Local Education Agency Race to the Top Expenditures

An Analysis of Fund Use and Expenditure Patterns

Nathan Barrett and Eric Houck
Carolina Institute for Public Policy, University of North Carolina at Chapel Hill

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Executive Summary

In 2010, North Carolina was awarded $399,465,769 from the federal Race to the Top (RttT) competition to fund state and local educational reform. States receiving RttT funds were required to allocate half of the funds to participating local education agencies (LEAs) and eligible charter schools. North Carolina pooled locally-allocated funds, totaling $34,639,376, to provide a computing infrastructure to serve local needs statewide, referred to as the North Carolina Education Cloud (NCEdCloud). LEAs were required to contribute, on a prorated basis, funds from their local allocations to this project, after which the amount allocated directly to LEAs (including eligible charter schools) was $165,360,624. The purpose of the direct allocation of funds to North Carolina LEAs was to provide them with resources to support statewide RttT initiatives locally and to allow LEAs flexibility in crafting their own plans to achieve the objectives of RttT. LEAs pursued multiple strategies for spending their first two years of RttT funds. In 2010-11, LEA RttT expenditures totaled $12,617,032 or approximately $11.92 per pupil. In 2011-12, LEA RttT expenditures totaled $58,745,648 or approximately $40.18 per pupil.

The initial report on LEA RttT expenditures provided information on the amount of RttT funds that were allocated to LEAs and participating charter schools, as well as an historical analysis of the equity of funding expended by LEAs (Houck 2012). This second report on local expenditures of RttT funds has three purposes: (1) to review the findings on local expenditures with an additional year of data and more sophisticated coding and expenditure-tracking techniques; (2) to investigate patterns of local expenditures of RttT funds across time and by purpose; and (3) to report on progress of the NCEdCloud, for which LEAs contributed a portion of their RttT funds. Data for this report include expenditure data provided by the North Carolina Department of Public Instruction (NCDPI), detailed scopes of work (DSWs) submitted by LEAs and participating charter schools and approved by NCDPI, and survey and interview responses from LEA and charter school officials.

Key Findings

1. Statewide, the top four local expenditures of RttT funds from 2010-11 through 2011-12 were for classroom instruction (56.5%), instructional support (22.9%), school leadership (8.1%), and professional development (7.4%), together totaling $69,002,697, or 94.9% of all RttT local expenditures. For the same time period and across all expenditure categories, the top four purposes for which the expenditures were used were: technology (44.9%), contracted services (13.6%), bonus/supplement/ extra-duty pay (12.3%), and instructional personnel (10.1%), which together totaled $58,871,178, or 80.9% of all RttT expenditures.

2. Consistent with LEA and charter school DSWs, the primary expenditures associated with RttT were for technology and professional development. According to DSWs, interviews,

and survey responses, technology expenditures focused on two main areas: (1) The North Carolina 1:1 Learning Technology Initiative, in which every student and teacher has access to her or his own computer to support 21st century teaching and active learning; and (2) achieving the capacity to administer real-time on-line student assessments, which will be needed to fully realize the benefits of the assessments being developed for the Common Core and Essential Standards. Professional development expenditures were focused primarily on preparing to implement the Common Core and Essential Standards.

3. LEA school finance officers reported using RttT local funds to support new or innovative RttT-inspired practices in their LEAs. Seventy-five percent of responding school finance officers (SFOs) reported using local funds to support the development of innovative new programs, while 21% reported using RttT local funds to provide additional funding to previously implemented innovations. Reflecting the difficult fiscal environment faced by public educators, 25% of responding SFOs used RttT local funds to continue the funding of innovative programs threatened by budget cuts.

4. Actual RttT expenditures compared to the projected costs of implementing the local DSWs present three distinct patterns. Thirty-seven LEAs (33%) and four charters (36%) are on track with their yearly spending to meet the spending goals of their DSWs by the end of RttT. Twenty-eight LEAs (25%) and one charter (9%) have spent their RttT allocation at a faster pace than that projected by their 2010-12 DSWs, suggesting that these LEAs and charter schools have remaining RttT funds that fall short of their projected 2012-13 and 2013-14 expenditures. Forty-seven LEAs (42%) and six charters (55%) have spent at a slower pace than their projected 2010-12 expenditure levels and have remaining RttT funds that exceed their remaining projected RttT expenditures.

5. LEAs that expended over 40% of their total RttT allotments in one year—whether in 2010-11 or 2011-12—primarily did so on technology. In 2010-11, eleven of twelve LEAs that expended over 40% of their annualized RttT allotment averaged 90.2% of that spending on technology. In 2011-12, 36 of 45 LEAs that expended over 40% of their annualized RttT allotment averaged 56.5% of that spending on technology.

6. LEAs expended a majority of their funds at the central office level. These expenditures accounted for $50,599,366 (70.4%) of 2010-12 local RttT expenditures. In 2010-11 and 2011-12, 53 and 33 LEAs expended the entirety of their RttT expenditures at the central office level, respectively. Twenty-three of those LEAs had no school-level expenditures in either year of implementation. Technology accounted for $27,013,744 (53.4%) of central office expenditures. Professional development-related expenses accounted for approximately $10 million (19.8%) of central office expenditures. Given the predominance of these two expenditures, LEAs may be purchasing goods and services centrally and then allocating them to schools.

7. School-level expenditures accounted for $21,266,835 (29.6%) of all RttT local expenditures. For those LEAs that expended funds at the school level, the average amount expended at each school was $23,442, with a high of $295,395 and a low of $91. The predominant expenditure categories were for technology and bonus/supplement/extra-duty pay associated with professional development activities.

8. Patterns of spending of RttT funds—defined by category, yearly spending levels, LEA-versus school-level spending, and support funding—do not show a statistically discernible
difference across LEAs by initial 2010 performance levels. In other words, the expenditure patterns in lower-performing LEAs are similar to those of higher-performing LEAs.

**Recommendations**

- **Require updated DSWs for select LEAs and Charters:** LEAs and charters that have under- or over-expended RttT funds according to their RttT expenditure projections in the most recent approved DSWs (typically Fall 2012) should submit revised DSWs that account for the surplus/deficit in their remaining RttT expenditure plans. This requirement should include those LEAs and charters that are not in the 95%-105% range of projected RttT expenditures for 2012-14 (see Table 7, main report text). It is important to note that this updating already may have occurred in some DSWs, as the updating of the DSWs is a continuous process and data in this report reflect only a point in time in Fall of 2012.

- **Include additional program report codes that align with the main RttT initiatives:** The vision set forth by the U.S. Department of Education to ensure college- and career-ready students focused on four pillars of reform: Great teachers and leaders; Standards and assessments; Turning around the lowest-achieving schools; and Data systems to support instruction. While the definitions and coding structure of expenditure categories used in the DSWs are well aligned with the pillars of the RttT initiative, they are difficult to replicate through coding of the annual financial reports using the current chart of accounts. Traditionally defined expenditure categories can encompass expenditures across multiple RttT pillars. A supplemental coding structure for the DSWs in the context of the current chart of accounts may help align implementers’, evaluators’, managers’, and the public’s understanding of how RttT funds are expended locally. One possible approach is to include a separate program report code for each pillar similar to the program report codes used for local support of statewide RttT initiatives. However, the benefits of the additional codes should be weighed against the cost of implementation. Providing additional layers of budget coding may affect the consistency of budget categorization across LEAs.

- **Develop a systematic categorization of professional development-related expenditures:** The accurate categorization of professional development expenditures presents challenges. Because costs associated with professional development can be apportioned to various parts of the budget, it is difficult to determine its true cost. Findings from this report suggest that some expenditures for professional development activities may have been sorted into other categories in a number of LEAs. The Evaluation Team suggests that a framework for assessing the actual local RttT expenditures for professional development activities be constructed through the use of a separate purpose code. As with the previous recommendation, the addition of such a code may provide further insight into the expenditures on professional development, but only in as much as the additional categorizations do not affect the consistency of coding across LEAs.

**Next Steps for the Local Expenditures Evaluation**

This report evaluates how LEAs spent RttT funds along three dimensions: category, year, and level. The report describes differences in expenditures by broad policy-relevant categories (such as classroom instruction and instructional support) and by the object or goods or services purchased by the funding (such as technology or contractual services). The report also describes
the variations in local expenditures based on LEAs’ actual annual spending, comparisons of that spending to their spending plans, and the extent to which spending is done at the school or central office level. In addition to providing a description of LEA and charter school expenditure patterns, the analysis of expenditures lays the groundwork for our investigation of the relationship between local expenditures and student performance. In future reports, the Evaluation Team will investigate the extent to which:

1. Expenditure priorities of the LEAs as defined by the amounts expended in 14 policy-relevant categories\(^2\) are associated with better student outcomes;
2. Expenditure priorities of the LEAs as defined by the amounts expended for various types of goods and services are associated with better student outcomes;
3. Expending more funds earlier in the grant period is associated with better student outcomes, relative to expending funds consistent with the LEA-planned expenditures; and
4. Expending more of the RttT funds at the school level, which may reflect using the funds in ways that are more tailored to individual school needs, or expending more of the RttT funds at the central office, which may reflect improved purchasing power or more LEA-level strategies, is associated with better student outcomes.

The remainder of the project period also will consider an expansion of the scope of work with consultation and feedback from NCDPI. Two evaluation components will be considered for addition:

1. **Conduct case studies**: Understanding how LEAs and charters expend funds through the classification and aggregation of RttT-related expenditures is an important aspect of the evaluation. However, estimating initiative effects through the broad application of expenditure categorization may be limited. The implicit assumption is that identical expenditures will have similar effects. The reality is that the quality of the goods and services purchased within the categories may vary significantly across LEAs. For example, $100,000 expended on professional development in one LEA may be of higher quality than the same expenditure in another LEA and subsequently may affect outcomes differently. The current coding structure cannot capture this difference in quality. While the Evaluation Team will continue to improve the interview protocol and the survey instrument to provide a deeper understanding of the context surrounding RttT fund use and implementation, there remains an opportunity to understand better the nuances of local expenditures. Since this one area accounts for half of all RttT expenditures, the Team suggests that several case studies be added to the current scope of work, using selection criteria developed with the help of the Financial and Business Services Department at NCDPI. The Team also plans to coordinate this work in conjunction with other RttT initiative evaluation projects that already are conducting case studies.

