EQUITABLE ACCESS TO EXCELLENT EDUCATORS

September 2015

Tennessee Department of Education

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Executive Summary

Tennessee's plan to ensure equitable access to excellent educators is a continuation of the work we have engaged in over the last several years to improve students' access to effective teaching. Through our Race to the Top plan, we have focused on a set of ambitious goals to address achievement gaps and ensure growth for all students. Our efforts to address issues of inequity are evident in many of the human capital strategies and initiatives we have implemented in pursuit of these goals. Moving into the 2015-16 school year, Tennessee aims to maintain its emphasis on rigorous standards, aligned assessment and strong accountability and to focus on five priority areas in a new strategic plan entitled Tennessee Succeeds. The strategic plan focus areas include early foundations and literacy, high school and the bridge to postsecondary, all means all, educator support and district empowerment. As part of this new plan, we continue to refine the ways we examine equity issues, consider the state's key levers in addressing these issues, and develop a set of new data metrics to consider and share.

Theory of Action

Our theory of action for addressing issues of inequity centers on the following principles and key beliefs:

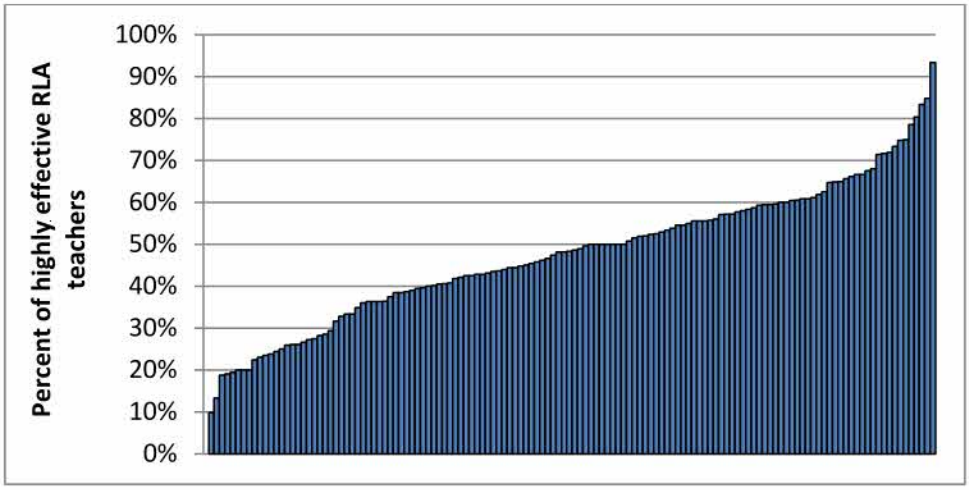
- Research shows that teachers have a greater impact on student achievement than any other in-school factor. Yet some students, in many instances the students who need good teaching the most, systematically do not have the same access to effective teaching.
- We believe this gap develops as a result of two key issues: 1) an inadequate supply of effective teachers and 2) the within- or between-school factors limiting access to effective teachers for particular groups of students. We carefully examine data metrics for each of these issues.
- There are a number of factors that impact a district's supply of effective teachers and students access to those teachers. To address these issues we need to continue working with districts to improve human capital management—preparation, recruitment, hiring, staffing, evaluation, development, retention, and compensation. Much of this work has been underway in Tennessee over the last several years.
- Districts vary considerably in the set of human capital issues they face, and improving access to meaningful data we believe will lead to improved district-level decision-making in this area.
- Our strategy for engagement includes several phases: initial support for districts across the full spectrum of human capital decisions, providing data to districts to facilitate targeted analyses and initiatives, and, finally, public transparency and accountability for equity and results.

Data and Performance

Defining the Issue: We describe state-level equity gaps in terms of both the supply and access to highly effective teachers. Highly effective teachers are defined as those teachers who achieve a level four or five rating on our Tennessee Value Added Assessment System (TVAAS). We believe that focusing on outcome measures like student growth is critical to improving equitable access.

Supply of Effective Teachers: To consider issues of equity, we first begin with the supply gap. As evidenced in Figure 1, we know that not all districts currently have the same supply of highly effective teachers. For some districts, the challenge of addressing issues of equity will begin with improving the pipeline of incoming teachers as well as the effectiveness of current teachers.

Figure 1: District Supply of Effective Reading/Language Arts Teachers



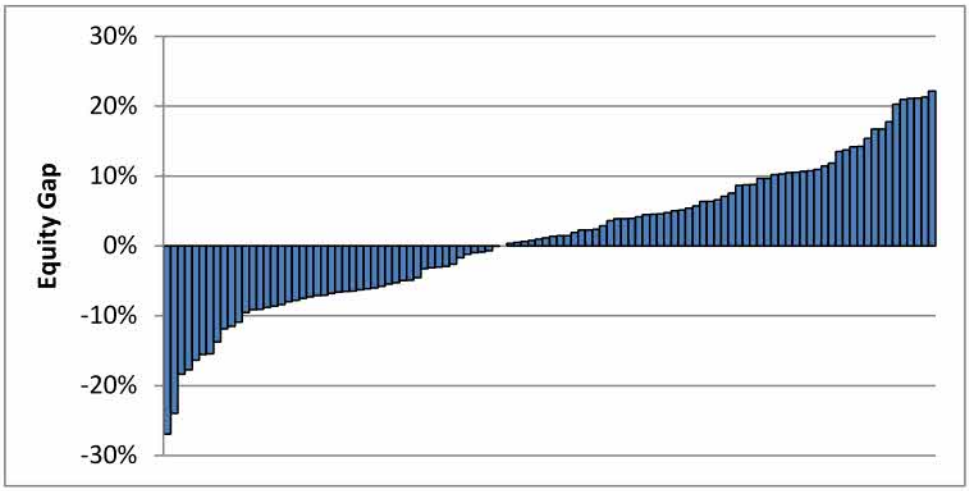
Each bar represents an individual district

Access to Effective Teachers: We also examine issues of access by determining whether particular groups of students have more or less access to effective teachers. We looked at this issue considering a variety of student groups, including prior achievement levels, minority, and low-income status. We ultimately chose to focus our analysis on advanced v. below basic students' access to highly effective teachers for several key reasons:

- We have a statewide focus on achievement and gap closure. In order to improve achievement of all students in our state, we must ensure our lowest achieving students have access to highly effective teaching
- A significant majority of our students who are low-income or minority are also low-achieving.
- The majority of our schools are homogenous in terms of racial and economic makeup. If we focused solely on minority or low-income students rather than on low achieving students of any race or income level, we would limit our ability to detect inequities between students within a single school.

Similar to what we found with supply data, we know that our districts vary considerably in the size of their equity gaps (i.e., the difference in access across student groups to highly effective teachers). Figure 2 below highlights that district variation in gap size.

