

Competitive Grants and Educational Federalism: President Obama's Race to the Top Program in Theory and Practice

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We use the Obama administration's Race to the Top (RTTT) program to address two questions about competitive grants. First, what does RTTT and its competitive approach reveal about the current state of educational federalism? Second, and more generally, how do large federal grant programs operate when state governments compete for funds? Our analysis indicates that although RTTT has expanded federal involvement in state education policy, its success still depends crucially on subnational implementation. We also note the important role of state capacity in predicting states' abilities to apply to and perform well in the RTTT competition. We conclude by suggesting implications for educational federalism during the coming years and offering more general insights about the operation of competitive federal grants to states.

Scholars frequently use federal grant programs to consider theoretical or empirical questions about American Federalism. One consistent pattern in the nation's intergovernmental system has been for federal lawmakers to use formulas to distribute large grants to subnational governments. Certainly, hundreds of competitive federal grants, often called "project" grants, also exist in which awards are not guaranteed because applicants compete for funds. Still, the vast majority of federal dollars flow to states via large formula grants, such as those for Medicaid, Temporary Assistance to Needy Families, and highway planning and construction (Beam and Conlan 2002). Politically, these formula grants provide legislators with reliable funding streams that help them claim credit with their constituents. That is one reason why proposals to change grant formulas, which can alter the amounts that states or congressional districts receive, spark intense political debates on Capitol Hill.

In education, federal officials have relied heavily on formula grants in major laws such as the Elementary and Secondary Education Act (ESEA), presently known as the No Child Left behind Act (NCLB). Title I of that law contains some of the

largest formula-driven education grant programs that the federal government administers. Although dozens of competitive federal grants for elementary and secondary education also exist, most are quite small. The vast majority of federal dollars for the nation's schools, including recent allocations in the American Recovery and Reinvestment Act (ARRA), also known as the 2009 economic stimulus package, have flowed to states via legislatively defined formulas. Interestingly, during the last two years, the Obama administration and its allies in Congress have begun to more aggressively embrace the use of large competitive grants for K-12 education. The most notable example is the administration's \$4.35 billion Race to the Top (RTTT) program, which was created from a portion of ARRA education funds that were reserved to the Secretary of Education for the explicit purpose of sparking educational reforms.¹

In this article, we use RTTT to address one specific and one general question about competitive grants. First, what does RTTT and its competitive approach reveal about the current state of educational federalism? As the major education reform initiative of the Obama administration's first two years, a close look at RTTT's content suggests insights about current policy developments and future directions that could influence the balance of federal and state power. In fact, Secretary of Education Arne Duncan and his colleagues have indicated that it is accurate to consider RTTT's content and design as a signal of where the administration intends to push its education agenda (Manna 2010a).

Second, and more generally, how do large federal grant programs operate when state governments compete for funds? We argue that the RTTT program can help test prior theoretical claims about how competitive grant programs work. Interestingly, the literature on competitive federal grants has tended to focus on programs that allocate funds to states via formulas, as in the Community Development Block Grant (CDBG) (Collins and Gerber 2006, 2008), but then have states administer competitions to distribute funds to localities. Given that essentially all large federal grant programs allocating funds to states are formula-driven, RTTT offers a valuable opportunity for studying competitions involving the states themselves. Thus, our objective is to consider whether general expectations about grant administration in state-run competitions among local units of government also hold in contexts where states are participating in competitions, rather than administering them.

We explore our first question by comparing and contrasting the key features of RTTT with the content of NCLB, which Congress passed in 2001. That comparison helps to reveal RTTT's main elements while also illustrating how the Obama administration has both extended and deviated from NCLB's approach. These changes have potentially important implications for contemporary educational federalism. After that analysis, subsequent sections of the article examine our more general question by embedding RTTT in a larger discussion about

competitive grants. There we review prior work on how grant competitions function. Then, we describe our empirical strategy and subsequently we discuss our results. Our main finding is consistent with prior work on local grant competitions, which has shown that the capacity of potential grant recipients to seek funds is an important factor that helps explain how these contests unfold. We find a similar pattern in the RTTT competition.

Educational Federalism Since 2001

Like all major federal education initiatives, RTTT was not written onto a blank slate. During the last decade, NCLB's implementation helped shape the educational landscape onto which RTTT emerged. The overall implications of NCLB for educational federalism have been the subject of much analysis and debate (Lowry 2009; McDermott and Jensen 2005; McDonnell 2005; McGuinn 2005; Shelly 2008; Wong and Sunderman 2007; Manna 2010a). Generally speaking, scholars agree that NCLB represented an important shift in the federal role. They also agree that it has influenced the content of federal, state, and local policy, as well as elite and mass opinion about the proper role that different levels of government should play in helping to educate the nation's children. Disagreements in the literature tend to center on the magnitude and implications of the growth in federal power. Still, consensus exists in at least four broad areas with much relevance for the RTTT program.

First, NCLB established a stronger and more formal federal commitment to promoting substantive educational outcomes rather than focusing mainly on equality of educational opportunity. While ensuring equitable opportunities still remains an important federal goal, NCLB also emphasized promoting educational quality, including the elimination of achievement gaps between student groups (McDonnell 2005; McGuinn 2005; Manna 2010a; Wong and Sunderman 2007). Making sure that opportunities helped students learn worthwhile academic content, which extended initiatives adopted during President Bill Clinton's first term, became more important, too.

A second line of scholarly agreement is that federal concerns about educational quality moved NCLB's authors to expand federally defined interventions to ensure that students were learning and that achievement gaps were closing. The law's theories of action and its specific components reveal its prescriptive nature on these matters (McGuinn 2005). It required mandatory testing of all students in reading, math, and science in grades three through eight and once in high school. It also required states to measure school progress each year and to identify which schools were making adequate yearly progress (AYP).² If a school received aid from NCLB's Title I program but failed to make AYP it was subject to federally defined improvement measures, which became more intense if a school struggled for

several consecutive years. The law also made schools responsible for hiring teachers in academic courses who were deemed “highly qualified.” That meant teachers needed to possess a bachelor’s degree, full-state certification, and could demonstrate their knowledge of the subjects they taught.