2. **Expand the technology evaluation**: Demonstrated by the nearly $67.3 million of local and NCEdCloud expenditures, technology is a main strategy of most local expenditure plans. While it is premature to discuss the impact these expenditures have on student outcomes, there are both short- and long-term considerations. A more extensive evaluation plan will be

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\(^2\) Codes were generated by evaluators prior to RttT implementation. The categories focus primarily on grouping related purpose codes from the NCDPI chart of accounts. See Table 1 (main text) and Appendix A for the full list.
developed to examine how technology is being implemented in the classroom as well as what type and to what extent staff development supports incorporation of technology into instructional practices. This plan also will evaluate the alignment between RttT technology-related expenditures and the strategies set forth by the North Carolina Learning Technology Initiative (NCLTI). This evaluation strategy will allow evaluators to better assess the impact of technology by understanding the variations in how it is supported and used locally. Finally, the evaluation will consider the extent to which technology has been or can be effectively deployed and utilized in those LEAs and charter schools that have not engaged in large technology initiatives, and how technology initiatives in the LEAs that have expended RttT funds can be sustained.
Introduction

This report is the second of a series of reports on the expenditures of Race to the Top (RttT) funds by the school districts in North Carolina (referred to as Local Education Agencies [LEAs]) and charter schools who chose to participate in RttT initiatives. The first analysis of RttT expenditures at the school and LEA level\(^3\) presented basic information about the amount, distribution, and general use of local RttT funds by LEAs and charter schools. In addition, the initial report presented information on state and local expenditures for public schools to establish the funding context into which the RttT local expenditures were being added, including the changes attributable to the Great Recession. Finally, the baseline spending report reported on LEA and charter school priorities for RttT funds as expressed in their formal Detail Scopes of Work (DSWs) and their actual initial RttT expenditures.

The purpose of this report is to expand the analysis of LEA and charter school RttT expenditures by incorporating a second year of funding usage and to begin to assess the progress of the North Carolina Education Cloud (NCEdCloud) initiative. Accordingly, three main evaluation questions guide this interim report: (1) How have LEAs and participating charter schools spent RttT funds? (2) Are differences in initial LEA performance levels associated with different patterns of RttT spending? and (3) What is the status of the NCEdCloud initiative implementation?

This report evaluates how LEAs spent RttT funds along three dimensions: category, year, and level. Our first question involves understanding the uses of funding within broadly defined, functional expenditure categories. The initial study reported on per-pupil spending across 14 broad expenditure categories generated by the Evaluation Team\(^4\) prior to RttT implementation (Appendix A). The categories—based on the NCDPI chart of accounts—focus primarily on grouping related purpose codes. In the current report, the Team also develops a sub-categorical classification that provides additional information on how RttT funds are expended by focusing on object codes to align more closely with DSWs. For example, a large portion of LEA DSWs planned to use RttT funds for technology. Using the functional expenditure categories, a majority of funds in 2010-11 were determined to have been expended in the Team’s “classroom instruction” category. Some of these expenditures may have been for technology that was used in the classroom, so in this report expenditures are categorized into their functional uses (e.g., classroom instruction or special instruction) as well as into the type of good or service being purchased (e.g., technology).

Second, the report explores how LEA and charter RttT funds are expended by year. This question addresses how annual LEA and charter actual RttT expenditures compare to the projected expenditures in their DSWs and also identifies common expenditures for those LEAs and charters that were characterized by high levels of initial spending. The Team’s initial review


\(^4\) The Consortium for Educational Research and Evaluation–North Carolina (CERE–NC) is conducting the evaluation of North Carolina’s RttT initiatives. CERE–NC is a partnership of the Carolina Institute for Public Policy at the University of North Carolina at Chapel Hill, the Friday Institute for Educational Innovation at North Carolina State University, and the SERVE Center at the University of North Carolina at Greensboro. The Carolina Institute for Public Policy leads the evaluation of local spending effort.
of DSWs indicates that some LEAs and charters planned to expend a considerable portion of their allotment up front in Years One and Two of RttT and taper their spending, some proposed to spend little in the initial years but spend a large amount later, and others proposed to spend at a more even pace over time. Charter schools exhibited similar variety in their expenditure patterns.

Third, the report seeks to determine whether LEAs have been more likely to expend funds at the central office or in schools. The Team’s initial analysis indicated that many LEAs reported expending RttT dollars primarily at the central office level, while some LEAs reported spending at the school level.

Fourth, the report analyzes the interaction of results from the three questions listed above to determine if it is possible to distill overall patterns in local spending. For example, it may be the case that LEAs that wish to invest heavily in technology are more likely to frontload their timelines and to spend at the LEA and not the school level. Detecting these patterns is important for assessing the relationships between spending patterns and student performance if, at the end of the distribution of RttT funds, some LEAs have proven to be more successful than others at leveraging RttT funds to improve student achievement and diminish achievement gaps.

Fifth, and on a related point, the report estimates whether there were systematic differences in spending patterns across schools based on initial performance. For example, did the schools in District and School Transformation or in generally low-performing LEAs incur different expenditure patterns than other schools or LEAs? The report also examines by performance level the use of funds from additional sources to support local RttT initiatives articulated in the DSWs.

Finally, we report on implementation of the NCEdCloud initiative with a specific focus on implications for educational budgets at the local and state levels.
Data Sources and Analysis

In addition to the expenditure reports from NCDPI and individual LEA and charter school DSWs that were analyzed in the first report on local expenditures, this report also includes data from interviews with representatives from eight LEAs and four charter schools, as well as from the online survey responses of LEA and charter school administrators from across North Carolina.

Annual Financial Reports

This report relies on NCDPI’s chart of accounts to categorize the expenditure data provided by NCDPI by purpose, object, level, program report code, as well as by revenue source. Expenditure reports are provided to the Carolina Institute for Public Policy (CIPP) by NCDPI and are coded for analysis by CIPP staff. This report consists of the following coding of NCDPI school- and LEA-level expenditures information:

1. Data are coded to conform to the 14 functional expenditure categories developed by CIPP in 2009 and utilized in non-RttT evaluations, as well as in the Year One RttT local spending baseline report (Appendix A).

2. Data also are coded based on object code to better understand how expenditures align with the goals of RttT spending as articulated in the US Department of Education’s RttT Request for Proposals and subsequent application by the state of North Carolina. The categorization of object codes is found in Appendix A.

3. This report analyzed the expenditure data using each coding scheme. The second coding scheme was developed specifically to provide a more direct link between actual expenditures to those proposed in the DSWs, with the primary purpose of illuminating expenditures on technology, since technology expenditures existed across multiple purpose categories.

Detailed Scopes of Work

A second source of data was the most recent LEA- and charter-specific detailed scopes of work submitted to and approved by NCDPI and housed on NCDPI’s public website. LEAs and charter schools were required to submit DSWs to show not only the ways in which they planned to expend RttT funds over time by RttT goal, but also the ways in which LEAs and charter schools planned to use additional funds from other federal, state, and local sources to support these same reform efforts. The DSW submission and review process, although crafted as a method for establishing LEA priorities in expending RttT local funds, has become a de facto LEA and charter improvement planning process. The DSWs provide information about how LEAs and charters planned to use these funds, while expenditure reports indicate how LEAs and charters actually spent their funds. One ongoing challenge involves linking the DSWs to the expenditure reports, as each uses a unique coding system that is not directly related to the other. The Evaluation Team’s additional coding using the NCDPI object codes represents the Team’s best efforts to connect the two by re-categorizing the actual expenditure data.

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5 Full documentation of the state purpose and object codes from which each category is constructed is included in Appendix B of the first local spending report (Local Education Agency Race to the Top Expenditures: An Initial Analysis; http://cerenc.org/wp-content/uploads/2011/11/NC-RttT_Local-spending-baseline_9-4-12.pdf)
Interviews

A third source of data was derived from interviews with select LEA school finance officers (SFOs). When possible, the Team asked that key members of the planning and implementation team also be present. Nine LEAs and five charters were selected for in-person interviews with eight and four administered, respectively. The sample frame used to choose LEAs stratified on region, size, and the amount of RttT local funding available per pupil, which correlated highly with LEA poverty levels. A final frame was derived from the Year One baseline local spending report: for that report, LEAs were evenly divided between those that reported expending RttT funds at the LEA level and those that reported expending RttT funds at the school level; charter schools were divided between those that expended in Year One and those that did not expend in Year One. For charter schools, the SFO was often the school principal.

Questions for the SFO fell broadly into three categories. First, questions were asked to provide a context of the LEA’s or charter school’s fiscal state before receiving RttT funds. Second, LEA and charter school SFOs were asked about their priorities for the use of RttT local funds and the manner in which the DSW planning process reflected spending priorities. Finally, SFOs were asked about their relationships with NCDPI with respect to RttT funding issues. The question path used in these interviews can be found in Appendix B of this report.

Survey

In addition to interviewing a subset of LEA and charter leaders, the Team also administered a survey to all SFOs and charter school leaders in the state. The purpose of this anonymous online survey was to determine how LEA and charter school leaders made sense of the broader economic context within which their respective educational units were receiving RttT funds, the purposes for which they planned to expend RttT funds, and their experiences working with NCDPI on the RttT allocation and DSW process. In short, the online survey questions asked of all LEA and charter school leaders paralleled the face-to-face interview questions. Seventy of 115 SFOs from the state’s LEAs responded to the survey, for a response rate of 61%. Representatives of 15 of 23 participating charter schools responded to the survey, for a response rate of 65%. The questions included in this survey can be found in Appendix C of this report.

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6 Two charters schools were listed as receiving allotments but chose not to participate in the survey, indicating they were not involved with the RttT Local Expenditures initiative. The survey was not administered to the four charter schools whose SFOs were interviewed.
Findings

This section addresses the three major evaluation questions presented in the introduction: How do LEAs and charter schools spend funds? Do spending patterns vary by LEA performance? and To what extent has the NCEdCloud initiative been implemented?

How do LEAs and Charter Schools Spend RttT funds?

Nearly half of North Carolina’s $400M RttT funds were allocated directly to the LEAs and participating charter schools to spend in support of the state’s RttT goals. How these funds are expended is expected to be critical to the overall success of the initiatives. In addition, some patterns of expenditures by the LEAs may be shown to be more related to increasing student performance than others. This section of the report documents LEA and charter school expenditures in the first two years of the RttT initiative—2010-11 through 2011-12—by functional category, object of expenditure, and year.

Functional Categories of Expenditures

Education finance literature has widely moved beyond the debate of whether additional educational resources matter to a more refined debate of how additional educational resources can matter (Wenglinsky, 1997). In addressing this question, researchers typically separate educational spending into categories. This report employs two categorization strategies for defining how RttT local funds are expended by LEAs and charter schools.

Table 1 (following page) presents categorical expenditures for LEAs. Overall, over the first two years in which they received RttT funding, LEAs spent $71.9M (35.9%) of their total allocation of $200.0M. Of this two-year total, $13.1M (18.2%) was expended in 2010-11 and $58.7M (81.8%) in 2011-12. LEAs expended $45.6M more in the 2011-12 academic year—almost 4.5 times more than in 2010-11. Additionally, more LEAs (115) reported RttT expenditures in 2011-12 than in 2010-11, when only 88 reported expenditures. LEAs focused spending, defined by both dollar amount and number of LEAs, in four main categories: 56.3% for classroom instruction, 23.2% for support for instruction, 8.1% for school leadership, and 7.3% for professional development. Expenditures in these categories accounted for over $68.2M (94.8%) of all LEA RttT expenditures in 2010-11 and 2011-12.

In 2010-11, most LEAs dedicated a large proportion of their total RttT expenditures to a small number of expenditure categories, with some LEAs dedicating 100% of their expenditures that year to only one category, suggesting that many LEAs chose to focus their 2010-11 RttT expenditures on only a few categories. This finding is confirmed by the DSWs, interviews, and surveys. Several LEAs indicated that they focused primarily on professional development in support of the implementation of the Common Core standards.