Figure 2: District-level Variation in the Distribution of Highly Effective Teachers



Each bar represents the size of the equity gap in a district.

We also examined the underlying data about the types of equity gaps in each district. In our analysis we considered both gaps caused by within- and between-school differences. Our districts vary widely in the type of equity gaps that we saw.

Stakeholder Engagement

We have been engaged in ongoing stakeholder engagement about issues of human capital. We also engaged in some preliminary stakeholder engagement on these particular issues and have continued to engage in discussions with district leaders, teachers and external groups throughout Spring 2015. Internally, we formed a workgroup consisting of members of the Teachers and Leaders Division and the Research and Policy teams. We also engaged a broader network of internal stakeholders and held day-long planning meeting with representatives from multiple other teams including, our District Support Office, Office of Consolidated Planning and Monitoring, and our Commissioner's Office.

External stakeholder engagement will be a critical focus of our efforts in 2015. We already address issues of human capital with a variety of stakeholder groups, and the engagement around this plan will capitalize on these existing stakeholder meetings. We will continue to communicate with several key audiences regarding this plan, including:

- Directors of Schools
- Supervisors and principals
- Teachers and teacher advocacy groups
- Other external education organizations

A full matrix outlining specific organizations and groups is included in the full draft. In November 2014, solicited input from a small group of districts to discuss issues of human capital management and compensation. We provided these districts with a state level overview of new equity metrics and piloted an initial version of a human capital data report. Connecting with small networks of district leaders for

feedback will be a critical component of our ongoing engagement plan. In April and May 2015, we solicited input from the Board of Directors of the Tennessee Organization of School Superintendents, the Commissioners Teacher Advisory Council and a group of external organizations such as the Tennessee Education Association, the Urban League of Middle Tennessee, and the Tennessee Business Roundtable, to name a few.

Root Cause Analysis

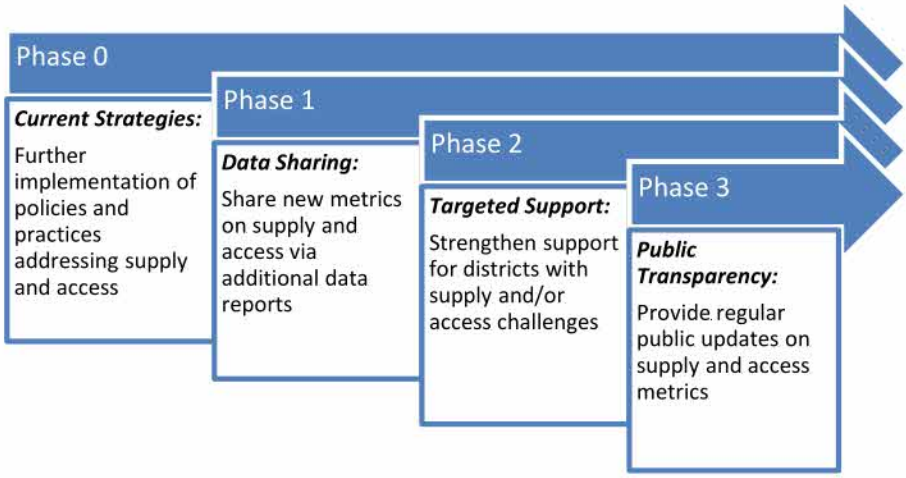
Given the variety of supply challenges and the size and type of equity gaps seen in our district data, we recognize that root causes will likely vary across districts. This is an area where we want to further engage stakeholders to understand the variety of root causes at the district level. We do anticipate, however, that there are some common root causes for supply and access challenges. The following is a list, more fully explained in the full plan, of what we anticipate those common root causes might be:

- Rural challenges
- Lack of quality preparation programs in specific geographic or subject areas
- Inadequate feedback, coaching, and professional learning for teachers
- Variance in leadership skills and capacity

Strategies for Achieving Objectives

We hope to capitalize on the strong policy foundation laid through our Race to the Top grant and other key initiatives to continue to address issues of equity. The strategies we are proposing fall into several phases designed to allow the state and districts opportunity to analyze new data metrics, build off of successful practices, and design local solutions. The graphic below outlines the key phases we intend to implement.

Figure 3: Equity Strategy Phases



In Phase 0 we will further our implementation of existing policies and practices. Initiatives like evaluation and differentiated pay have helped to address issues of both supply and access in the last several years. Other initiatives have focused specifically on improving the incoming and existing supply of educators or specifically addressing educator access. We have made changes to educator preparation policy, embarked on new partnerships to improve recruitment and hiring, and invested heavily in improving professional learning opportunities for teachers. In Phase 1 we will share new data metrics with districts through human capital reports and allow districts the time to develop and implement responses to this new information. Phase 2 will focus on a series of targeted supports for those districts with the greatest challenges. Finally, in Phase 3 we will ensure public transparency by reporting about our progress in closing equity gaps.

Ongoing Monitoring and Support

The state has heavily invested in support structures for districts throughout the last few years. These support structures will play a valuable role in supporting districts in addressing supply or access challenges. Our regional support offices, Centers of Regional Excellence (CORE), are charged with support of district achievement and will play a large role in assisting districts in planning and implementing equity strategies. We will also monitor equity data through a yearly release of new human capital data reports as well as providing regular updates to external stakeholders. To foster cross-departmental work streams and transparency, this data will be also shared with the Division of Consolidated Planning and Monitoring (CPM) and utilized as part of the annual LEA risk-assessment to prioritize district support and strategic planning.

Introduction

Four years ago Tennessee set forth an ambitious goal to become the fastest improving state in the nation. We believed the future welfare of our state and the livelihood of our students hinged on our success in this effort. Over the course of the last few years, the state added to the solid foundation laid through previous efforts to ensure the attainment of this vision. We use a multiple measures model including student growth to evaluate all teachers and principals in an effort to provide meaningful feedback to improve instruction. We are committed to implement a set of college- and career- ready standards so that all students graduate prepared for post-secondary success. We also set rigorous proficiency and gap closure targets to measure the progress of all students and districts.

In November 2013, Governor Bill Haslam announced that Tennessee educators and students had in fact achieved this goal of becoming fastest improving. Fourth graders jumped from 46th in the nation in math as measured by the National Assessment of Educational Progress (NAEP) to 37th, while their scores in reading accelerated from 41st to 31st. Eighth grade scores had a similar trajectory, and the overall growth of the state outpaced all others. The fall of 2014 also saw the state's biggest improvement in ACT scores since all students began taking the assessment in 2010.