Third, NCLB’s implementation reveals that the federal government’s ability to influence American schools remains fundamentally constrained because subnational governments are ultimately responsible for implementing federal education law (McDonnell 2005). Manna (2006) argues that federal policymakers must “borrow strength” from state governments to achieve federal objectives in education. For example, although NCLB required annual testing, the states themselves remained empowered to develop academic standards, to write the tests that would measure student achievement, and to identify the cut scores that defined proficiency. Discretion also existed in the law’s teacher quality requirements. States retained the authority to define which credentials a fully certified teacher needed to possess, and further, states could devise several different methods for teachers to demonstrate their subject-matter knowledge, both elements of NCLB’s highly qualified teacher requirements. These results illustrate what classic works in political science have shown. Embedded in the ability to administer laws is a tremendous power to define what the law actually means (Lipsky 1980; Wilson 1989).

A fourth point of agreement is that federal enforcement of NCLB has not been as assertive as federal officials’ initial promises implied (Hess and Finn 2007; Manna 2010a). While President George W. Bush’s first secretary of education, Rod Paige, was fairly uncompromising early in his tenure, he later adjusted the law’s regulatory requirements to address state concerns about including students with disabilities in state accountability systems and the challenges of meeting the law’s highly qualified teacher deadlines. Bush’s second education secretary, Margaret Spellings, extended Paige’s more forgiving approach on teacher quality, specifically by telling the states that they could meet the law’s requirement of having a highly qualified teacher in all core classes by 2005–2006 if they had simply made a good-faith effort to do so. Finally, despite the aggressive and prescriptive content of NCLB’s remedies for schools missing AYP, the law’s implementation suggested that large loopholes weakened state and local enforcement, and federal officials were unwilling to demand much more.

Federal capacity deficits are a large reason for NCLB’s weak enforcement in key areas, a finding consistent with past research on grant administration (Derthick 1970; Beam and Conlan 2002). Federal education officials were at times unable to keep up with the amount of oversight work and technical assistance required during implementation. That limited the department’s ability to hold states to the law’s requirements because, as Wong and Sunderman (2007, 47) have explained, “effective oversight and enforcement requires federal administrative and judicial capacity that is often lacking.” That problem is not unique to NCLB. A common

theme emerging from prior ESEA reauthorizations has been that federal policies embraced “revolutionary ambitions for schools, but the instruments that they deployed were far from commensurate with those ambitions” (Cohen and Moffitt 2009, 186–187).

Enter RTTT

President Obama and his education secretary, Arne Duncan, entered the White House offering two main criticisms of NCLB (Manna 2010a). First, they claimed that NCLB encouraged states and local schools to lower their standards. Second, they believed that NCLB was administratively misguided given its penchant for creating excessive red tape across the federal system and for embracing faulty approaches for measuring student learning and evaluating school performance. Despite these criticisms, President Obama and his team advanced RTTT in ways that adopted NCLB’s stated goal of increasing student achievement and decreasing achievement gaps. They also built upon state and local policy developments that NCLB helped to encourage.

Obama administration officials argued that educational success would occur if states embraced an overall strategy of reform, and that RTTT would help those strategies develop.³ The regulations governing RTTT appeared in the *Federal Register* on November 18, 2009 and identified four specific federal priorities. In their applications for RTTT funds states needed to demonstrate how they were committed to “(a) adopting internationally benchmarked standards and assessments that prepare students for success in college and the workplace; (b) building data systems that measure student success and inform teachers and principals in how they can improve their practices; (c) increasing teacher effectiveness and achieving equity in teacher distribution; and (d) turning around our lowest achieving schools” (p. 59,688).

That list of priorities echoed and extended many of the sentiments of NCLB’s supporters. The stress on developing state data systems and intervening in low-achieving schools, parts (b) and (d), remained quite consistent. President Obama’s willingness to assert a stronger federal role was most apparent in parts (a) and (c). Like NCLB, the RTTT program continued federal support for standards-based reform as a model to drive improvement. But whereas NCLB did not endorse anything but state-defined standards, RTTT more boldly asserted that inconsistencies across state standards were a problem. Similarly, even though NCLB specified criteria to define high-quality teachers, RTTT pushed those definitions farther by stating that teacher (and principal) quality should not only depend upon proper credentials, but also be tied to evidence that teachers were actually helping students learn.

To administer the RTTT competition, the federal education department enlisted a group of peer reviewers to rate the states' submitted proposals. The states primarily were evaluated on their past track records of policy development and past records of student success, what the department called "state reform conditions," and on their future proposals for using the RTTT money, known as their "reform plan." The department provided the reviewers with a rubric to score the proposals using a 500-point scale. The rubric allocated points in the following seven areas, which were further broken down into more specific criteria: state success factors (125 points); standards and assessments (70 points); data systems to support instruction (47 points); great teachers and leaders (138 points); turning around the lowest achieving schools (50 points); other general areas (55 points); and the extent to which state applications made teaching of science, technology, engineering, and mathematics a priority (15 points). Multiple reviewers examined each proposal. Each state's score was calculated by averaging the reviewers' ratings.

The topics and weightings appearing in the RTTT rubric represented a tossed salad of ingredients, combined in varying quantities, but they did not emerge randomly. Two main factors appeared to drive federal choices. First, administration officials shaped the program's content to forecast the direction they intended to move their overall education agenda, including the overdue reauthorization of NCLB. Duncan has called RTTT an "opening act" and others in the administration confirmed that it would be correct to see it as foreshadowing administration initiatives to come (Klein 2010). Federal officials envisioned the eventual RTTT winners as developing innovative reform models that the federal government and other states could draw upon in developing their future education agendas (Manna 2010a).

Second, RTTT's criteria and their associated weights also reflected other ongoing initiatives and political priorities of the Obama administration. Attempts to stress certain reform agendas and advance other initiatives meant that some RTTT criteria would be more important than others. For example, one specific criterion awarded up to forty points for states that had created conditions to promote the development of high-performing public charter schools and other innovative schools. The weighting clearly favored charter schools, though, because if a state had many policies to promote different alternatives except charter schools then the most it could earn on this criterion was eight points. As Joanne Weiss, who was Obama's manager of RTTT before becoming Duncan's chief of staff, explained: "Charters are the type of schools under law that are currently widespread and showing, when the accountability structure underlying them is good, showing high results. And therefore, we chose to elevate that in this [RTTT] application to something that was worthy of earning points" (U.S. Department of Education 2009, 315–316).

