

# How Much Are Districts Spending to Implement Teacher Evaluation Systems?

Case Studies of Hillsborough County Public Schools, Memphis City Schools, and Pittsburgh Public Schools

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## Preface

The Bill & Melinda Gates Foundation launched the Partnership Sites to Empower Effective Teaching in 2009–2010. After careful screening, the foundation identified four Intensive Partnership Sites (IPS grantees)—three school districts and a cluster of charter management organizations (CMOs)—to implement strategic human capital reforms over a six-year period. The Gates Foundation also selected the RAND Corporation and its partner, the American Institutes for Research (AIR) to evaluate the reform efforts. The RAND/AIR team is conducting three interrelated studies examining the implementation of the reforms, the reforms’ impact on student outcomes, and the extent to which the reforms are replicated in other districts.

The evaluation began in July 2010 and collected its first wave of data during the 2010–2011 school year; it will continue through the 2015–16 school year and produce a final report in 2017. During this time period, the RAND/AIR team is producing a series of internal progress reports for the Gates Foundation and the IPS grantees. The present report focuses on the investment made by three school districts, Hillsborough County Public Schools, Memphis City Schools and Pittsburgh Public Schools, to launch, implement, and operate new teacher evaluation systems.

The interim reports contain preliminary findings that have not been formally reviewed. Nevertheless, they should be of interest to the Gates Foundation as it monitors the project and to the IPS grantees as they implement their reforms. The reports are designed to foster both internal conversations and feedback to the evaluation team to help focus future data collection, analysis, and reporting.

Previous reports in this series include the following:

*Interim findings from the Evaluation of the Intensive Partnership for Effective Teaching: Results on the overall impact through 2012 for the College Ready Promise.* PR-379-BMGF. (Martorell, P., Scherer, E., and Engberg, J.) Santa Monica: RAND. January 2013.

*Estimates of the overall impact of the Intensive Partnership for Effective Teaching initiative on student outcomes.* PR-144. (Engberg, J., Martorell, P., and Scherer, E.) Santa Monica: RAND. October, 2012. (with supplemental memorandum, “Exploration of Changes in Demographic Characteristics of IPS Districts Relative to the State and the Synthetic Comparison Group (SCG)”)

*Interim report on the evaluation of the Intensive Partnership for Effective Teaching, 2010–11.* PM-3977-BMGF. (Stecher, B., Garet, M.S., Hamilton, L.S., Holtzman, D., Engberg, J. Chambers, J., McCombs, J., and Levin, J.) Santa Monica: RAND. January 2012.

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## Acronyms

AFT	American Federation of Teachers
AIR	American Institutes for Research
BCG	Boston Consulting Group
CMO	Charter Management Organization
DTTE	Department of Teacher Talent and Effectiveness
EET	Empowering Effective Teachers
EIP	Employee Improvement Plan
FFE	Fund for Excellence
FTE	Full-time Equivalent
HCPS	Hillsborough County Public Schools
HEF	Hillsborough Education Foundation
IPS	Intensive Partnership Site
IT	Information Technology
MCS	Memphis City Schools
MEA	Memphis Education Association
MET	Measures of Effective Teaching
OPTES	Online Principal Teacher Evaluation System
OTE	Office of Teacher Effectiveness
PFT	Pittsburgh Federation of Teachers
PPS	Pittsburgh Public Schools
RISE	Research-based Inclusive System of Evaluation
RTTT	Race to the Top
SIG	School Improvement Grant
TIF	Teacher Incentive Fund
TVAAS	Tennessee Value-Added Assessment System
VAM	Value-Added Model
VARC	Value-Added Research Center

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## Executive Summary

This report presents case studies of the efforts by three school districts, Hillsborough County Public Schools (HCPS), Memphis City Schools (MCS), and Pittsburgh Public Schools (PPS), to launch, implement, and operate new teacher evaluation systems as part of a larger reform effort called the Partnership Sites to Empower Effective Teaching. The HCPS system evaluates teachers based on a value-added model (VAM) of student achievement and structured classroom observations, while the MCS and PPS systems include surveys of students in addition to the VAM and classroom observation components. In each district, teachers receive individual overall performance ratings composed of a weighted combination of the evaluation system components.

Through our case studies, we have developed estimates of the expenditures in HCPS, MCS, and PPS for start-up and ongoing activities associated with each component of the new teacher evaluation systems in the three districts. We define start-up activities as those focused on defining, describing, or planning elements of the initiative and ongoing activities as those related to operating and maintaining elements of the initiative. We have also investigated the funding sources the districts used to cover the expenditures.

Our data collection and analyses cover the 32-month period from November 2009 through June 2012. Though the districts engaged in planning and preparation during the spring and summer of 2009 as they worked on the application for the Partnership Sites to Empower Effective Teaching grant, they did not commence expenditure of grant dollars until November 2009 in HCPS and MCS, and December 2009 in PPS. Exhibit A summarizes the implementation timeline and scale of the teacher observation, VAM, and student surveys in each district.

### *Exhibit A. Overview of Evaluation System Component Implementation Timeline by District*

	<b>Teacher Observation</b>	<b>Value Added Model (VAM)</b>	<b>Student Surveys</b>
<b>HCPS</b>	The new teacher observation system was first implemented for K-12 classroom teachers in the 2010–11 school year.	The first value-added calculations, based on 2010–11 achievement data, were released in the fall of 2011. All K–12 classroom teachers were included.	Student surveys were not included in the evaluation system.
<b>MCS</b>	The new teacher observation system was piloted in 2010–11 and implemented for all classroom teachers in 2011–12.	VAM scores were first incorporated in the new teacher evaluation in 2011–12. For teachers of core subjects, MCS is using growth measures from the Tennessee Value-Added Assessment System, which predates the district's new teacher evaluation system. Development of student growth measures for teachers of non-	Student surveys were piloted in 2009–10 and rolled out to all classroom teachers in 2011–12.

	Teacher Observation	Value Added Model (VAM)	Student Surveys
		core subjects began in 2011–12.	
PPS	The new teacher observation system was piloted in 24 schools in 2009–10 and rolled out to all schools in 2010–11.	The VAM system was piloted in 2009–10 and 2010–11. In 2011–12, scores were computed for and reported privately to almost 40 percent of classroom teachers (the majority of whom were 3 <sup>rd</sup> –12 <sup>th</sup> grade teachers of core subjects), based on student achievement data from 2008–09, 2009–10, and 2010–11.	Student surveys were piloted in 2010–11 and rolled out to all classroom teachers in 2011–12.

Our analyses are based on expenditure reports generated by the districts as well as information from interviews with district officials conducted in June of 2012. Each case study represents our best effort to estimate what each of the three districts has spent over the period between November 2009 and June 2012 to support the implementation of the new teacher evaluation system. Some of the expenditures cover teacher evaluation activities entirely new to the districts, and some cover activities that replace what the districts were already doing. For example, while expenditures to support the VAM or the student surveys might represent spending on new ways of doing business, expenditures on the teacher observation component may, to some degree, represent a new way of carrying out this function (e.g., employment of teacher evaluators as in HCPS) that replaces an old way of doing business (e.g., teacher observations performed solely by school leaders). The present study focuses on the total spending to support the new teacher evaluation system, but we make no attempt to assess how this spending differs from what districts were previously spending on these types of activities.

As displayed in Exhibit B, HCPS had the highest total expenditure for the new teacher evaluation systems (\$24.8 million), and PPS had the lowest total expenditure (\$6.4 million) between November 2009 and June 2012. This is not surprising given the relative enrollment in the two districts (approximately 195,000 in HCPS and 25,000 in PPS). In HCPS, MCS, and PPS, philanthropic funds account for roughly 60 to 90 percent of the investment allocated to the teacher evaluation system. MCS has funded the new teacher evaluation system almost exclusively through philanthropic funds (92 percent from the Gates grant). The second highest funding

category is federal funding, which is a combination of Teacher Incentive Fund (TIF), Title I and Title II, and Race to the Top (RTTT) funds.

***Exhibit B. Overview of Expenditures on the Evaluation Systems in HCPS, MCS and PPS between November 2009 and June 2012***

	Hillsborough County Public Schools (HCPS)	Memphis City Schools (MCS)	Pittsburgh Public Schools (PPS)
Total evaluation system expenditures	\$24.8 million	\$8.5 million	\$6.4 million
<b>Percentage of evaluation system expenditure by component</b>			
Teacher observations	87%	82%	47%
Value-added model (VAM)	13%	1%	45%
Student surveys	Not Applicable	17%	8%
<b>Funding sources</b>			
Philanthropic funds	62%	94%	58%
Federal funding	19%	6%	27%
District funding	19%		8%
Mixed funding			7%

*Source:* Author calculations based on effective teaching initiative expenditure figures from IPS grantee financial reports.

As shown in Exhibit C, over the period from November 2009 to June 2012, PPS had the highest per-pupil evaluation system expenditure of the three districts, ranging from \$50 to \$118. Over the same period, MCS had the lowest per-pupil evaluation system expenditure, ranging from \$8 to \$51. These estimates include both start-up and ongoing costs for planning, implementing, and operating the evaluation systems in each district. In 2011–12, evaluation system expenditures in the three districts accounted for between 0.4 and 0.5 percent of total district expenditures. In the same year, evaluation system expenditures were between 1.0 and 1.3 percent of overall teacher compensation. In each district, evaluation system expenditure as a percentage of total district expenditures and evaluation system expenditure as a percentage of overall teacher compensation showed an increasing trend from November 2009 to June 2012, reflecting the districts' transitions from the start-up to implementation phases of the initiative.



***Exhibit C. Per-Pupil Evaluation System Expenditure by Year and Percent of Total District Expenditures and Teacher Compensation***

<b>Academic Year</b>	<b>Nov 2009–June 2010</b>	<b>July 2010–June 2011</b>	<b>July 2011–June 2012</b>
<b>HCPS</b>			
Total evaluation system per-pupil expenditures	\$13	\$54	\$61
Teacher evaluation expenditures as a percentage of total district expenditures	0.1%	0.5%	0.5%
Teacher evaluation expenditures as a percentage of overall teacher compensation	0.2%	1.1%	1.2%
<b>MCS</b>			
Total evaluation system per-pupil expenditures	\$8	\$21	\$51
Teacher evaluation expenditures as a percentage of total district expenditures	0.1%	0.2%	0.4%
Teacher evaluation expenditures as a percentage of overall teacher compensation	0.2%	0.4%	1.0%
<b>PPS</b>			
Total evaluation system per-pupil expenditures	\$50	\$84	\$118
Teacher evaluation expenditures as a percentage of total district expenditures	0.2%	0.3%	0.5%
Teacher evaluation expenditures as a percentage of overall teacher compensation	0.6%	0.9%	1.3%

Source: Author calculations based on effective teaching initiative expenditure figures from IPS grantee financial reports.

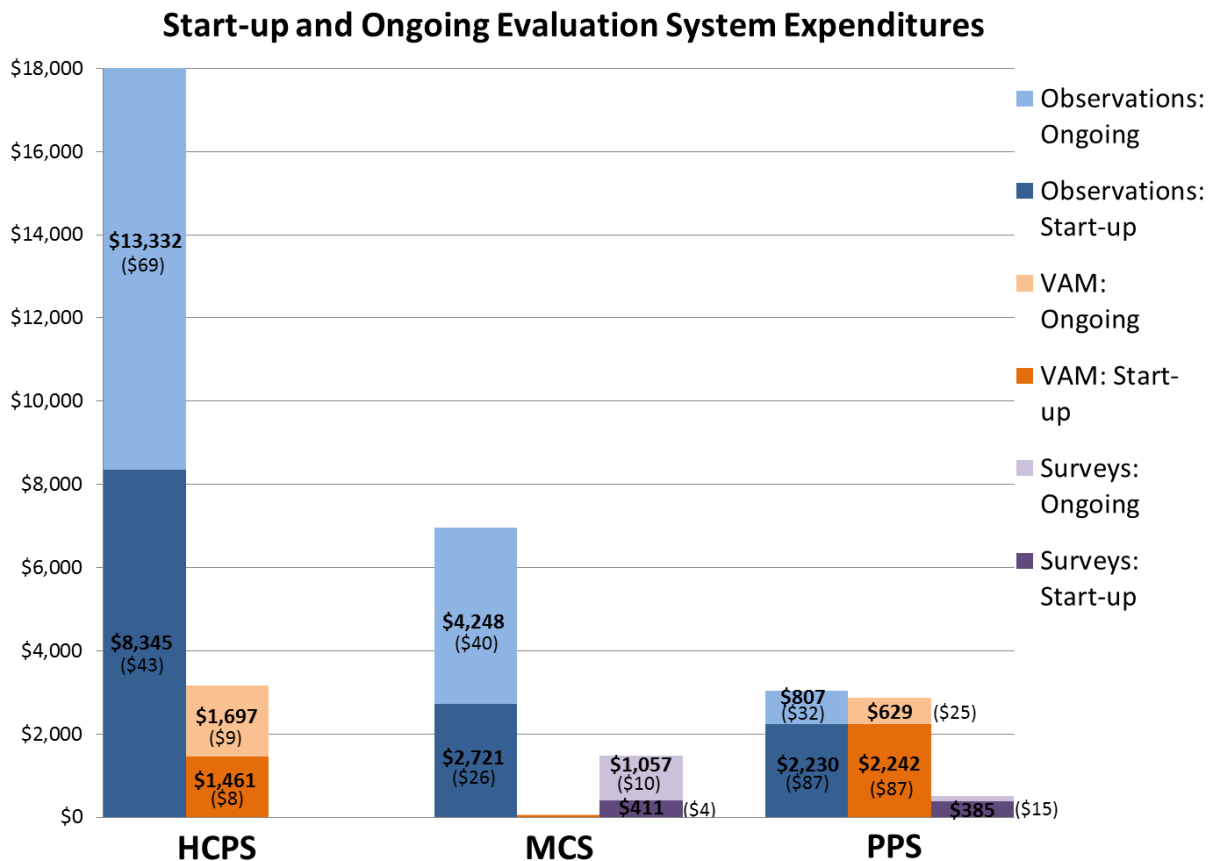
Though expenditures associated with the teacher evaluation systems are relatively small in comparison to the overall district expenditures and the overall teacher compensation, it is worth pointing out that much planning effort was put forth in all three sites during the application phase that has not been captured in our analysis. Thus, the expenditures we have captured (beginning in fall 2009 when the grant money began flowing) reflect the amount spent by three districts already engaged in the movement toward teacher effectiveness reforms and already having put forth a considerable planning effort.

Furthermore, our expenditure estimates do not capture the investment of time in initiative-related activities by school- and district-level staff whose positions were not explicitly created for the initiative but who have nevertheless taken on new duties or experienced a change in their way of work as a result of the initiative. *Most notably, our expenditure estimates do not*

include time spent by school leaders observing and evaluating teachers.<sup>1</sup> However, we do report estimates of the average amount of time school leaders in each district have spent conducting observations and preparing and providing feedback to teachers.

Exhibit D shows the portion of expenditure each district has invested in start-up and ongoing activities by evaluation system component over three years of analysis.

**Exhibit D. Expenditures for the Evaluation Systems in HCPS, MCS, and PPS by Start-Up and Ongoing Activities for November 2009 to June 2012 (in thousands of dollars)**



Note: Expenditures below \$600,000 are not displayed.

Source: Author calculations based on effective teaching initiative expenditure figures from IPS grantee financial reports.

Key findings on the districts’ investment in evaluation systems are described below by component. There is considerable variation in the expenditures across districts due to the way the local systems are structured, the existing capacity, and the strategies selected by districts.

<sup>1</sup> We are currently in the process of analyzing data gathered by the RAND/AIR evaluation team on the time allocated by principals and teachers to evaluation activities.

### **Teacher Classroom Observations**

- The three districts spent more on activities related to the teacher observation component than on activities associated with the VAM or student survey components. However, PPS spent a far lower percentage of overall evaluation system expenditure on classroom observations (47 percent) than MCS and HCPS, which both spent over 80 percent of evaluation system expenditure on their classroom observations (Exhibit B).
- All three districts use principals and assistant principals to conduct teacher observations. In addition, HCPS and PPS hire and train teachers to serve as additional observers.
- In HCPS, the main driver of expenditures on teacher observations are resources invested in employing full-time observers. MCS has recruited instructional facilitators to help administrators in their duties. In contrast, PPS has only used principals and assistant principals to conduct the observations as part of their regular job responsibilities.
- Each district spent substantial amounts on software infrastructure to create in-house solutions to meet the observation component needs.

### **Value-Added Model**

- In HCPS and PPS, the main drivers of expenditure on the VAM component were development of the statistical models and building of data linkages. At \$3.2 million (\$1,461,000 + \$1,697,000) in HCPS and \$2.9 million (\$2,242,000 + \$629,000) in PPS, overall expenditures on the VAM were comparable in both districts despite the much larger student and teacher populations of HCPS (Exhibit C).
- Both HCPS and PPS engaged an external statistical partner to develop the model and to calculate the value-added scores.
- The statistical partners helped provide the capacity needed to support the development and statistical analysis to implement the VAM.
- In MCS, the expenditures were much lower than the other two sites because the VAM, based on a state model (the Tennessee Value Added Assessment System, or TVAAS), has been in place for several years; the main effort under this initiative has been to create VAM measures for teachers of non-core subjects.

### **Student Survey**

- PPS and MCS launched a student survey for all classroom teachers in 2011–12. HCPS has no current plans to incorporate this component into its formal teacher evaluation process.

- Design and implementation was the largest category of expense on this component in both MCS and PPS. The main driver of these expenditures were payments to Cambridge Education for its support in planning and implementing of Tripod.

## Conclusions

We believe the expenditure estimates presented in this report represent a lower bound of the true investment HCPS, MCS, and PPS are making to implement and begin to operate the initiative. In addition to the direct dollar costs included in our estimates, each district made investments in building internal and external partnerships as well as changing the district culture and way of working for many staff members. These changes are difficult to fully capture in quantifiable terms. In fact, HCPS, MCS, and PPS received the Gates grants, in part, because of their prior engagement in teacher effectiveness work. Thus, a district with less experience and capacity in the area of teacher effectiveness reforms might face higher planning costs than those captured in this analysis, as we do not capture any district investment prior to November 2009. In addition, as we mentioned above, our estimates do not include the costs of existing district and school staff who devoted time to evaluation (e.g., principals).<sup>2</sup>

Given the variation in expenditure across HCPS, MCS, and PPS due to the prior experience and capacity of each district and the differing approaches the districts have taken in implementing the components of their evaluation systems, we would expect to see variation in expenditure across other districts implementing similar reforms.

Our data pertain to the early years of implementation of teacher evaluation reforms; we do not yet have data on the costs over the longer run, or on how the districts will sustain these expenditures. The sustainability of these reforms relies on the ability of the districts to get continued buy-in from all stakeholders and to integrate and align reform activities across many facets of the organizations, creating a new way of “doing business” rather than trying to maintain the initiatives as an “add-on” to the old way of working. Sustaining the reforms may also depend on the ability of the districts to become more efficient in the way they create better results for students. Teacher evaluation systems should allow districts to identify the better-qualified staff for purposes of retention. They should also be better able to identify staff needs and help to improve performance through targeted professional development programs. Both of these factors could save money in the long run that could be used to support the teacher evaluation systems.