7 In the first report, 114 LEAs were reported to have expended funds in 2010-11 but upon reanalysis the number was determined to be 88, which is the amount reported in this report.
Table 1: Total RttT Expenditures by Expenditure Category, LEAs

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>2010-11 RttT Expenditure</th>
<th>2011-12 RttT Expenditure</th>
<th>Total RttT Expenditure</th>
<th>Percent of Total RttT Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Instruction</td>
<td>$8,092,645</td>
<td>$32,347,483</td>
<td>$40,440,128</td>
<td>56.27%</td>
</tr>
<tr>
<td>Support for Instruction</td>
<td>$3,871,731</td>
<td>$12,796,818</td>
<td>$16,668,549</td>
<td>23.19%</td>
</tr>
<tr>
<td>School Leadership</td>
<td>$293,507</td>
<td>$5,539,554</td>
<td>$5,833,061</td>
<td>8.12%</td>
</tr>
<tr>
<td>Professional Development</td>
<td>$456,785</td>
<td>$4,756,867</td>
<td>$5,213,652</td>
<td>7.25%</td>
</tr>
<tr>
<td>LEA Administration</td>
<td>$290,317</td>
<td>$1,640,192</td>
<td>$1,930,509</td>
<td>2.69%</td>
</tr>
<tr>
<td>Government Transfers</td>
<td>$84,592</td>
<td>$432,296</td>
<td>$516,888</td>
<td>0.72%</td>
</tr>
<tr>
<td>Supplementary Classroom Instruction</td>
<td>$10,044</td>
<td>$440,163</td>
<td>$450,207</td>
<td>0.63%</td>
</tr>
<tr>
<td>Support for Students</td>
<td>$0</td>
<td>$421,748</td>
<td>$421,748</td>
<td>0.59%</td>
</tr>
<tr>
<td>Special Instruction</td>
<td>$0</td>
<td>$290,241</td>
<td>$290,241</td>
<td>0.40%</td>
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<tr>
<td>Transportation</td>
<td>$970</td>
<td>$72,167</td>
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<td>0.10%</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>$19,961</td>
<td>$814</td>
<td>$20,775</td>
<td>0.03%</td>
</tr>
<tr>
<td>Food Services</td>
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<td>$5,624</td>
<td>$5,624</td>
<td>0.01%</td>
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<tr>
<td>Maintenance</td>
<td>$0</td>
<td>$1,681</td>
<td>$1,681</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>Extracurricular Activities</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$13,120,550</strong></td>
<td><strong>$58,745,648</strong></td>
<td><strong>$71,866,200</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

As indicated previously, local-level RttT expenditures increased substantially from 2010-11 to 2011-12. This increase is consistent with projected increases outlined in LEA DSWs and also with information obtained during the interviews with LEA SFOs. For instance, one LEA official suggested that the timing of funds and the articulation of the purchasing guidelines at the beginning of the RttT grant period made it difficult to expend funds in 2010-11. Although the expenditures by LEAs increased dramatically in 2011-12, the priorities of LEAs, as expressed through the percentages of total spending across activities, varied comparatively little. For example, the proportional spending in classroom instruction decreased by only 6.6%, and support for instruction by only 7.7%, while proportional spending on professional development increased by only 4.6%, and school leadership by only 7.2%. Overall, the proportional changes were relatively small and reflect consistent expenditure priorities for LEAs between Years 1 and 2. However, in 2011-12 LEAs expended funds in more categories and their mean expenditure amounts (as a percent of their total 2011-12 RttT expenditures) decreased in all categories, suggesting that, although spending priorities remained consistent, LEA spending was more diverse in 2011-12.
Table 2 presents categorical expenditures for charter schools. Sixteen charter schools expended RttT funds in 2010-11 and an additional four charter schools expended RttT funds in 2011-12. Classroom instruction and professional development account for the majority of RttT-related expenditures for charter schools in 2010-11, in both dollar amount and number of charters. Similar to some of the LEAs, several charters chose to focus the entirety of their RttT-related expenditures in one or two categories. In 2011-12, charter schools only expended funds in four categories. However, the four categories are the common expenditure categories of classroom instruction, support for instruction, professional development, and school leadership, which account for a majority of LEA expenditures as well, although there are differences between LEAs and charter schools in their prioritization of these categories. For example, while LEAs spent 56.3% of their RttT expenditures in classroom instruction, charter schools spent 73.1%. Charter schools spent a higher proportion in professional development (16.2%) than did LEAs (7.3%), while LEAs spent a higher proportion in instructional support (23.2%) than did charter schools (2.3%).

Table 2: Total RttT Expenditures by Expenditure Category, Charter Schools

<table>
<thead>
<tr>
<th>Category</th>
<th>2010-11 RttT Expenditure</th>
<th>2011-12 RttT Expenditure</th>
<th>Total RttT Expenditure</th>
<th>Percent of Total RttT Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Instruction</td>
<td>$288,384</td>
<td>$345,375</td>
<td>$633,759</td>
<td>73.08%</td>
</tr>
<tr>
<td>Professional Development</td>
<td>$56,401</td>
<td>$83,963</td>
<td>$140,364</td>
<td>16.19%</td>
</tr>
<tr>
<td>School Leadership</td>
<td>$8,354</td>
<td>$45,000</td>
<td>$53,354</td>
<td>6.15%</td>
</tr>
<tr>
<td>Support for Instruction</td>
<td>$3,559</td>
<td>$16,271</td>
<td>$19,830</td>
<td>2.29%</td>
</tr>
<tr>
<td>Special Instruction</td>
<td>$9,729</td>
<td>$0</td>
<td>$9,729</td>
<td>1.12%</td>
</tr>
<tr>
<td>Supplementary Classroom Instruction</td>
<td>$7,789</td>
<td>$0</td>
<td>$7,789</td>
<td>0.90%</td>
</tr>
<tr>
<td>Government Transfers</td>
<td>$2,366</td>
<td>$0</td>
<td>$2,366</td>
<td>0.27%</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td>LEA Administration</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Food Services</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Extracurricular Activities</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Maintenance</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Support for Students</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Transportation</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$376,581</strong></td>
<td><strong>$490,609</strong></td>
<td><strong>$867,190</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

8 The second column of Table 2 replicates Table 14 in the baseline report. The reanalysis presented for this report updates those findings.
LEA RttT Expenditures: Analysis of Fund Use and Expenditure Patterns
June 2013

Proportional changes in charter school spending between 2010-11 and 2011-12 for each of the four expenditure categories are as follows: classroom instruction decreased 6.18 percentage points, support for instruction increased by 2.37 percentage points, professional development increased by 2.13 percentage points, and school leadership increased by 6.95 percentage points. The reduction of RttT expenditures from seven to four categories, coupled with many LEAs’ decision to focus spending in only one or two categories, suggests that charter schools chose to focus their RttT expenditures even more narrowly in 2011-12. This assertion is supported by interviews and surveys. For example, in one interview, a charter school official stated that she or he allocated the entirety of her or his school’s RttT allotment for a salary supplement for teachers with an advanced degree. In addition, comments from the survey indicated that some charter school officials expended all funds for professional development that they would not have been able to provide otherwise.

Overall, the expenditure patterns summarized in Tables 1 and 2 demonstrate that, although RttT expenditures more than quadrupled in 2011-12, expenditure priorities remained consistent, with LEAs and charter schools typically focusing their spending on one or two areas. The four main categories of RttT expenditures—classroom instruction, instructional support, professional development, and school leadership—account for $69,002,697 or 94.9% of all RttT local expenditures through 2011-12.

The 14-category expenditure designation developed by Evaluation Team members at CIPP provides key insights into how RttT funds are expended by LEAs and charter schools. However, responses from NCDPI officials, survey and interview responses from school officials, and further analysis of the DSWs indicated that the 14 expenditure categories may be too broad to capture some important distinctions in the manner in which RttT funds are expended. To begin to address this issue, the Team also developed eight spending sub-categories—determined through analysis of LEA and charter DSWs and the spending priorities outlined by administrators—and grouped RttT expenditures based on reported expenditure object codes. These categories reflect expenditures that might cut across multiple previously-defined expenditure categories and attempt to link the categories utilized in the DSW planning with actual LEA and charter expenditures. The eight sub-categories are: administration/administrative support, benefits, supplemental/bonus/extra-duty pay, contracted services, instructional personnel, supplies and materials, technology and a miscellaneous category. A full list of how the object codes used by LEAs and charter schools are connected to these sub-categories is included in Appendix A.

Because almost 95% of all RttT expenditures fall into four categories, the Team only applied the sub-categorization to expenditures in those four areas (classroom instruction, instructional support, professional development, and school leadership). This strategy allowed for a more focused analysis and a better understanding of the sub-categorical expenditure mixes.

Table 3 (following page) presents LEA spending by these new sub-categories for the 2010-11 and 2011-12 academic years combined. A number of important findings emerge from this analysis. First, spending on technology accounts for the highest expenditure proportions in both academic years. In 2010-11, technology comprised over $9.5 million (75%) of total spending in the analyzed categories, and, though the proportion dedicated to it dips in 2011-12, more than twice that at almost $23 million (41%) in 2011-12—$32.5M in all. Table 1 illustrates that
classroom instruction garnered the most attention from LEAs in the 2010-11 and 2011-12 academic years, but Table 3 provides insight into that spending by demonstrating that 74.3% of all technology spending was for classroom instruction purposes in 2010-11 and 2011-12. Factoring in the additional information that the two-year percentage of classroom instruction spending designated as technology spending was 59.7%, we see that technology was the focus of most classroom instruction RttT expenditures in the 2010-11 and 2011-12 academic years. The next-highest sub-category by proportion is contracted services, which, though it remained a constant proportion of total expenditures across both years, fluctuated somewhat in terms of where those services were engaged each year. While 78.0% of contracted services expenditures were for instructional support in 2010-11, in 2011-12 contracted services expenditures were more evenly distributed across the four main expenditure categories: 19.6% in classroom instruction; 23.1% in instructional support; 25.7% in professional development; and 31.5% in school leadership. A third category—bonus/supplement/extra duty pay—comprised only 4% of total expenditures in the 2010-11 academic year but accounted for 15% of total expenditures in 2011-12—a notable increase. Expenditures on instructional personnel also significantly increased from 2.8% to 12.3% of all expenditures.