While the attainment of these goals represented a watershed moment in Tennessee education, our vision is not complete. We know that while we have made progress in closing achievement gaps between minority and economically disadvantaged students and their peers, we can do more to ensure that all students achieve. Tennessee students on average still perform at proficiency levels in the bottom half of the nation, and less than 19 percent of our graduates meet all of the ACT college-readiness benchmarks. Furthermore, economic forecasts have shown that within the next five years that more than half of the state's jobs will require postsecondary credentials while currently only 32 percent of Tennesseans have these credentials. These statistics look even graver when we consider the outlook for our students who are furthest behind, often those who are low income and minority students.

As we approach the next phase of our work, we are bolstered by another set of goals. Our Governor laid forth the "Drive to 55", an ambitious plan to increase the percentage of Tennesseans with postsecondary credentials from 32 to 55 percent. This initiative is accompanied by another historic program—Tennessee Promise—the only free, public P-14 education system in the nation. Tennessee Promise offers two tuition-free years of community or technical college to all graduating seniors. This program offers the potential to substantially alter the college-going prospects for students throughout our state and further highlights the importance of our P-12 responsibility to ensure that all students are prepared to take advantage of these new opportunities.

Moving into the 2015-16 school year, Tennessee aims to maintain its emphasis on rigorous standards, aligned assessment and strong accountability and to focus on five priority areas: early foundations and literacy, high school and the bridge to postsecondary, all means all, educator support and district empowerment. We will not achieve our goals of postsecondary success for all students unless we ensure students' access to effective educators. Educators are the largest in-school factor contributing to

student achievement, and our assurance that all students, regardless of prior achievement, minority, or income status, have access to effective teaching is a critical part of our mission as a state agency.

This plan sets forth a careful examination of our state data and considers two key issues of equity: access to effective teachers and the supply of effective teachers. We analyze gaps in these two metrics at both the state and district levels revealing variations in the size and types of gaps present throughout the state. We also thoughtfully consider possible root causes of these issues and outline our stakeholder engagement plan to further investigate these causes and possible strategies. Finally, we highlight the crucial state levers and strategies for addressing these equity issues. These strategies include strengthening our current policies and practices, sharing new data metrics with districts, providing targeted support for districts with the greatest challenges, and ultimately ensuring public reporting and transparency as a mechanism for holding ourselves accountable to addressing this important issue of equitable access to effective teaching.

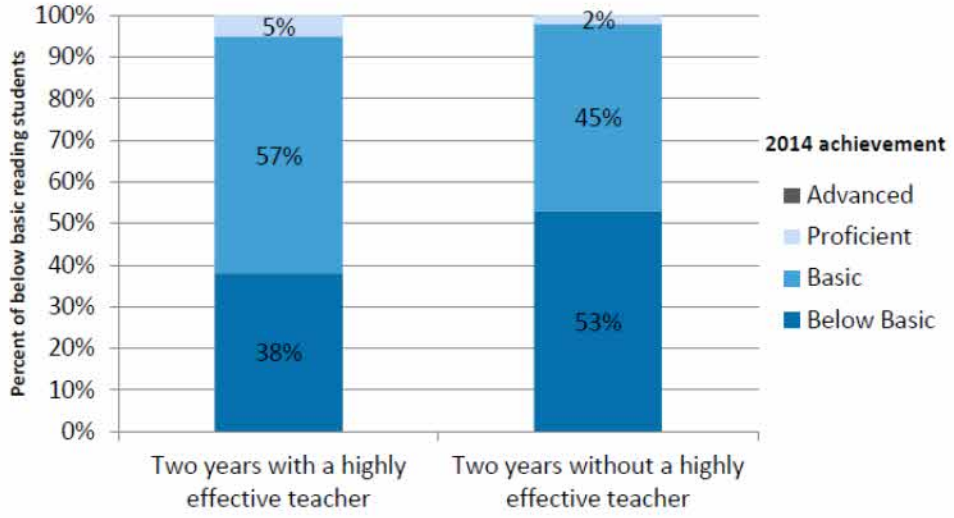
Theory of Action

During the development of this plan, we considered a few key issues concerning equitable access. First, we worked with leaders across our state agency to better understand and connect the way various divisions and programs were already addressing issues of access to effective educators. We established an equity workgroup of representatives from our internal Office of Research and Policy as well as our Teachers and Leaders division to consider not only what data metrics we might analyze to better understand this issue, but also to grapple with difficult questions about the state's role and key levers for addressing problems of inequity.

Research shows that teachers have a greater impact on student achievement than any other in-school factor.[1] They are especially important for students who do not have the same access to additional resources outside of school. Yet some students, in many instances the students who need good teaching the most, systematically do not have the same access to effective teaching.

Analysis of Tennessee's data echoes the above findings. As seen in the figure below, students who score at lower achievement levels are much more likely to achieve proficiency if they have a highly effective teacher. The relationship between teacher quality and student success is even stronger for our most disadvantaged students. This national and state level research about the importance of access to effective teaching formed the basis of our theory of action and research into the state and district equity gaps.

Figure 4: Highly Effective Teachers' Impact on Student Achievement



We sought to better understand whether particular subgroups of students based on minority, income, or prior achievement status had the same access to effective educators as their peers. In examining this data, we find that students from the most disadvantaged subgroups tend to have less access to the most

[1] Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement* (Research Progress Report). Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.

effective teachers than their peers. Importantly, we find substantial variation across districts in the state, with the state-level gap in access driven by particular districts rather than by a homogenous pattern of inequitable access in all districts across the state.

We hypothesize that a number of factors influence a district's supply of effective teachers and the extent to which certain students receive access to these teachers. Supply-side factors likely include the quality of and proximity to teacher preparation programs, recruitment and teacher hiring practices, geographic labor markets, teacher evaluation and professional development, teacher retention, and compensation strategies. Factors affecting access include the quality of school leadership, teacher preferences about schools and courses, district assignment of teachers to schools (where applicable), principal assignment of teachers to courses, and school assignment of students to teachers.

The varied root causes of inequity as well as the heterogeneous nature of the size and type of equity gaps across districts precipitated an important dialogue around the state agency's role in addressing issues of inequitable access. While we know that many of the root causes lie in systemic issues outside of education or are issues best addressed through district solutions, we also recognize several key levers that the state can utilize to call attention to and address inequitable access. Providing the right policy context to empower districts to make human capital decisions for their district is invaluable, along with the invaluable role that the state can play in providing data transparency around key issues. Our plan builds off of these strategies in a multi-phased approach to consider current initiatives like evaluation and differentiated pay and providing districts with access to new data metrics. We believe that sharing this data will enable the majority of districts to address issues, while the state will also provide a series of targeted supports for those districts with more severe challenges. Finally, ensuring regular mechanisms to share the state's progress in addressing equitable access to effective teachers will hold both the state agency and districts accountable for improvement.