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<sup>2</sup> Our current estimates also do not include the time of Gates Foundation staff (and associated overhead costs) spent supporting the IPS grantees in implementation of the Empowering Effective Teachers (EET) initiative. These staff have contributed to whatever success the EET initiative might have by serving as thought partners for district leadership, connecting districts with external expertise, and facilitating cross-district collaboration.

## I. Introduction

This report presents case studies on the resources invested by three school districts—Hillsborough County Public Schools (HCPS), Memphis City Schools (MCS), and Pittsburgh Public Schools (PPS)—to launch, implement, and operate new teacher evaluation systems. The teacher evaluation systems in the three districts are part of a larger effort called the Partnership Sites to Empower Effective Teaching (subsequently referred to as the effective teaching initiative in this report), initiated by the Bill & Melinda Gates Foundation. The goal of the effective teaching initiative is to improve the quality of teaching available to all students.

Our case studies focus on developing estimates of the expenditures in HCPS, MCS, and PPS for start-up and ongoing activities associated with three components of teacher evaluation systems: teacher classroom observations, value-added models (VAM), and student surveys. We estimate what HCPS, MCS, and PPS have spent on their teacher evaluation systems between November 2009 and June 2012. We do not attempt to distinguish the part of that expenditure that would have occurred in the absence of the reform activities from the amount that occurred because of the reforms. We also investigate the funding sources the districts used to cover the expenditures.

Our data collection and analyses covers the 32-month period from November 2009 through June 2012. Though the districts engaged in planning and preparation during the spring and summer of 2009 as they worked on the application for the Partnership Sites to Empower Effective Teaching grant, they did not commence expenditure of grant dollars until November 2009 in HCPS and MCS, and December 2009 in PPS. Our analyses are based on expenditure reports generated by the districts, as well as information from interviews with district officials conducted in June of 2012.

The HCPS system evaluates teachers based on a value-added model (VAM) of student achievement and structured classroom observations; the MCS and PPS systems also include surveys of students in addition to the VAM and classroom observation components. In each district, the overall evaluation represents a weighted combination of the components to produce an overall rating.

HCPS began observations of K–12 classroom teachers in the 2010–11 academic year and first computed VAM scores for all K–12 classroom teachers in the fall of 2011 based on student data from the 2010–11 academic year.

MCS implemented the classroom teacher observations and the student surveys in 2011–12. VAM scores obtained from the Tennessee Value Added Assessment System (TVAAS) were incorporated into evaluation of teachers of core subjects in 2011–12. MCS began developing growth measures for teachers of non-core subjects (and piloted measures specifically for art teachers) in 2011–12.

PPS piloted its classroom teacher observation system in 24 schools in the 2009–10 academic year. The observation system was rolled out to all PPS schools in 2010–11. PPS piloted the VAM in the 2009–10 and 2010–11 academic years, and VAM scores were computed for about half of classroom teachers (3rd–12th grade teachers of core subjects) in the 2011–12 academic year based on achievement data from the spring of that school year. PPS first piloted the student survey in the 2010–11 academic year, and in 2011–12 the surveys were rolled out to all of the classroom teachers.

During this 32-month period, HCPS achieved full implementation of classroom teacher observations and VAM for K–12 classroom teachers. PPS took a more gradual approach and, by the end of the 32-month period, had 70 percent of its classroom teachers participating in the observation component, had computed VAM scores for 33 percent of its classroom teachers, and had administered student surveys for 100 percent of its teachers. By the end of the 32-month period, MCS had 100 percent of its classroom teachers participating in the observation component, had computed unique VAM scores for 31 percent of its classroom teachers (the remaining teachers received a VAM score based on school averages), and had administered student surveys for 70 percent of its teachers. Exhibit 1 summarizes the implementation scale and timeline of the teacher evaluation system components in each district.

***Exhibit 1. Overview of Evaluation System Component Implementation Timeline by District***

	<b>Teacher Observation</b>	<b>Value Added Model (VAM)</b>	<b>Student Surveys</b>
<b>HCPS</b>	The new teacher observation system was first implemented for K-12 classroom teachers in the 2010–11 school year.	The first value-added calculations, based on 2010–11 achievement data, were released in the fall of 2011. All K–12 classroom teachers were included.	Student surveys were not included in the evaluation system.
<b>MCS</b>	The new teacher observation system was piloted in 2010–11 and implemented for all classroom teachers in 2011–12.	VAM scores were first incorporated in the new teacher evaluation in 2011–12. For teachers of core subjects, MCS is using growth measures from the Tennessee Value-Added Assessment System, which predates the district's new teacher evaluation system. Development of student growth measures for teachers of non-core subjects began in 2011–12.	Student surveys were piloted in 2009–10 and rolled out to all classroom teachers in 2011–12.

	<b>Teacher Observation</b>	<b>Value Added Model (VAM)</b>	<b>Student Surveys</b>
<b>PPS</b>	The new teacher observation system was piloted in 24 schools in 2009–10 and rolled out to all schools in 2010–11.	The VAM system was piloted in 2009–10 and 2010–11. In 2011–12, scores were computed for and reported privately to almost 40 percent of classroom teachers (the majority of whom were 3 <sup>rd</sup> –12 <sup>th</sup> grade teachers of core subjects), based on student achievement data from 2008–09, 2009–10, and 2010–11.	Student surveys were piloted in 2010–11 and rolled out to all classroom teachers in 2011–12.

For the teacher observation component, expenditures have covered the training of observers (and hiring of observers in HCPS and MCS), calibration procedures, investment in developing in-house software to support the observations, and management and communication activities. For the VAM, most of the investment has been related to developing the statistical model, reviewing the data sources, and building the data systems to support the VAM. For student surveys, the main activities have included developing, administering, and processing the surveys.

As shown in Exhibit 2, over the 32-month period between November 2009 and June 2012, we estimate that HCPS spent roughly \$13 to \$61 per pupil per year on its teacher observation and VAM components. MCS spent between \$8 and \$51 per pupil per year, and PPS spent between \$50 and \$118 per pupil per year, to implement the VAM, classroom observation, and student survey components. It is also important to note that these expenditure estimates are driven by the particular features that each district has chosen to include in its evaluation system.

As shown in Exhibit 2, expenditures on the teacher evaluation systems across the three districts account for 0.1 to 0.5 percent of the overall district expenditures and roughly 0.2 to 1.3 percent of overall teacher compensation.

***Exhibit 2. Overview of Evaluation System Expenditures in HCPS, MCS, and PPS for November 2009 through June 2012***

	<b>Hillsborough County Public Schools (HCPS)</b>	<b>Memphis City Schools (MCS)</b>	<b>Pittsburgh Public Schools (PPS)</b>
Total evaluation system expenditures	\$24.8 million	\$8.5 million	\$6.4 million
<b>Percent of evaluation system expenditure by component</b>			
Teacher observations	87%	82%	47%
Value-added model (VAM)	13%	1%	45%
Student surveys	Not Applicable	17%	8%
<b>Funding sources</b>			
Philanthropic funds	62%	94%	58%
Federal funding	19%	6%	27%
District funding	19%		8%
Mixed funding			7%

Academic Year	Nov 2009–June 2010	July 2010–June 2011	July 2011–June 2012
<b>HCPS</b>			
Total evaluation system per-pupil expenditures	\$13	\$54	\$61
Teacher evaluation expenditures as a percentage of total district expenditures	0.1%	0.5%	0.5%
Teacher evaluation expenditures as a percentage of overall teacher compensation	0.2%	1.1%	1.2%
<b>MCS</b>			
Total evaluation system per pupil expenditures	\$8	\$21	\$51
Teacher evaluation expenditures as a percentage of total district expenditures	0.1%	0.2%	0.4%
Teacher evaluation expenditures as a percentage of overall teacher compensation	0.2%	0.4%	1.0%
<b>PPS</b>			
Total evaluation system per-pupil expenditures	\$50	\$84	\$118
Teacher evaluation expenditures as a percentage of total district expenditures	0.2%	0.3%	0.5%
Teacher evaluation expenditures as a percentage of overall teacher compensation	0.6%	0.9%	1.3%

Source: Author calculations based on effective teaching initiative expenditure figures from IPS grantee financial reports.

We believe the figures reported above represent a lower-bound estimate of the expenditures due to our inability to obtain accurate information on some of the activities required to implement these teacher evaluation systems. In each district, the reforms were intentionally aligned with other key district initiatives in order to integrate them into the policies and operations of various district departments. Ultimately, these key initiatives will involve a change in the way school and central office staff work, and it is this approach to change that makes it difficult to determine the “boundaries” of the initiative. This fact made it difficult to separate the expenditures on the teacher evaluation system from spending on the larger effective teaching initiative with complete accuracy. Also, our current figures are likely lower-bound estimates because data on expenditures for some activities (e.g., the time spent by principals in conducting evaluations or the time spent in planning meetings by various central office or school staff) are difficult to obtain and are not readily accessible.<sup>3</sup> Our current cost estimates also do not include

<sup>3</sup> We have gathered survey data on school leader time allocation, which will be summarized in a forthcoming report.



the time of Gates Foundation staff (and associated overhead costs) spent supporting the IPS grantees in implementation of the Empowering Effective Teachers (EET) initiative. These staff have contributed to whatever success the EET initiative might have by serving as thought partners for district leadership, connecting districts with external expertise, and facilitating cross-district collaboration.

The rest of this report is organized in five sections: Methodology, HCPS Findings, MCS Findings, PPS Findings, and Conclusions. The Methodology section presents information on our data sources and methods and provides key definitions. The HCPS, MCS, and PPS sections first provide an introduction to each district, then discuss prior related investments, and examine the activities and expenditures related to each component—teacher classroom observations, the value-added model, and student surveys. The concluding section summarizes the analysis and provides some overarching points regarding the teacher evaluation systems.

## II. Methodology

As indicated above, the analysis focuses on the following components identified in the Measures of Effective Teaching Project, which the districts have been using to evaluate and provide feedback to their teachers: teacher classroom observations, VAM, and student surveys.

The information for this report was obtained from several sources. First, we examined the reports submitted by each district to the Gates Foundation. These reports include the initial grant proposals, progress reports, budgets, and expenditure reports. We then analyzed the documents produced by other institutions or researchers, such as the Aspen Institute and Mathematica Policy Research, Inc., that relate to the effective teaching initiative. Finally, during the late spring and summer of 2012, we engaged in a series of conversations with district officials, including the leaders of the effective teaching initiative as well as the component managers and the financial staff members attached to the effective teaching initiative.

The financial reports allowed us to quantify many of the investments in the initiative, but the information we gathered through interviews revealed additional investments in activities related to the effective teaching initiative (e.g., construction of assessment labs as part of a wider trend toward computerized testing, developing internal software for linking students, and teacher data), as well as investments that were not readily accessible or easily quantifiable (e.g., planning sessions, staff time spent serving on committees, increased workloads, stress and fatigue experienced by school and central office staff). In this way, we attempted to capture investments made in the evaluation systems, even if they took the form of a change in the way of doing business rather than a specific dollar cost to the district. When we were able to quantify these investments, we included them in our overall expenditure estimates. For those investments we were not able to quantify, we include a discussion of the associated activities.

We conducted our data collection and analysis for the case studies to cover the 32-month time period from November or December 2009 through June 2012. We defined the first year of the initiative as beginning in November 2009 in HCPS and MCS and in December 2009 in PPS, when the effective teaching initiative grants were received, and as ending in June 2010. The second and third years were defined as July 2010 through June 2011 and July 2011 through June 2012, respectively.

During our data collection activities, we classified reported activities as start-up versus ongoing activities, and divided expenditures accordingly. We defined these activities as follows:

- **Start-up activities:** These are activities focused on defining, describing, or planning elements of the initiative. Start-up activities were likely one-time occurrences or initial investments over a specific period of time. Examples of start-up activities include redesigning of the observation rubric or upgrading of data systems to maintain student–teacher data linkages necessary for VAM calculations.

- **Ongoing activities:** These are activities related to operating and maintaining elements of the initiative. These activities were expected to occur on a periodic (generally annual) basis, though the form they take or the resource investment they require may change over time as districts and school staff integrate them into day-to-day activities and learn how to do them more efficiently and effectively. Examples of ongoing activities include recruitment, training, and calibration of observers.

Some of the activities we identified were common to, and supported different components of, the teacher evaluation systems: teacher classroom observations, VAM, and student surveys. For example, in HCPS, district accountants dedicated to the effective teaching initiative and the fiscal agent who handles the Gates grant support both the observation and VAM components. We apportioned the expenditures associated with these activities to each evaluation system component in proportion to the given component's share of the overall evaluation system expenditure; for each component we took the ratio of the sum of directly attributable expenditure (i.e., excluding expenditure on common activities) to the overall expenditure of the effective teaching initiative. We then multiplied the expenditure on common activities by this ratio to obtain the portion of expenditure on common activities that would be added to each component. Because there were many expenditures requiring apportionment to multiple components in MCS, we discuss these expenditures in a separate section before the discussion of expenditure by component. In HCPS, there were only two expenditures requiring apportionment to multiple components, so we include them in the discussion of expenditure by component.

We identified funding sources for each expenditure, classifying them into two main categories:

- **Philanthropic grant:** Those funds provided by the Gates grant or other local grants to support implementation of the initiative in each district.
- **District contribution:** Those funds supplied by each site to support implementation of the initiative. These could be paid out of the site's general budget or out of other grant funds, such as the Teacher Incentive Fund (TIF) or Race to the Top (RTTT) grant.

Expenditures on activities were first classified by teacher evaluation component (VAM, classroom observations, and student surveys). Within each of the three teacher evaluation components, we classified each expenditure into one of five categories based on the activity on which it was spent:

- **Design and implementation:** This category includes expenditures associated with the development of materials and processes associated with the initiative, such as the teacher observation rubric and the VAM. Activities associated with implementation, such as trainings and observer calibrations, are also included in this category.

- **Observers [for HCPS and MCS only]:** This category refers only to the teacher classroom observation component. It includes the salaries, benefits, and travel expenses of full-time peer and mentor observers in HCPS and expenditures associated with Instructional Facilitator observers in MCS. Though school leaders conduct observations in all three districts, we are not able to account for their time spent on initiative-related activities in our expenditure estimates.<sup>4</sup> However, we do provide estimates of their time spent conducting classroom observations and spent on related preparation and conferencing.
- **Management and communications:** These expenditures relate to activities regarding the planning and implementation of the effective teaching initiatives and the communication efforts to introduce the reforms to the district staff within each of the three teacher evaluation components.
- **Technology and data systems:** These expenditures are investments that the districts made to develop software infrastructure as well as to purchase information technology (IT) equipment to support the teacher observation, VAM, and survey components.
- **Other:** These are expenditures for things such as office overhead and support for data collection.

We calculated per-pupil expenditures based on district-reported enrollment data to provide a measure of what has been spent per student. This measure helps compare results across all three districts, since they vary substantially in total enrollment (ranging from about 25,000 in PPS to 195,000 in HCPS).

In addition, in order to capture the relative magnitude of the effective teaching initiative, we calculated the expenditure on the teacher evaluation system as a percentage of the total operating expenditures for each district and the expenditure on the teacher evaluation system as a percentage of total teacher compensation (salaries and benefits) expenditures.

The next section of the report presents the data for HCPS. We first provide a brief introduction and then continue with the activities and expenditures related to the three teacher evaluation components introduced above. We then turn to PPS and MCS.

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<sup>4</sup> We are currently in the process of analyzing data gathered by the RAND/AIR evaluation team on the time allocation of principals and teachers, from which we may be able to estimate these costs incurred by the district.

### III. Hillsborough County Public Schools (HCPS)

#### 1. Introduction

Hillsborough County Public Schools (HCPS) is the eighth-largest school district in the nation, and enrolls approximately 190,000 students, more than half of whom are eligible for the free or reduced-priced lunch program. The district employs approximately 12,500 classroom teachers, has an annual budget of around \$2.3 billion, and operates 248 schools spanning 1,000 square miles.<sup>5</sup>

Aligned with its goal of improving student achievement by raising teacher effectiveness and putting highly effective teachers in front of students in most need, HCPS is developing a performance-based career ladder, a pay-for-performance system, and professional development linked to its new evaluation system.<sup>6</sup> While these reforms are all currently part of the effective teaching initiative, they will become integrated into the operations of many district departments, such as Human Resources, Curriculum and Instruction, Professional Development, and Information Services.

In 2009, HCPS received a \$100 million, seven-year grant from the Gates Foundation to support implementation of the teacher effectiveness reforms over the grant period. Prior to the awarding of the grant, HCPS was already focusing on many of these reforms, as exemplified by several pay-for-performance initiatives, large expenditures in the area of professional development, and the development of IT tools that helped identify outstanding teachers and helped teachers identify student needs. Aside from its regular budget, the district found additional funding primarily through federal TIF and RTTT grants.

Exhibit 3 shows spending on the overall effective teaching initiative, spending on the teacher evaluation system, total district operating expenditures, total district compensation expenditures, and student enrollment for HCPS. Exhibit 4 breaks down the total expenditures by source.

From the beginning of the Gates Foundation grant in November 2009 through June 2012, HCPS spent \$24.8 million, or \$128 per pupil, on its new evaluation system, as shown in Exhibit 5. This expenditure amounts to between \$13 and \$61 per pupil per year (Exhibit 3). We estimate that this expenditure on the evaluation system represents about one-third (34.5 percent) of the total expenditures made on the entire effective teaching initiative between November 2009 and July

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<sup>5</sup> HCPS Partnership Sites to Empower Effective Teaching proposal to the Bill & Melinda Gates Foundation.

<sup>6</sup> HCPS is rolling out new evaluations for all teachers (including K–12, adult education, and hospital/homebound) as well as for other school staff such as guidance counselors and media and technology specialists. Our data collection and analysis includes investments made in evaluations for all of these types of staff. The district is also in the process of developing a new evaluation system for school leaders that is aligned to the EET strategic goals and priorities. Investments made in school leader evaluation are excluded from this analysis with the exception of the VAM for which we cannot distinguish between expenditures associated with teachers, instructional support personnel, or school leaders. However, district officials report that the overwhelming proportion of the effort and resources directed toward development of the VAM is focused on applying it to the evaluation of teachers.

2012 (Exhibit 5). As shown in Exhibit 3, teacher evaluation system expenditures during the 2010–11 and 2011–12 academic years were both less than 1 percent of total district operating expenditures and were about 1.1 percent of district teacher compensation expenditures.

As shown in Exhibit 4, almost two-thirds of the expenditures for the teacher evaluation system between November 2009 and July 2012 were paid out of philanthropic funds, while the remaining one-third was paid for in roughly equal amounts by the Race to the Top (RTTT) grant and reallocated district funds.