The RTTT competition created two application phases. Overall, forty-six states and the District of Columbia submitted applications in Phases 1 or 2 or

both phases. Only Alaska, North Dakota, Texas, and Vermont did not participate. Phase 1 applications were due in January 2010. Those applying for Phase 2, which was open to states that skipped Phase 1 or that lost in that earlier round, needed to submit their applications in June 2010. For each phase, the department ranked the states based on their proposal score and then identified a smaller group as finalists. The finalists presented their work to the peer reviewers in Washington, who then asked follow-up questions and could revise their scores based on the added information they gained from the presentations.

In the weeks before the Phase 1 deadline Duncan and his colleagues stressed that the competition would be stiff and that the losers would vastly outnumber the winners (Manna 2010a). Despite those warnings, forty states and the District of Columbia applied to Phase 1. Among those applicants, sixteen were declared finalists and only Delaware and Tennessee were awarded funding. Some states became discouraged by those results and opted out of the next phase. Still, the majority remained optimistic as thirty-five states and the District of Columbia applied to Phase 2. The department announced nineteen finalists in late July and ten funding winners in late August, which included nine states and the District of Columbia. Figure 1 identifies the winners and losers from both phases, as well as states that did not apply.

Parallels and Differences between RTTT and NCLB

As federal initiatives designed to influence education policy, the framing and design of RTTT and NCLB shared many attributes. Both were couched in similar rhetoric about the need to increase student achievement and eliminate achievement gaps. Both embraced standards-based reform, an emphasis on reading and math achievement, and the use of data to evaluate school performance. Both also articulated visions about teacher quality. Finally, although Obama and Duncan were reluctant to discuss it, RTTT also continued the pattern from NCLB of creating additional program expectations that did not consolidate or eliminate other regulatory structures. In other words, states that appeared strong based on RTTT criteria were not exempt from adhering to the legal requirements and regulatory expectations of NCLB and other federal education policies. Thus, RTTT contributed yet another grant program silo to the already crowded landscape, which the literature on intergovernmental grants has shown can complicate program administration at subnational levels (Beam and Conlan 2002).

Important differences between NCLB and RTTT also were apparent, which help reveal the state of educational federalism at the end of 2010 and into 2011. First, Obama's willingness to aggressively embrace common standards as a way to deter states from lowering expectations marked a shift in federal advocacy from the George W. Bush era. Previously, Bush administration officials, though stressing the

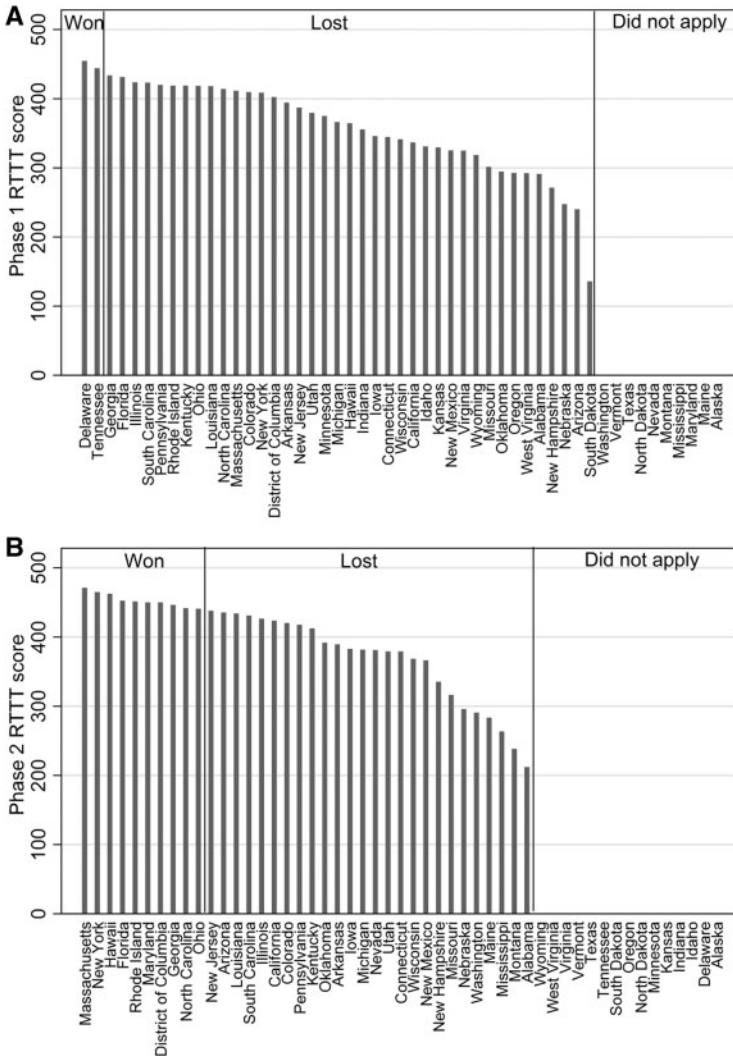


Figure 1 State RTTT proposal scores for Phase 1 and Phase 2.

need to have high expectations with NCLB, did not endorse the adoption of more uniform standards across all states. Second, Obama’s claim that assessments of teacher quality should incorporate measures of teacher contributions to student achievement leveraged two federal efforts underway since 2001: the highly qualified teacher components of NCLB and separate federal support designed to help states develop longitudinal data systems. As with common standards, RTTT’s definitions

of “teacher effectiveness” tied to learning, not simply “teacher quality” as revealed through credentials, was a more assertive federal articulation of what it means to be a good teacher.