Table 3: Sub-Categorical Expenditures of the Top Four Expenditure Categories, LEAs, 2010-11 through 2011-12

<table>
<thead>
<tr>
<th>Sub-Category</th>
<th>Sub-Category Total</th>
<th>% of Total 2010-11</th>
<th>% of Total 2011-12</th>
<th>CI 2010-11</th>
<th>IS 2010-11</th>
<th>PD 2010-11</th>
<th>SL 2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration/ Administrative Support</td>
<td>$3,438,827</td>
<td>1.6</td>
<td>5.8</td>
<td>5.05</td>
<td>0.0</td>
<td>54.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Benefits</td>
<td>$4,395,813</td>
<td>1.7</td>
<td>7.5</td>
<td>6.45</td>
<td>57.6</td>
<td>26.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Bonus/ Supplement/ Extra Duty Pay</td>
<td>$8,851,818</td>
<td>4.0</td>
<td>15.0</td>
<td>12.99</td>
<td>61.0</td>
<td>4.7</td>
<td>23.2</td>
</tr>
<tr>
<td>Contracted Services</td>
<td>$9,598,896</td>
<td>13.6</td>
<td>14.2</td>
<td>14.08</td>
<td>17.9</td>
<td>33.0</td>
<td>22.7</td>
</tr>
<tr>
<td>Instructional Personnel</td>
<td>$7,146,902</td>
<td>2.8</td>
<td>12.3</td>
<td>10.49</td>
<td>70.8</td>
<td>25.9</td>
<td>3.3</td>
</tr>
<tr>
<td>Supplies and Materials</td>
<td>$2,061,515</td>
<td>0.9</td>
<td>3.5</td>
<td>3.02</td>
<td>74.6</td>
<td>22.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Technology</td>
<td>$32,518,185</td>
<td>75.4</td>
<td>41.4</td>
<td>47.71</td>
<td>74.3</td>
<td>23.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$143,436</td>
<td>&lt;0.1</td>
<td>0.3</td>
<td>0.21</td>
<td>35.6</td>
<td>30.7</td>
<td>10.0</td>
</tr>
</tbody>
</table>

*This is the proportion of the sub-category that is attributable to the four main categorical expenditures: classroom instruction (CI), instructional support (IS), professional development (PD), and school leadership (SL).

9 2010-11 classroom instruction spending on technology: 90.7%; 2011-12 classroom instruction spending on technology: 52.0%
Because technology expenditures account for such a large proportion of all RttT-related expenditures, we present here specific findings from the survey and interview responses related to technology initiatives. Table 4 presents results from the technology portion of the survey of LEA SFOs. When asked to rate the importance of various technology initiatives on a scale of 1 to 3, LEA SFOs rated expenditures on connectivity as the highest priority item, followed closely by hardware in the form of technology equipment. When asked to provide other types of technology spending important to them that were not listed on the survey, LEA SFOs noted spending on technology facilitators—an expenditure that is both technology- and personnel-oriented. The coding of technology used for this report does not include expenditures for technology support personnel, but if technology support services is included as part of the technology sub-category, an additional $5.5M of RttT funds were spent on technology-related expenditures in 2010-11 and 2011-12.

Table 4: SFO Priority Ratings for Technology Initiatives

<table>
<thead>
<tr>
<th>Function</th>
<th>Priority Rating</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>2.62</td>
<td>39</td>
</tr>
<tr>
<td>Technology Equipment</td>
<td>2.61</td>
<td>41</td>
</tr>
<tr>
<td>Software</td>
<td>2.25</td>
<td>36</td>
</tr>
<tr>
<td>Assistive Technology</td>
<td>1.7</td>
<td>27</td>
</tr>
<tr>
<td>Outsourcing Key Functions</td>
<td>1.52</td>
<td>27</td>
</tr>
</tbody>
</table>

This strategic approach and pattern of spending reflects common wisdom and best practices in school finance circles, which encourage spending of non-recurring funds (such as the RttT allocations) on non-recurring expenditures (such as technology equipment), and discourages spending (such as on the addition of permanent staff) that obligates LEAs to long-term funding obligations with non-recurring revenue (Odden and Picus, 2008). Consideration of this concept is readily evident in survey responses and interviews. One LEA official stated that the creation of permanent positions with “soft” money places stress on future budgets, in which there will be a question of sustainability via “hard” money or local funds. The official identified that investment of RttT funds in technology allowed her/his LEA to make the most out of its RttT allotment by supporting the funding of its 1:1 initiative. This allocation allowed the LEA to accelerate 1:1 adoption and move closer to that goal than would have been possible. Another school official stated that “As a district, we decided to limit the number of personnel hired with RttT funds because it would not be sustainable. The majority of our funds are being used for classroom technology and professional development in addition to instructional resources.”

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10 Purpose Code 6400
11 The North Carolina 1:1 Learning Technology Initiative supports high schools in North Carolina so that they can accomplish the mission set forth by The North Carolina State Board of Education: that every public school student graduates from high school globally competitive for work and postsecondary education and prepared for life in the 21st century. The most notable element of this initiative is the provision of a wireless computing device for every teacher and student, although there are other considerations such as: technology infrastructure; pedagogy; and professional development.
Table 5 presents charter school spending by sub-category for the 2010-11 and 2011-12 academic years combined. Compared to the sub-categorical expenditures of LEAs, there is less emphasis on technology expenditures and a greater emphasis on contracted services and instructional personnel. Charter school interviews suggest that an important focus of their RttT spending was for professional development activities, which would account for the large proportion of professional development-related expenditures for contracted services. This is also consistent with the charter school DSWs, which also indicate a primary focus on professional development activities and instruction personnel. Finally, it is interesting to note that investment in technology appears to be a more prominent strategy for RttT fund use in LEAs than in charter schools.

### Table 5: Sub-Categorical Expenditures of the Top Four Expenditure Categories, Charter Schools

<table>
<thead>
<tr>
<th>Sub-Category</th>
<th>Sub-Category Total</th>
<th>% of Total</th>
<th>Category Proportiona</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration/Administrative Support</td>
<td>$53,121</td>
<td>2.3 9.2 6.32</td>
<td>0.0 5.7 0.0 94.3</td>
</tr>
<tr>
<td>Benefits</td>
<td>$31,263</td>
<td>5.3 2.5 3.72</td>
<td>95.1 4.9 0.0 0.0</td>
</tr>
<tr>
<td>Bonus/Supplement/Extra Duty Pay</td>
<td>$68,566</td>
<td>3.5 11.5 8.16</td>
<td>58.2 17.2 19.9 4.7</td>
</tr>
<tr>
<td>Contracted Services</td>
<td>$325,598</td>
<td>47.1 32.1 38.74</td>
<td>61.0 0.0 39.0 0.0</td>
</tr>
<tr>
<td>Instructional Personnel</td>
<td>$193,199</td>
<td>23.8 23.5 22.99</td>
<td>98.2 1.8 0.0 0.0</td>
</tr>
<tr>
<td>Supplies and Materials</td>
<td>$0</td>
<td>0.0 0.0 0.00</td>
<td>0.0 0.0 0.0 0.0</td>
</tr>
<tr>
<td>Technology</td>
<td>$168,014</td>
<td>18.0 21.2 19.99</td>
<td>100.0 0.0 0.0 0.0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$633</td>
<td>0.0 0.1 0.08</td>
<td>100.0 0.0 0.0 0.0</td>
</tr>
</tbody>
</table>

a This is the proportion of the sub-category that is attributable to the four main categorical expenditures: classroom instruction (CI), instructional support (IS), professional development (PD), and school leadership (SL).

A note on coding and analysis of professional development expenditures. Taken together, Tables 1 through 5 provide detailed information about how LEAs and charters expended RttT funds across the 2010-11 and 2011-12 academic years. However, it is important to note one possible limitation to this analysis of expenditures by category: discrepancies between the professional development estimates and the true cost of professional development. This potential limitation is highlighted by the fact that DSWs of some LEAs and charter schools indicate a high priority for professional development that is not reflected in the categorization of their expenditures. The discrepancy is likely a result of three factors. The first is that SFO coding strategies regarding professional development may vary. If so, the resulting data from the annual financial reports may not produce accurate estimates of the cost of professional development due to a variance in that particular categorization across LEAs that the Team’s coding strategy cannot capture. The second is that some LEAs and charter schools have expended funds differently than what they
projected in their DSWs. The third factor, and perhaps the one with greater implications, is that the complex nature of professional development expenditures may make it difficult for LEAs to code accurately using the current chart of accounts. Miles et al. (2004) suggest that actual spending on professional development may be much higher than traditionally calculated because expenditures for these activities may be coded in other areas of the budget. This assertion is supported in part by the sub-categorical analysis presented in this report. For example, a high proportion of LEA expenditures on contracted services, which is primarily expenditures for workshop expenses,\(^{12}\) is in the area of instructional support (33%; Table 3). While this linkage is understandable—professional development activity easily can be considered instructional support—it does present difficulties for analysis when attempting to generate accurate accounting of the expenditures for professional development.

**Spending by Year**

Examination of the year-to-year spending patterns of LEAs and charter schools motivates two important questions. The first question, which was prompted by the baseline spending report, asks whether actual LEA and charter school expenditures are aligned with their NCDPI-approved DSW expenditure projections. While on the surface this issue might appear to be one of simple compliance, it also may have implications for analyzing the relationship between expenditures and student outcomes in later stages of the evaluation. The second question is whether it is possible to understand better how yearly RttT spending plans are related to expenditure strategies in terms of categorical spending. Understanding yearly expenditures in the context of categorical spending will help illuminate why we see unbalanced (front-loaded) four-year spending patterns in some LEAs and charter schools.

**Alignment of projected and actual expenditures.** Before presenting the findings for this section, it is important to make two notes. First, although the DSWs can include projected spending of funds from various sources, this section only reports on RttT funds. Second, although the report examines the DSWs at a point in time, the revisioning of the DSWs is a continual process. Therefore it is possible that some of the DSWs have been updated since the drafting of this report. Table 6 (following page) addresses the first question by presenting data on LEA and charter school spending relative to the amounts projected in DSWs. This relative spending is calculated as actual expenditures as a percentage of planned expenditures. For example, if an LEA is designated in the <60% group, its actual expenditures were less than 60% of what it planned to expend, according to its DSW. If we take the category representing 95-105% of DSW allocations as indicating alignment with DSW-projected expenditures, 42 LEAs and eight charter schools spent according to plan in 2010-11, 17 LEAs and two charter schools spent at a slower pace than projected, and 20 LEAs and three charter schools spent at a faster pace than projected. Additionally in 2010-11, 23 LEAs and 10 charter schools did not allocate RttT funds in their DSWs and did not expend RttT funds, while nine LEAs and three charter schools expended RttT funds with no DSW RttT allocation, and four LEAs and two charter schools allocated RttT funds in their DSWs but did not expend RttT funds.

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\(^{12}\) Object Code 312
Table 6: Spending Deviation from DSWs, by Years and Totals

<table>
<thead>
<tr>
<th>Actual Expenditure as Percent of DSW Projections</th>
<th>Number of LEAs</th>
<th>Number of Charters&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010-2011</td>
<td>2011-2012</td>
</tr>
<tr>
<td>&lt;60%</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>60%-95%</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>95%-105%</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>105%-140%</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>&gt;140%</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>No Allocation No Expenditure</td>
<td>23</td>
<td>–</td>
</tr>
<tr>
<td>No Allocation Have Expenditures</td>
<td>9</td>
<td>–</td>
</tr>
<tr>
<td>Have Allocation No Expenditure</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>115</td>
</tr>
</tbody>
</table>

<sup>a</sup> There are three charters that have valid DSWs submitted with NCDPI but did not have RttT related expenditures in for 2010-2012. When contacted for survey and interview participation two indicated that they were not a participating charter.