**Exhibit 3. HCPS Overview Table of Expenditures, District Size, and Teachers Included in the Effective Teaching Initiative Evaluation System**

Academic Year	Nov 2009–June 2010	July 2010–June 2011	July 2011–June 2012
<b>Overall actual expenditure</b>			
Teacher evaluation system	\$2,365,374	\$10,481,339	\$11,987,381
Effective teaching initiative total budget	\$7,235,268	\$36,150,461	\$28,640,721
District*	\$2,253,386,314	\$2,249,589,540	\$2,304,590,552
Teacher compensation*†	\$992,195,517	\$990,523,748	\$1,014,741,414
<b>Per-pupil expenditure</b>			
Teacher evaluation system	\$13	\$54	\$61
Effective teaching initiative total budget	\$38	\$188	\$147
District*	\$11,980	\$11,683	\$11,791
Teacher compensation*	\$5,275	\$5,144	\$5,192
<b>Percentages of district expenditures</b>			
Teacher evaluation system	0.1%	0.5%	0.5%
Effective teaching initiative total budget	0.3%	1.6%	1.2%
<b>Percentages of overall teacher compensation</b>			
Teacher evaluation system	0.2%	1.1%	1.2%
Effective teaching initiative total budget	0.7%	3.6%	2.8%
<b>District size</b>			
Student enrollment	188,096	192,547	195,461
Classroom full-time teachers	12,678	12,226	12,459
<b>Evaluation system</b>			
Teachers observed with new rubric	Not yet implemented	11,774	12,148
Instructional support staff observed with new rubric	Not yet implemented	0	648
Teachers receiving unique VAM score	Not yet implemented	~12,300	12,482
Instructional support staff receiving school-level VAM score	Not yet implemented	~1,700	1,768
School leaders receiving school-level VAM score††	Not yet implemented	~595	599

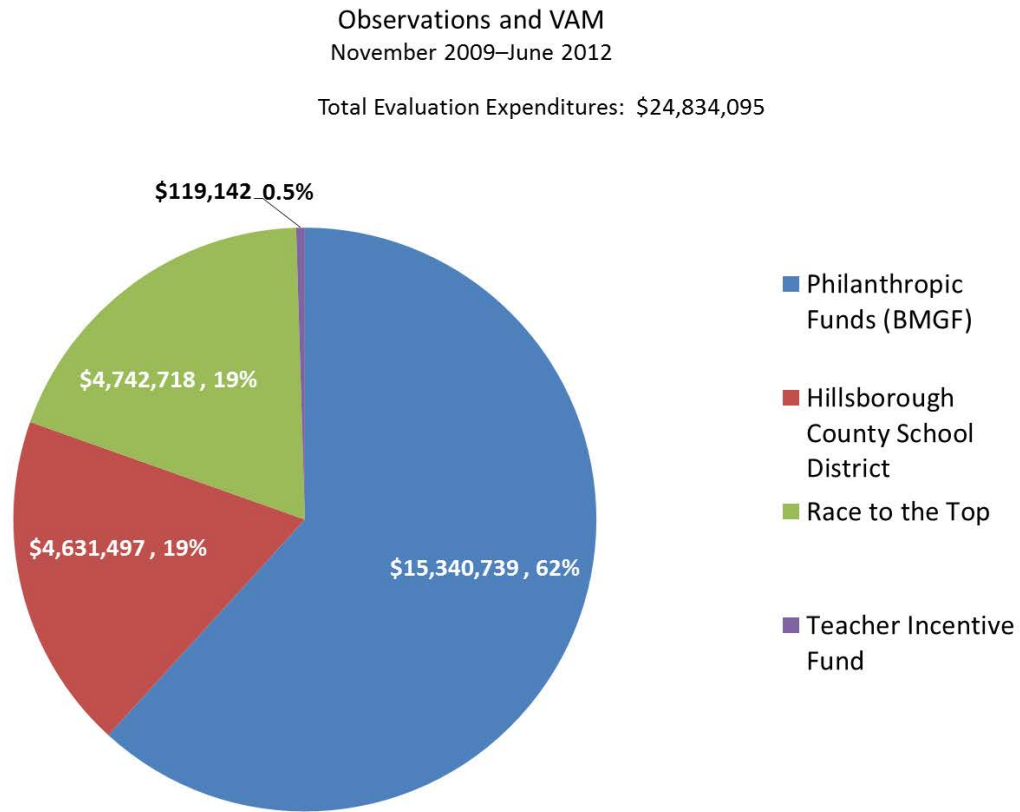
\* Overall and per-pupil district expenditures and teacher compensation are for the entire school year (July 2009–June 2010).

† Teacher compensation figures do not include compensation for instructional support personnel who are being evaluated under the new system and thus included in the expenditure estimates. The 2010–11 and 2011–12 teacher compensation figures were estimated by applying the proportion of 2009–10 teacher compensation to 2009–10 district expenditure to the 2010–11 and 2011–12 district expenditure figures.

†† Expenditure associated with the development and implementation of VAM measures for school leaders cannot be distinguished from that for teachers or support personnel.

Source: Author calculations based on expenditure figures from the HCPS effective teaching initiative financial report and district operating expenditures. Student enrollment, classroom full-time teachers, evaluation system figures provided by the district.

**Exhibit 4. HCPS Effective Teaching Initiative Evaluation System Expenditure by Funding Source**



Source: Author calculations based on HCPS effective teaching initiative financial report and interviews with HCPS staff.

**2. Prior Related Investment**

While this analysis is focused on expenditures from November 2009 through June 2012, HCPS made investments before the effective teaching initiative that laid the groundwork for the district to implement the reforms. Since the 1980s, HCPS has been investing approximately \$100,000 per year in test development for subjects and grades not covered in the state accountability testing program, establishing a culture of regular summative assessment, and providing the district with pre- and post- tests to use for the VAM. With its participation in Florida’s Merit Award Program since 2007, HCPS began to develop student–teacher data links, and gained experience implementing and communicating a system of pay based on student achievement. Finally, the district’s Renaissance Schools program, which provides bonuses to teachers for working at the highest-need schools, helped to pave the way for the effective teaching initiative’s overall goal of placing highly effective teachers in high-need classrooms.



In addition to these investments made prior to the start of the effective teaching initiative, investments associated with negotiation and planning during the grant application phase are not captured within our time period of focus, yet these activities contributed to the effective teaching initiative effort. Boston Consulting Group (BCG) worked with HCPS from May 2009 through August 2009 to prepare its application, and it was paid directly by the Gates Foundation. Additionally, a number of district staff worked extensively on the application throughout the summer of 2009. This start-up effort during the application phase laid the foundation for the effective teaching initiative. Investments made prior to and during the application phase might be considered additional expenditures related to implementing the reforms that are not captured in our estimates.

### ***3. Investment by Component***

This section describes the major activities (and associated expenditures) undertaken by HCPS to plan, implement, and operate each component of its evaluation system, beginning with the awarding of the Gates Foundation grant in November 2009 and continuing through June 2012.

Exhibit 6 provides an overview of start-up and ongoing expenditures associated with the VAM and observation components during our time periods of focus. With the exception of about \$30,000 in administrative expenditures (or 1 percent of total expenditures on the evaluation system in Year 1), the evaluation system incurred only start-up expenses in the first year of the grant. In Year 2, start-up expenditures amounted to 55 percent [ $\$5,120,816 / (\$5,120,816 + \$4,108,637)$ ] of overall observation-related expenditures, while they were more than 80 percent [ $\$1,039,755 / (\$1,039,755 + \$212,131)$ ] of overall VAM-related expenditures. These proportions are likely due to the differing implementation timelines for each component; while HCPS rolled out the new teacher observation in Year 2, it did not compute value-added scores for teachers (based on Year 2 student achievement data) until the beginning of Year 3. Thus, expenditures associated with the ongoing activity of computing VAM scores are found in Year 3 expenditure data even though the VAM scores were incorporated into teachers' Year 2 evaluations. By the third year of the grant, when ongoing activities were underway for both the teacher observations and VAM, ongoing expenditures far exceeded start-up expenditures for each component.

Exhibit 6 is followed by a detailed discussion of the start-up and ongoing activities that contribute to these overall expenditures. For each component of the evaluation system, we provide expenditure estimates by activity category and percentages of total component expenditure represented by each activity category.

#### **3.1. Teacher Observations**

From November 2009 through June 2012, quantifiable expenditures on the teacher observation component of the effective teaching initiative totaled \$21.7 million (\$112 per pupil), or about 30 percent of the total initiative expenditures reported during that time period (see Exhibit 5). In this section, we describe the start-up and ongoing activities included in our

expenditure estimates for each of the following categories of observation-related activities: design and implementation, peer and mentor observers, management and communications, and technology and data systems.

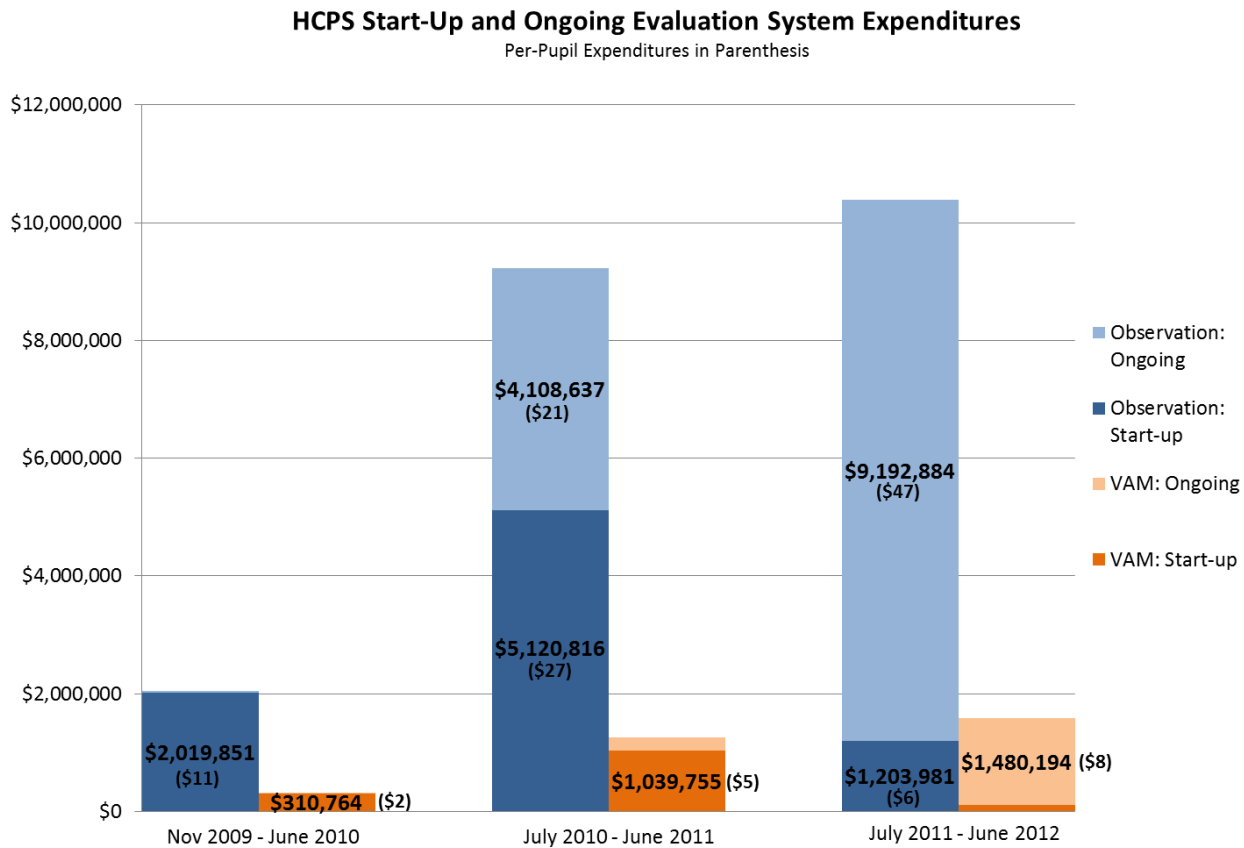
**Exhibit 5. HCPS Table of Start-Up and Ongoing Expenditures by Component**

Activity category	Overall Expenditures							% of total evaluation system expenditure	% of total effective teaching initiative expenditure*
	Nov. 2009–June 2010		July 2010–June 2011		July 2011–June 2012		Total		
	Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing			
Observations									
Design & implementation (rubric design, training)	\$20,226	\$0	\$3,691,650	\$0	\$0	\$524,580	\$4,236,456	20%	
Peer & mentor observers	\$0	\$0	\$0	\$3,637,802	\$0	\$8,122,558	\$11,760,360	54.3%	
Management & communications	\$912,879	\$30,333	\$797,916	\$344,868	\$0	\$316,740	\$2,402,736	11.1%	
Technology & data Systems	\$1,086,746	\$0	\$631,250	\$125,966	\$1,203,981	\$229,007	\$3,276,950	15.1%	
<b>Total spent in observations</b>	<b>\$2,019,851</b>	<b>\$30,333</b>	<b>\$5,120,816</b>	<b>\$4,108,637</b>	<b>\$1,203,981</b>	<b>\$9,192,884</b>	<b>\$21,676,502</b>		30.1%
Value-Added Model (VAM)									
Design & implementation (VARC contract)	\$0	\$0	\$537,046	\$0	\$0	\$457,713	\$994,759	31.5%	
Management & communications	\$276,186	\$4,425	\$373,157	\$12,461	\$0	\$225,011	\$891,241	28.2%	
Technology & data systems	\$34,578	\$0	\$129,552	\$0	\$110,322	\$152,671	\$427,124	13.5%	
Assessment development	\$0	\$0	\$0	\$199,670	\$0	\$644,799	\$844,469	26.7%	
<b>Total spent in VAM</b>	<b>\$310,764</b>	<b>\$4,425</b>	<b>\$1,039,755</b>	<b>\$212,131</b>	<b>\$110,322</b>	<b>\$1,480,194</b>	<b>\$3,157,593</b>		4.4%
<b>Total expenditures on evaluation system</b>	<b>\$2,330,615</b>	<b>\$34,759</b>	<b>\$6,160,571</b>	<b>\$4,320,768</b>	<b>\$1,314,303</b>	<b>\$10,673,078</b>	<b>\$24,834,095</b>		34.5%
Activity category	Per-pupil Expenditures								
	Nov. 2009–June 2010		July 2010–June 2011		July 2011–June 2011		Total		
	Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing			
Observations									
Design & implementation (rubric design, training)	\$0.1	\$0.0	\$19.2	\$0.0	\$0.0	\$2.7	\$22.0		
Peer & mentor observers	\$0.0	\$0.0	\$0.0	\$18.9	\$0.0	\$41.6	\$60.4		
Management & communications	\$4.9	\$0.2	\$4.1	\$1.8	\$0.0	\$1.6	\$12.6		
Technology & data Systems	\$5.8	\$0.0	\$3.3	\$0.7	\$6.2	\$1.2	\$17.0		
<b>Total spent in observations</b>	<b>\$10.7</b>	<b>\$0.2</b>	<b>\$26.6</b>	<b>\$21.3</b>	<b>\$6.2</b>	<b>\$47.0</b>	<b>\$112.0</b>		
Value-Added Model (VAM)									
Design & implementation (VARC contract)	\$0.0	\$0.0	\$2.8	\$0.0	\$0.0	\$2.3	\$5.1		
Management & communications	\$1.5	\$0.0	\$1.9	\$0.1	\$0.0	\$1.2	\$4.6		
Technology & data Systems	\$0.2	\$0.0	\$0.7	\$0.0	\$0.6	\$0.8	\$2.2		
Assessment Development	\$0.0	\$0.0	\$0.0	\$1.0	\$0.0	\$3.3	\$4.3		
<b>Total spent in VAM</b>	<b>\$1.7</b>	<b>\$0.0</b>	<b>\$5.4</b>	<b>\$1.1</b>	<b>\$0.6</b>	<b>\$7.6</b>	<b>\$16.3</b>		
<b>Per-pupil expenditures on evaluation system</b>	<b>\$12.4</b>	<b>\$0.2</b>	<b>\$32.0</b>	<b>\$22.4</b>	<b>\$6.7</b>	<b>\$54.6</b>	<b>\$128.3</b>		

\*The remaining 65.5% of effective teaching initiative expenditure is associated with the other components of the initiative such as professional development, revised career ladders, and performance-based compensation.

Source: Author calculations based on HCPS effective teaching initiative financial report and interviews with HCPS staff.

**Exhibit 6. HCPS Expenditures by Evaluation System Component**



Note: Overall expenditures less than \$300,000 are not displayed.

Source: Author calculations based on HCPS effective teaching initiative financial report and interviews with HCPS staff.

**Design and Implementation**

Expenditures associated with the design and implementation of the teacher observation component ranged from \$0.1 to \$19.2 per pupil per year between November 2009 and June 2012. This investment represents 20 percent of total expenditures on the observation component (see Exhibit 5).

\$20,226, or about 0.5 percent (\$20,226/\$4,236,456), of observation-related design and implementation expenditures involved contracting with Charlotte Danielson for the redesign of the observation rubric. Danielson’s work in helping to plan and develop the new rubric occurred in Year 1 and was entirely a start-up activity. However, the district plans to revisit and update the rubrics periodically.

Payments to Cambridge Education for training and calibration services provided in Years 2 and 3 make up the remainder of observation-related design and implementation expenditures. Training observers and ensuring inter-rater consistency of observers are essential pieces of an

effective, accurate, and fair observation and evaluation system. HCPS contracted Cambridge Education to develop and provide initial trainings to administrators, peers, and mentors in how to conduct the observations. To ensure consistency, each observer is joined by a Cambridge Education representative during two observations per year for a calibration. In Year 3, the district's Professional Development department took responsibility for providing these trainings.<sup>7</sup> Training and calibration of observers will be ongoing yearly activities.

In addition to payments to Charlotte Danielson and Cambridge Education, HCPS has made investments that are not easily estimated and are therefore not included in our estimates of the design and implementation expenditures between November 2009 and June 2012. These less readily accessible investments include time spent on peer and mentor interviewing and selection, train-the-trainer sessions conducted for district content supervisors and area leadership directors, and supports deployed to schools to ease the burden on school administrators. These will all be ongoing activities. While there were some start-up expenditures associated with developing observer training, the majority of quantifiable and less-readily accessible expenditures related to observers are associated with ongoing activities.

### *Peer and Mentor Observers*

Teacher observations in HCPS are conducted by principals, assistant principals, peer evaluators (for experienced teachers), and mentor evaluators (for new teachers).<sup>8</sup> Teachers are observed between four and 11 times per year based on their previous year's performance. First-year teachers are observed nine times over the course of the year.<sup>9</sup> Peers and mentors serve one- to three-year terms and are recruited from the district's teaching ranks.<sup>10</sup> They remain on the payrolls of the schools from which they are on leave and receive a stipend of \$5,000 per year for serving in the role. Therefore, the additional yearly cost to the district for each peer or mentor is \$5,000 plus the salary and benefits of a replacement teacher to take over their classroom while

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<sup>7</sup> During the first year of observer trainings (2010–11), Cambridge Education delivered 45- to 60-hour training sessions to 798 peers, mentors, and administrators. The number of training sessions has declined in subsequent years, but some training has continued, as there is approximately a 33-percent yearly turnover rate for peers and mentors. The costs of in-house observer trainings, now provided by the Professional Development department, are contained in the department budget, not in the effective teaching initiative budget, and thus are not captured in this estimate. District staff reported that these trainings will cost about \$1,000 per year, as the main expense is payment for the trainer (trainees do not receive additional payment for attending if the training is held on a regular work day).