As with NCLB, the extent to which RTTT’s priorities regarding common standards and teacher effectiveness gain traction ultimately depends upon state and local officials embracing and then faithfully implementing them. RTTT has not changed that fundamental limit on federal power. Policy entrepreneurs at subnational levels of government who endorse these ideas will be better positioned to advance their claims. Improving the position of such reformers was central to RTTT’s theory of action. The program’s authors hoped to inspire policy changes that could serve as models for improvement even in states that did not win an RTTT grant. Many subnational leaders have already used the RTTT competition to help push policies in areas such as charter schools and teacher evaluation, as well as new efforts including the Common Core State Standards Initiative. RTTT’s advocates have highlighted those results as evidence that states are responsive to federal initiatives when money is at stake. Some observers and state officials themselves have questioned whether state policy changes represent a real embrace of new ideas or mere posturing to gain more federal resources during difficult fiscal times (Manna 2010b).

Two additional differences between NCLB and RTTT are worth noting both for assessing the state of contemporary educational federalism and for considering broader issues. First, as federal statutes, NCLB and RTTT were quite different. The former is a law running several hundred pages with dozens of specific programs, while the latter amounts to a handful of relatively brief paragraphs embedded in the larger ARRA. Thus, Congress played a much more weighty role in crafting NCLB’s provisions. In contrast, RTTT took its substantive shape from regulatory choices made inside the U.S. Department of Education. The greater flexibility with RTTT allowed Duncan to advance the administration’s priorities even while the NCLB reauthorization remained stalled. Given that the administration had a relatively free hand to develop RTTT, it will be interesting to see how Congress reacts when it revises other federal education laws and considers Obama’s proposals for extending RTTT. Clearly, given that RTTT has prompted both enthusiasm and criticism among members of Congress, state officials, and interested groups, including opposition from teacher unions, Obama will face a challenging political landscape as he develops his future education plans (Klein 2011).

Second, as we explained earlier, RTTT’s use of a competitive process to award funds to states also represented a break with prior practices. Historically, competitions in education have tended to distribute much smaller amounts of money. Or when larger amounts have been in play states have received funds via formulas but then run competitions to award funds to local districts.⁴ Thus, RTTT

provides an opportunity to test prevailing theories about the operation of competitive grant programs in a relatively unexplored setting.

Such a test is valuable for immediate and more general reasons. If Obama accomplishes his goal of pushing even more federal education dollars into RTTT-like state competitions, then developing a deeper understanding of this policy tool will be valuable for scholars of federalism and policymakers. Researchers already have examined the dynamics in grant contests where local governments compete for funds. The state-level competition of RTTT enables us to see if findings from those studies generalize to a different level of government. The rest of our article considers those broader issues.

Competitive Grants in Theory and Practice

Distinguishing between competitive and formula grants provides a useful heuristic for understanding how grant programs intersect with American federalism. One should remember, though, that variation exists within each type and that policies may embrace both approaches simultaneously. In other words, deciding between formulas or competitions is not an either-or choice for legislators or agency administrators. Collins and Gerber (2008) explore these possible combinations in a theoretical model of grant distribution that examines two dimensions: (i) the methods for identifying grant recipients, and (ii) the methods for distributing funds once recipients are declared. Competitions or formulas may be used at either of these stages, or both, with the resulting combinations implying different policy priorities. We already have noted such combinations in the CDBG, which sends funds to states via formulas and then leaves states much flexibility to administer competitions among the localities that ultimately receive funding (Government Accountability Office 2010).

In the case of RTTT, an interesting hybrid emerged that partially reversed the logic of typical designs involving state-administered competitions. In RTTT, states competed for funds and were allowed to keep 50 percent for their own state-level initiatives; for the other 50 percent, federally defined formulas determined the dollar amounts flowing to school districts that had agreed to help the winning states implement their RTTT plans. The reason why we indicate that RTTT only partially rather than fully reversed the CDBG logic was because the size of the winning states' awards depended in part on population size, a common variable used in funding formulas. Due to space limitations, our subsequent analysis focuses on the initial state competition for RTTT funds. We recognize that future researchers could derive insights from examining the amounts received by winning states and the distribution patterns to participating school districts.

President Obama's embrace of competitive approaches with RTTT raises an obvious question: What are the advantages to using competitions rather than formulas to distribute grants? The literature on intergovernmental grants suggests three potential benefits of competitive approaches (Derthick 1970; Gilbert and Specht 1974; Beam and Conlan 2002; Collins and Gerber 2008). First, competitions help to enhance accountability and minimize agency problems by forcing potential recipients to develop specific plans for their use of funds. The proposal process helps to make recipient interests and capabilities more (although not perfectly) transparent, which can aid program administrators charged with holding recipients accountable. Second, competitions can promote policy innovations as applicants develop initiatives that they believe will meet program requirements and that agency officials will find compelling. Officials overseeing RTTT have repeatedly advanced this argument in describing the program to potential competitors, other public officials, and the media (U.S. Department of Education 2009). Finally, executives and managers in government agencies may prefer administering competitive grants due to the flexibility they often create. Competitive programs usually delegate more authority over implementation and program design to agency administrators than programs where distribution occurs by formula. The very general description of RTTT in the ARRA illustrates this pattern.

Alongside these potential advantages, competitive grants raise management challenges (Gilbert and Specht 1974; O'Toole 2000; Beam and Conlan 2002; Government Accountability Office 2011). First, the administrative discretion that comes with competitive grants also expands and complicates the work agencies must complete to distribute funds. The agency needs to define and apply criteria to judge proposals, which can become complex in competitions that invite a diverse range of applicants who may have tremendously different ideas about how to accomplish the grant program's objectives. Much less work is required when more-or-less automatic formulas dictate grant awards. Given that only states competed for RTTT funds, the program did not create a pool of many diverse applicants, although other education grant competitions in ARRA did.⁵ Still, the process of evaluating RTTT proposals was incredibly difficult. State proposals were several hundreds of pages long, with even longer appendices, and the reviewers needed to offer specific scores on more than fifty specific criteria along with composing comments to justify their scores.