Data and Performance

Defining the Issue

Tennessee measures teacher effectiveness based on teachers' contributions to student learning. In 2011-12, Tennessee implemented a new policy around statewide teacher evaluation. The evaluation system is comprised of multiple measures including teacher observations, student growth, and student achievement measures. For the purpose of this analysis we use a measure of teacher effectiveness from our evaluation system, the Tennessee value-added assessment system (TVAAS). This measure provides a statistical estimate of a teacher's contribution to students' learning. It also provides the greatest amount of variation. Under this system teachers are categorized as a level one to five.

In this analysis we define highly effective teachers as teachers scoring a level four or five on TVAAS in math and reading/language arts on a five-point scale. A level four or five score indicates that a teacher's students tended to show more growth than expected. We use one-year TVAAS scores in the year prior to assignment.

To identify issues of equity, we examined both the supply of highly effective teachers as well as particular students' access to those highly effective teachers. For a district to address an issue of equity they must first ensure that they have a high quality supply of teachers, then consider which students are assigned to those teachers. We felt that this two-prong analysis was critical for capturing the complexity of equitable access issues.

Supply of Highly Effective Teachers

In order to provide students' access to highly effective teachers they must have a sufficient supply of highly effective teachers. The table below shows the variation in highly effective teachers across subjects at the state level. The percentage of highly effective teachers ranges from 42 to 56 percent. Forty-five percent of the elementary teachers in Tennessee received a TVAAS score of four or five and would be considered highly effective for the purpose of this analysis.

Table 1: State Level Supply

Subject/Grade level	Percentage of Teachers with a 4 or 5 TVAAS score
Elementary	45%
7-12 Math	56%
7-12 English/Language Arts	43%
7-12 Science	42%
7-12 Social Studies	53%

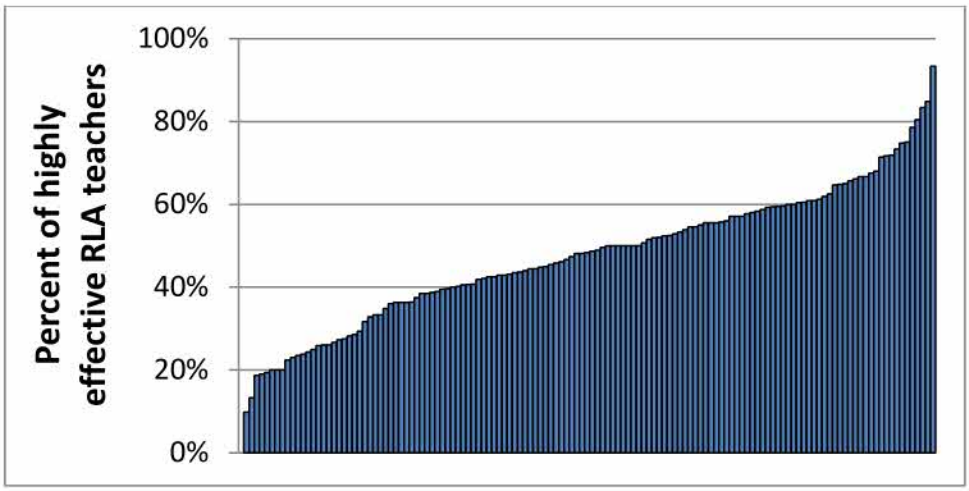
This data highlights that we must do more to address supply by focusing on the quality of both incoming teachers and providing supports for existing teachers to improve. In order to achieve our goals, we must increase the number of highly effective teachers available to our students. We also recognize that this

issue of supply becomes even more critical as we examine the percentage of highly effective teachers available in particular districts.

District-level Variation in Supply

We also examined this supply data at the district level. The percentage of highly effective teachers varies substantially across districts in Tennessee (see Figure 6 below). For districts on the far left side of this distribution, ensuring equitable access means first increasing the number of effective teachers in the district. One element of our plan involves identifying the districts that have small number of highly effective teachers and working with the district leadership to improve the pipeline of high quality teachers in those areas. Concurrently we must also focus on improving the effectiveness of currently employed teachers through access to effective feedback, coaching, and professional learning.

Figure 5: District-level Variation in the Supply of Highly Effective RLA Teachers



Each bar represents a district.

Access to Highly Effective Teachers

After examining, the state and district-level variation in the supply of highly effective teachers, we turned our attention to the issue of access. We calculated gaps in access to highly effective teachers between several student subgroups and comparison groups. Subgroups examined include low-income students, minority students, low-performing students, and high-performing low-income students.

For the purposes of our analysis, low-income students are those who were eligible for free and reduced price lunch. Minority students include black, Hispanic, and Native American students, as defined within our state accountability system. These racial subgroups comprise the minority group because they are the subgroups currently performing below the state average. We define student performance levels based on proficiency levels on state assessments. The low-performing students' analysis focuses on assignment inequities between below basic and advanced students. We focus on below basic students

as our low-performing students due to our state priority to increase the achievement of below basic students.

The "equity gap" is defined as the difference in the percent of students in one subgroup who receive highly effective teachers compared to the percent of students in a comparison group who receive highly effective teachers. The equity gaps at the state level are displayed in Tables 2 and 3.

Table 2: Mathematics Equity Gaps

Subgroup	Comparison group	2014			2013		
		Percent of comparison group with access to a highly effective teacher	**Percent of subgroup with access to a highly effective teacher**	**Size of equity gap**	**Percent of comparison group with access to a highly effective teacher**	**Percent of subgroup with access to a highly effective teacher**	**Size of equity gap**
Low-income	Not low-income	60.8%	57.3%	3.5%	73.2%	69.3%	3.9%
Minority	Not minority	59.4%	57.5%	1.9%	72%	68.5%	3.5%
Advanced	Below Basic	59.8%	53.3%	6.5%	74.5%	67.9%	6.6%
Advanced, Low-income	Advanced, not Low-income	61.1%	57.2%	3.9%	76.4%	70.6%	5.8%

Table 3: Reading/Language Arts Equity Gaps

Subgroup	Comparison group	2014			2013		
		Percent of comparison group with access to a highly effective teacher	**Percent of subgroup with access to a highly effective teacher**	**Size of equity gap**	**Percent of comparison group with access to a highly effective teacher**	**Percent of subgroup with access to a highly effective teacher**	**Size of equity gap**
Low-income	Not low-income	30.3%	24%	6.3%	47	41.6	5.4%
Minority	Not minority	28.5%	23.0%	5.5%	43.9	44.3	-.4%
Advanced	Below Basic	22.6%	21.1%	1.5%	50.6	41.8	8.8%
Advanced, Low-income	Advanced, not Low-income	24.2%	18.4%	5.8%	52.7	44.8	7.9%

Tables 2 and 3 above display the percent of students from subgroups and comparison groups that have access to highly effective teachers across the state. It is evident from these tables that the size of the equity gaps range depending on the year, subject, and subgroup analyzed.