<sup>8</sup> One hundred percent of peer evaluators' time is dedicated to observation and the related pre- and post-conferencing. Mentors are mainly dedicated to providing professional development to their mentees. However, they spend about 25 percent of their work year observing and conferencing with new teachers as a part of their formal evaluations.

<sup>9</sup> Curtis, R. (March, 2012). *Building it together: The design and implementation of Hillsborough County Public Schools' teacher evaluation system*. Washington, D.C.: The Aspen Institute.

<sup>10</sup> The number of peer evaluators has increased as the district has rolled out evaluations for different types of school staff, and is expected to level out at about 140 evaluators. Similarly, the number of mentors has increased each year as the initiative is rolled out, and it is expected to stabilize at 90 to 100 mentors.

they are on special assignment.<sup>11</sup> The district will incur these teacher replacement and stipend costs on a yearly basis.

Over the first three years of the grant, between \$18.9 and \$41.6 per pupil per year, or 54.3 percent of all expenditures made on the teacher observation component, were spent on supplying peer and mentor observers to the field (Exhibit 5).

As they did in the district's previous evaluation system, school leaders perform observation and evaluation duties as a part of their regular work responsibilities. However, due to the increased number of observations and more time-intensive preparation and feedback processes, the new observation system is most likely consuming more of administrators' work hours, resulting in a shift of some of their other responsibilities. HCPS's 678 school leaders conducted a total of 18,107 formal teacher observations and 15,623 informal teacher observations in 2011–12. Including related scheduling, preparation, and conferencing, formal observations take about 2-3 hours while informal observations take about two hours. We are not able to capture the dollar value of this increased time pressure on school leaders in our expenditure analysis at this point.<sup>12</sup> For more information about observer time, see Appendix A.

### *Management and Communications*

Between November 2009 and June 2012, reported management and communications expenses for the observation component ranged from \$1.60 to \$5.90 (\$4.10 + \$1.80) per pupil per year, or about 11.1 percent of the total observation-related expenditures (Exhibit 5). These expenditures cover initiative management and fiscal oversight personnel, as well as two consultants hired for planning, change management, and communications.

To plan and implement the effective teaching initiative, HCPS assembled a management team in the central office. The project director, director of professional development, director of evaluation and compensation, and director of communications and project management were all directly involved with the observation component. While they all hold dual roles in the district, the time these managers spent on the effective teaching initiative was entirely funded by philanthropic sources, with the exception of the director of communications and project management, who was funded by both philanthropic and RTTT grants. The first year of the grant largely involved start-up activities. Observation and formal evaluation began in Year 2. Thus, initiative directors were associated with start-up activities in Year 1 and ongoing activities in Years 2 and 3.

During Year 2, HCPS engaged BCG to assist with planning of the new evaluation system, which was entirely a start-up activity. For all three years, HCPS has contracted with Hill & Knowlton

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<sup>11</sup> Replacements for peers and mentors tend to be newer teachers who therefore earn lower salaries.

<sup>12</sup> We are currently in the process of analyzing data gathered by the RAND/American Institutes for Research (RAND/AIR) evaluation team on the time allocation of principals and teachers, from which we may be able to estimate these costs incurred by the district.

Strategies to assist with external communication and change management. Like the initiative directors, Hill & Knowlton was largely engaged in start-up activities in Year 1 and ongoing activities in Years 2 and 3. BCG and Hill & Knowlton were entirely funded by Gates Foundation grant dollars.

Fiscal oversight of the grant is provided by the Hillsborough Education Foundation (HEF), and internal fiscal management and reporting is handled by two HCPS accountants assigned to the project. Unlike the initiative directors and Hill & Knowlton, HEF and the accountants have primarily been engaged in ongoing activities since the beginning of the grant, such as compiling and reviewing fiscal reports and maintaining the budget and the flow of money between the two organizations. This fiscal management and oversight is entirely funded by philanthropic grant dollars.

HCPS made investments in management and communications activities that were not easily estimated as part of our current data collection effort. These include expenditures by the district for management support for the observation component by existing district departments, such as Information Services, Human Resources, and Federal Programs. In particular, support has been provided by the district communications officer and his staff.<sup>13</sup>

### *Technology and Data Systems*

Investments in technology to support the observation component ranged from \$4.00 (\$3.30 + \$0.70) to \$7.40 (\$6.20 + \$1.20) per pupil year, or 15.1 percent of overall reported initiative spending from November 2009 through June 2012 (Exhibit 5). A primary component of the new observation system is the online platform through which school administrators, peer and mentor evaluators, and teachers post and access observation ratings, evaluations, comments, and other documentation. These initial technology investments include resources to plan and build the system and to finance a team of programmers dedicated to its ongoing yearly maintenance.

HCPS has invested in laptops for the peers and mentors to capture data during observations. Thus far, these expenditures have been entirely start-up due to the initial purchase of the computers. However, the district will incur maintenance and replacement costs for these laptops in the future.

### **3.2 Value-Added Model (VAM)**

From November 2009 through June 2012, we estimate that expenditures on VAM totaled \$3.2 million or \$16.3 per pupil. This investment is about 4 percent of the total teacher effectiveness initiative expenditures reported during that time period (see Exhibit 5). In this section, we describe the start-up and ongoing activities included in our expenditure estimates for

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<sup>13</sup> While this additional effort will not be reported in the effective teaching initiative budget because it comes out of the regular work day and is part of the job responsibilities for certain district staff, this investment should still be considered, as it generally means time away from other activities and responsibilities staff could be engaged in (or simply an increase in their workload, possibly causing stress and fatigue).

each of the following categories of VAM-related activities: design and implementation, management and communications, technology and data systems, and assessment development.

HCPS contracted with the University of Wisconsin's Value Added Research Center (VARC) in the summer of 2010 and began roster verification in March 2011. The first value-added calculations, based on 2010–11 achievement data, were produced in the fall of 2011. Unless otherwise noted below, it is understood that activities occurring in Years 1 and 2 are start-up, and activities occurring in Year 3 are ongoing.

### *Design and Implementation*

The district's payment to VARC ranged between \$2.30 and \$2.80 per pupil per year over the period November 2009 to June 2012. This represents 31.5 percent of overall expenditure on the VAM. (See Exhibit 5.) Contracted in 2010 and funded entirely with philanthropic grant dollars, VARC was engaged in Year 2 start-up activities such as reviewing the district's data sources and developing VAM. VARC began ongoing activities in September of Year 3, when the first value-added scores were generated and incorporated into the Year 2 evaluations. While VARC's role in the HCPS value-added calculation process will likely decline over the next few years as the model is refined and VAM is incorporated into the district's way of doing business, HCPS expects to continue to rely on VARC for each year's calculations.

### *Management and Communications*

Between November 2009 and June 2012, HCPS reported management and communications expenses related to VAM that ranged from \$1.20 to \$2.00 (\$1.90 + \$0.10) per pupil, or 28.2 percent of the total expenditures on the VAM (Exhibit 5). As with the observation component, several key members of the effective teaching initiative management team are directly involved with VAM, including the project director, director of assessment and performance management, and director of communications and project management. Also included in the estimate of management expenditures is a 25-percent full-time equivalent (FTE) employee responsible for coordinating assessments. BCG provided planning support and Hill & Knowlton have provided communications and change management support for VAM. As mentioned above, the HEF and two district accountants have provided ongoing fiscal management to all components of the initiative since the beginning of the grant in November 2009.

### *Technology and Data Systems*

Between November 2009 and June 2012, reported expenditures on technology and data systems for VAM ranged from \$0.20 to \$1.40 (\$0.60 + \$0.80) per pupil per year, or 13.5 percent of all VAM-related expenditures (Exhibit 5). A five-person team of programmers within the district's Information Services department is responsible for coordinating with the VARC team. They have been involved in the start-up effort of planning and building the data systems supporting VAM, and will continue to provide ongoing yearly maintenance support. Also included in our estimate of



technology expenditure on the VAM component is a start-up investment in server capacity necessary for operating the data systems associated with VAM.

Teacher pay-for-performance, managed through the district's TIF grant, requires student-teacher data linkages and a data warehouse. Due to their similar goals, HCPS has aligned efforts made through TIF and effective teaching initiative. The district contracted the Convergence Consulting Group to maintain the data warehouse of teacher scores. While the contractor is TIF funded, its efforts contribute to the VAM component of the effective teaching initiative. Expenditures made on the Convergence Consulting Group are not included in effective teaching initiative financial reports and thus are not captured in our estimate of the total expenditures related to VAM. Also not captured in our estimates is a supervisor in the Human Resources department who is responsible for managing the roster verification process and the student-teacher data link.

### *Assessment Development*

As part of its ongoing work to develop and maintain valid pre- and post-measures of student performance, HCPS spent between \$1.00 and \$3.30 per pupil per year, or 26.7 percent of overall VAM expenditure, on assessment development (Exhibit 5). Not included in this estimate is the considerable test development work done by the Assessment department and district curriculum supervisors to make sure aligned assessments exist for every course.

### **3.3 Student Surveys**

HCPS has no current plans to incorporate student surveys into its formal teacher evaluation process. The district is planning to perform a small-scale pilot of student surveys with volunteer teachers. However, the results would be used solely for professional development purposes.

## IV. Memphis City Schools (MCS)

This section of the report focuses on MCS findings and is organized in a manner similar to the previous section. First we provide a brief introduction and then present details of our expenditure estimates for the various activities associated with the three components of the teacher evaluation system.

### *1. Introduction*

In 2009, MCS received a grant for up to \$90 million from the Gates Foundation to implement the effective teaching initiative, covering the period from November 2009 to June 2016. MCS plans to contribute approximately \$52 million from local funds. Exhibit 7 shows spending on the overall effective teaching initiative between November 2009 and June 2012 and how much of this was devoted to implementing the teacher evaluation system, total district operating expenditures, and student enrollment for MCS. Exhibit 8 breaks down the total expenditures by source.

From the receipt of the Gates Foundation grant in November 2009 through June 2012, MCS spent \$8.5 million in total, or between \$8.00 and \$51.00 per pupil per year, on the effective teaching initiative evaluation system (Exhibit 7). We estimate that the teacher evaluation system represents 25.8 percent of the total expenditures made on the effective teaching initiative during that time period (Exhibit 9). Total evaluation system expenditures were less than 0.5 percent of the district's operating expenditures in each year. Evaluation system expenditures were less than one-half of 1 percent of district teacher compensation expenditures in 2010–11, and about 1 percent in 2011–12 (see Exhibit 7). Total effective teaching initiative expenditures were less than 2 percent of the district's operating expenditures in each year.

**Exhibit 7. MCS Overview Table of Expenditures, District Size, and Teachers Included in the Effective Teaching Initiative Evaluation System**

Academic Year	Nov 2009–June 2010	July 2010–June 2011	July 2011–June 2012
<b>Overall actual expenditure</b>			
Teacher evaluation system	\$815,275	\$2,238,061	\$5,432,590
Effective teaching initiative total budget	\$4,469,889	\$9,848,217	\$18,551,824
District*	\$1,287,950,050	\$1,329,431,661	\$1,325,793,560
Teacher compensation*†	\$514,444,815	\$531,013,780	\$529,560,617
<b>Per-pupil expenditure</b>			
Teacher evaluation system	\$8	\$21	\$51
Effective teaching initiative total budget	\$42	\$92	\$175
District*	\$12,032	\$12,465	\$12,508
Teacher compensation*	\$4,806	\$4,979	\$4,996
<b>Percentages of District Expenditures</b>			
Teacher evaluation system	0.1%	0.2%	0.4%
Effective teaching initiative total budget	0.3%	0.7%	1.4%
<b>Percentages of overall teacher compensation</b>			
Teacher evaluation system	0.2%	0.4%	1.0%
Effective teaching initiative total budget	0.9%	1.9%	3.6%
<b>District size</b>			
Student enrollment	107,041	106,656	105,992
Classroom full-time teachers**	7,248	7,027	7,018
<b>Observation component</b>			
Classroom teachers observed with new system***	Not yet implemented	Not yet implemented	6,206
Instructional support staff observed with new system****	Not yet implemented	Not yet implemented	692
Observations of classroom teachers conducted with new system***	Not yet implemented	Not yet implemented	26,955
Observations of instructional support staff conducted with new system****	Not yet implemented	Not yet implemented	2,576
<b>VAM component</b>			
Number of classroom teachers assigned VAM score based on school average	0	0	4,352
Number of classroom teachers receiving a unique VAM score	2,028	1,973	1,854
<b>Student survey component</b>			
Classroom teachers included in student surveys (Tripod)	2,597	Not administered	4,856
Students included in survey Component	45,355	Not administered	Data not available
Total number of student surveys administered	45,355	Not administered	185,667

\* Overall and per-pupil district expenditures and teacher compensation are for the entire school year (July 2009–June 2010).

\*\* Includes elementary, secondary, and other full-time teachers as defined in the MCS 2012-13 budget.

\*\*\* Classroom teachers include general education and exceptional education (self-contained or inclusion). Staff who have been in the district fewer than 120 days do not receive an evaluation score and are thus not included.

\*\*\*\* Instructional support staff include library/media specialists, guidance counselors, psychologists, social workers, and instructional facilitators. Staff who have been in the district fewer than 120 days do not receive an evaluation score and are thus not included.

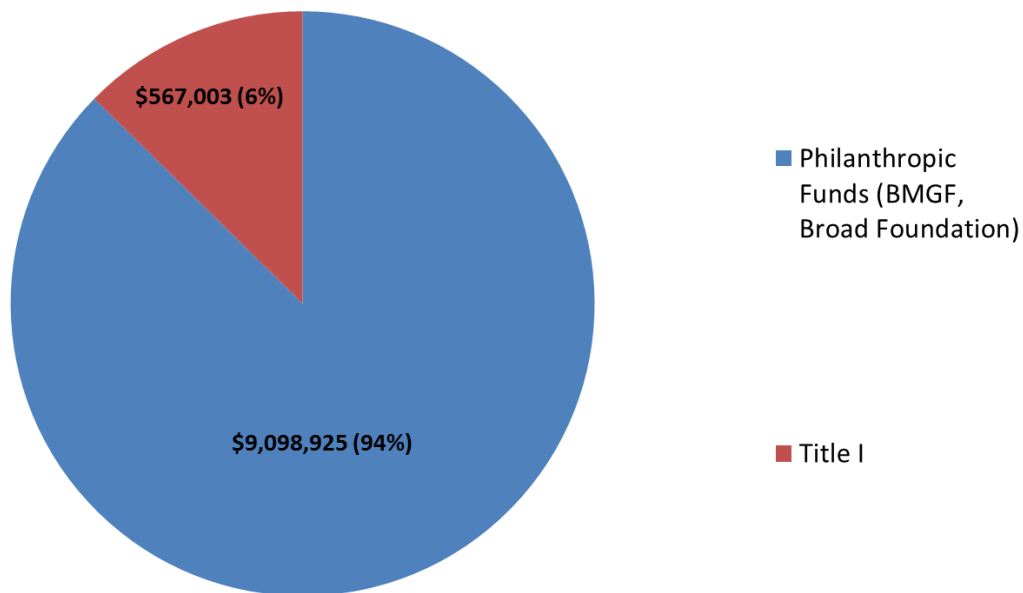
† Teacher compensation figures do not include compensation for instructional support personnel who are being evaluated under the new system and thus included in the expenditure estimates. The 2010–11 and 2011–12 teacher compensation figures were estimated by applying the proportion of 2009–10 teacher compensation to 2009–10 district expenditure to the 2010–11 and 2011–12 district expenditure figures.

Source: Author calculations based on expenditure figures from the MCS effective teaching initiative financial report, district operating expenditures, and student and teacher numbers provided by the school district.

### Exhibit 8. MCS Effective Teaching Initiative Evaluation System Expenditure by Funding Source

Observations, VAM, and Student Surveys  
November 2009–June 2012

Total Evaluation Expenditures: \$8,485,926



Source: Author calculations based on MCS effective teaching initiative financial report and interviews with MCS staff.

As shown in Exhibit 8, the activities related to the effective teaching initiative evaluation system have been almost exclusively funded through philanthropic sources. In addition to the

Gates Foundation grant, MCS has received support for the effective teaching initiative from the Broad Education Foundation in the form of two full-time staff members. Philanthropic funding represents 94 percent of the total amount spent on the evaluation system. The remaining 6 percent were spent out of the district's Title I budget and used to pay teacher leaders (called Instructional Facilitators) who assist principals with the observation process.

## ***2. Prior Related Investment***

Although this analysis is focused on expenditures between November 2009 and June 2012, it is important to consider efforts prior to this initiative that helped create the supporting conditions for the effective teaching initiative. Though we do not have the data necessary to quantify these expenditures, they laid the foundation for the initiative and directly contributed to many current efforts around teacher evaluation.

After undergoing an administration change in 2008, MCS embarked upon its Cradle to Career initiative, a comprehensive reform effort to change conditions in the district to provide greater learning opportunities for all students. District officials describe the effective teaching initiative as fitting into this trajectory of reform. The current district administration has also made a concerted effort to strengthen its relationship with the Memphis Education Association (MEA);<sup>14</sup> this partnership has reportedly been critical to the effective teaching initiative.

In particular, the Measures of Effective Teaching (MET) project provided a launching pad for the teacher evaluation system implemented under the effective teaching initiative. MET allowed the district to investigate, pilot, and validate possible metrics of teacher effectiveness. In particular, as part of the MET project, the district piloted a student perception survey called Tripod (developed by Ronald Ferguson at Harvard University and distributed by Cambridge Education), which asked students to rate their teachers on observable practices in the classroom. Additionally, efforts made to recruit teachers for the student survey component of the MET project contributed directly to communication and teacher buy-in efforts for the student survey component of the effective teaching initiative. Another investment made by MCS shortly before the effective teaching initiative was implemented was an upgrade to the student information system.<sup>15</sup> The new, more sophisticated system enabled the district to link student and teacher data, which became essential for the new evaluation system.

In addition to the aforementioned district investments, the TVAAS, paid for and operated by the state in the past 20 years, has been a large cost-saving factor for MCS. In addition to funding development of TVAAS, the state continues to pay for its yearly operation as well as related training and communication materials. Thus, for core grade levels and subjects, MCS has been able to use TVAAS scores as the growth component of its VAM in the effective teaching initiative without incurring the costs often associated with the building and operation of such

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<sup>14</sup> The teachers' union.

<sup>15</sup> Upgraded to a Pearson product—Chancery SMS.

models. However, MCS does bear costs in the form of administrator and teacher time associated with administering and managing tests used to calculate TVAAS scores. These tests are used for several monitoring and decision-making purposes beyond evaluating teachers and would still be administered in the absence of the effective teaching initiative.

MCS staff time invested in developing the application for Gates funding contributed directly to planning and preparing efforts for the effective teaching initiative that occurred prior to the start of the Gates grant, but is not captured in our analysis. A cross-functional team of about 10–15 upper-level management staff spent about 10–15 hours per week per person for about three months working on the application. A five- to six-person team from the Parthenon Group supported MCS for four months throughout the application phase. Payments to Parthenon for this work were made directly by the Gates Foundation and occurred before the start of the Gates grant; thus they are not captured in our analysis.