<sup>b</sup> There was one charter that expended funds under the RttT program report code that did not have a DSW.

In 2011-12, 44 LEAs and eight charter schools spent in accordance with their DSWs, 47 LEAs and 10 charter schools spent at a slower pace than expected, and 24 LEAs and two charter schools spent at a faster pace than projected. Additionally, five charter schools did not allocate RttT funds in their DSWs and did not expend RttT funds, and two charter schools allocated RttT funds in their DSWs but did not expend RttT funds. Consequently, there is a significant number of LEAs and charter schools that spent RttT funds at a faster or slower pace with respect to their projected expenditures in the 2010-11 and 2011-12 academic years. The result, as we look ahead to 2012-14 (Table 7, following page), is that, while 37 LEAs and four charters schools are on track with their DSWs, several LEAs (28) and one charter school have remaining RttT fund allocations that are less than projected expenditures. In addition, 47 LEAs and six charter schools have remaining RttT funds that exceed projected expenditures in their DSWs. We may infer from this that many LEAs and charter schools are having difficulty implementing their DSWs in the timeframe allotted; however, we must also realize that, although this variation may indicate that spending is not in line with DSWs as submitted, it may also indicate changing contexts or priorities for LEAs and charter schools that are not reflected in their planning documents (DSWs) but are reflected in their subsequent spending decisions.
Table 7: Remaining RttT Funds and Projected DSW Expenditures, 2012-14

<table>
<thead>
<tr>
<th>Remaining RttT Funds as a Percent of DSW Projections</th>
<th>Number of LEAs</th>
<th>Number of Charters</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;60%</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>60%-95%</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>95%-105%</td>
<td>37</td>
<td>4</td>
</tr>
<tr>
<td>105%-140%</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>&gt;140%</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td>No Allocation</td>
<td>–</td>
<td>11</td>
</tr>
<tr>
<td>No Remaining Funds</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Have Remaining Funds</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Have Allocation</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>No Remaining Funds</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>27</td>
</tr>
</tbody>
</table>

Relationships between annual RttT spending plans and expenditure strategies. Table 8 (following page) provides greater detail about spending among the LEAs and charter schools with the highest rates of RttT spending in 2010-11 and 2011-12. This analysis examines LEAs and charter schools that spent over 40% of their RttT allotment in either the 2010-11 or the 2011-12 academic years. On average, early-spending LEAs spent over 60% of their total allocations in their respective high-spending years, which may suggest that these LEAs intended for their up-front expenditures to have an impact over the remaining years of the RttT program. The charter school early spenders committed even more heavily in these early years by expending, on average, about 70% of their total RttT allotment in either of the first two years of RttT implementation.

The most common expenditure category for LEAs was technology. Of the 12 LEAs that expended over 40% of their RttT allotment in the first year, 11 expended funds for technology, accounting for over 90% of their total expenditure in that year. In 2011-12, technology was again the main category of spending, with 36 of the 45 high-spending LEAs committed to technology expenditures, accounting for 56.5% of their total expenditure. High-spending charter schools expended heavily on professional development (though see note 8, Table 8; professional development actually received a more significant commitment of charter school RttT funds than did technology in the 2010-11 academic year). The interviews of first-year high-spending LEAs and charter schools confirms this analysis. One LEA official suggested that her or his LEA expended a large amount of funds to procure technology in the first year, with a focus on professional development for its use in support of instructional practices in the following years.
Table 8: Common Expenditures for High-Spending LEAs and Charter Schools

<table>
<thead>
<tr>
<th></th>
<th>2010-2011</th>
<th></th>
<th>2011-2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEAs Expend</strong></td>
<td></td>
<td><strong>Charters</strong></td>
<td></td>
<td><strong>LEAs Expend</strong></td>
</tr>
<tr>
<td><strong>&gt;40% of Allotment</strong></td>
<td></td>
<td><strong>&gt;40% of Allotment</strong></td>
<td></td>
<td><strong>&gt;40% of Allotment</strong></td>
</tr>
<tr>
<td>(n = 12)</td>
<td>(n = 10)</td>
<td>(n = 45)</td>
<td>(n = 10)</td>
<td>(n = 45)</td>
</tr>
<tr>
<td>Mean Expenditure</td>
<td>$502,461</td>
<td>$29,381</td>
<td>$774,160</td>
<td>$32,580</td>
</tr>
<tr>
<td>Mean Expenditure as % of 4-Year Allotment</td>
<td>61.7</td>
<td>73.9</td>
<td>63.4</td>
<td>69.8</td>
</tr>
<tr>
<td>Most Common Expenditure Category</td>
<td>technology</td>
<td>technology</td>
<td>technology</td>
<td>professional development</td>
</tr>
<tr>
<td>Number Expend in this Category</td>
<td>11</td>
<td>5</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>Mean Categorical Expenditure</td>
<td>$438,895</td>
<td>$14,722</td>
<td>$455,522</td>
<td>$19,873</td>
</tr>
<tr>
<td>Mean % of Yearly Expenditure</td>
<td>90.2</td>
<td>94.9</td>
<td>56.5</td>
<td>70.3</td>
</tr>
</tbody>
</table>

a Technology was the most common expenditure for high-spending charter schools in 2010-11, but professional development was the largest expenditure overall, primarily because two charters expended funds on professional development totaling $114,727, or 95.7% of their 2010-11 expenditures, whereas spending on technology accounted for a total of $73,610.

Spending by Level

This report’s final analysis is of RttT spending by level—spending at the central office level versus spending at the school level—with the purpose of clarifying trends in these spending patterns. The primary motivation for this section was the high level of central office spending in the Year One report and the general concern that fewer funds may be reaching schools than intended under the RttT grant. Specifically, if funds are expended at the central office level, it is difficult to ascertain whether they are being used in the lowest-achieving schools. This analysis assigns LEAs to spending categories based on their percentage of RttT funds expended at the central office by year. From this designation, patterns of spending were calculated. The results of this analysis are summarized in Table 9 (following page).

In 2010-11, 53 LEAs spent the entirety of their expenditures at the central office level, and technology accounted for the majority of that spending. Only 20 LEAs spent at least half of their 2010-11 RttT expenditures at the school level. The average amount spent directly at the school level is fairly small across all groups (between $839 and $17,833 per school) except for the two groups in which between 10% and 29.9% of all RttT expenditures was at the school level. Schools in the 20%-29.9% group that received RttT funds collected an average of about $24,000, while schools in the 10%-19.9% group that received RttT funds collected an average of almost $29,000. The most common school-level expenditure was tabulated for each group and included all categories and sub-categories. 2010-11 common expenditures appear to be fairly mixed, although a majority of the expenses designated as contracted services and bonus/supplement/extra-duty pay was professional development-related. Accordingly, professional development-related categories and technology were the focus of school level expenditures.
### LEA RttT Expenditures: Analysis of Fund Use and Expenditure Patterns

**June 2013**

**Table 9: Expenditures by Level and Common Expenditure Categories, by Year**

<table>
<thead>
<tr>
<th>% of RttT Expenditure at the LEA Level</th>
<th>2010-2011</th>
<th>2011-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of LEAs</td>
<td>Average LEA-Level Expenditure</td>
</tr>
<tr>
<td></td>
<td>(n = 88)</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>53</td>
<td>$167,372</td>
</tr>
<tr>
<td>90-99.9</td>
<td>5</td>
<td>$126,659</td>
</tr>
<tr>
<td>80-89.9</td>
<td>2</td>
<td>$58,495</td>
</tr>
<tr>
<td>70-79.9</td>
<td>3</td>
<td>$29,107</td>
</tr>
<tr>
<td>60-69.9</td>
<td>3</td>
<td>$48,994</td>
</tr>
<tr>
<td>50-59.9</td>
<td>2</td>
<td>$88,910</td>
</tr>
<tr>
<td>40-49.9</td>
<td>2</td>
<td>$2,591</td>
</tr>
<tr>
<td>30-39.9</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>20-29.9</td>
<td>3</td>
<td>$76,268</td>
</tr>
<tr>
<td>10-19.9</td>
<td>3</td>
<td>$36,224</td>
</tr>
<tr>
<td>0-9.9</td>
<td>12</td>
<td>$1,984</td>
</tr>
</tbody>
</table>

In 2011-12, the number of LEAs that spent their entire year’s allocation at the central office level dropped to 33. The decrease is even more significant given that all 115 LEAs expended RttT funds in 2011-12. However, this is offset somewhat by the fact that 25 LEAs fell into the 90-99.9 central office expenditure category, which makes the sum of LEAs in the top two central office spending categories in 2011-12 (58) equal to the sum in 2010-11. Technology was the main expenditure category for the top central office spending group. The total number of LEAs that spent at least half of their RttT yearly expenditures at the school level rose to 28, and there was a significant increase in the average amount of total funds available to schools in all groups but one. However, the average number of schools receiving those funds also rose, indicating that, while more schools were direct recipients of RttT funds in 2011-12, the per-school level of that funding was generally lower than it was in 2010-11. In total, five groups averaged over $23,000 of RttT fund allocation per school in 2011-12, most notably the lowest central office spending group, which averaged over $88,000 per school. As in 2010-11, the most common expenditures were in the sub-categories of technology and bonus/supplement/extra-duty pay related to professional development.
Given the high level of expenditures at the central office level, the Team sought to better understand this practice through the survey and interviews. The most common finding was that LEAs sought to take advantage of purchasing power at the central office level in buying technology and engaging in large-scale professional development activities. This suggests that, although expenditures appear to be at the central office, the ultimate benefits of those expenditures still could be accruing at the school level. However, this uncertainty points up a key issue from an implementation and evaluation perspective: There is no clear way to determine whether and to what extent individual schools benefitted from the central office expenditure.

**Do Spending Patterns Vary by Past LEA Performance?**

To investigate whether variations in LEA RttT spending patterns were related to performance, we examined the relationship between pre-RttT LEA performance composite scores and Year 1 and 2 RttT expenditure patterns. Table 10 presents the expenditure patterns for ten subsets of LEAs, which have been grouped based on their 2009-10 performance composites. Not surprisingly, since the RttT funding formula specified by the US Department of Education was based on the number of students eligible for Title I, higher-performing LEAs receive, on average, fewer local RttT dollars per pupil. Research suggests, however, that more money does not necessarily lead to better results; instead, how the funding is spent is what is most crucial to improving student performance (Baker, 2012; Hanushek, 1997). To generate a baseline for future investigations of differences in outcomes relative to differences in RttT investment, this report details the expenditure patterns to date by LEA performance group to determine if there is a systematic difference between the way lower-performing and higher-performing LEAs expend RttT funds.