Although we calculated gaps for all of the subgroups described above, our primary focus in this analysis is on the gaps in teacher access between low-performing students and their advanced peers, with a secondary focus on low-income students' access, once we control for achievement. We believe low-performing students' access to highly effective teachers is a priority due to the following reasons.

1. Tennessee prioritizes improving achievement for all students and closing achievement gaps. We have historical achievement gaps by race and economic status. In order to improve achievement of all students in our state, we must ensure our lowest performing students have access to highly effective teaching.

2. The majority of the low-performing students are also low-income and/or minority. In 2014, 83 percent of students scoring below basic on the state's reading language arts assessments were low-income and 53 percent were minority. When we fail to include achievement in our analysis it is difficult to untangle the root causes of inequities in students' access to highly effective teachers.

3. Schools in Tennessee tend to be homogenous in terms of racial and economic makeup. About 70 percent of schools in the state have student bodies comprised of 75 percent or more of one race. About two-thirds of schools serve 60 percent or more low-income students. If we focused solely on minority or low-income students rather than on low achieving students of any race or income level, we would limit our ability to detect inequities between students within a single school.

To better understand the size of the gaps, we translated them into the chances a student had of receiving an effective teacher over a six year period. In the case of our primary analysis, across the state in 2013, 50.6 percent of advanced reading students had access to a highly effective teacher, which means an advanced reading student in grades four through eight had a five in ten chance of receiving a highly effective teacher. In contrast, only 40.8 percent of below basic reading students had a highly effective teacher, which means a below basic student had a four in ten chance of receiving a highly effective teacher. This means that over the course of the five year period, we expect the advanced students to have three years of highly effective teachers while the below basic student only receives two years of highly effective teachers.

Within- and between-school gaps

Inequitable teacher assignment can occur within- and between-schools. The following section explains the difference between within school gaps and between-school gaps, as well as how we combine the two to compute the overall district equity gap. We think it is important to consider which type of gaps districts are experiencing so that district leaders can better target strategies to address the specific problems.

Figure 6: Effective Teaching Gap

Within-school gaps occur when certain students are assigned to more or less effective teachers in their school, dependent on characteristics such as socio-economic background or prior achievement. Consider the following scenario: John and Kevin, both attended fourth grade at Meadowbrook Elementary in 2013. John scored advanced on his third grade RLA and math TCAP exams. He is placed with a teacher named Ms. Knight, who received a level five TVAAS score in math and a level four TVAAS score in reading in 2012. Kevin scores below basic on his third grade RLA and math TCAP exams. He is placed with Ms. Shipp, who received a level three TVAAS score in math and a level two TVAAS score in

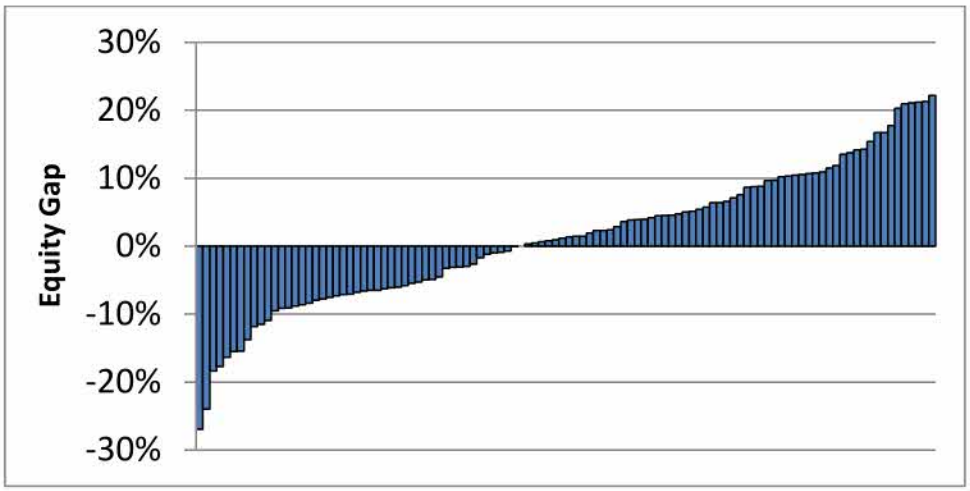
reading in 2012. If this assignment pattern occurred systemically, then this would be an example of a within-school gap.

Between-school gaps occur when more effective teachers are assigned or selected to teach in schools that serve certain groups of students in mass, dependent on characteristics such as socio-economic background or prior achievement. For example, Liberty Elementary in Hope School District has five fourth grade teachers. All teachers at Liberty received a TVAAS score of four or higher in math and RLA in 2012. Therefore, all students at Liberty had access to highly effective teachers in 2013. Fourth graders at Liberty Elementary are mostly from non-economically disadvantaged households. In contrast, Freedom Elementary in Hope School District has three fourth grade teachers. No teacher at Freedom received a TVAAS score higher than a three in math or RLA in 2012. Thus, no fourth grader who attended Freedom Elementary in 2013 received a highly effective teacher. All the fourth graders at Freedom Elementary come from economically disadvantaged households. If this occurred systemically throughout the district, the district would have a between-school gap.

District-level variation in the distribution of highly effective teachers

The primary analysis examines the size of the equity gap between low-performing and high-performing students. Similar to all gaps examined, the size of the equity gaps between these two student groups varies by district (see Figure 7). In 2013, some districts provided low-performing students more access to highly effective teachers than high-performing students. About 60 out of 142 districts, however, had an equity gap greater than zero, meaning that low-performing students had less access to highly effective teachers than their high-performing peers.