A final factor associated with the application phase was its influence on state policy. In its application for a federal Race to the Top grant, Tennessee drew heavily from the MCS application to the Gates Foundation for the effective teaching initiative grant. So, although MCS is considered by many to be at the forefront of teacher effectiveness reforms in the state and has thus likely incurred certain higher costs associated with pioneering and developing pieces of the initiative from scratch, it had the opportunity to have an early impact on state policies related to teacher effectiveness. Although we will not attempt to quantify the complex interactions between state and district policy, it is important to consider the enabling or hindering influence that the wider policy context may have had on the district's ability to develop and implement the effective teaching initiative.

### *3. Investments Across the Evaluation System Components*

Several of the initiative expenditures between November 2009 and June 2012 supported the evaluation system or the effective teaching initiative as a whole but cannot be separately attributed to the observation, VAM, or student survey components. To calculate expenditure estimates for the teacher observation, VAM, and student survey components, we apportioned these common expenditures across each evaluation system component, according to the share of overall effective teaching initiative expenditure that each component represents. (For more information on this process, please see the Methodology section.) However, for ease and clarity of explanation, we describe these apportioned expenditures in this section, rather than repeat the same description for each component.

The investments across components are classified in three categories: design and implementation, management and communication, and other related activities.

### 3.1. Design and Implementation Expenditures Spread Across All Components

MCS holds a summer professional development session for all teachers in the district, at which the new teacher evaluation system was addressed in Years 2 and 3. This training is attributed to all three components and we have apportioned the \$45,000 expense across the design and implementation category of the three evaluation system components accordingly.

### 3.2. Management and Communication Expenditures Spread Across All Components

To lead the development, implementation, and operation of the effective teaching initiative, MCS established the Department of Teacher Talent and Effectiveness (DTTE). The executive director of the DTTE spent 100 percent, 50 percent, and 35 percent of her time managing the evaluation system in Years 1, 2, and 3 of the initiative, respectively. Until the spring of Year 3, the teacher effectiveness measure coordinator reported that she and her research assistant spent 100 percent of their time on activities associated with each component of the evaluation system. The initiative's teacher liaison who oversaw the initiative ambassadors, among other activities related to the interface between the effective teaching initiative and teachers, spent approximately 75 percent of her time on activities related to the evaluation system. The coordinator of teacher career management spent approximately 10 percent of his time on budgeting activities associated with the three components of the evaluation. In her role to document the challenges and the progress of the initiative, the effective teaching initiative archivist spent approximately 75 percent of her time on activities related to the evaluation system. With the exception of the archivist, who has been engaged in primarily ongoing activities since Year 1 of the initiative, the other staff members were engaged in start-up activities in Years 1 and 2 and ongoing activities in Year 3. These time estimates were gathered through interviews with central office staff. In addition to expenditures driven by staff time, effective teaching initiative staff traveled to conferences and other districts to exchange knowledge and experience around the reform effort; this is an ongoing activity.

Although we have not been able to quantify it for the purposes of this analysis, a description of effective teaching initiative management would be incomplete without mentioning the time spent on leadership and advising by senior district staff, such as the superintendent and his executive cabinet. Similarly, the MEA has devoted time and energy to the initiative. Although MEA staff members are not paid by the district, their efforts are integral to the planning, implementation, and communication of the effective teaching initiative.

From the beginning of the effective teaching initiative, MCS has relied on teacher working groups to provide input on the development and ongoing implementation of the evaluation system as well as a means to gain teacher buy-in to the initiative as a whole. The working groups were primarily engaged in start-up activities in Years 1 and 2 and ongoing activities in Year 3. The district has also recruited one or two teachers from each school to serve as ambassadors to the initiative by disseminating information, answering questions, and generally acting as liaisons

between the school sites and the DTTE. These ambassadors were engaged in start-up activities in Year 2 and ongoing activities in Year 3. The working groups and ambassadors present costs to MCS in the form of stipends paid to teachers as compensation for serving in either role. To facilitate implementation and communication with teachers, the district produced a manual to explain the various processes involved in the observations, VAM, and student surveys; this was a start-up effort. Finally, several consultants provided project management and communications support to the district, engaging in primarily start-up activities in Years 1 and 2 and ongoing activities in Year 3.

Management and communication costs are not only spread across the components of the evaluation system, but also spread across the entire effective teaching initiative. These costs include salaries and benefits for a full-time accountant and two full-time administrative assistants, who have been engaged in ongoing activities since Year 1 of the grant. Ongoing fiscal oversight of the Gates grant is provided by the MCS Foundation, for which salaries, benefits, and office overhead are billed to the effective teaching initiative. The initiative staff has also provided professional development for the MCS school board on the reforms. In Year 2, MCS engaged the Parthenon Group to assist with fiscal sustainability planning for the effective teaching initiative; this was primarily an ongoing effort.

### **3.3. Other Expenditures Spread Across All Components**

Finally, several costs that we have classified as “other” are attributable to each evaluation system component. Overhead costs associated with purchasing and maintaining DTTE equipment, furniture, and supplies are considered start-up expenses in Year 1 and ongoing expenses in Years 2 and 3.

In the following sections, delineated by evaluation system component, we provide expenditure estimates by activity category and percentages of the total component expenditure represented by each activity category. The activities described earlier, which are common to all three components, are not described in the following sections to avoid repetition, but are factored into the expenditure estimates given below.

## **4. Investment by Evaluation System Component**

This section describes the major activities (and associated expenditures) undertaken by MCS to plan, implement, and operate each component of the evaluation system between November 2009 through June 2012.

Exhibit 10 provides an overview of the start-up and ongoing expenditures associated with VAM, observation, and the student survey components during our time periods of focus. The majority of expenditures on each component of the evaluation system in the first two years of the grant were associated with start-up activities. In Year 3, start-up expenses decreased to approximately 11 percent [ $\$482,056 / (\$482,056 + \$3,829,229)$ ] for observations, 64 percent



[\$30,815/(\$30,815 + \$17,342)] for VAM, and 5 percent [\$49,784/(\$49,784 + \$1,023,363)] for student survey related activities (Exhibit 9).

Exhibit 10 is followed by a detailed discussion of the start-up and ongoing activities contributing to these overall expenditures.

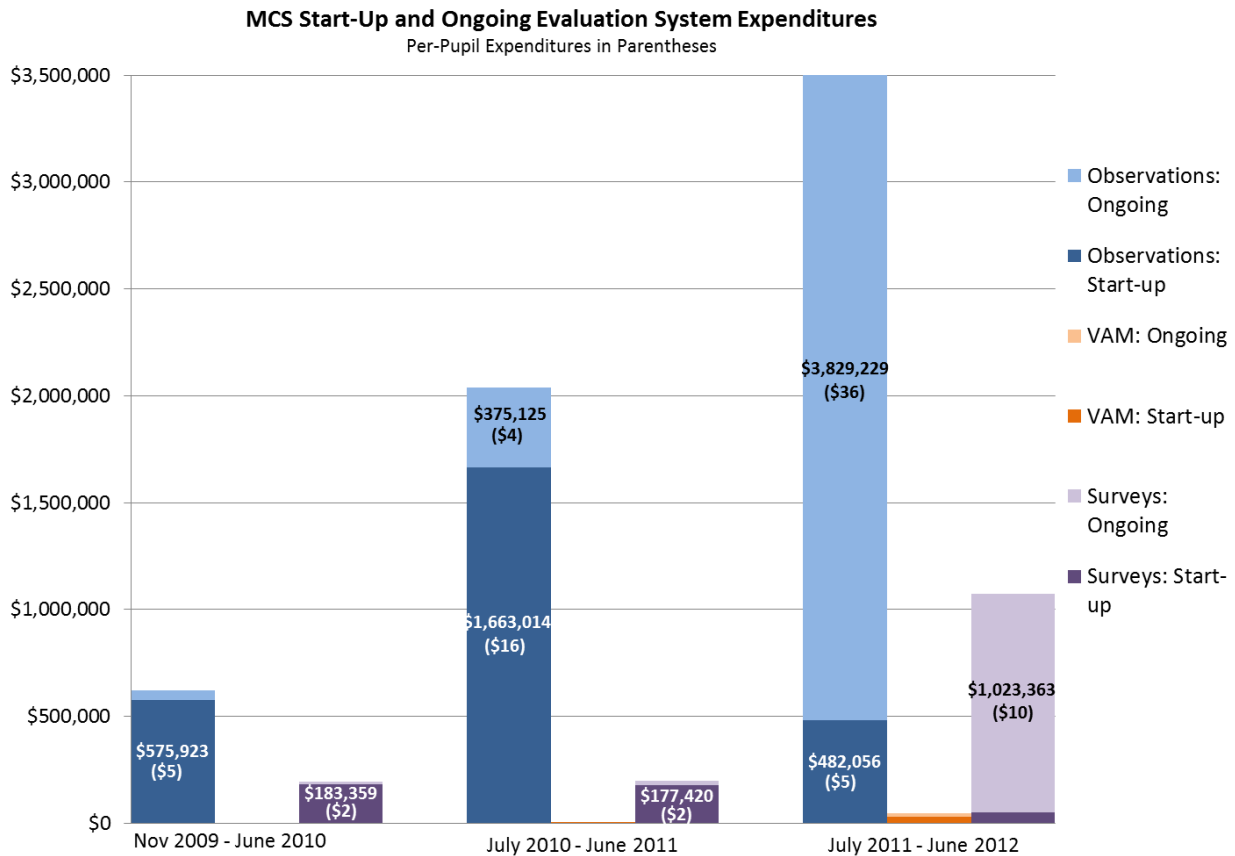
### Exhibit 9. MCS Table of Start-Up and Ongoing Expenditures by Component

Activity category	Overall Expenditures							% of total evaluation system expenditure	% of total effective teaching initiative expenditure*
	Nov. 2009–June 2010		July 2010–June 2011		July 2011–June 2012		Total		
	Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing			
<b>Observations</b>									
Design and implementation (training & calibration)	\$0	\$0	\$0	\$6,713	\$0	\$1,186,707	\$1,193,420	17.1%	
Observers	\$0	\$0	\$0	\$0	\$0	\$1,072,601	\$1,072,601	15.4%	
Management & communications	\$559,503	\$43,954	\$577,737	\$333,960	\$118,218	\$1,143,811	\$2,777,182	39.8%	
Technology & data systems	\$0	\$0	\$869,031	\$0	\$363,839	\$396,526	\$1,629,396	23.4%	
Other (data collection, overhead)	\$16,420	\$0	\$216,246	\$34,452	\$0	\$29,584	\$296,701	4.3%	
<b>Total spent in observations</b>	<b>\$575,923</b>	<b>\$43,954</b>	<b>\$1,663,014</b>	<b>\$375,125</b>	<b>\$482,056</b>	<b>\$3,829,229</b>	<b>\$6,969,300</b>		21.2%
<b>Value-Added Model (VAM)</b>									
Design and implementation (assessment development)	\$0	\$0	\$0	\$0	\$9,745	\$380	\$10,125	20.5%	
Management & communications	\$0	\$0	\$1,179	\$0	\$19,729	\$12,536	\$33,443	67.8%	
Technology & data systems	\$0	\$0	\$0	\$0	\$1,342	\$4,035	\$5,377	10.9%	
Other (data collection, overhead)	\$0	\$0	\$0	\$0	\$0	\$391	\$391	0.8%	
<b>Total spent in VAM</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,179</b>	<b>\$0</b>	<b>\$30,815</b>	<b>\$17,342</b>	<b>\$49,336</b>		0.2%
<b>Student Surveys</b>									
Design and implementation	\$120,000	\$0	\$60,000	\$382	\$0	\$493,360	\$673,741	45.9%	
Management & communications	\$61,989	\$12,039	\$43,568	\$18,985	\$19,729	\$430,873	\$587,183	40.0%	
Technology & data systems	\$0	\$0	\$61,559	\$0	\$30,055	\$90,377	\$181,991	12.4%	
Other (data collection, overhead)	\$1,370	\$0	\$12,293	\$1,958	\$0	\$8,752	\$24,373	1.7%	
<b>Total spent in student surveys</b>	<b>\$183,359</b>	<b>\$12,039</b>	<b>\$177,420</b>	<b>\$21,325</b>	<b>\$49,784</b>	<b>\$1,023,363</b>	<b>\$1,467,289</b>		4.5%
<b>Total expenditures on evaluation system</b>	<b>\$759,282</b>	<b>\$55,993</b>	<b>\$1,841,612</b>	<b>\$396,449</b>	<b>\$562,655</b>	<b>\$4,869,934</b>	<b>\$8,485,926</b>		25.8%
Activity category	Per-pupil Expenditures								
	Nov. 2009–June 2010		July 2010–June 2011		July 2011–June 2011		Total		
	Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing			
<b>Observations</b>									
Design and implementation (training & calibration)	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$11.2	\$11.3		
Observers	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.1	\$10.1		
Management & communications	\$5.2	\$0.4	\$5.4	\$3.1	\$1.1	\$10.8	\$26.1		
Technology & data systems	\$0.0	\$0.0	\$8.1	\$0.0	\$3.4	\$3.7	\$15.3		
Other (Data collection, overhead)	\$0.2	\$0.0	\$2.0	\$0.3	\$0.0	\$0.3	\$2.8		
<b>Total spent in observations</b>	<b>\$5.4</b>	<b>\$0.4</b>	<b>\$15.6</b>	<b>\$3.5</b>	<b>\$4.5</b>	<b>\$36.1</b>	<b>\$65.6</b>		
<b>Value-Added Model (VAM)</b>									
Design and implementation (assessment development)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.1		
Management & communications	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.1	\$0.3		
Technology & data systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1		
Other (data collection, overhead)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0		
<b>Total spent in VAM</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.3</b>	<b>\$0.2</b>	<b>\$0.5</b>		
<b>Student Surveys</b>									
Design and implementation	\$1.1	\$0.0	\$0.6	\$0.0	\$0.0	\$4.7	\$6.3		
Management & communications	\$0.6	\$0.1	\$0.4	\$0.2	\$0.2	\$4.1	\$5.5		
Technology & data systems	\$0.0	\$0.0	\$0.6	\$0.0	\$0.3	\$0.9	\$1.7		
Other (data collection, overhead)	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.1	\$0.2		
<b>Total spent in student surveys</b>	<b>\$1.7</b>	<b>\$0.1</b>	<b>\$1.7</b>	<b>\$0.2</b>	<b>\$0.5</b>	<b>\$9.7</b>	<b>\$13.8</b>		
<b>Per-pupil expenditures on evaluation system</b>	<b>\$7.1</b>	<b>\$0.5</b>	<b>\$17.3</b>	<b>\$3.7</b>	<b>\$5.3</b>	<b>\$45.9</b>	<b>\$79.9</b>		

\*The remaining 74.2% of effective teaching initiative expenditure is associated with the other components of the initiative such as professional development, revised career ladders, and performance-based compensation.

Source: Author calculations based on MCS effective teaching initiative financial report and interviews with MCS staff.

**Exhibit 10. MCS Expenditures by Evaluation System Component**



Note: Overall expenditures less than \$200,000 and per-pupil expenditures less than \$2.00 are not displayed.

Source: Author calculations based on MCS effective teaching initiative financial report and interviews with MCS staff.

**4.1. Teacher Observations**

Expenditures on the observation component of the effective teaching initiative totaled \$7.0 million, or \$65.6 per pupil, over the period from July 2009 to June 2012 (Exhibit 9). This expenditure represents 21.2 percent of the total initiative expenditures reported during that time period (Exhibit 9). In this section, we describe the start-up and ongoing activities included in our expenditure estimates for the following categories of observation-related activities: design and implementation, observers (for the observation component only), management and communications, technology and data systems, and other.

**Design and Implementation**

Insight Education Group helped MCS develop and pilot the rubric for classroom observations, and trained and calibrated observers. The consulting firm was involved in start-up

activities in Years 1 and 2, and in ongoing activities in Year 3 when MCS rolled out its new observation system. Between \$0.10 and \$11.20 per pupil per year, or about 17.1 percent of the overall expenditure on teacher observations between November 2009 and June 2012, was spent on these activities (Exhibit 9).

### *Observers*

Teacher observations are conducted primarily by principals and assistant principals; however, other school- and district-level staff members do assist with the activity to take some of the burden off of school leaders. Beginning in Year 3 with the roll-out of the new teacher observation, MCS employed 80 school-based teacher leaders called Instructional Facilitators to conduct teacher observations. Data from the district's observation data system suggest that each of these Instructional Facilitators spent an average of 32 hours on classroom observations in 2010–11, including time spent preparing and providing feedback to teachers (see Appendix B). MCS spent \$10.10 per pupil in Year 3, or 15.4 percent of overall observation-related expenditure between November 2009 and June 2012, on Instructional Facilitators (Exhibit 9).

The majority of teacher observations are conducted by school leaders. Principals spent approximately 114 hours and assistant principals spent approximately 93 hours on classroom observations in 2011-12, including time spent preparing and providing feedback to teachers (see Appendix B). Time spent on observation by principals and assistant principals is not captured in our observer expenditure estimate. Although teacher evaluation is a typical job responsibility of school leaders, and school leader compensation for time spent conducting observations is not included in the effective teaching initiative financial reports, they may be spending more time on teacher observation under the new evaluation system than they were previously. This time pressure could crowd out other school leadership activities, presenting an indirect cost to the district. Appendix B details time spent on observation by staff type.

### *Management and Communications*

During the first three years of the grant, between \$5.60 (\$5.20 + \$0.40) and \$11.90 (\$10.80 + \$1.10) per pupil per year, or 39.8 percent of all expenditures on the observation component between November 2009 and June 2012, were spent on the costs of managing and communicating the teacher observation effort (Exhibit 9).

One full-time manager oversaw the development of the teacher observation process and continues to manage the ongoing implementation of the observations. Another DTTE member has provided full-time support to the observation process, focusing on training principals and teachers on the observation rubric. Both of these staff members were engaged in start-up activities in Years 1 and 2 and ongoing activities in Year 3; Year 3 was the first year of implementation of the new teacher observation system. A Broad Resident managed the development<sup>16</sup> and implementation

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<sup>16</sup> Development of the Web-based evaluation tool was done by Randa Tower, an education software firm.

of a Web-based application used by observers and teachers to enter and access observation schedules, data, teacher self-assessments, and teacher professional growth and support plans. She was engaged in ongoing activities in Years 2 and 3.

### *Technology and Data Systems*

During the first three years of the grant, between \$7.10 (\$3.40 + \$3.70) and \$8.10 per pupil per year, or 23.4 percent of all expenditures made on the observation component between November 2009 and June 2012, were associated with building and implementing technology tools to facilitate the evaluation process and house evaluation data (Exhibit 9).

In Year 1, MCS began working on a software system—the Online Principal Teacher Evaluation System (OPTES)—to facilitate the recording and sharing of evaluation (primarily observation-related) data. However, this effort was ultimately discarded. In Year 2, the district changed course from development of OPTES to work with Randa Tower, a developer of technology-based education tools. Work on OPTES was a start-up cost, as it was part of the development process that helped the district progress to its current state.

