

U.S. Department of Education
October 2016

Race to the Top: Implementation and Relationship to Student Outcomes Executive Summary

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

Race to the Top: Implementation and Relationship to Student Outcomes Executive Summary

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 2017-4000
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: Executive Summary* (NCEE 2017-4000). 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.

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* or *other 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 RTT-promoted 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.¹ 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.² 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.³ 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.

¹ 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.

² Alaska, North Dakota, Texas, and Vermont did not apply for RTT grants in any round.

³ 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 questions 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):⁴

- 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.⁵

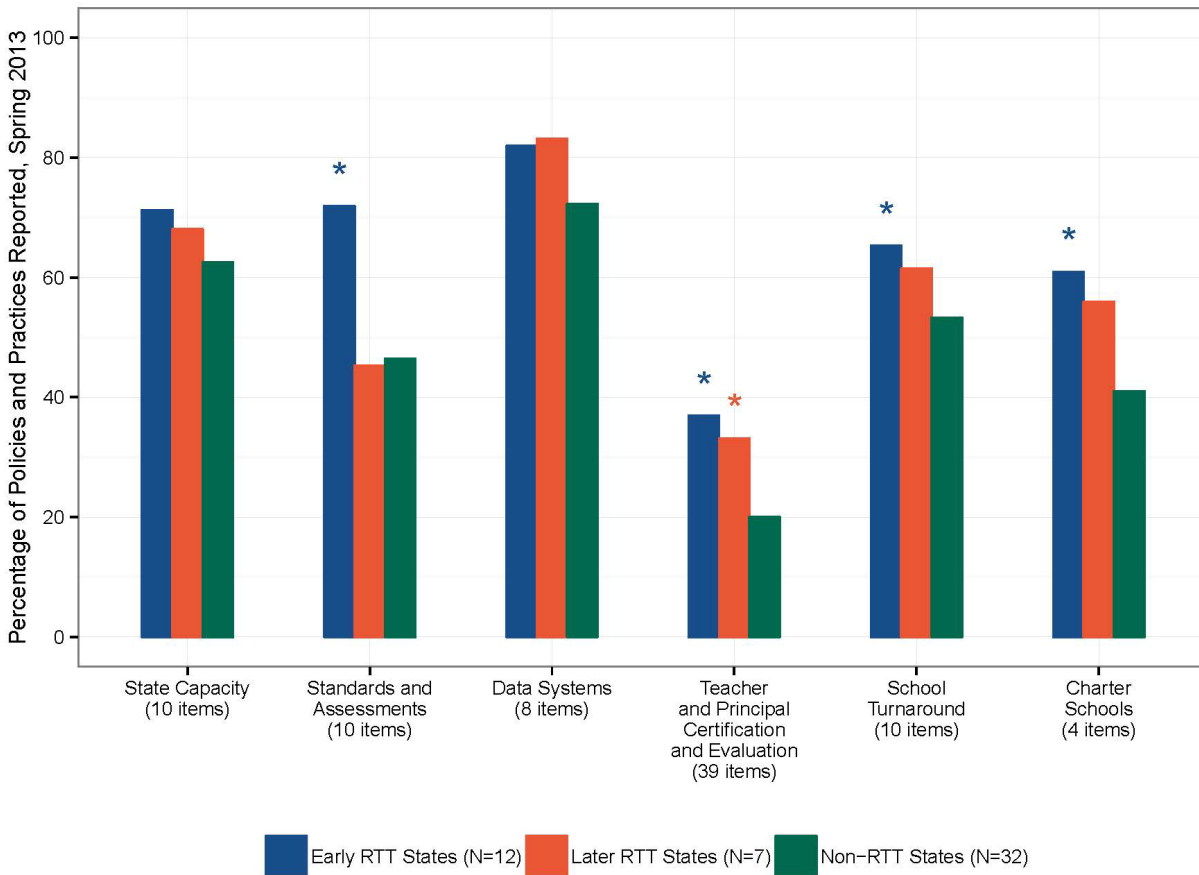
In one of the six areas examined, teacher and principal certification and evaluation, later RTT states reported using more policies and practices promoted by RTT than non-RTT states in spring 2013

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).⁶ 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

⁴ Chapter IV contains results for the individual policies and practices within each of these areas.

⁵ 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.

⁶ 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.

Figure ES.1. Use of policies and practices promoted by RTT, by topic area

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.