Figure 7: District-level Variation in the Distribution of Highly Effective Teachers

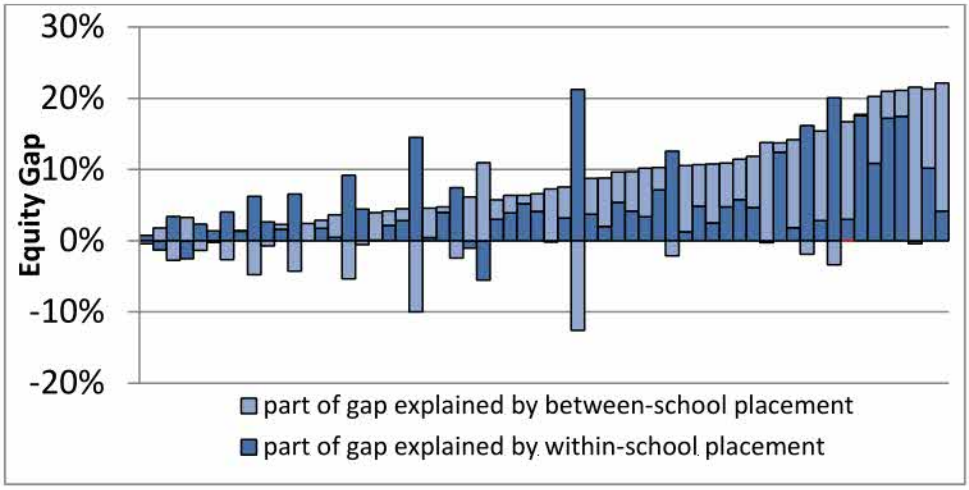


Each bar represents the size of the equity gap in a district.

We then examined in Figure 8 whether the districts with gaps greater than zero (those districts represented by the lines in the upper, positive portion of Figure 7) had challenges with student placement between- or within-schools. Figure 8 shows that some districts' gaps were due entirely to between-school placement, where highly effective teachers are concentrated at the schools with a

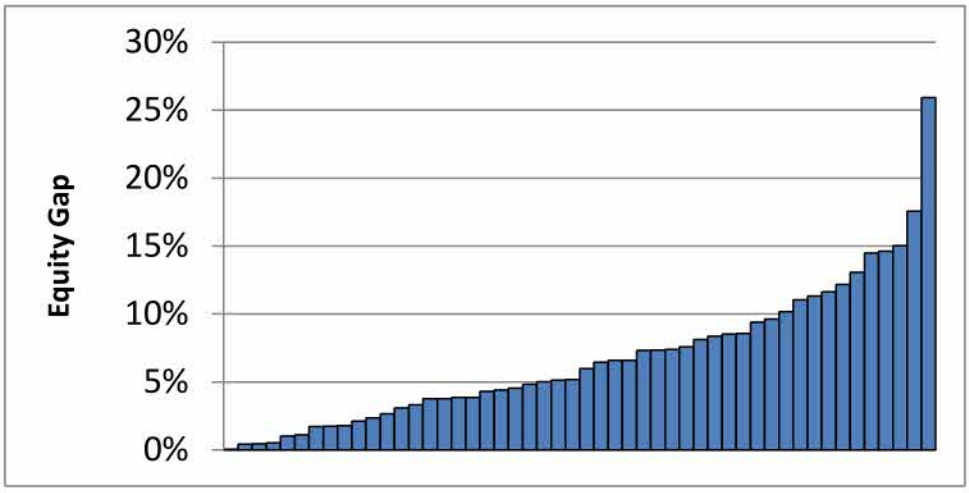
larger percentage of high-performing students than at those schools serving low-performing students. In other districts gaps were due to within-school placement, where low-performing students within a school have less access to highly effective teachers than their high-performing peers in the same school. For several districts both within- and between- school placements contributed to the gaps.

Figure 8: Within and Between School Gaps



The secondary analysis examines the size of the equity gap between low-income high-performing students and high-performing students who are not low-income. Like the primary analysis, districts vary in the size of their equity gaps. Many districts place low-income high performing students with highly effective teachers at higher rates than the high performing students who are not low-income. In 50 of the state's 142 districts, advanced low-income students receive highly effective teachers at lower rates than their advanced, not low-income peers (see Figure 9 below).

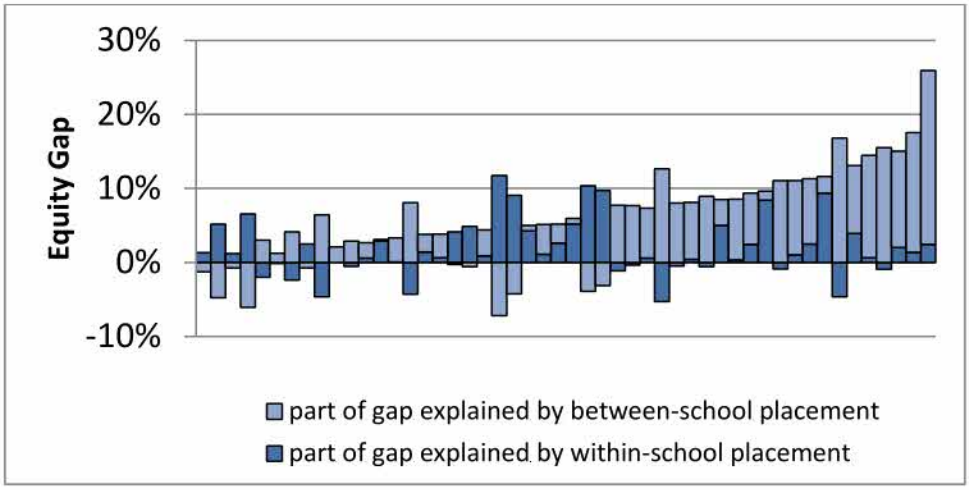
Figure 9: Equity Gap Between Low Income Students



Each bar represents the size of the equity gap in a district.

In Figure 8, we saw that equity gaps between low-achieving and high-achieving students were explained partially by within-school gaps and partially by between-school gaps. In contrast, Figure 10 shows that majority of gaps between low-income and not low-income students, controlling for achievement, are explained by between-school differences..

Figure 10: Equity Gaps Between Low-Income and Not Low-Income Students



Assessing the Problem at the State and District Levels

Given the district level variation in equity gap size, we concluded that not all districts contribute to the gaps we see at the state level. Only some of our districts are encountering large issues with providing equitable access to their most effective teachers. Based on this and the supply data analyzed we determined that we should classify districts based on the problem(s) the data revealed and to plan targeted support strategies. We are aiming to identify districts that have a particularly low supply of highly effective teachers or large equity gaps. Additionally, we plan to include data from secondary subjects (i.e. End of Course exams) to provide a more complete picture for districts and to further examine patterns in districts and schools. We plan to engage with multiple stakeholders to develop a common definition of what a low supply or large equity gap looks like. The following sections will detail our strategies to address the root causes of low supplies of highly effective teachers and equity gaps.

Additional Measures of Teacher Quality

While we plan to primarily use the percentage of highly effective teachers, as measured by teacher value-added scores, to identify equity gaps in Tennessee, we also examined equity gaps by other teacher quality indicators including: highly qualified status, out of field teaching, and teacher experience.

We defined highly qualified as a teacher who is fully licensed and does not have any licensure requirements waived on an emergency, temporary or provisional basis and who has subject content knowledge verified for federal reporting purposes under No Child Left Behind (NCLB).