Although expenditures resulting from work on OPTES, the Randa Tower Web-based software, Tableau, and the district's newly purchased server were made in support of the evaluation system overall, MCS staff reported that between 80 and 95 percent of their expenditures can be attributed to the observation component. Teachers and principals rely heavily on these systems for scheduling, data entry, and the sharing of information pertaining to classroom observations and subsequent conferences and reflections. Simply in terms of the volume of data housed, the observation puts a larger burden on these technology systems than does VAM or the student surveys. Thus, this discussion of technology costs is most relevant in the context of the observation component. However, please note that these systems support (though to a lesser extent) the VAM and survey components discussed in the following sections. The remaining amounts of these expenses were apportioned across the VAM and student survey components.

In Year 3, the district developed and implemented a Web-based system built by Randa Tower for data capture during observations and to serve as a central point for principals and teachers to input and access information around the evaluation. Work on the Randa Tower system was a start-up cost in Year 3.

The Randa Tower software system was intentionally built such that it could be used on an iPad by observers in a classroom while they are conducting an observation. In Year 2, the district purchased approximately 100 iPads with which to pilot the new observation process. In Year 3's full-scale implementation of the observation system, schools were required to supply their own iPads for this purpose. From its initially purchased set of iPads, the district gave iPads to schools that could not afford them and loaned temporary replacements to schools whose iPads had

broken. Our expenditure estimate has captured the cost of the iPads purchased by the district, but not those purchased by schools.

Also in Year 3, MCS incurred start-up costs to purchase and implement a data processing and visualization tool from Tableau Software, which it has installed on all principals' computers and iPads. This system provides access to teacher evaluation data, student data, and school-level data. With the increase in data systems to facilitate the evaluation process and house teacher, student, and school data, MCS purchased an additional server in Year 3; this is considered a start-up cost.

In this analysis, we have not been able to attach a dollar figure to technological support provided to the teacher evaluation system by district staff belonging to departments outside DTTE.<sup>17</sup> In terms of time, these investments include a 15-percent full-time equivalent employee from the School Operations department to support the Tableau system, a 30-percent full-time equivalent employee to plan and implement changes in the district's payroll system, and a 50-percent full-time equivalent employee in the Information Technology department to work on the data linkages between the payroll and Randa Tower systems.

### *Other*

The remaining 4 percent of expenditure on the observation component during the first three years of the effective teaching initiative is attributed to activities spread across the entire evaluation system. For discussion of these activities, please see Section 3.2.

## **4.2. Value-Added Model**

VAM expenditures totaled approximately \$50,000, or \$0.50 per pupil, from November 2009 to June 2012. This expenditure represents 0.2 percent of the total expenditures reported during that time period (see Exhibit 9). In this section, we describe the start-up and ongoing activities included in our expenditure estimates for the following categories of VAM-related activities: design and implementation, management and communications, technology and data systems, assessment development (for the VAM component only), and other. VAM scores are based on TVAAS; therefore, the expenditures related to VAM are relatively minor because the district has developed measures only for non-core teachers.

### *Design and Implementation*

As part of the VAM component of the district's evaluation, each teacher receives a growth measure and a student achievement measure, to be chosen jointly with his or her principal. For core grade levels and subjects, MCS uses the state-calculated TVAAS scores. For non-core grade levels and subjects, MCS has begun working with teachers to develop appropriate growth measures. Thus far, MCS has piloted, implemented, and received approval on such measures for

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<sup>17</sup> We are in the process of requesting data from the district that will allow us to estimate these expenditures.

arts teachers. The other activity related to design and implementation during this first three years of the effective teaching initiative was the Practitioners' Summit, which is described in Section 3.2. The expenditures related to these activities occurred entirely in Year 3 and amount to approximately \$0.10 per pupil, yet make up 20.5 percent of the total spent on the VAM (Exhibit 9).

### *Management and Communications*

Between November 2009 and July 2012, MCS spent \$0.30 per pupil per year or less on management and communication activities related to the VAM, making up about 67.8 percent of the overall VAM expenditures (Exhibit 9). These activities are shared with the observation and student survey components and are described in Section 3.1.

### *Technology and Data Systems*

Between November 2009 and July 2012, MCS spent less than \$1.00 per pupil per year, or 10.9 percent of the overall VAM expenditures, on technology and data system activities related to the VAM (Exhibit 9). Although these activities supported the entire evaluation system, they were overwhelmingly focused on the observation component and are discussed in detail in Section 3.2.

### *Other*

The remaining 1 percent of expenditure on the VAM during the first three years of the effective teaching initiative is entirely attributed to activities spread across the entire evaluation system (Exhibit 9). For discussion of these activities, please see Section 3.2.

## **4.3. Student Surveys**

We estimate that expenditures on student surveys totaled \$1.5 million, or \$13.80 per pupil, over the period from November 2009 to June 2012. This expenditure represents 4.5 percent of the total effective teaching initiative expenditure reported during that time period (see Exhibit 9). In this section, we describe the start-up and ongoing activities included in our expenditure estimates for the following categories of activities related to student surveys: design and implementation, management and communications, technology and data systems, and other.

### *Design and Implementation*

Between November 2009 and July 2012, MCS spent between \$0.60 and \$4.70 per pupil per year, or 45.9 percent of overall student survey expenditure, on design and implementation activities related to student surveys (Exhibit 9). These expenditures were payments to Cambridge Education for its support in planning and implementing Tripod.

### *Management and Communications*

Between November 2009 and July 2012, MCS spent between \$0.60 (\$0.40 + \$0.20) and \$4.30 (\$0.20 + \$4.10) per pupil, or 40 percent of overall student survey expenditure, on management and communication activities related to student surveys (Exhibit 9). The district

estimates that Tripod costs \$1.50 per student per administration, including analysis of results and reporting. The remaining activities that drive management and communications costs associated with VAM are common to all three components of the evaluation system. For greater detail, see Section 3.1.

### *Technology and Data Systems*

Between November 2009 and July 2012, MCS spent between \$0.60 and \$1.20 (\$0.30 + \$0.90) annualized per pupil, or about 12.4 percent of student survey expenditure, on technology and data system activities related to student surveys (Exhibit 9). Although these activities supported the entire evaluation system, they were overwhelmingly focused on the observation component and are discussed in detail in Section 4.1.

### *Other*

The remaining 2 percent of expenditures on the student surveys during the first three years of the effective teaching initiative was associated with activities attributable to the entire initiative (Exhibit 9). For a discussion of these activities, see Section 3.2.

## V. Pittsburgh Public Schools (PPS)

This section of the report delves into the specifics of PPS findings and is organized in the same way as the HCPS and MCS sections. First we provide a brief introduction, and then continue with the activities and expenditures related to the three selected components.

### 1. Introduction

Pittsburgh Public Schools (PPS) is a medium-sized urban district enrolling approximately 25,000 students, out of which about 70 percent are eligible for free or reduced-priced lunch. The district is ethnically diverse: more than half are African American, about one-third are white, and one-fifth are Asian, Hispanic, and multiracial students. PPS employs approximately 1,900 full-time classroom teachers, operated 60 schools in 2011-12,<sup>18</sup> and more than 90 percent of schools qualify for Title I funding. The district's annual operational expenditures are approximately \$600 million. As of 2012, PPS made Adequate Yearly Progress for two out of the previous four years and with community support had helped 3,200 of its graduates attend college through the Pittsburgh Promise Scholarship.<sup>19</sup>

PPS's effective teaching reforms are designed to improve student outcomes by ensuring an effective teacher in every classroom. The district worked hand in hand with the Pittsburgh Federation of Teachers (PFT) to create and implement the initiative. Beginning in 2008, the constructive collaboration between PPS and PFT was based on a commitment to create joint ownership and to develop multiple measures of teacher and school effectiveness to support professional growth and drive decision making. Increasing teacher effectiveness is a key part of the district's strategy to tackle problems including declining enrollment, financial challenges, and the lack of a rigorous and supportive evaluation system.<sup>20</sup>

The effective teaching reforms in PPS center on the following three strategies: (1) increasing the number of highly effective teachers, (2) increasing the exposure of high-need students to highly effective teachers, and (3) ensuring that all teachers work in learning environments that support their ability to be highly effective. PPS has developed the Research-Based Inclusive System of Evaluation (RISE), a teacher evaluation system that informs, guides, and supports teachers in continuous growth of their professional practice. In fact, PPS has multiple research-based measures of teacher effectiveness in use district-wide:

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<sup>18</sup> The number of schools in PPS has declined from 66 at the start of the initiative (2009-10) and decreased to 54 in 2013-14.

<sup>19</sup> Pittsburgh Public Schools. (2012, November 15). State of the district: On a journey to excellence and equity for all. Retrieved from

<http://www.pghboe.net/cms/lib07/PA01000449/Centricity/Domain/112/PPS%20SOD%20BROCHURE.pdf>

<sup>20</sup> Based on projected budget deficits, PPS eliminated 217 central office positions resulting in 147 layoffs or furloughs. Additionally, reductions to the teacher workforce have been approved by the school board. The district is working to increase operational efficiency by closing and reconfiguring schools, changing feeder patterns, and adjusting educational delivery models. (Pittsburgh Public Schools. (2012, February 23)). Building a sustainable district. Retrieved from <http://www.aplusschools.org/wp-content/uploads/pdf/find/build.pdf>



- Measures of teacher practice (observation and evidence collection either through the Research-based, Inclusive System of Evaluation (RISE) or through Employee Improvement Plans);
- Measures of student learning and growth (value-added measures at the school and individual level); and
- Measures of other student outcomes (Tripod student surveys).

As of June 2012, PPS estimated that about 93 percent of classroom teachers had two or more measures of effective teaching.<sup>21</sup> In 2013–14, PPS is planning to implement a combined measure to evaluate its teachers, with 50 percent of the evaluation based on teacher practice and 50 percent based on student outcomes per the requirements of new Pennsylvania law. PPS is using this information to begin responding to differences in teacher effectiveness to provide better support and to make better decisions. For example, the district has developed rewards and recognition opportunities for effective teachers, teams, and schools and promotional roles for effective teachers (called Career Ladders) measured by contributions to student growth and observations. Work continues to determine how to best account for missing measures in order to provide feedback to all teachers based on multiple lenses and ensure a balanced approach to evaluation for teachers and administrators.

PPS’s overarching vision driving these reforms is to create a comprehensive professional growth system and culture, rethinking how teachers experience their careers to advance the teaching profession in a way that is aligned with its goals for students. While the evaluation system is purposefully intertwined with teacher professional development, career advancement, and other elements of the initiative, this analysis is explicitly focused on the evaluation system. Thus, our expenditure estimates do not capture the investment the district has made in these other elements of the effective teaching initiative. This analysis focuses on the primary measures (components) at the core of the teacher evaluation system: teacher classroom observations (RISE), value-added measures (VAM), and student surveys (Tripod). The time period analyzed is December 2009 through June 2012.<sup>22</sup> We estimate the expenditures on activities related to start-up efforts—expenditures related to defining, describing, planning, developing, or negotiating elements of the initiative—and expenditures on ongoing activities—those related to operation and maintenance of the initiative.

For RISE, the start-up activities were mainly conducted in 2009–10, and were fully implemented in 2010–11. In the case of the VAM, start-up activities were conducted primarily in

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<sup>21</sup> In 2011-12, 1,796 out of 1,922, or 93 percent, of teachers had two or more measures. The measures PPS takes into account are 1) School VAM, 2) Individual VAM or RISE component 3f (a proxy for individual VAM), 3) RISE or Employee Improvement Plans (EIP), and 4) Tripod. The breakdown is the following: 144 teachers with two measures (7 percent), 331 with three measures (17 percent), and 1,321 with four measures (69 percent).

<sup>22</sup> The PPS fiscal year is from January to December, so in order to be able to compare PPS to HCPS and MCS, we broke down the PPS expenditures by academic year.

2010–11, with the first year of implementation being 2011–12. For Tripod, full district-wide implementation started in 2011–12, with some pilot work, research, and participation in the Measures of Effective Teaching research project dating back to 2009–10.

### *An Overview of the Investment in the Partnership Sites to Empower Effective Teaching initiative*

The effective teaching initiative began in December 2009 with a grant of \$40 million from the Gates Foundation.<sup>23</sup> PPS also secured nearly \$40 million in federal grant funds to support the effective teaching initiative over the seven-year grant period. These district contributions will come through the federal Teacher Incentive Fund (TIF) and the School Improvement Grant (SIG). PPS has begun contributing what it expects to be close to \$4.3 million toward the effective teaching initiative over the course of the grant period.<sup>24</sup> These contributions come from the redirection of existing district funds and also from the support of local foundations (e.g., the Fund for Excellence (FFE), Heinz).

Exhibit 11 shows overall PPS spending on the effective teaching initiative, and how much was devoted to the evaluation system, how these expenditures relate to total district operating expenditures, and the basic student demographics of the district. Exhibit 10 breaks down the total expenditures by funding source.

Overall, effective teaching initiative expenditures accounted for 1.2 percent of total district expenditures in 2010–11, and 1.1 percent in 2011–12. From the beginning of the Gates Foundation grant in December 2009 through June 2012, PPS spent a reported \$6.4 million on the evaluation system, or between \$50 and \$118 per pupil per year (Exhibit 11). These expenditures represent 34 percent of the expenditures made on the entire effective teaching initiative in that time period (Exhibit 13). The evaluation system represents about 0.3 and 0.5 percent of the overall district expenditures respectively for the academic year of 2010–11 and 2011–12. The evaluation system expenditures are, on average, about 1 percent of district teacher compensation expenditures (see Exhibit 11).

As shown in Exhibit 12, 58 percent of the expenditures related to the evaluation system between December 2009 and June 2012 were paid out of the philanthropic funds, with the majority from the Gates Foundation grant, and the remainder coming from TIF (26 percent) and from a combination of local funds and mixed funding sources (district money, TIF, Title I, and Title II; 16 percent).

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<sup>23</sup> The Gates Foundation grant was awarded in November of 2009, but grant funds were not spent until December of 2009.

<sup>24</sup> The source for \$40 million in federal grant funding is primarily a \$37.4 million grant from the Teacher Incentive Fund and \$4.2 million in School Improvement Grant funds (the overall SIG grant received by PPS is \$12.2 million). The \$4.3 million local contribution is based on the projections from the financial report that PPS provided to the Gates Foundation and does not take into account the unfunded projected expenditures.

The activities related to planning and designing of the new evaluation system helped lay the foundation for implementing the effective teaching initiative. However, in this report, investments made prior to and during the effective teaching initiative application phase are not captured in our estimates.

**Exhibit 11. PPS Overview Table of Expenditures, District Size, and Teachers Included in the Evaluation System**

Academic Year	Dec 2009–June 2010	July 2010–June 2011	July 2011–June 2012
<b>Total actual expenditures</b>			
Teacher evaluation system	\$1,287,980	\$2,182,035	\$2,944,949
Effective teaching initiative total budget	\$4,907,191	\$7,280,539	\$6,429,224
District*	\$597,598,126	\$628,039,703	\$592,302,060
Teacher compensation*†	\$225,463,608	\$236,948,697	\$223,465,492
<b>Per-pupil actual expenditures**</b>			
Teacher Evaluation System	\$50	\$87	\$118
Effective teaching initiative total budget	\$189	\$290	\$257
District*	\$23,008	\$25,022	\$23,663
Teacher Compensation*†	\$8,680	\$9,440	\$8,928
<b>Percentages of district expenditures</b>			
Teacher evaluation system	0.2%	0.3%	0.5%
Effective teaching initiative total budget	0.8%	1.2%	1.1%
<b>Percentages of overall teacher compensation</b>			
Teacher evaluation system	0.6%	0.9%	1.3%
Effective teaching initiative total budget	2.2%	3.1%	2.9%
<b>District size</b>			
Student enrollment***	25,974	25,100	25,031
Classroom teachers****	~2,000	~2,000	~1,925
<b>Evaluation system</b>			
Teachers included in teacher Observation Component (RISE)	502 (24 schools)	1,838	1,727
Number of observations conducted (RISE)	~ 1,000	~ 3,600	~3000 formal and ~3,100 informal
Teachers included in VAM component	0	723	737
Teachers included in student surveys (Tripod)	250	42	~ 1,800
Students included in survey component	Not Available	Not Available	Not Available
Surveys administered	~ 4,073	~ 90	~ 54,000

\*Overall and per-pupil district expenditures and teacher compensation are for the entire school year (July 2009–June 2010).

\*\* Per-pupil expenditures are calculated per enrolled student, not per average daily membership.

\*\*\* Includes all students for whom PPS has a financial responsibility.

\*\*\*\* Classroom teacher is defined as an employee who provides direct instruction to students related to a specific subject or grade level. It includes all core subject and elective teachers, ESL teachers, special education teachers, teachers at special schools and gifted centers, and Pre-K teachers. It does not include adjuncts, librarians, counselors and social workers.

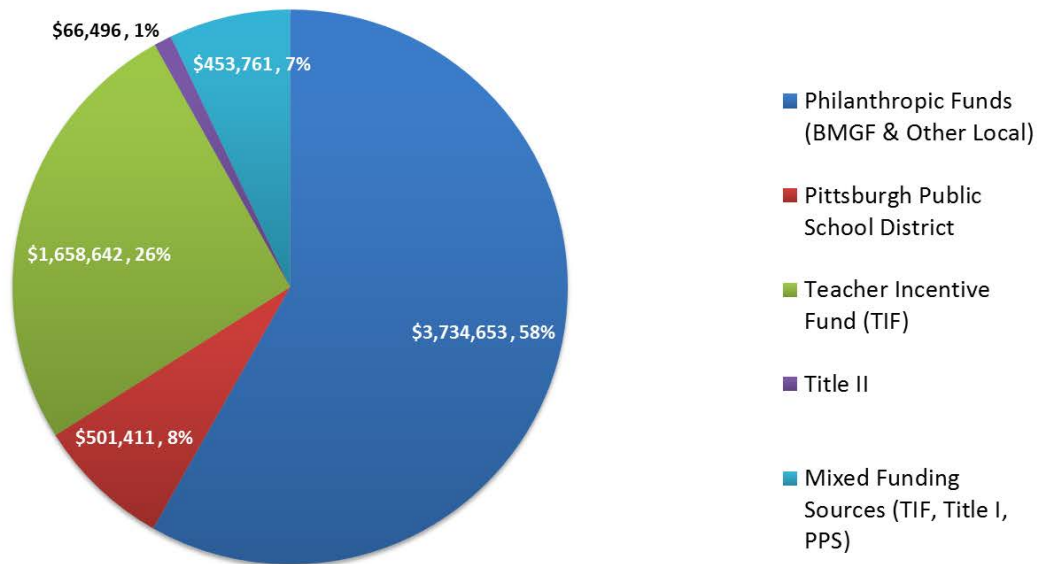
† Teacher compensation includes regular salaries, temporary salaries, overtime salaries, sabbatical leave, and termination or leave payout salaries for professional educational employees as defined by the Manual of Accounting and Financial Reporting for Pennsylvania Public Schools. The 2010–11 and 2011–12 teacher compensation figures were estimated by applying the proportion of 2009–10 teacher compensation to 2009–10 district expenditure to the 2010–11 and 2011–12 district expenditure figures.