*Table 10: Summary of expenditure trends by performance deciles, LEAs*

<table>
<thead>
<tr>
<th>LEA Performance Decile</th>
<th>Mean RttT Allocation per Pupil</th>
<th>Mean % Allocation Expended in 2010-11</th>
<th>Mean % Allocation Expended in 2011-12</th>
<th>Mean % Expenditures at the School Level 10-12</th>
<th>Mean % Expenditures at the School Level 10-12</th>
<th>Mean # Schools Receiving Funds</th>
<th>Mean % Technology Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (lowest)</td>
<td>$248.17</td>
<td>3.98</td>
<td>37.54</td>
<td>29.40</td>
<td>6.17</td>
<td>34.87</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>$168.53</td>
<td>36.82</td>
<td>36.95</td>
<td>42.99</td>
<td>15.55</td>
<td>50.23</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>$133.03</td>
<td>5.90</td>
<td>34.42</td>
<td>46.54</td>
<td>19.94</td>
<td>22.36</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>$143.15</td>
<td>13.60</td>
<td>55.75</td>
<td>33.20</td>
<td>17.12</td>
<td>52.68</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>$128.04</td>
<td>22.31</td>
<td>62.52</td>
<td>27.48</td>
<td>20.07</td>
<td>53.81</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>$15.47</td>
<td>12.08</td>
<td>24.26</td>
<td>45.69</td>
<td>23.29</td>
<td>51.10</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>$94.68</td>
<td>12.55</td>
<td>52.62</td>
<td>25.72</td>
<td>18.15</td>
<td>24.22</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>$110.08</td>
<td>15.83</td>
<td>22.32</td>
<td>48.70</td>
<td>22.88</td>
<td>31.92</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>$104.85</td>
<td>7.69</td>
<td>33.49</td>
<td>42.85</td>
<td>9.37</td>
<td>28.83</td>
<td></td>
</tr>
<tr>
<td>10 (highest)</td>
<td>$65.49</td>
<td>21.29</td>
<td>58.97</td>
<td>67.17</td>
<td>25.72</td>
<td>37.51</td>
<td></td>
</tr>
</tbody>
</table>
The data in Table 10 indicate that no relationships exists between an LEA’s performance decile and either the percent of the four-year allocation expended in either the 2010-11 or 2011-12 academic year. However, the analysis does indicate a moderate relationship (r=−.5) between the performance decile of an LEA and the percentage of RttT local funds expended directly at the school level. Specifically, higher-performing LEAs tend to expend more funds at the school level. This finding is consistent with the information gathered from interviews with LEA school finance officers. In higher-performing LEAs, SFOs spoke specifically to numerous factors that contributed to their LEAs’ ability to push RttT funds to the school level. Among these factors were pre-existing capacity for LEA-wide strategic planning and the engagement of the SFO in the LEA planning process. These same SFOs often were intimately involved in regular strategic planning sessions. In one higher-performing LEA, a three-person team participated in the SFO interview. By contrast, in two lower-performing LEAs, the SFOs interviewed clearly were not included in strategic planning decisions and could only answer budgetary questions, not questions about the strategies behind the expenditure patterns. One possible inference from these data and analysis is that lower-performing LEAs may have a greater need for systemic capacity building to support stronger coordination between LEA central offices and schools.

What is the Status of the North Carolina Education Cloud Initiative Implementation?

NCEdCloud is a statewide initiative to leverage cloud technology in order to consolidate costs and provide a central location for data and learning materials. In general, cloud computing can be defined as a secure central infrastructure that can be accessed remotely for software, data, and other computing needs. In the past, North Carolina’s 115 LEAs and over 100 charter schools have consumed learning technology independently and have had limited capacity to share materials. Furthermore, many LEAs have struggled with the high costs of maintaining server infrastructure, and, because of variations in the level and type of server security employed by each LEA, some schools have been more vulnerable than others to breaches in security. The NCEdCloud offers a host of opportunities to safely share infrastructure, platforms, software, documents, and data. Cloud technology also can increase equity across LEAs, since it enables improved access to technology for LEAs with otherwise limited resources.

The major goals of the NCEdCloud are to improve instructional technology (IT) access, reliability, and efficiency, while cutting long-term costs and allowing current IT specialists to shift into instructional support positions. As an initiative within the RttT grant, the NCEdCloud is intended to support each of the four pillars of RttT: great teachers and leaders, quality standards and assessment, data-driven decisions, and turnaround for lowest-achieving schools. In a best-case scenario, a teacher with cloud technology access can more readily secure better instructional materials and software, adapt new standards and improve student assessment, and make use of student data in order to tailor instruction and track mastery. Furthermore, the teacher enjoys quality technological capabilities regardless of her or his location, thus allowing for technology-dependent improvements in low-achieving schools that otherwise may not have had such access.

The NCEdCloud proposes to offer a complex bundle of services for a variety of users. Various groups involved in providing education can utilize different elements of the cloud. At the LEA and school administration levels, the cloud may provide a) network services—such as filtering, firewalls, managed WiFi, and finance software—and b) enterprise services—such as computing,
storage, and identity and access management. At the educator level, the cloud might act as a common site for data storage, documents, and other learning materials. At the student and parent levels, the cloud might provide interactive learning programs that can be accessed from any location. Also, the cloud might provide interfaces that can facilitate parent-teacher communication.

Other potential benefits from the cloud model may include a reduction in local LEA technology-related maintenance demands. Since computing infrastructure and software maintenance will be centralized, local demands for technology maintenance can be greatly reduced. This shift can allow LEAs to lower costs for technology or redistribute existing LEA technical staff to refocus time and energy toward direct instruction and instructional support for the use of technology not supported by the NCEdCloud. Centralization also lowers electricity costs, and physical building space that previously housed servers can be used for other purposes.

**Funding**

Once the $200M of local RttT funds were allocated to LEAs and charters, 17.3% of that local funding was pulled back from LEAs and charters to fund NCEdCloud operations. This pullback resulted in an initial total budget of $34,639,376. A May 2012 update on the NCEdCloud noted that $30M of those dollars (88%) were dedicated to providing goods and services to LEAs and charters. Of that $30M, $7.5M (25%) was estimated as the price for NCEdCloud infrastructure deployment at the state level.

**Timeline and Implementation**

The NCEdCloud implementation was planned to take place over the four-year RttT grant period. Since the initiative is so complex in nature, the initial phase of implementation involved surveying and consulting with LEAs and charter schools. On the project timeline, this planning period is followed by procurement and contracting, which requires Office of State Budget and Management (OSBM) approval. Approved planning is followed by NCEdCloud deployment, which begins with pilot migrations, and continues with statewide migrations. Once fully implemented, the initiative requires measurement and monitoring, as well as NCEdCloud administration. The timeline indicates estimated lengths for each phase, with planning requiring between six and nine months, NCEdCloud deployment about six months, pilot migrations about three months, and statewide migration a full 30 to 36 months. Measurement and monitoring, along with NCEdCloud administration, will be an ongoing process after full implementation. In short, NCEdCloud implementation was projected to begin in pilot stages by the second year of RttT, with full LEA infrastructure migration complete at the end of the grant period. There will be ongoing maintenance thereafter.

The initial planning phase was completed in September 2012 with the publication of the NCEdCloud work plan. This phase included consultation with LEAs across the state, along with a survey of LEAs and charter schools. Consultation and survey findings indicated varying access to technology and a need for more stable access. The initiative is currently at the procurement and contract stage and is facing delays in the OSBM approval process. IT procurement primarily involves buying non-recurring services, such as programming for infrastructure. However, because this is a service associated with a grant, the contract process has been longer than
anticipated. This unanticipated duration of the procurement and contract stage has delayed the implementation process by approximately six months. Still, the NCEdCloud Team has indicated that they can most likely recover this time at later stages.

Responses from interviews and surveys have indicated that stalled implementation of the NCEdCloud has led some LEAs to seek other short-term means for addressing current technology needs at the local level. In some cases, LEAs have procured outside funding for infrastructure improvement, despite upcoming NCEdCloud implementation, because of pressing current technology needs. In addition, recent survey and interview responses indicate that some RttT funding is being used to complement NCEdCloud implementation, but some of that funding is being used for technology services that eventually will be provided by the NCEdCloud.

Responses indicating complementary spending included:

- “We will use RttT funds to augment the availability of testing devices for online testing.”
- “It [RttT] allowed for the completion of our district-wide wireless installation and helped fund the beginning of our 1:1 initiative.”
- “Without RttT funding, we would not have been able to continue implementation of the IMPACT model whereby each school has a full-time instructional technology facilitator.”
- “The RttT Funds has [sic] enabled our LEA to buy Smartboards, and Ceiling Mounted Projectors to upgrade our classrooms with 21st Century Technology.”

Responses indicating spending on technology that NCEdCloud implementation would render unnecessary (e.g., such as purchasing Rosetta Stone software at the LEA level) included:

- “We are utilizing the funds to . . . improve our technology infrastructure, strengthen our data management program, and expand virtual learning.”
- “RttT funds have greatly impacted our ability to . . . implement a data warehouse, and improve student access to technology.”

Other spending was ambiguous, and may also be on items covered by the NCEdCloud. For example, during an interview in one LEA, the interviewee indicated that his/her LEA was using RttT funds to hire a technology facilitator and that the LEA had sought other funding for a 1:1 initiative funded by GoldenLEAF. Related comments from other interviews included:

- “It has provided some technology equipment we would not otherwise have been able to afford.”
- “We also hired technology technicians to support our technology for teachers and students.”

Also, it is worth noting that at least one response was negative regarding NCEdCloud funding:

- “I think the Department of Public Instruction held onto too much of the state pot of RttT funding. The amount we received was inadequate to make much of a difference, especially considering it is designed to cover a four-year period. In addition, we were required to give a specified amount of our funding back for DPI’s technology purposes.”
Along with the NCEdCloud timeline outlined above, the NCDPI Instructional Technology Division is leading professional development specifically for NCEdCloud development. This professional development is using a train-the-trainer model: the Division firsts trains regional instructional technology consultants, who then train LEA technology directors. The Division already has conducted four face-to-face training sessions in preparation for disseminating information to LEA technology directors. NCEdCloud professional development has two major purposes: to provide training on how each LEA can leverage the NCEdCloud to benefit the LEA and its stakeholders, and to inform and involve LEAs in the continuous development and improvement of the NCEdCloud in the future.

Cost Savings Evaluation

Ascertaining cost savings in a public agency can be difficult to achieve, since LEAs may expend funds after implementation in ways similar to prior spending patterns. For example, the centralization of software applications implies that LEAs no longer will need to make those purchases at the local level. However, rather than allocating those funds to other needs or reducing expenditures in total, LEAs may choose to purchase additional software that is not available on the NCEdCloud and/or use the funds to increase technological support for instruction, thereby reducing or eliminating any potential cost savings (though increasing their overall software libraries and/or enhancing technology support). Also, since implementation takes time, and LEA technology infrastructure contracts for technology such as servers can be for long periods, the time between how quickly LEAs are able to substitute away from their own resources and realize cost savings may be delayed. Finally, the NCEdCloud offers many potential cost savings due to centralization, but cost savings may be harder to detect because LEAs may choose to expand their technology portfolios in an effort to realize greater benefits from the resources the NCEdCloud offers. Schools may invest in more laptops, iPads, smart boards, or other capitalized spending. To assess cost saving more accurately, these technology expenditures should be differentiated from expenditures that replicate the service that the NCEdCloud offers within the capitalized computer hardware object code.