A second challenge is that because grant competitions involve human judgments about proposal quality, agencies administering competitions are vulnerable to charges that political concerns have swayed their conclusions. Cynics sometimes allege that although grant competitions claim proposals are judged on merit, politics really determines the winners. Designers of RTTT were sensitive to this issue and took steps to insulate the contest from such charges (Manna 2010b). Those efforts made the evaluation process open and transparent, but

simultaneously reduced the pool of quality reviewers because the education department forbade individuals from being RTTT reviewers if they had some meaningful connection to states or their proposals. Ironically, that criterion not only addressed the political problem, but also may have eliminated individuals with tremendous technical knowledge who could have helped the department accurately judge the various state plans.

Scholars of federalism and intergovernmental relations have considered these assumptions about grants, including competitive ones, in many settings (Derthick 1970; Gilbert and Specht 1974; O'Toole 2000; Bickers and Stein 2004; Collins and Gerber 2006, 2008; Beam and Conlan 2002; Treisman 2007; Volden 2007). Several findings from empirical studies of grant administration that are relevant to RTTT appear to stand out. Overall, prior literature highlights three important factors likely to influence how competitive grant programs operate: applicant capacity, applicant need, and politics.

First, grant applicants' capabilities are strongly related to their chances of winning grant competitions. It takes administrative talents and resources to assemble compelling grant applications and so governments possessing more administrative capacity enjoy advantages in grant contests. Second, the capacity disparities during the application stage make it difficult for competitive grant programs to foster outcomes that promote equity. As Collins and Gerber (2006, 628) note in their study of CDBG, "Ironically, the local governments least capable of obtaining access to federal funds are probably also those governments most in need of federal assistance." These authors and others (Bickers and Stein 2004; Collins and Gerber 2008) have found that the design of grant competitions and the institutional relationships between potential recipients can help to foster equity. An example of this would be competitions in which potential applicants can compete as teams and put forth joint applications. Although that option was available in other education grant competitions in ARRA, including the Investing in Innovation Fund and grants designed to help states develop common student exams, states competed alone in RTTT. Third, while the evidence is less clear regarding politics, some work has suggested that political favoritism does appear to creep into the awarding of competitive grants. Certainly, perceptions of such favoritism may be real, especially among applicants who fail to win grant awards.

Hypotheses

Our hypotheses consider the likelihood of states applying for competitive grants and the performance of those states that choose to apply. The first set of hypotheses focuses on the administrative capacity of state applicants. We expect a

positive relationship between capacity and the desire to apply as well as the overall performance in the competition. We state these two hypotheses as follows.

H1a: States with higher capacity will be more likely to apply for competitive grants than states with lower capacity.

H1b: States with higher capacity will be more likely to perform well in grant competitions than states with lower capacity.

The second pair of hypotheses considers the need of potential applicants, in particular financial need. Needy states may be more likely to apply for funds to support valuable programs. However, given that competitions give less consideration to need (e.g., equity concerns), we do not expect need to translate into greater success in the competition itself. Those expectations generate these two hypotheses.

H2a: States with greater financial need will be more likely to apply for competitive grants than states with less financial need.

H2b: States with greater financial need will be no more or less likely to perform well in grant competitions than states with less financial need.

Our final pair of hypotheses entertains the possibility that politics may influence the operation of competitive grant programs. Based on prior literature, which offers suggestive correlations between politics and the administration of competitive grants, our expectations here are not as strong as in the other hypotheses. Still, because scholars who have examined grant programs in more general terms—but not focused on competitions, specifically—have found that political considerations do influence the distribution of funds (Gamkhar 2002; Lee 2003; Bickers and Stein 2004) we operate with that expectation here and examine these two hypotheses.

H3a: Political affiliations of state leaders will influence the decision to apply for competitive funds.

H3b: Political affiliations of state leaders will influence the performance of their states in grant competitions.

Data and Methods

In this section, we describe our data and methods, which include three sets of regression analyses. (Data sources appear in the Supplementary Appendix.) In our first set of results, we use three dichotomous dependent variables in a series of logit models to analyze whether states applied for RTTT. The first measures whether a state applied in Phase 1, the second whether it applied in Phase 2, and the third whether it applied in both phases of the competition. Each variable is coded 1 if the state applied and 0 otherwise.

In our second set of regression results, we examine a different dependent variable, state RTTT proposal scores, using ordinary least squares. The dependent

variable is measured either as the average state RTTT score across Phases 1 and 2 or the single-state score if the state only applied to one phase. We chose this measure of performance for two main reasons. Separately analyzing the Phases 1 and 2 scores would have decreased our already small number of cases given that forty states applied in Phase 1 and thirty-five applied in Phase 2. That approach also would have required accounting for sample selection, something that is difficult to do given the data available and with relatively few cases. Averaging across both phases or taking a single-phase score for states that applied only once allowed us to work with forty-six states in this part of our study.⁶

We used the same set of independent variables in our first and second set of regression analyses. To measure capacity, we chose one situational and one more enduring measure. The first is a dummy variable coded 1 if the state received a planning grant from the Gates Foundation to help develop its RTTT proposal, and 0 otherwise. The foundation hand-picked some states that it believed were well positioned to put forth a strong application, but it also invited other states to apply for these awards, which provided to up to \$250,000. Acquiring a Gates grant would have given a state a valuable short-term boost to capacity, given that the RTTT application timetable was somewhat short (considering the work required) and with their strapped budgets states had limited extra funds to spend on crafting their RTTT applications. We expect states receiving Gates funds to be more likely to apply for an RTTT grant and more likely to have higher scores in the competition.

Our models also include a more enduring, albeit indirect, measure of capacity: the logged population density in the state. We chose this measure given that urban states tend to have greater state and local administrative capacity than rural ones to design and implement programs. This fact has been noted in other studies of federal education policy, including those that have examined NCLB's implementation (Center on Education Policy 2007). We expect more densely populated states to be more likely to apply for RTTT grants and to have higher RTTT scores.

To measure state need we also use a situational and a more enduring measure. The situational measure is the percentage cut to the state's education budget from fiscal year 2009 to fiscal year 2010. We assume that states making larger cuts (coded as larger values on this variable) would have greater need and therefore be more likely to apply for RTTT grants, although we do not expect this measure to influence state proposal scores. The more enduring measure of need is the percent of state residents living in poverty. Members of Congress frequently incorporate some version of this measure into formula grants for education. Like the budget measure, we expect it to be positively related to a state's chance of applying but unrelated to the RTTT proposal score.