Source: PPS Evaluation System expenditures are author calculations based on the PPS effective teaching initiative financial report and information provided by PPS. PPS total effective teaching initiative expenditures include additional expenditures from the general fund that were not included in the PPS IP Initiative financial report. Initiative related salaries and benefits were estimated by PPS. Enrollment statistics and operating expenditures were provided by PPS.

**Exhibit 12. PPS Teacher Evaluation System by Funding Source**

Observations, VAM, and Surveys  
December 2009–June 2012

Total Expenditures \$6,414,963



Note: Information needed to disaggregate mixed funding sources was not available.

Source: Author calculations based on PPS effective teaching initiative financial report and interviews with PPS staff.

**2. Prior Related Investment**

The district engaged in several efforts prior to receiving the Gates Foundation grant in December 2009. These efforts helped the district design, launch, and implement the effective teaching initiative: the Excellence for All reform plan, a partnership with the teachers’ union, the creation of design and leadership teams to revamp the evaluation system, and the investment on information systems.

In 2006, PPS engaged in a comprehensive reform agenda, Excellence for All, to improve student academic performance. The Excellence for All reform included the implementation of new curriculum for prekindergarten through grade 12, improving professional development, and implementation of an accountability system to enhance school leadership.<sup>25</sup>

In 2008, PPS administered a survey in which teachers responded that the evaluation system was inadequate. Teachers felt that it did not provide relevant information or accurately

<sup>25</sup> The description of Excellence for All is based on the Pittsburgh Partnership Sites to Empower Effective Teaching proposal to the Bill & Melinda Gates Foundation, *Empowering Effective Teachers in the Pittsburgh Public Schools*.

capture teacher effectiveness or abilities. These survey results helped the teachers' union and the district recognize they had common concerns about the status quo and a broad base of support for change.

As a result, in December 2008 the PPS and PFT leadership agreed upon the shared goal of improving teacher evaluation. This partnership allowed the district to move forward and bring on board the teachers and administrators to revamp the evaluation systems. One of the early activities the PPS and PFT engaged in was the creation of a video in which the superintendent and the PFT president appeared together to communicate how the district planned to revamp the teacher evaluation system. Two representatives each from the district and the teachers' union were appointed to allocate a substantial amount of their time to address the inadequacy of the evaluation system.

These four leaders led a design team of about 120 members composed of at least the principal and one teacher from each school. The design team met for four days in 2008 to analyze the design rubric created by the Danielson Group and tailor it to the needs of the district, and to create the vision for a new observation system. This effort was funded by FFE. A second, larger group called the RISE Leadership Team was also created, consisting of the principal and four to seven teachers from every school. They first met in spring 2009, and continue to work on refining the growth and evaluation system today. Additionally, participation in the Measures of Effective Teaching research project beginning in 2009–10 enabled the district to learn about and to pilot the process of implementing student surveys, which have now become a part of the overall growth and evaluation system.

Finally, another major investment made by PPS was the homegrown student information system, which enabled PPS to link student outcomes to teachers. It was an investment made early on that helped PPS with the implementation of the VAM and RISE. However, PPS continues to address challenges with software and data systems necessary to enable and sustain its effective teaching reforms.

### ***3. Investment by Component***

This section describes the major activities and expenditures for each of the selected components of the teacher evaluation system for PPS, beginning with the awarding of the Gates Foundation grant in December 2009 through June 2012. We discuss the teacher classroom observations, VAM, and student surveys.

In order to support all aspects of the effective teaching initiative, PPS created the Office of Teacher Effectiveness (OTE). The OTE is composed of an executive director and six project managers who work with the district leads as well as with the chief of human resources, the chief academic officer, and the deputy superintendent. The OTE is responsible for developing the project management plans, facilitating the communication across departments, tracking and reporting the progress of the effective teaching initiative, and working across multiple

departments to develop strategies to implement the initiative. In addition to the team in the Office of Teacher Effectiveness, grant funds support additional project managers and coordinators within various departments developing and managing programs ranging from new leadership roles for teachers with a demonstrated track record of effectiveness, to managing the administration of student surveys. Finally, district leaders credit the deep involvement of the PFT and teachers themselves in building district capacity and participating in design decisions as a key resource for the development and implementation of the initiative.

Exhibit 13 provides an overview of start-up and ongoing activities associated with the teacher evaluation system. The expenditures related to the teacher classroom observations are the largest, followed by the VAM. In Year 1, all of the expenditures on the teacher evaluation system were associated with start-up activities, which were related to the design of the VAM and teacher observations. In Year 2, the proportion of start-up activities decreased to, on average, 83 percent of the expenditures on the teacher evaluation system: 74 percent for teacher observations, 77 percent for the VAM, and 98 percent for student surveys. Student survey expenditure remained almost entirely start-up in Year 2 due to the district's holding of development sessions and delivering of teacher and school level reports. For Year 3, the start-up activities represented, on average, 67 percent of the teacher evaluation system expenditures. This decrease is mainly due to full roll out of the teacher observation components, whereas VAM and student survey activities are still mainly start-up activities.

**Exhibit 13. PPS Table of Start-Up and Ongoing Expenditures by Component**

Component		Activity category		Overall Expenditures						% of total evaluation system expenditure	% of total effective teaching initiative expenditure*	
				Dec 2009–June 2010		July 2010–June 2011		July 2011–June 2012				Total
				Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing			
Teacher Classroom Observations (RISE)	Design and implementation	\$40,009	\$0	\$34,293	\$0	\$120,000	\$0	\$194,303	6%			
	Management & communications	\$226,645	\$0	\$242,841	\$289,309	\$486,868	\$324,597	\$1,570,260	52%			
	Technology & data systems	\$424,917	\$0	\$536,874	\$0	\$118,000	\$192,715	\$1,272,506	42%			
	<b>Total spent in teacher classroom observations</b>	<b>\$691,571</b>	<b>\$0</b>	<b>\$814,008</b>	<b>\$289,309</b>	<b>\$724,868</b>	<b>\$517,312</b>	<b>\$3,037,068</b>		<b>16%</b>		
Value-Added Model (VAM)	Design and implementation	\$249,744	\$0	\$498,907	\$0	\$566,738	\$32,000	\$1,347,389	46.9%			
	Management & communications	\$203,390	\$0	\$94,560	\$238,243	\$195,259	\$358,363	\$1,089,815	38%			
	Technology & data systems	\$143,274	\$0	\$190,055	\$0	\$100,048	\$0	\$433,377	15%			
	<b>Total spent in VAM</b>	<b>\$596,408</b>	<b>\$0</b>	<b>\$783,522</b>	<b>\$238,243</b>	<b>\$862,045</b>	<b>\$390,363</b>	<b>\$2,870,581</b>		<b>15%</b>		
Student Surveys (Tripod)	Design and implementation	\$0	\$0	\$0	\$0	\$223,853	\$22,387	\$246,240	48.5%			
	Management & communications	\$0	\$0	\$19,442	\$947	\$105,494	\$94,127	\$220,010	43%			
	Technology & data systems	\$0	\$0	\$36,564	\$0	\$0	\$4,500	\$41,064	8%			
	<b>Total spent in student surveys</b>	<b>\$0</b>	<b>\$0</b>	<b>\$56,005</b>	<b>\$947</b>	<b>\$329,347</b>	<b>\$121,015</b>	<b>\$507,314</b>		<b>3%</b>		
<b>Total expenditures on evaluation system</b>		<b>\$1,287,980</b>	<b>\$0</b>	<b>\$1,653,535</b>	<b>\$528,499</b>	<b>\$1,916,259</b>	<b>\$1,028,689</b>	<b>\$6,414,963</b>		<b>34%</b>		

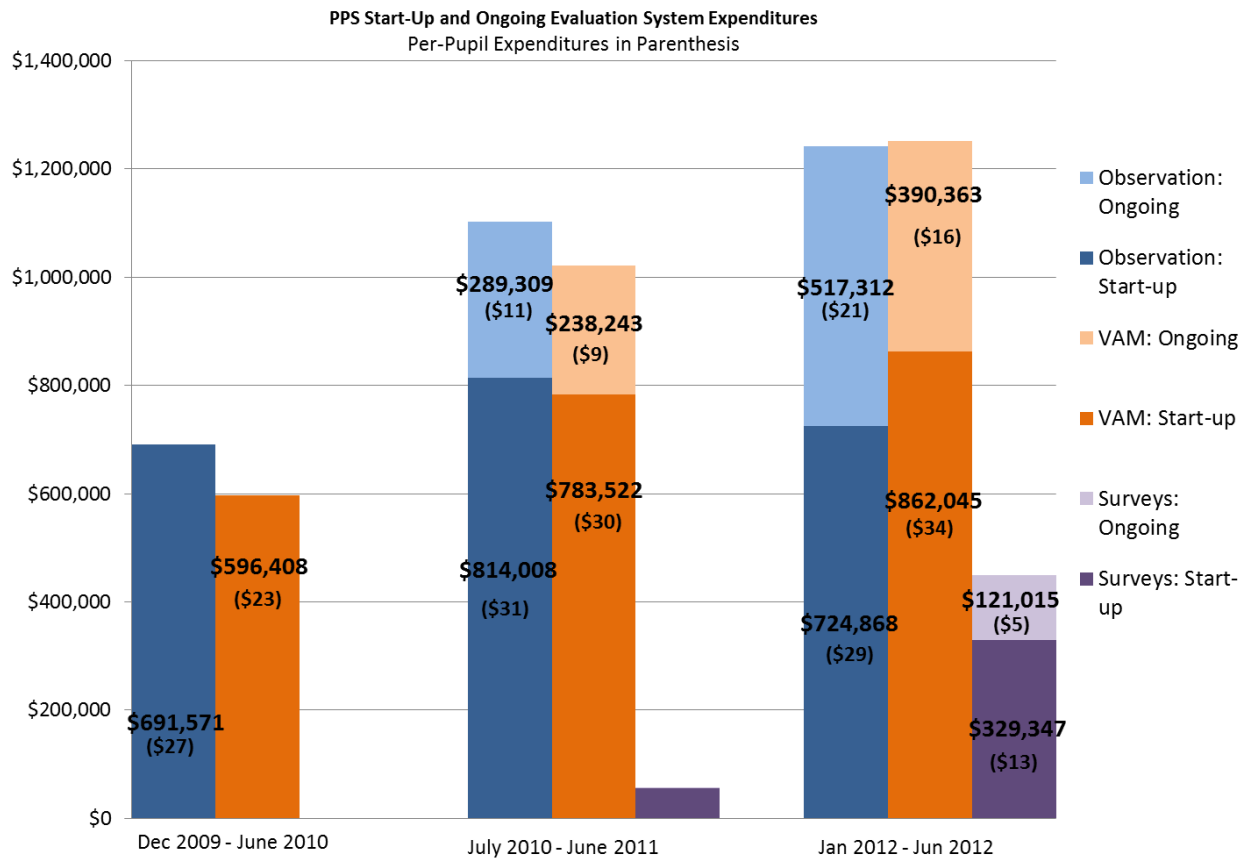
Component		Activity category		Per-Pupil Expenditures						
				Dec 2009–June 2010		July 2010–June 2011		July 2011–June 2012		Total
				Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing	
Teacher Classroom Observations (RISE)	Design and implementation	\$1.5	\$0.0	\$1.3	\$0.0	\$4.8	\$0.0	\$7.6		
	Management & communications	\$8.7	\$0.0	\$9.3	\$11.1	\$19.4	\$12.9	\$61.5		
	Technology & data systems	\$16.4	\$0.0	\$20.7	\$0.0	\$4.7	\$7.7	\$49.4		
	<b>Total spent in teacher classroom observations</b>	<b>\$26.6</b>	<b>\$0.0</b>	<b>\$31.3</b>	<b>\$11.1</b>	<b>\$28.9</b>	<b>\$20.6</b>	<b>\$118.6</b>		
Value-Added Model (VAM)	Design and implementation	\$9.6	\$0.0	\$19.2	\$0.0	\$22.6	\$1.3	\$52.7		
	Management & communications	\$7.8	\$0.0	\$3.6	\$9.2	\$7.8	\$14.3	\$42.7		
	Technology & data systems	\$5.5	\$0.0	\$7.3	\$0.0	\$4.0	\$0.0	\$16.8		
	<b>Total spent in VAM</b>	<b>\$23.0</b>	<b>\$0.0</b>	<b>\$30.2</b>	<b>\$9.5</b>	<b>\$34.3</b>	<b>\$15.6</b>	<b>\$112.2</b>		
Student Surveys (Tripod)	Design and implementation		\$0.0	\$0.0	\$0.0	\$8.9	\$0.9	\$9.8		
	Management & communications		\$0.0	\$0.7	\$0.0	\$4.2	\$3.8	\$8.7		
	Technology & data systems		\$0.0	\$1.4	\$0.0	\$0.0	\$0.2	\$1.6		
	<b>Total spent in student surveys</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$2.2</b>	<b>\$0.0</b>	<b>\$13.1</b>	<b>\$4.8</b>	<b>\$20.1</b>		
<b>Per-pupil expenditures on evaluation system</b>		<b>\$49.6</b>	<b>\$0.0</b>	<b>\$63.7</b>	<b>\$20.7</b>	<b>\$76.3</b>	<b>\$41.0</b>	<b>\$251.3</b>		

\*The remaining 66% of effective teaching initiative expenditure is associated with the other components of the initiative such as professional development, revised career ladders, and performance-based compensation.

Source: Author calculations based on PPS effective teaching initiative financial report and interviews with PPS staff.



**Exhibit 14. PPS Expenditures by Evaluation System Component**



Notes: Expenditures less than \$100,000 are not displayed.

Source: Author calculations based on PPS effective teaching initiative financial report and interviews with PPS staff.

**3.1. Teacher Observations**

From December 2009 through June 2012, we estimate that expenditures on the teacher classroom observation component (RISE) amounted to approximately \$3 million (\$119 per pupil), or about 16 percent of the total initiative expenditures during that time period (see Exhibit 13).

In the 2009–10 academic year, RISE was piloted in 24 schools. By the 2010–11 academic year, RISE was rolled out to all schools and all teachers (except teachers identified as needing additional support and assigned to an improvement plan). Software that automates the RISE process was introduced to 41 out of the 66 schools that participated in the teacher observation component.

In this section, we describe the start-up and ongoing activities included in our expenditure estimates for each of the following categories of teacher observation-related activities: design and implementation, management and communications, and technology.

### *Design and Implementation*

About 6 percent of the expenditures for teacher observations from December 2009 to June 2012 (between \$1.30 and \$4.80 per pupil per year) were associated with the design and implementation of the observation component (Exhibit 13). The main activities involved were the design of the new observation system, principal and teacher training, and working on the inter-rater reliability of observers.

One caveat to our expenditure estimate related to the observers is that there are not readily available data on the time principals have allocated to conducting observations, uploading the results of the observations into the RISE system, and providing teachers with formal or informal feedback. Our estimates also exclude the time teachers have spent with the principals discussing the observations results.<sup>26</sup> Therefore, our estimate is likely to underestimate the true cost of observations.

PPS worked with an external consultant, the Danielson Group, to revise the observation rubric and adapt it to the needs of the district. PPS incorporated effort-based learning theory, metrics on cultural competence and equity, and teacher impact on student achievement to the Danielson framework. These activities were mainly funded by the TIF grant.

Regarding the training of school leaders on the new observation system, the PPS strategy first entails the design work and engagement with and training of the RISE Leadership Team (the principal and four to seven teachers from each school); subsequently the RISE Leadership Team has the responsibility of training all of the teachers in the school. In 2010 the RISE Leadership Team engaged in monthly trainings, and in 2011 it participated in trainings every other month. This approach helped to empower teachers, as they not only learned about the teacher evaluation system but were prepared to provide professional development to other staff in their schools. Parts of the training-related activities were funded by a combination of funds from philanthropic sources and federal funds.

To ensure the quality of the evaluation process and to provide inter-rater reliability and validity training, PPS implemented the use of Teachscape for the 2011–12 academic year. As of April 2012, 90 percent of principals and teachers had reached level 1 in the Instructional Quality Assurance Certification.

The teacher classroom observations are mainly conducted by principals, with some support by assistant principals. Initially, in the 2011–12 academic year, principals were expected to observe each tenure-track teacher twice formally and twice informally as part of their regular work responsibilities. Non-tenure-track teachers received eight or more observations per year. Now,

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<sup>26</sup> We are currently in the process of analyzing data gathered by the RAND/AIR evaluation team on the time allocation of principals and teachers, from which we may be able to estimate these costs incurred by the district.

with two years of experience with the observation system, PPS has modified the guidelines to differentiate supervision using the previous year performance as a reference point, as well as increased the range of observations for the 2012–13 academic year to between 5 and 15 observations per teacher. This number depends on whether a teacher has a tenured or a non-tenured position. The observation length ranges from 15 to 90 minutes, and the guidelines suggest that principals allow 20 minutes for feedback conferences.<sup>27</sup> This means that the allocation of the time that principals will devote to teacher observations will increase substantially for the upcoming academic year.

School leaders conducted a total of 3,000 formal observations and 3,100 informal observations during Year 3 (see Exhibit 11). Central office staff estimate that about 80 percent of these observations were conducted by the districts 67 principals. PPS reported that formal observations generally require observers to spend an hour preparing for the observation, 30 to 45 minutes in the classroom conducting the observation, and an hour holding a post-conference with the teacher. Informal observations generally take less time overall. See Appendix C for more information on observer time in PPS. The district has continued to experience challenges with its technology system developed to capture observation results and help teachers and principals navigate the process. This has occasionally caused observers to spend additional time on the observation process and the district is reassessing its approach now that the market for these types of tools is more advanced and the RISE system is more mature.

For the observers category, the start-up activities relate mainly to adapting the observation rubric, whereas the ongoing activities are principal and teacher training, ensuring the inter-rater reliability of principals, and the time principals and teachers spent on RISE.

### *Management and Communications*

Fifty-two percent of the teacher observation expenditures were allocated to management and communications between December 2009 and June 2012—between \$8.70 and \$32.30 (\$19.40 + \$12.90) per pupil per year (Exhibit 13). Many district leaders and support team members were directly involved in the teacher classroom observation component, for which the executive director of the office of effective teaching, the chief academic officer, the director of professional development, and the chief of human resources allocated 20 to 50 percent of their time at different points between 2009 and 2012. Their salaries were funded by a combination of Gates Foundation and general funds. In the course of their regular district jobs, other district staff have provided support to the initiative, though their time is not captured in our expenditure estimates.

Planning activities are one of the main drivers of the expenditures in this activity category, which includes an estimate of staff time spent participating in the annual planning meetings. This estimate was provided directly by PPS in an effort to approximate the time and resources

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<sup>27</sup> In 2010–11, in some instances principals spent an hour or more discussing evaluation results with each teacher.

allocated to the design and planning of the new observation system. However, this estimate only takes into account the yearly retreats and not the weekly and monthly meetings in which key staff participated.