Next Steps for NCEdCloud Evaluation

As indicated above, challenges for estimating the fiscal impact of the NCEdCloud initiative involve accurately estimating cost savings based on LEA and charter adoption of online services, savings associated with moving critical services to vendors, and the amount of time and salary saved by repurposing LEA employees to other functions once NCEdCloud service is implemented in LEAs. LEAs have indicated that they are understaffed in technology, so that a move to the NCEdCloud may result in staff repurposing rather than staff reductions. Therefore, because estimating the value of changes in job duties and their contributions to LEA performance may be better understood through interviews and case studies rather than through budget analysis, the Team plans to dedicate more resources to that approach for the remaining two years of the evaluation in addition to analysis of technology expenditures.
Recommendations

- **Require updated DSWs for select LEAs and Charters:** LEAs and charters that have under- or over-expended RttT funds according to their RttT expenditure projections in the most recent approved DSWs (typically Fall 2012) should submit revised DSWs that account for the surplus/deficit in their remaining RttT expenditure plans. This requirement should include those LEAs and charters that are not in the 95%-105% range of projected RttT expenditures for 2012-14 (see Table 7). It is important to note that this updating already may have occurred in some DSWs, as the updating of the DSWs is a continuous process and data in this report reflect only a point in time in Fall of 2012.

- **Include additional program report codes that align with the main RttT initiatives:** The vision set forth by the U.S. Department of Education to ensure college- and career-ready students focused on four pillars of reform: Great teachers and leaders; Standards and assessments; Turning around the lowest-achieving schools; and Data systems to support instruction. While the definitions and coding structure of expenditure categories used in the DSWs are well aligned with the pillars of the RttT initiative, they are difficult to replicate through coding of the annual financial reports using the current chart of accounts. Traditionally defined expenditure categories can encompass expenditures across multiple RttT pillars. A supplemental coding structure for the DSWs in the context of the current chart of accounts may help align implementers’, evaluators’, managers’, and the public’s understanding of how RttT funds are expended locally. One possible approach is to include a separate program report code for each pillar similar to the program report codes used for local support of statewide RttT initiatives. However, the benefit of the additional codes should be weighed against the cost of implementation. Providing additional layers of budget coding may affect the consistency of budget categorization across LEAs.

- **Develop a systematic categorization of professional development-related expenditures:** The accurate categorization of professional development expenditures presents challenges. Because costs associated with professional development can be apportioned to various parts of the budget, it is difficult to determine its true cost. Findings from this report suggest that some expenditures for professional development activities may have been sorted into other categories in a number of LEAs. The Evaluation Team suggests that a framework for assessing the actual local RttT expenditures for professional development activities be constructed through the use of a separate purpose code. As with the previous recommendation, the addition of such a code may provide further insight into the expenditures on professional development, but only in as much as the additional categorizations do not affect the consistency of coding across LEAs.

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13 Codes include 157, 159, and 159.
Next Steps for the Local Expenditures Evaluation

This report evaluates how LEAs spent RttT funds along three dimensions: category, year, and level. The report describes differences in expenditures by broad policy-relevant categories (such as classroom instruction and instructional support) and by the object or goods or services purchased by the funding (such as technology or contractual services). The report also describes the variations in local expenditures based on LEAs’ actual annual spending, comparing that to their spending plans, and the extent to which spending is done at the school or central office level. In addition to providing a description of LEA and charter school expenditure patterns, the analysis of expenditures lays the groundwork for our investigation of the relationship between local expenditures and student performance. In future reports, the Evaluation Team will investigate the extent to which:

1. Expenditure priorities of the LEAs as defined by the amounts expended in the 14 policy-relevant categories generated by the Evaluation Team are associated with better student outcomes;
2. Expenditure priorities of the LEAs as defined by the amounts expended for various types of goods and services are associated with better student outcomes;
3. Expendling more funds earlier in the grant period is associated with better student outcomes, relative to expending funds consistent with the LEA-planned expenditures; and
4. Expendling more of the RttT funds at the school level, which may reflect using the funds in ways that are more tailored to individual school needs, or expending more of the RttT funds at the central office, which may reflect improved purchasing power or more LEA-level strategies, is associated with better student outcomes.

The remainder of the project period also will consider an expansion of the scope of work with consultation and feedback from NCDPI. Two evaluation components will be considered for addition:

1. *Conduct case studies:* Understanding how LEAs and charters expend funds through the classification and aggregation of RttT-related expenditures is an important aspect of the evaluation. However, estimating initiative effects through the broad application of expenditure categorization may be limited. The implicit assumption is that identical expenditures will have similar effects. The reality is that the quality of the goods and services purchased within the categories may vary significantly across LEAs. For example, $100,000 expended on professional development in one LEA may be of higher quality than the same expenditure in another LEA and subsequently may affect outcomes differently. The current coding structure cannot capture this difference in quality. While the Evaluation Team will continue to improve the interview protocol and the survey instrument to provide a deeper understanding of the context surrounding RttT fund use and implementation, there remains an opportunity to understand better the nuances of local expenditures. Since this one area accounts for half of all RttT expenditures, the Team suggests that several case studies be added to the current scope of work, using selection criteria developed with the help of the Financial and Business Services Department at NCDPI. The Team also plans to coordinate this work in conjunction with other RttT initiative evaluation projects that already are conducting case studies.
2. *Expand the technology evaluation:* Demonstrated by the nearly $67.3 million of local and NCEdCloud expenditures, technology is a main strategy of most local expenditure plans. While it is premature to discuss the impact these expenditures have on student outcomes, there are both short- and long-term considerations. A more extensive evaluation plan will be developed to examine how technology is being implemented in the classroom as well as what type and to what extent staff development supports incorporation of technology into instructional practices. This plan also will evaluate the alignment between RttT technology-related expenditures and the strategies set forth by the North Carolina Learning Technology Initiative (NCLTI). This evaluation strategy will allow evaluators to better assess the impact of technology by understanding the variations in how it is supported and used locally. Finally, the evaluation will consider the extent to which technology has been or can be effectively deployed and utilized in those LEAs and charter schools that have not engaged in large technology initiatives, and how technology initiatives in the LEAs that have expended RttT funds can be sustained.
References


Appendix A: Original Evaluation Team Expenditure Category Codes and Revised Sub-Category Codes (with Related Object Codes)

Broad, Policy-Relevant Expenditure Categories Developed by the Evaluation Team

- Classroom Instruction
- Support for Instruction
- School Leadership
- Professional Development
- LEA Administration
- Government Transfers
- Supplementary Classroom Instruction
- Support for Students
- Special Instruction
- Transportation
- Capital Outlay
- Food Services
- Maintenance
- Extracurricular Activities

Object Codes by Sub-Category

Instructional Personnel

121-Teacher; 126-Extended Contracts; 131-Instructional Support I—Regular Teacher Pay Scale; 134-Teacher Mentor; 135-Instructional Facilitators; 142-Teacher Assistant—NCLB; 143-Tutor (Within the instructional day); 146-School-Based Specialist; 148-Non-Certified Instructor; 162-Substitute Teacher—Regular Teacher Absence; 163-Substitute Teacher—Staff Development Absence; 165-Substitute—Non-Teaching; 166-Teacher Assistant Salary When Substituting (Staff Development Absence); 167-Teacher Assistant Salary When Substituting (Regular Teacher Absence); 198-Tutorial Pay

Bonus/Extra Duty Pay

181-Supplement/Supplementary Pay; 183-Bonus Pay; 184-Longevity Pay; 187-Salary Differential; 191-Curriculum Development Pay; 192-Additional Responsibility Stipend; 193-

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14 Full documentation of the state purpose and object codes from which each category is constructed is included in Appendix B of the first local spending report (Local Education Agency Race to the Top Expenditures: An Initial Analysis; http://cerenc.org/wp-content/uploads/2011/11/NC-RttT_Local-spending-baseline_9-4-12.pdf)
LEA RtT Expenditures: Analysis of Fund Use and Expenditure Patterns
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Mentor Pay Stipend; 194-State-Designated Stipend; 196-Staff Development Participant Pay; 197-Staff Development Instructor; 199-Overtime Pay

Benefits

188-Annual Leave Payoff; 189-Short Term Disability Payments—First Six Months; 211-Employer’s Social Security Cost—Regular; 221-Employer’s Retirement Cost—Regular; 231-Employer’s Hospitalization Insurance Cost; 232-Employer’s Workers’ Compensation Insurance Cost; 233-Employer’s Unemployment Insurance Cost; 234-Employer’s Dental Insurance Cost; 235-Employer’s Life Insurance Cost; 351-Tuition Reimbursements; 352-Employee Education Reimbursements; 361-Membership Dues and Fees

Technology

343-Telecommunications Services; 418-Computer Software and Supplies; 461-Furniture and Equipment—Inventoried; 462-Computer Equipment—Inventoried; 541-Purchase of Furniture and Equipment—Capitalized; 542- Purchase of Computer Hardware - Capitalized

Administration/Administrative Support

113-Director and/or Supervisor; 114-Principal/Headmaster; 116-Assistant Principal (Non-teaching); 117-Other Assistant Principal Assignment; 151-Office Support; 152-Technician; 153-Administrative Specialist (Central Support)

Contracted Services

311-Contracted Services; 312-Workshop Expenses; 313-Advertising Cost; 314-Printing and Binding Fees; 315-Reproduction Costs; 319-Other Professional and Technical Services

Supplies and Materials

411-Supplies and Materials; 413-Other Textbooks; 414-Library Books (Regular and Replacement)

Miscellaneous (Operational)

171-Driver; 327-Rentals/Leases; 332-Travel Reimbursement; 333-Field Trips; 341-Telephone; 342-Postage; 344-Mobile Communication Costs; 349-Other Communication Services; 422-Repair Parts, Materials, and Related Labor, Grease, and Anti-Freeze; 423-Gas/Diesel Fuel; 451-Food
Appendix B: Interview Protocol

SCHOOL DISTRICT FINANCE OFFICER (OR DESIGNATED INDIVIDUAL)
INTERVIEW QUESTIONS

1. I’m going to ask you about some district-level [charter school] budget trends since [input year]. First, could you provide me with some context about what has been happening in your district [charter school] during that time period? For example, have there been any significant changes in your student or staff populations?

2. During this time period, what, if any, revenue streams (local, state, federal, or other) would you say have changed significantly? Why? What have been the consequences of these revenue changes? What has your district [charter school] done to forestall revenue cuts? For instance, have you applied for new monies or become eligible for new monies that you were previously ineligible for?

3. During this time period, what, if any, expenditures would you say have changed significantly in your district [charter school]? Why? What have been the consequences of these changes in spending on your district [charter school]? What has your district [charter school] done specifically to forestall program cuts in spending?

4. [If a charter school]- Our records indicate that you [did/did not] expend RttT funds in the 2011-2012 academic year.
   a. Is this correct?
   b. What are your plans for expending funds in this academic year (2012-2013)?
   c. What is your overall strategy and timeline for expending funds?

5. [If a traditional LEA]- Our records indicate that you [expended RttT funds at the LEA level/expended RttT funds at the school level] in the 2011-2012 academic year.
   a. Is this correct?
   b. Do you plan to follow the same strategy in the current (2012-2013) academic year?
   c. What is your expenditure strategy that informed this decision?
   d. How effective has this decision been?