We consider politics by including a measure of the partisan affiliation of the state's governor, coded 1 if the governor is a Republican and 0 otherwise. We chose this political measure given the direct link between the office of governor and the

instructions for prospective RTTT applicants. Governors were the state officials responsible for assembling and transmitting applications to the federal government. Therefore, state plans would have needed to be amenable to each governor's political tastes. We also believe that the measure of gubernatorial partisanship is quite direct and attractive given that state party leadership has been associated with state responses to other major Obama initiatives. For example, although state lawsuits filed to date that have challenged "Obamacare," the president's health care reform law, have come from diverse geographic locales, thirteen of the fourteen challenges have been initiated by Republican state attorneys general. If partisan politics influenced the dynamics of the RTTT competition, administered by a Democratic administration, we would expect states with Republican governors to be less likely to apply and less likely to earn high scores.⁷

Our third set of regression results considers our politics hypothesis (H3b) from a different angle by examining state RTTT proposal scores in another ordinary least squares regression. In this model, we were interested in seeing if the RTTT proposal scores were consistent with judgments about state policies that other independent organizations have offered outside the RTTT contest. If politics were playing an important role in the scoring process, then we would expect the reviewers' judgments to be unrelated to separate assessments of state policy that these other independent organizations have conducted. Although these other organizations and the RTTT rubric did not always incorporate identical criteria into their judgments, their definitions of policy content and quality are positively correlated, making them good measures for our purposes. We focus on six independent variables that represent topics receiving much attention in advance of the RTTT application deadlines.⁸ If state proposals were judged on substance, and immune from political considerations, then we would expect the six model coefficients for these variables to be positive and statistically significant.

First, we examine the quality of state education data systems. We use a twenty-point measure derived from analyses conducted by the Data Quality Campaign, a non-profit organization that works with states to help them improve their data systems. Higher scores on this measure indicate better quality systems.

Second, we use overall ratings of state policy computed by researchers at Editorial Projects in Education (EPE), an independent research institute affiliated with the trade publication *Education Week*. Each year, as part of its *Quality Counts* report, EPE uses a 100-point scale to grade the states' standards and accountability systems and 100-point scale to grade the quality of their policies governing teachers. Higher values on both scales indicate greater quality. In order to conserve degrees of freedom, we enter the average of these two marks in our regression model.

Our third and fourth measures cover topics that received much attention in state policy debates leading up to the RTTT application deadlines. One is a dummy

measure, coded 1 if states adopted the academic standards advanced by the Common Core State Standards Initiative, a state-led movement involving governors and the nation's state education agency chiefs, and 0 otherwise. Another measure is the rating of state charter school permissiveness, compiled annually by the Center on Education Reform, a pro-charter organization that rates states on how supportive they are of charter schools. That measure varies from a 0, which indicates a state has no charter law, to a 5, which indicates state law makes it relatively easy for charters to form. Members of the Obama administration sent clear signals before the RTTT deadlines that states adopting common standards and facilitating the development of charter schools would fare better in the competition than states that failed to support these initiatives.

The fifth and sixth measures consider state scoring gains on the National Assessment of Educational Progress (NAEP), given to random samples of 4th and 8th graders in reading and math, from 2003 to 2009. These federally administered tests have been conducted during odd-numbered years in all states since 2003 and are the only assessments that allow for comparisons of academic achievement across states and across time. For our fifth variable we examined the changes in NAEP scores for all students in 4th-grade reading, 4th-grade math, 8th-grade reading, and 8th-grade math, and then averaged the gains across those areas to compute an overall gain measure, which we use in our model. The sixth variable focused on state progress in closing achievement gaps between students who qualify for free or reduced cost school meals (e.g., a measure of poverty) and students who do not qualify. We computed the achievement gap for each grade and subject noted above for 2003 and 2009. We then subtracted the 2009 gap from the 2003 gap for each grade and subject to reveal whether states had made progress in closing gaps (positive values) or if gaps had widened (negative values). We then averaged across these gap measures to compute an overall measure of whether gaps were closing or widening.

Across all three sets of regressions, we attempted to strike a balance between incorporating relevant independent variables that we could reasonably measure while simultaneously, given our small N-size, not saturating our models with too many regressors. As with any model with a small number of independent variables, we recognize that bias caused by omitted variables may be an issue. While that problem can be overstated (Clarke 2005), it is nevertheless worth recognizing especially when variables that may be theoretically relevant to a model may be difficult or impossible to measure with much accuracy. A possible example in our context is the effect of managerial skill (Meier and O'Toole 2006) in state education agencies or governors' offices, the two main institutions responsible for developing and submitting RTTT proposals. Talented state education chiefs, for example, are likely to have some impact on RTTT proposal scores while also contributing to state capacity and the content of prior state policy. Despite that potential

Table 1 Predicting which states applied for RTTT grants

	Applied in Phase 1	Applied in Phase 2	Applied in both
Received support from Gates Foundation	2.49** (1.06)	0.35 (0.88)	2.07** (0.92)
Logged population density	0.43 (0.28)	0.82** (0.27)	0.82** (0.35)
Percentage of education budget cut FY09 to FY10	-0.04 (0.07)	0.01 (0.07)	-0.005 (0.06)
Percentage of residents in poverty	-0.05 (0.15)	0.09 (0.13)	0.01 (0.15)
Governor is Republican	-0.07 (0.85)	-1.25 (0.81)	-0.24 (0.89)
Constant	-0.14 (2.11)	-3.04 (2.07)	-3.98 (2.57)
Model χ^2 -square	14.13**	14.85**	19.84**
N	50	48	48

* $p < 0.10$; ** $p < 0.05$. Results reported are logit coefficients with robust standard errors in parenthesis. Dependent variables are coded 1 if the state applied in the given phase of the RTTT competition, and 0 if the state did not apply. Delaware and Tennessee did not apply for Phase 2 grants because they won in Phase 1. Omitting those states from the second and third models, as we did, instead of coding them as “0” for the dependent variable slightly alters the coefficient sizes but does not change the substantive results. Data sources are in the Supplementary Appendix.

limitation, we believe we did a reasonable job of incorporating theoretically relevant variables that prior studies have shown to be important factors that influence the operation of competitive grant programs.