Planning for the observation component began in 2008, when the district decided that the teacher evaluation program needed to be revised. From 2009–2011, the leadership and design teams met regularly (monthly to every other month). The assistant superintendents, chief of school performance, and chief academic officer, along with other district staff usually attend these meetings as well. The scope of these meetings has expanded since 2009 to train the teachers to become experts on all of the evaluation system components. Beginning in the 2011–12 academic year, the teams have focused a substantial portion of their time on the VAM, Tripod and bringing these measures together to reach an overall lens on effective teaching.

Another main driver of the expenditures in the management and communications category has been the district's communications and engagement effort. PPS hired the Danielson Group to help the district engage the RISE Leadership Team in development of this new approach to evaluation and professional growth. PPS created the training materials, content, and support materials, while the Danielson Group helped PPS engage teachers in making recommendations and decisions about how the system should work, collect regular feedback through visits to every school to refine and improve implementation, and empower teachers as central to the development and success of this system. For 2009–10 the expenditures were mostly related to start-up activities, and in 2010–11 the expenditures were related to ongoing activities. The expenditures were paid out of a combination of federal, district, and philanthropic funds.

### *Technology and Data Systems*

Investments in technology to support the teacher classroom observation component represent 42 percent of the teacher observation expenditures; between \$12.40 (\$4.70 + \$7.70) and \$20.70 per pupil per year was spent between December 2009 and June 2012 (Exhibit 13). PPS developed an in-house software solution to implement the teacher observation system. The IT consultant, Global Scholar, worked closely with the district to develop the customized software as part of a broader implementation of a new student information system including gradebook, scheduling, and attendance functionality. In 2010–11, it focused on adding functionality to the RISE software tool, with 41 schools participating in the pilot of the software. For the 2009–10 academic year, the majority of the activities related to technology were start-up activities funded by the Gates Foundation grant. Starting in 2010–11, the technology-related activities were all ongoing activities.

In interviews, PPS staff indicated that software customization has been challenging. While there are now other software solutions on the market, few were available at the time PPS was developing software to support the RISE process. PPS has been studying the implications of continuing with the customized tool versus moving toward a more basic tool for future years. PPS

staff also pointed out that a transition to a more basic tool could incur additional costs, but be more cost effective in the long run and make it easier to include other employee groups in the future.

### **3.2. Value-Added Model (VAM)**

From December 2009 through June 2012, as seen in Exhibit 13, the expenditures on the VAM component amounted to approximately \$2.9 million (\$112.20 per pupil), or about 15 percent of the total effective teaching initiative expenditures reported during this time period. The VAM was developed in partnership with Mathematica Policy Research, Inc., and with the support of internal staff.

The development of the VAM measures was completed in 2010–11, and in the 2011–12 academic year, measures were calculated for 737 teachers, or almost 40 percent of classroom teachers. In 2010–11, the VAM included the evaluation of teachers in the areas of English language arts, mathematics, science, and social studies for grade 4 through grade 12. In 2011–12 the VAM included third-grade teachers, and over time PPS will attempt to increase the content areas included.

For this component, we describe the start-up and ongoing activities included in our expenditure estimates for each of the following categories of VAM-related activities: design and implementation, management and communications, and technology and data systems.

#### ***Design and Implementation***

Between December 2009 and June 2012, the activities related to design and implementation ranged from \$9.60 to \$23.90 (\$22.60 + \$1.30) per pupil per year. This represents about 47 percent of overall expenditures on the VAM (see Exhibit 13). The main driver of this expense has been the district's work with its statistical consultant partner, Mathematica Policy Research, Inc. This work has involved reviewing the PPS assessment system, developing VAM measures, and looking at what policy decisions are needed to implement the VAM. These expenditures were start-up-related activities covered by a combination of Gates Foundation and TIF funds.

#### ***Management and Communications***

The activities centered on planning, management, and communications represent 38 percent of the expenditures allocated to the VAM, ranging from \$7.80 to \$22.10 (\$7.80 + \$14.30) per pupil per year (Exhibit 13). The planning sessions for the VAM occurred once a week during the 2009–10 academic year and every other week during the 2010–11 academic year. As with the teacher classroom observation component, the executive director of the effective teaching initiative and the director of strategic compensation in the OTE as well as the district's chief academic officer, communications project manager, and the director of professional development were directly involved with the VAM, and allocated approximately 20 to 25 percent of their time

to this component. The director of strategic compensation was mainly focused on developing the applications and specific value-added measures regarding the rewards and recognition program. Their salaries were funded by a combination of Gates Foundation, TIF, and general funds. A project manager who was involved in the leadership of the VAM component allocated 50 percent of her time to the effort. In the 2011–12 academic year the director of professional development and a communications project manager were also involved.

PPS worked with an external consultant, Battelle for Kids, to prepare the user guides and materials needed to train teachers and administrators about the school-level and individual-level value-added measures. These expenditures were start-up-related activities covered by a combination of Gates Foundation and TIF funds.

While it was not a substantial expense, the district also engaged an advisory committee of technical experts from higher education, and organizations such as the American Federation of Teachers (AFT) to participate in the development of the district's value-added measures and provide advice and oversight related to technical and policy decisions. Expenditure associated with the advisory committee is not reflected in our cost estimates.

### *Technology and Data Systems*

Technology represents 15 percent of VAM expenditures, ranging from \$4.00 to \$7.30 per pupil per year from December 2009 through June 2012 (Exhibit 13). PPS has an existing electronic data system strengthened through the implementation of a new student information system that allows teacher identifiers and student–teacher links to match more than 98 percent of the records.<sup>28</sup> A three-person team has been responsible for coordinating the data system support needed to implement the VAM. The majority of these expenditures are related to start-up activities funded by a combination of Gates Foundation and TIF funds. The district continues work to develop a comprehensive data and reporting system that could allow the district to deliver relevant reports related to teacher effectiveness, student information and more as it is still the case that users are required to log-in and visit multiple sources to access information. These could allow the district to create and deliver the VAM reports internally even while Mathematica continues to provide the actual calculations and results.

### **3.3 Student Surveys**

From December 2009 through June 2012, overall quantifiable expenditures on the student survey component of the effective teaching initiative, as seen in Exhibit 13, were \$507,314 (\$20.10 per pupil), or about 3 percent of the total effective teaching initiative expenditures reported during that time period.

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<sup>28</sup> This estimate was obtained from *Estimating Teacher and School Effectiveness in Pittsburgh: Value-Added Modeling and Results*, Mathematica Draft Report, August 2010, page 2.

The student surveys (Tripod) were piloted in 2010, and by 2011 all grade 4 through grade 8 teachers were included in Tripod in mathematics and English language arts, and all grade 9 teachers were included for algebra. In the 2011–12 academic year, all teachers from kindergarten through grade 12 participated in Tripod, including many special education teachers and special subject teachers—about 1,700 teachers in total. Approximately 54,000 surveys were administered in the 2011–12 academic year.

Teachers have provided their feedback to improve Tripod by discussing issues regarding the roster information, the length of the survey, and the protocol and survey for kindergarten through grade 2.

In this section we discuss the start-up and ongoing activities included in our expenditure estimates for each of the following categories of student survey–related activities: design and implementation, management and communications, and technology.

### **Design and Implementation**

Design and implementation–related activities started in the 2010–11 academic year, and represent 49 percent of the expenditures allocated to student surveys, or about \$9.80 per pupil (Exhibit 13).

The external partner, Cambridge Education, is responsible for processing and administering the surveys. Cambridge Education also assisted in the preparation and training of the RISE Leadership Teams with regard to Tripod. In 2011, the support provided by Cambridge Education increased as they processed the surveys of all PPS classroom teachers. The expenditures related to administering and processing the surveys occurred primarily in the second half of the 2011–12 academic year, and ongoing activities were funded by the Gates Foundation.

The training sessions were mainly funded by the Gates Foundation. However, this estimate underestimates the true cost of training, since we were unable to quantify the time teachers spent in the training that occurred in the regular professional development sessions.

### **Management and Communications**

As with the teacher classroom observation component, the executive director of the effective teaching initiative and the director of strategic compensation in the Office of Teacher Effectiveness (OTE) as well as the district’s chief academic officer, communications project manager, and the director of professional development were directly involved with the VAM, and allocated approximately 20 to 25 percent of their time to this component.

The activities centered on planning, management, and communications represent 43 percent of the expenditures allocated to student surveys, ranging from \$0.70 to \$8.00 (\$4.20 + \$3.80) per pupil per year (Exhibit 13). As with the other two components, staff within the OTE office and from other departments, including Research, Assessment and Accountability,

Curriculum, Instruction, and Professional Development; and Human Resources were directly involved with Tripod. Our estimates include expenses associated with the work of the chief academic officer and the executive director of the effective teaching initiative who each allocated approximately 20 percent of their time to this component. The chief academic officer's salary was funded with general funds and the executive director's compensation was funded by the Gates Foundation. The Tripod effort was also led by a project manager who allocated 50 percent of her time to the component.

The planning meetings were held once a month, and involved the participation of Cambridge Education. The management-related activities were mainly start-up activities funded by the Gates Foundation, TIF, and general funds.

### Technology and Data Systems

The investments in technology to support Tripod represent 8 percent of the expenditures allocated to student surveys, ranging from \$0.20 to \$1.40 per pupil per year (Exhibit 9). These expenditures have been paid out of Gates Foundation funding.

Regarding technology activities, one of the main challenges of the student survey component has been the verification of rosters in order to have accurate information for teacher schedules and student classes. PPS mentioned that one person has been devoted to the task of assuring that the information systems accurately match what is happening in the classrooms, including data on what classes students are taking and links between the student data and teacher data.



## VI. Conclusions

Expenditures on the teacher evaluation systems for the three districts are between 0.1 and 0.5 percent of the overall district expenditures and between 0.2 and 1.3 percent of overall teacher compensation. Though the expenditures to implement the teacher evaluation systems seem to be relatively small compared to the overall district expenditures, there is considerable variation in the expenditures across districts due to the way local systems are structured, the implementation strategies used, and the districts' pre-existing capacity, among other local factors. It is worth underscoring that much planning effort was put forth in all three sites during the application phase that is not captured in our analysis. Thus, the expenditures we have captured (beginning in fall 2009 when the Grant money began flowing) reflect those of three districts already engaged in the movement toward teacher effectiveness reforms and already having put forth planning effort.

Furthermore, additional factors that ought to be taken into account are the efforts involved in building relationships and the leadership to implement the initiative as the new way of conducting business, replacing old practices. Our expenditure estimates also do not capture school leader time spent conducting observations and communicating information about the initiative to teachers and parents.<sup>29</sup>

Almost 40 percent of HCPS and MCS expenditures on the evaluation systems over the first three years of planning and implementation supported start-up activities, compared with 76 percent in PPS. The remaining 60 percent of expenditures for HCPS and MCS, and 25 percent for PPS, supported activities ongoing activities (see Exhibit 15). We would expect that over time the proportion attributed to start-up expenditures would decline, as districts settle into routines for supporting ongoing implementation of the teacher evaluation systems. We might also expect that as practices become more routine and as staff grow in their experience, ongoing activities may tend to settle to a constant level.

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<sup>29</sup> It is important to note that our current estimates do not include the time of Gates Foundation staff (and associated overhead costs) spent supporting the IPS grantees in implementation of the EET initiative. These staff have contributed to whatever success the EET initiative might have by serving as thought partners for district leadership, connecting districts with external expertise, and facilitating cross-district collaboration.

***Exhibit 15. Start-Up and Ongoing Expenditures and Per-Pupil Expenditures by Evaluation System Component from November 2009 to June 2012***

	Hillsborough County Public Schools (HCPS)		Memphis City Schools (MCS)		Pittsburgh Public Schools (PPS)	
	Start-up	Ongoing	Start-up	Ongoing	Start-up	Ongoing
<b>Total expenditures</b>						
Total evaluation system expenditures	\$9.8 MM	\$15 MM	\$3.2 MM	\$5.3 MM	\$4.9 MM	\$1.6 MM
Percent of evaluation system by type of expenditure	39%	61%	37%	63%	76%	24%
<b>Per-pupil evaluation system expenditure</b>	Year 1: \$13 Year 2: \$52 Year 3: \$61		Year 1: \$8 Year 2: \$21 Year 3: \$51		Year 1: \$50 Year 2: \$84 Year 3: \$118	
By component:						
Teacher observations	87%		82%		47%	
Value-added model (VAM)	13%		1%		45%	
Student surveys	Not Applicable		17%		8%	

Source: Author calculations based on effective teaching initiative expenditure figures from IPS grantee financial reports.

Philanthropic funds accounted for between 58 and 94 percent of the total expenditures associated with the effective teaching initiative, with the Gates Grant funds making up the largest portion. MCS had the highest proportion of philanthropic funds. Per-pupil expenditures annualized over the period from November 2009 to June 2012 were highest in PPS, at \$94, and the lowest in MCS, at \$30, during the period from November 2009 through June 2012.

In HCPS, activities related to the teacher classroom observation component generated higher total expenditures than activities associated with the VAM; these accounted for 87 and 13 percent of overall evaluation system expenditure, respectively. In MCS, activities related to classroom observation were the largest source of expenditure at 82 percent, the VAM accounted for just 1 percent, and student surveys represented 17 percent. In PPS, teacher classroom observations and VAM-related activities generated almost equal expenditures, at 47 and 45 percent of overall evaluation system expenditure, respectively, while surveys accounted for 8 percent (see Exhibit 15).

Regarding the VAM, the main expenditures were related to the development of the statistical model. MCS and PPS launched a student survey for all classroom teachers in 2011–12. The main driver of these expenditures were payments to Cambridge Education for its support in planning and implementing of Tripod.

In examining the differences in spending across districts we can highlight the following factors. The first is district size, as HCPS is by far the largest district of the three, with almost 200,000 students and more than 12,000 teachers. Conversely, PPS has only 25,000 students and less than 2,000 teachers. MCS has student and teacher populations in between the other two districts.

The second factor that might explain some of the differences is the previous effort and existing capacity that each district has. For example, under the Measures of Effective Teaching (MET) project, both HCPS and MCS were able to identify and pilot multiple ways of assessing teacher effectiveness. Another factor is that MCS already had a VAM model (the TVAAS developed by the state), so its recent investment in the VAM component has been fairly small. MCS mainly engaged in developing value-added measures for non-core grade subjects. In addition, MCS had also piloted the student survey through the MET project; therefore, the costs in MCS reflect the lower investment that the district had to make to implement the teacher evaluation initiative.

The third factor that might explain part of the differences across the districts is the approach that each site has taken. HCPS has invested in full-time observers, resulting in additional cost to hire teachers to fill in the positions of the experienced teachers serving as peers and mentor evaluators. In contrast, MCS and PPS rely heavily on their principals and assistant principals to conduct the classroom evaluations, and we have not incorporated the cost of principal time in our estimates. MCS, like HCPS, has also hired teaching facilitators to help principals in conducting the observations and relieve them from some of their duties. A factor that has increased expenditures associated with implementation of the initiative in PPS is the incorporation of the teachers' union into the design and implementation process of the initiative. The partnership has been productive, but it also meant that the decision process took longer, because it required consensus.

We believe the estimates presented in this report represent a lower bound of the true investment HCPS, MCS, and PPS are making to implement and begin to operate the initiative. This is due to the investments in building internal and external partnerships and stakeholder buy-in, as well as the increased costs associated with personnel that are difficult to fully capture in quantifiable terms.

The sustainability of these reforms relies on the ability of the districts to get continued buy-in from all stakeholders and to integrate and align reform activities across many facets of the organizations, creating a new way of "doing business" rather than trying to maintain the initiatives as an "add-on" to the old way of working. Sustaining the reforms may also depend on the ability of the districts to become more efficient in the way they create better results for students. Teacher evaluation systems should allow districts to identify the better-qualified staff for purposes of retention. They should also be better able to identify staff needs and help to improve performance through targeted professional development programs. Both of these factors could save money in the long run that could be used to support the teacher evaluation systems.

## Appendix A. Hillsborough County Public Schools (HCPS)

### *Exhibit A1. HCPS Number of Observations by Staff and Time Spent on Classroom Observation*

	Year	School Leaders (Principals and Assistant Principals)	Peer and Mentor Evaluators of Classroom Teachers
Total number of staff type in HCPS	2009-10	641	0
	2010-11	654	118
	2011-12	678	189
Total number of <i>formal</i> observations of classroom teachers conducted by staff type	2009-10	Not yet implemented	
	2010-11	19,255	24,627
	2011-12	18,107	15,411
Approximate time spent per <i>formal</i> observation of classroom teachers (and related scheduling, preparation, and conferencing)		2-3 hours	2-5 hours
Total number of <i>informal</i> observations conducted by staff type	2009-10	Not yet implemented	
	2010-11	Not yet implemented	
	2011-12	15,623	20,875
Approximate time spent per <i>informal</i> observation of classroom teachers (and related scheduling, preparation, and conferencing)		2 hours	3 hours

*Source:* Principal and assistant principal numbers were obtained from the "Staff in Florida's Public Schools" data sets found on the Florida Department of Education website at <http://www.fldoe.org/eias/eiaspubs/archives.asp>. All other numbers were provided by HCPS.

## Appendix B. Memphis City Schools (MCS)

### *Exhibit B1. MCS Number of Observations by Staff and Time Spent on Classroom Observation in 2010–11*

<b>Staff type</b>	<b>Count of staff type conducting observations</b>	<b>Total number of observations</b>	<b>Average number of observations per staff member</b>	<b>Average observation length (minutes)</b>	<b>Approximate time per observation spent preparing and providing feedback (minutes)*</b>	<b>Average time per staff person spent on observation and related preparation and conferencing activities in 2010–11 (hours)</b>
Principal	203	13,060	64	31	75	114
Assistant Principal	155	8,190	53	31	75	93
Instructional Facilitator	80	1,451	18	32	75	32
Teacher	32	172	5	37	75	10
Other School-level Staff	104	1,065	10	33	75	18
Supervisor/Instruction	21	217	10	37	75	19
Data Analyst/Viewer	5	25	5	40	75	10
<b>Total</b>	600	24,180				296

\*This estimate of observer time spent coding observations after the fact, preparing feedback, and holding the post conference was provided by a district official and based on anecdotal evidence.

Source: MCS observation data system.

## Appendix C. Pittsburgh Public Schools (PPS)

### *Exhibit C1. PPS Number of Observations by Staff and Time Spent on Classroom Observation*

<b>Academic Year</b>	<b>Dec 2009–June 2010</b>	<b>July 2010–June 2011</b>	<b>July 2011–June 2012</b>
Teachers evaluated with RISE	502	1,838	1,727
Number of teacher observations conducted	~ 1000	~ 3,600	~ 3,000 formal and ~ 3,100 informal
Number of principals	68	65	67
Number of assistant principals	43	36	22
Estimated percentage of observations conducted by principals	80 percent		
Average time spent on formal observations (and related prep and conferencing)	Formal observations are generally 30–45 minutes, plus an hour of preparation and an hour of post-conference		
Average time spent on informal observations (and related prep and conferencing)	Shorter than the formal observation but no data are available		

*Source:* Number of principals and assistant principals, observations, and average observation length obtained from PPS central office staff.