Out of field teaching is defined as teaching on an approved waiver or permit. A waiver must be requested and approved if an educator holding an Apprentice, Transitional, or Professional License is scheduled to teach more than one course or more than two sections of one course outside the area of endorsement. A permit is a type of emergency credential that may be issued to an individual who does not meet the requirements for any other type of teaching license. Permits are rare and issued by the Commissioner in response to extenuating circumstances. It is important to note that any courses which conclude with an end-of-course exam for high school credit may not be taught on waivers or permits. Due to the high percentage of teachers defined as highly qualified and the few number of state licensure waivers, almost all students from both the subgroup and comparison group tended to have highly qualified teachers and teachers teaching in-field .

Experienced teachers are defined as having three years or more of teaching experience. Low-performing students were more likely to have inexperienced teachers compared to their advanced peers.

Table 4: Equity Gaps by Highly Qualified Teacher Status

Subgroup	Comparison group	Math 2014			Reading 2014		
		Percent of comparison group with access to a highly qualified teacher	**Percent of subgroup with access to a highly qualified teacher**	**Size of equity gap**	**Percent of comparison group with access to a highly qualified teacher**	**Percent of subgroup with access to a highly qualified teacher**	**Size of equity gap**
Low-income	Not low-income	99.9%	99.5%	0.4%	99.2%	98.9%	0.3%
Minority	Not minority	99.8%	99.7%	0.1%	99.2%	98.9%	0.3%
Below Basic	Advanced	98.8%	99.2%	-0.4%	99.9%	99.3%	0.6%

Table 5: Equity Gaps by In-Field Teaching Status

Subgroup	Comparison group	Math 2014			Reading 2014		
		Percent of comparison group with access to an in-field teacher	**Percent of subgroup with access to an in-field teacher**	**Size of equity gap**	**Percent of comparison group with access to an in-field teacher**	**Percent of subgroup with access to an in-field teacher**	**Size of equity gap**
Low-income	Not low-income	99.7%	99.9%	-0.2%	99.9%	99.8%	0.1%
Minority	Not minority	99.8%	99.8%	0%	99.9%	99.9%	0%
Below Basic	Advanced	99.6%	99.8%	-0.2%	100%	99.8%	0.2%

Table 6: Equity Gaps by Teacher Experience

Subgroup	Comparison group	Math 2014			Reading 2014		
		Percent of comparison group with access to an experienced teacher	**Percent of subgroup with access to an experienced teacher**	**Size of equity gap**	**Percent of comparison group with access to an experienced teacher**	**Percent of subgroup with access to an experienced teacher**	**Size of equity gap**
Low-income	Not low-income	80.1%	77.9%	2.2%	82.4%	79.7%	2.7%
Minority	Not minority	80.0%	75.9%	4.1%	82.0%	78.1%	3.9%
Below Basic	Advanced	80.5%	75.6%	4.9%	83.4%	78.0%	5.4%

Stakeholder Engagement

The Tennessee Department of Education recognizes the need for early and frequent input from stakeholders in three key ways:

- Development of the equity plan;
- Root cause analysis at the state, district, and school level, and;
- Implementation and monitoring of state and local strategies to address equity gaps.

Over the last three years of statewide teacher and principal evaluation implementation, the department has listened to educators and has made modifications to its evaluation model each year as a result of stakeholder feedback. Because the equity gaps identified through our research rely heavily on teacher evaluation data, we intend to continue sharing information on the methodology as well as working collaboratively to develop solutions to address the identified gaps.

In summer 2014, the Teachers and Leaders division convened an internal workgroup to create a coordinated human capital report using the various, existing state level data on educators. The internal working group consisted of representatives from the internal Office of Research and Policy, the Evaluation team, the Educator Talent team. Concurrently, an internal equity workgroup was formed as the Office of Research and Policy team began working to understand teaching gaps and supply and demand issues across the state. As both groups finalized their analyses, the teams began to share the information with a broader network of internal and external stakeholders.

Beginning at the department level, a cross-functional team convened to review the equitable teaching gap information and draft human capital report. The team included former Commissioner Kevin Huffman, representatives from the Teachers and Leaders Division, representatives from the Centers of Regional Excellence (CORE) offices, and representatives from the Deputy Commissioner's office including the Office of Consolidated Planning and Monitoring.

In November 2014, the Educator Talent team also convened approximately 25 district teams who are currently implementing strategic compensation plans. The participants in this day-long meeting received a draft of the new human capital data report and previewed the equitable teaching gap state-level research. The human capital data report is one of the new strategies proposed by the state and includes information such as evaluation distributions, persistently low-performing and persistently high performing educator information, and teacher improvement information. The participants were able to provide valuable feedback on the types of additional information they would like to see and how this report could be used at the district and school levels.

In early 2015, under the leadership of Commissioner Candice McQueen, an engagement plan was developed to gather feedback on the draft equity plan from teachers, district leadership, and external policy and community organizations. In spring 2015, the team met with the following groups to get feedback on the research methodology, the root causes and the strategies described in the following

sections. Participants in these meetings also received a draft of the human capital data report and a draft of a district equity gap report.

- Tennessee Organization of School Superintendents Board of Directors on April 15, 2015
- Commissioners Teacher Advisory Council on May 7, 2015
- External organizations and Community groups on May 12, 2015
    - Professional Educators of Tennessee
    - State Board of Education
    - State Collaborative on Reforming Education
    - Teach for America
    - Tennessee Association of Colleges of Teacher Education
    - Tennessee Association of School Personnel Administrators
    - Tennessee Business Roundtable
    - Tennessee Education Association
    - Tennessee Parent Teacher Association
    - Tennessee School Boards Association
    - Urban League of Middle Tennessee

Based on the feedback of the group, we plan to conduct additional data analyses which include secondary TVAAS data (i.e. End of Course exams) in fall 2015 and build upon the existing strategies with input and new ideas proposed by district level leaders.

We will continue to seek feedback on the district level data reports and the strategies outlined in the next section throughout the upcoming school year. Below is a table which represents the types of stakeholders that the TDOE typically engages with on a regular basis.

Table 7: Stakeholder Groups

Directors	Supervisors & Principals	Teachers & Teacher Groups	Other Education Organizations
Tennessee Organization of School Superintendents	Administrator Evaluation Coaches	Common Core Coaches	Tennessee State Board of Education
Superintendents Study Council Executive Board	Principal Study Council	Teacher Advisory Council	Tennessee School Boards Association
Common Core Leadership Council	Supervisors Study Council	Teach Plus	Tennessee Association of School Personnel Administrators
	TEAM Coaches		State Collaborative on Reforming Education

Root Cause Analysis

After careful examination of data, a thorough root cause analysis is critical to determine underlying causes of inequitable access to effective teachers. The state views this root cause analysis as an integral part of our stakeholder engagement plan and key to successful implementation of strategies. Without this step in the process, we risk investing time and resources into strategies ill-equipped to address the specific causes of inequity. Furthermore, we believe most of this root cause analysis must be conducted at the district level. Because our districts vary widely in terms of their size, geographic location, local challenges, leadership, and in many other aspects, we know that a one-size fits all root cause analysis is not sufficient.

