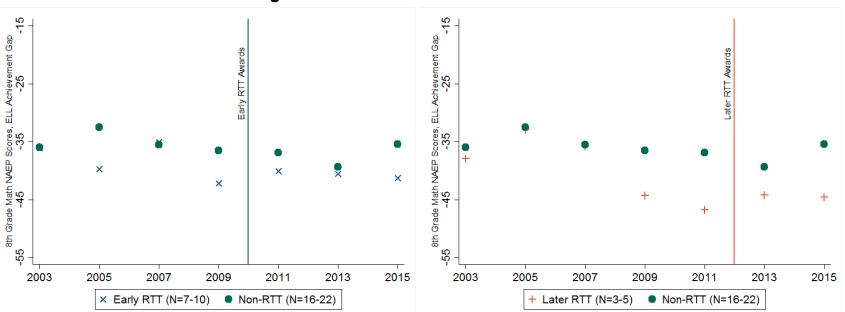


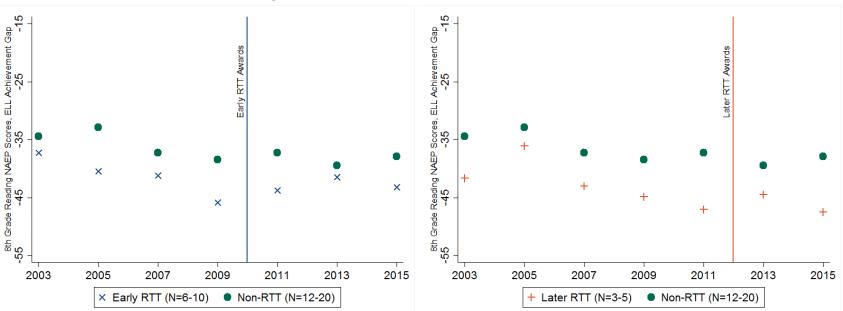
Figure E.35. ELL achievement gap in 4th grade reading NAEP scores for early, later, and non-RTT states, before and after the award of RTT grants

Notes: Each point on the figure represents the average difference between the scores of ELL students and non-ELL students for the group of states indicated. For each state, we computed the difference between the average score for ELL students and the average score for non-ELL students (ELL minus non-ELL). Negative numbers indicate that average scores for ELL students were lower than average scores for non-ELL students. We then took the average of these differences for each group of states (early, later, or non-RTT). A range is provided for the sample sizes because the number of states with missing data varied by year.





Notes: Each point on the figure represents the average difference between the scores of ELL students and non-ELL students for the group of states indicated. For each state, we computed the difference between the average score for ELL students and the average score for non-ELL students (ELL minus non-ELL). Negative numbers indicate that average scores for ELL students were lower than average scores for non-ELL students. We then took the average of these differences for each group of states (early, later, or non-RTT). A range is provided for the sample sizes because the number of states with missing data varied by year.





Notes: Each point on the figure represents the average difference between the scores of ELL students and non-ELL students for the group of states indicated. For each state, we computed the difference between the average score for ELL students and the average score for non-ELL students (ELL minus non-ELL). Negative numbers indicate that average scores for ELL students were lower than average scores for non-ELL students. We then took the average of these differences for each group of states (early, later, or non-RTT). A range is provided for the sample sizes because the number of states with missing data varied by year.