Statistical Results

Our presentation of results begins with table 1, where we examine factors predicting which states applied for RTTT grants. The findings support our capacity hypothesis but fail to support the need and politics hypotheses. States receiving support from the Gates Foundation were more likely to apply in Phase 1 and in both phases; the variable is positive but statistically insignificant in the Phase 2 model. The other measure of capacity, logged population density, is positively signed in all three models, as predicted, and is statistically significant in the models predicting applications to Phase 2 and to both phases.

To illustrate the substantive significance of these results, we generated a series of predicted probabilities computed by varying our capacity measures while holding

other variables at their means.⁹ In the Phase 1 application model, receiving Gates Foundation support increased the probability of applying by 0.28. In the model predicting applications to both phases, having Gates support increased the probability by 0.44. The population density measure produced even larger swings in the probability of applying, varying it from its minimum to maximum value in the Phase 2 application model, while still holding other variables at their means, increased the probability of applying by 0.87; the corresponding probability change was 0.89 in the model predicting applications to both phases.

The results fail to support our need and politics hypotheses, although the results on the latter are potentially interesting. Coefficients for the two variables capturing need (size of education budget cuts and residents in poverty) are inconsistently signed and none are statistically significant. The results for the Republican governor variable, although not attaining statistical significance at conventional levels, are perhaps suggestive of perceived partisan bias. All coefficients for that variable are negatively signed, as predicted. Interestingly, in the Phase 2 model, the absolute value of the coefficient is quite large compared to the other two models, and nearly statistically significant ($p = 0.12$). While we do not want to overstate this result, it does suggest that Republican governors perhaps believed they were unlikely to win after having seen the Phase 1 results.

In table 2, we begin our examination of state RTTT proposal scores. As we noted earlier, we consider the same set of independent variables we used to predict state applications in table 1. The results are similar but with one interesting exception. Both capacity measures—received Gates Foundation support and logged population density—were positively signed, as expected. The logged population

Table 2 Predicting state RTTT proposal scores using measures of capacity, need, and politics

	Beta	Robust std. error
Received application support from Gates	22.40	(14.80)
Logged population density	35.64**	(6.93)
Percentage of education budget cut FY09 to FY10	4.06**	(1.45)
Percentage of residents in poverty	-1.03	(2.36)
Governor is Republican	-17.51	(15.64)
Constant	181.24**	(52.14)
Model <i>F</i> -value ($p < 0.01$)	8.59	
Adjusted <i>R</i> -square	0.55	
<i>N</i>	46	

* $p < 0.10$; ** $p < 0.05$. The dependent variable is the average state RTTT score across Phases 1 and 2 or the state score for a single phase if the state applied to one phase but not the other. Data sources are in the Supplementary Appendix.

density measure was highly statistically significant, while the Gates Foundation measure possessed a p -value of 0.14. Substantively, population density appears to matter a great deal in predicting state RTTT scores. A one-standard deviation increase in logged population density is associated with a forty-five-point (nearly two-thirds of a standard deviation) increase in a state's score.

We consider our need and politics hypotheses next. The model coefficient on the Republican governor variable was far from statistically significant, but it was negatively signed as the politics hypothesis suggested. The results on need differ from our expectations. Although, as we expected, the percent of residents in poverty measure was not statistically significant, states making larger budget cuts between fiscal years 2009 and 2010 were more likely to score higher than states making smaller cuts or increasing funding during this time. A one-standard deviation increase in the budget cuts measure was associated with a twenty-three-point-score increase (roughly one-third of a standard deviation) in a state's RTTT score. States with more precarious budget situations appeared to fare well in the competition.

In table 3, we present an additional regression predicting state RTTT proposal scores. As we noted earlier, this model offers an additional check on our politics hypothesis (H3b). The results provide strong evidence that the judgments of the RTTT proposal reviewers were generally consistent with other assessments of the

Table 3 Predicting state RTTT proposal scores using external assessments of state policy and prior state academic performance

	Beta	Robust std. error
Data systems quality	4.66	(3.05)
Standards/accountability/teacher policy quality	1.82*	(1.05)
Adopted Common Core standards	46.07**	(16.52)
Charter law permissiveness	18.94**	(5.08)
NAEP achievement gains overall, 2003–2009	6.00**	(2.86)
NAEP achievement gap progress between poor and others, 2003–2009	3.03	(3.03)
Constant	73.41	(79.81)
Model F -value ($p < 0.01$)	9.43	
Adjusted R -square	0.57	
N	46	

* $p < 0.10$; ** $p < 0.05$. The dependent variable is the average state RTTT score across Phases 1 and 2 or the state score for a single phase if the state applied to one phase but not the other. Data sources are in the Supplementary Appendix.

states' policy content and past academic performance. All of the model coefficients in table 3 are positively signed, which one would expect if state policy content and prior academic performance were driving reviewer scores. Further, four of the six variables in table 3 were statistically significant and, given the magnitude of the model coefficients relative to the 500-point scale used to assess state RTTT proposals, the variables were substantively significant as well. The model predicts that states with higher quality standards, accountability, and teacher policies, that have adopted Common Core standards, that possess permissive charter school laws, and that have seen overall student achievement gains on NAEP were more likely to receive higher scores.

Interestingly, when we examine bivariate relationships between the regressors from table 2 with those from table 3 (results are available in our Supplementary Appendix), we derive additional insights about our hypothesis H1b, which focused on the role of state capacity in the RTTT competition. Those bivariate relationships between logged state population density from table 2 and the independent variables in table 3 are positive and statistically significant in five out of six instances. In other words, higher capacity states were more likely to possess the sorts of policies and have academic track records that would position them to perform well in the RTTT competition. Nearly all of the other bivariate relationships between the regressors in tables 2 and 3 were statistically insignificant. These results further underscore the important role that state capacity appeared to play in the RTTT competition.