6. How did your receipt of RttT funding fit into your district’s [charter school’s] budgetary picture? For example, did RttT monies allow you to continue preserving specific budgetary line items or allow you to re-fund previously cut budgetary items?

7. What is your perception of RttT? Do you find the initiatives espoused by national and state leaders to be appropriate? [Follow up: turnaround, evaluation and compensation, common core standards and assessment]

8. Let’s review your detailed scope of work [produce document]. Do you feel that this represents your RttT expenditures?
9. Who specifically is involved in the budget decision-making process as it relates to your district’s [charter school’s] use of RttT funding? Which budgetary decisions involving the use of RttT funds have been the most difficult and/or controversial and how have you dealt with that?

10. Of all the budgetary decisions made regarding RttT spending, which ones do you think have had the most impact on your district [charter school], positive or negative? Please describe.

11. Describe your work with NCDPI around RttT. Have you received clear communications about the potential use of these funds? Has the process been clear and aligned with your current operations? Has the review process of your proposed scope of work been constructive? Has the funding been distributed in a timely manner?

12. The state of North Carolina currently has four major reform goals for the use of RttT funds in districts [charter schools] across the state. These four reform goals include:

   a. using RttT funds to fund great teachers and principals,
   b. enhancing learning standards and assessments that align with 21st Century demands,
   c. funding technology systems to support strong schools; and
   d. providing financial support or “turnaround support” for the lowest-achieving schools.

In your district [charter school], what do you think are the most important of these four reform initiatives? Also, do you believe RttT monies will significantly help in achieving these reforms? Why or why not?

13. What impact, if any, do you think will happen when RttT funding stops?

14. Are there any other budgetary issues involving RttT funds to your district [charter school] that you would like to discuss at this time?
LEA RttT Expenditures: Analysis of Fund Use and Expenditure Patterns
June 2013

Appendix C: Online Survey

LOCAL SPENDING ONLINE SURVEY
North Carolina Charter School Spending of Race to the Top Funds

Filtering Question

The purpose of this survey is to gather information regarding your charter school’s experience with, and impression of, the Race to the Top (RttT) funding stream and how it has fit in to your school’s budget. This information will be used to evaluate the state’s overall efforts at funding and supporting charter schools through RttT. You have received this survey because you are the administrator of record for your charter school. However, if you believe that you are not the appropriate individual to provide information regarding RttT local spending in your school, please indicate the name, title, and email address of the individual who should be contacted instead.

☐ I am the appropriate individual to complete this survey.
☐ I am NOT the appropriate person to complete this survey. Instead, please contact:

Name/Title:  
Email:  

My charter school applied for and received RttT funding:

☐ Yes – if Yes, continue to Part I.
☐ No – if No, do not continue.

[If the respondent indicates that she or he is not the appropriate individual to complete the survey or that she or he did not apply and receive RttT funding, she or he will be redirected automatically to a “Thank you” page and will not have access to any survey questions.]

Part I. Current Financial Condition of Your School

(1.) How would you describe your school’s overall current economic situation? (Select one)
   a) Inadequately funded
   b) Adequately funded
   c) More than adequately funded

(2.) Is your school’s information on eliminated teaching positions (as of the 2010-11 school year and to date) listed on the NCDPI website (www.ncpublicschools.org/fbs) accurately?
   a) Yes
   b) No

(3.) Is the information on proposed cuts in staffing positions you have had to make in your school (as of the 2010-11 school year and to date) listed on the NCDPI website (www.ncpublicschools.org/fbs) accurately?
   a) Yes
   b) No
(4.) Which of the following budgetary actions has your school implemented or considered as a result of the current economic downturn which began in 2008? (Select one for each statement)

<table>
<thead>
<tr>
<th>Implemented</th>
<th>Did Not Consider</th>
<th>Delayed</th>
<th>Rejected</th>
</tr>
</thead>
</table>

**Personnel Related Budgetary Issues:**

a) Reducing hours of non-certified personnel  
b) Laying-off personnel  
c) Freezing outside professional service contracts  
d) Reducing non-teaching professional support staff  
e) Reducing staff-level hiring while preserving faculty hiring  
f) Reducing personnel recruiting and/or job fair initiatives  
g) Other (Please specify): ____________________

**Buildings and Facilities Related Budgetary Issues:**

h) Deferring short or long-term maintenance projects  
i) Delaying/declining a capital debt (bond) program  
j) Reducing custodial services  
k) Other (Please specify): ____________________

**Curriculum Related Budgetary Issues:**

l) Increasing class size  
m) Eliminating/delaying instructional improvement initiatives  
n) Cutting non-academic programs  
o) Cutting academic programs  
p) Deferring textbook purchases  
q) Reducing high-cost course offerings such as AP courses, advanced science and mathematics courses, etc.  
r) Reducing instructional materials  
s) Eliminating field trips  
t) Other (Please specify): ____________________

**Operations Management Related Budgetary Issues:**

u) Reducing operations to four-day work week during school year  
v) Reducing operations to four-day work week during summer  
w) Cutting transportation availability  
x) Reducing extracurricular activities  
y) Deferring technology purchases  
z) Reducing consumable supplies  
aa) Eliminating non-essential travel  
bb) Other (Please specify): ____________________
Part II. Your School’s Use of RttT Funds

(5.) Based on the following list of allowable expenses for RttT funds, please indicate your school’s level of priority for the use of these funds: (Select one for each statement)

<table>
<thead>
<tr>
<th>High Priority</th>
<th>Priority</th>
<th>Low Priority</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Facilities Management:
a) School modernization and repair
b) Grounds renovation and repair/renovation
c) Safety and security measures
d) Other (Please specify) _________________

Instructional Materials:
e) Art education equipment/supplies
f) Classroom equipment/supplies
g) Classroom technology
h) Health equipment
i) Music education equipment/instruction
j) Physical education equipment/supplies
k) Textbooks
l) Career/technical equipment
m) Other (Please specify): _________________________

Professional Development:
n) Professional development-related expenses tied to RttT priorities
o) Professional development-related expenses not tied to RttT priorities
p) Other (Please specify): _________________________

Technology:
q) Internet connectivity (fiber optics, modems, wireless, etc.)
r) Technology equipment (computers, printers, faxes, copiers, etc.)
s) Educational software for student improvement
t) Assistive or supportive technology (for students with special needs)
u) Repurposing technology funds to support outsourcing of key functions (outsourcing email to an external vendor, etc.)
v) Other (Please specify) _________________________

(6.) Identify how RttT funds are supporting reform in your school. (Select all that apply)

___ Continuing funding of previously implemented innovations threatened by budget cuts
___ Supporting development of innovative programs and practices
___ Providing additional funding for previously implemented innovative practices
___ Other (please specify): _________________________
(7.) Indicate how RttT funds are being used by your school to support reform. (Select all that apply directly to your school)

___ Expand Pre-K services  
___ Enhance bilingual instruction  
___ Expand course offerings  
___ Dropout prevention initiatives  
___ Enhance on-line or distance education course offerings  
___ Support early intervention  
___ Teacher salary increases  
___ Teacher bonus and incentive payments  
___ Raise student performance on state mandated exams (ABC’s, AYP, etc.)  
___ Improve student attendance  
___ Provide a safer student learning environment  
___ Align student curriculum with state and national standards  
___ Reduce class size  
___ Sustain student/teacher ratio  
___ Expand technology available to students  
___ Other (To indicate reform initiatives not mentioned above, please specify)

(8.) How knowledgeable are you about the priorities of RttT? (Select one for each statement)

<table>
<thead>
<tr>
<th>Not at All Knowledgeable</th>
<th>Somewhat Knowledgeable</th>
<th>Very Knowledgeable</th>
</tr>
</thead>
</table>

a) Re-staffing failing schools  
b) Transforming failing schools  
c) Providing intense professional development in failing schools  
d) Differentiated compensation based on field  
e) Differentiated compensation based on performance  
f) Adopting national standards and assessments  
g) Adopting NC’s new evaluation system

(9.) Based on your school’s current spending level, to what extent has your school’s current economic situation affected your capacity to do the following? (Select one for each statement)

<table>
<thead>
<tr>
<th>Unknown</th>
<th>Not Affected</th>
<th>Somewhat Affected</th>
<th>Greatly Affected</th>
</tr>
</thead>
</table>

a) Maintain administrative employment levels  
b) Maintain teacher employment levels  
c) Provide professional development for administrators  
d) Provide professional development for teachers  
e) Recruit and retain highly qualified administrators
f) Recruit and retain highly qualified teachers

g) Improve student achievement

h) Close student achievement gaps

i) Maintain focus on student learning/instructional improvement

j) Address the learning needs of all students, including students with special needs and disabilities

k) Meet or exceed state and federal student performance assessment levels

(10.) Based on your school’s current spending level, to what extent do you believe that RttT funds will improve your school’s economic capacity to do the following? (Select one for each statement)

<table>
<thead>
<tr>
<th>Unknown</th>
<th>No Improvement</th>
<th>Some Improvement</th>
<th>A Great Deal of Improvement</th>
</tr>
</thead>
</table>

a) Maintain administrative employment levels

b) Maintain teacher employment levels

c) Provide professional development for administrators

d) Provide professional development for teachers

e) Recruit and retain highly qualified administrators

f) Recruit and retain highly qualified teachers

g) Improve student achievement

h) Close student achievement gaps

i) Maintain focus on student learning/instructional improvement

j) Address the learning needs of all students, including students with special needs and disabilities

k) Meet or exceed state and federal student performance assessment levels

(11.) As a result of RttT funds, has your school specifically been able to: (Select one for each statement)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure/NA</th>
</tr>
</thead>
</table>

a) Save core subject teaching jobs

b) Save art/music/physical education teaching jobs

c) Save foreign language teaching jobs

d) Save special education teaching jobs

e) Save school librarian positions

f) Save school nursing positions

g) Save maintenance/cafeteria/transportation staff positions

h) Save office/administrative positions
(12.) Rate your interactions with the North Carolina Department of Public Instruction (NCDPI) around the distribution of RttT funds. How would you and your colleagues describe the level of support received during different parts of the allocation process: (Select one for each statement)

<table>
<thead>
<tr>
<th>Little Support</th>
<th>Adequate Support</th>
<th>Excellent Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Initial contacts with NCDPI about use of RttT funds</td>
<td>b) Regional briefings on the ways in which RttT funds could be used</td>
<td>c) Reviewing and editing your proposed scope of work</td>
</tr>
<tr>
<td>d) Revising and approving your proposed scope of work</td>
<td>e) Guidelines for reporting on your RttT expenditures</td>
<td>f) Timeliness of the disbursement of RttT funds</td>
</tr>
</tbody>
</table>

You have now reached the end of the NC RttT Local Spending Survey. In the space below, please take this opportunity to provide any other suggestions, feedback, or general comments that you might like to share regarding your school’s experience with, and impression of, the RttT funding stream and how it has fit into your school’s overall budgetary picture.
Contact Information:
Please direct all inquiries to Dr. Nathan Barrett
nate.barrett@unc.edu