Conclusions

We began our analysis by asking two research questions: What does RTTT and its competitive approach reveal about the current state of educational federalism? How do large federal grant programs operate when state governments compete for funds? Those questions helped us to analyze RTTT's immediate impact and to consider some general lessons that it suggests. Of course, we recognize important limits to our results and approach, which should accompany any analysis of a single program operating at a particular moment in time. Among other things, those constraints limited our ability to consider more than a handful of key variables and move us to exercise caution as we offer more general conclusions. We recognize that subsequent scholars may consider RTTT or other similar grant competitions from different angles using different frameworks and variables. Still, we believe our approach represents a reasonable first step for understanding important theoretical matters that are relevant to contemporary educational federalism and to federal grant programs involving state competitors. In closing, and with those caveats in mind, we offer three main conclusions.

First, with RTTT the Obama administration has advanced an agenda that has the potential to further deepen federal involvement in elementary and secondary education. That approach builds on NCLB, yet pushes forward in new and important ways. Perhaps most significant is the federal government's present willingness to make more assertive claims about matters related to educational quality. The strong endorsement in RTTT of the urgent need for states to adopt common standards in the core subjects of reading and math is one example. Although Obama and his team emphasize that these are state-developed rather than federally designed standards, the willingness of federal leaders to so directly assert a need for more common "national" standards has not received this much attention since the early 1990s, when similar arguments failed to gain support. A related sort of federal assertiveness also exists with the administration's new definitions of teacher quality that consider what students learn rather than just the mere credentialing of the nation's educators.

Those assertive federal moves have raised worries among some who see greater federal influence, especially in the wake of NCLB, as inappropriate. At the same time, these moves have provided political cover to state-level leaders who have used the RTTT contest to help advance agendas that are consistent with the administration's views on common standards, teacher quality, and charter schools, among other things. How those federal-state dynamics continue to play out and the ensuing political debates they stoke will be interesting to follow during the coming years, especially if Obama remains committed to initiating more grant competitions guided by principles like those contained in RTTT.

Second, the key empirical finding from our statistical analysis is that state capacity is a powerful variable helping to predict which states applied for RTTT funds and which states scored well in the competition. This result is consistent with prior case studies and small-N work on grants administration (Gilbert and Specht 1974; Center on Education Policy 2007) and large-N quantitative studies that have examined grant competitions involving local governments (Collins and Gerber 2006, 2008). The finding underscores the important fact that state governments, especially their education agencies, possess varying capabilities that influence their ability to administer federal programs. That claim will not surprise scholars of state politics, who generally are attentive to these issues. But, as others have cautioned (Meier and O'Toole 2006), it helps to remind researchers that assessing agency performance requires attending to agency characteristics rather than just the external preferences of agency principals or the environments in which agencies work. The results on capacity also should serve as a caution to federal officials who sometimes craft federal policies based on inaccurate assumptions about state capabilities.

Finally, the importance of state capacity suggests implications for those who see competitive grant programs as useful vehicles for developing innovative policies.

Federal education officials have explained that RTTT is valuable in part because it will identify a cadre of state educational leaders from whom federal and other state policymakers can gain insights as they develop their own initiatives. That view makes strong assumptions about the ease with which ideas may translate from winning states to losing ones. If capacity is a key variable that helps predict success in RTTT and other similar competitions, then states losing those contests may not be well-positioned to adopt the winners' reforms in their own contexts. A practical suggestion that emerges from this reality may be that future grant competitions involving the states may benefit from allowing states to submit joint proposals rather than forcing individual states to compete on their own. Prior empirical work has shown that local governments that work together tend to fare better in acquiring federal grants (Bickers and Stein 2004). One could imagine similar cooperative ventures involving the states. Such arrangements could help weaker states more easily benefit from the initiatives of more capable ones by helping them identify partners and providing them access to funds that may help valuable reforms gain traction.

Supplementary Data

Supplementary Data are available at *Publius* online.

Notes

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1. Background on ARRA's education programs is available at <http://www2.ed.gov/policy/gen/leg/recovery/implementation.html> (accessed March 13, 2011).
2. Although NCLB required testing in science, results from those tests did not factor into AYP calculations.
3. The description of RTTT's operation is adapted from Manna (2010b). We thank Frederick Hess at the American Enterprise Institute for permission to include that discussion here. Comprehensive information about RTTT is available at <http://www2.ed.gov/programs/racetothetop/index.html> (accessed November 29, 2010).
4. The Reading First program in NCLB is an example of a program with such a competitive design. Information on Reading First is at <http://www2.ed.gov/programs/readingfirst/index.html> (accessed March 13, 2011).
5. An example is the Investing in Innovation fund, which is described here: <http://www2.ed.gov/programs/innovation/index.html> (accessed March 13, 2011).

6. As figure 1 shows, Alaska, South Dakota, Texas, and Vermont chose not to apply to either phase.
7. Anonymous reviewers questioned our choice of partisanship rather than some other political measures, such as the ideology of a state's citizens. Citizen ideology in the states seemed to us too indirect of a political measure given the dynamics we were attempting to examine in the context of the RTTT competition.
8. In specifying our models for our second and third set of regression results—reported in tables 2 and 3, respectively—we were forced to deal with conflicting advice that we received from our reviewers. One suggestion was that with so few cases we should not be specifying models with more than five or so independent variables. Another suggestion argued for including all theoretically relevant variables from both models in a single regression, even though doing so would have produced a model with roughly twice that many independent variables. We decided to split the difference between these two suggestions by doing two things: (i) running two separate models as we have done in tables 2 and 3 to minimize the number of regressors in any one model; and (ii) including additional results in our on-line appendix that illustrate the bivariate relationships between the independent variables from tables 2 and 3. That approach enabled us to address the first suggestion by specifying parsimonious models given our limited number of cases. It also helped us address the second comment, which raised the potential that omitted variables may be unduly influencing the results in the tables 2 and 3 models. Seeing the full range of bivariate relationships between the independent variables can help interested readers to assess this potential issue.
9. We conducted all our analyses in Stata 10 and computed simulated probabilities using Long and Freese's (2006) `prchange` command.

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