Through the analysis described in the data and performance section, we identified a state-level picture of the supply and distribution challenges. While we believe that a comprehensive district-level root cause analysis is critical, there are likely some common root causes for supply and access challenges across districts. To begin that discussion, our internal stakeholder group identified several likely state-level root causes. As will be explored in the *Strategies for Achieving Objectives* section, many current initiatives are aimed at addressing many of these root causes, including evaluation, differentiated compensation, and enhanced recruitment tools.

The preliminary root cause list outlined below is not exhaustive and is outlined for purposes additional discussion with our districts.

- Variance in Leadership Skills and Capacity—We know that principals and district leadership must be excellent talent and human capital managers. They must be adept evaluators and skilled at providing feedback and coaching. They are also often responsible for recruitment and selection of teachers. We recognize that this instructional leadership and talent management focus is a big shift from the previous responsibilities focused on building management for some of our administrators. The variance in these skills and capacities and the shifting role of leaders are likely contributing factors to the supply challenges faced in some schools and districts. We must ensure all school leaders have the skills to effectively recruit, assign, and develop their teachers.
- Rural Challenges—We know that the challenges present in rural communities make it difficult to attract and retain great teachers. The pressures to recruit and retain high quality candidates in rural areas without a local tax base to contribute to more competitive salaries is difficult. This is particularly a challenge in certain subject areas where the state already has a lower supply of highly effective teachers[2]. Because of these challenges, we must support rural districts in creating innovative recruitment programs and compensation systems, while also developing strong professional learning plans that help them grow their own talent.

[2] Supply and demand study

- Lack of quality prep programs in certain regions/for certain subjects—We know that access to the state's most effective educator preparation programs is not equal throughout the state[3]. We also know that currently our largest producers of new teachers are not always the most effective preparation programs[4]. Districts also tend to hire educators from the nearest institutions which may not always be the highest quality[5]. This precipitates the need to continue raising preparation standards and strengthening partnerships between districts and programs.
- Inadequate professional learning—We know that high quality, targeted professional learning is key to improving teacher effectiveness of our existing workforce and ensuring a high quality supply of educators for all students to access. We also know that increased focus on providing job-embedded and personalized professional learning is the right one[6]. We must support districts in establishing more job-embedded opportunities like Professional Learning Communities (PLCs) and more frequent coaching and feedback for educators.

While the root causes outlined above are likely to resonate throughout the state, a more thorough analysis with the engagement and conversation of our districts is needed. Moreover, when we disaggregate the supply and distribution metrics to the district-level we see great variation across the state. For example, when we analyze supply data, we know that some districts struggle to maintain a high quality supply of teachers, while in other districts this is not a current challenge. The same variation is true as we examined our other equity metric—access to effective teachers. A closer look at this data revealed not only variation among districts as to whether there was an effective teaching gap or not, the size of that gap, and whether it was due to between or within school gaps.

With this nuanced data picture, it is essential that we also conduct a similarly nuanced root cause analysis. Root causes are likely to vary from district to district depending on their precise supply and distribution data metrics. A district with a high quality supply of teachers but with a within school effective teaching gap could likely have a different root cause and strategy than a school without an effective teaching gap but with a low quality supply of teachers.

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[3] Tennessee Higher Education Commission. *Tennessee Report Card on the Effectiveness of Teacher Training Programs.*
http://www.tn.gov/thec/Divisions/AcademicAffairs/rttt/report_card/2014/report_card/14report_card.shtml
[4] *Ibid.*
[5] *Ibid.*
[6] Common Core Research Report

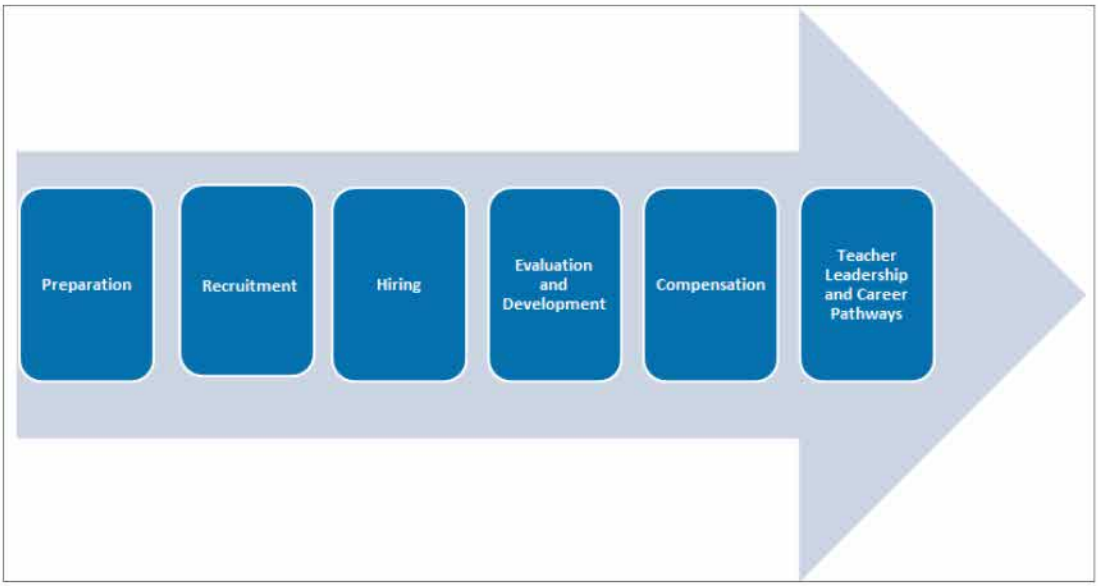
Strategies for Achieving Objectives

It was clear from the outset that our ambitious charge to be the fastest improving state in the nation that success would hinge on ensuring access to excellent educators for all students. In the department's 2011 strategic plan, the first strategic priority provided the vision for aligning the state's resources and strategies to "[expand] kids' access to effective teachers and leaders." The strategic plan outlined several key strategies for this important Priority:[7]

- Create marketplaces and supports for districts to hire the most effective teachers
- Strengthen the links between effectiveness, licensure and program approval
- Expand recruitment and supports for districts to hire effective principals
- Support superintendent searches where desired
- Expand the reach of our most effective teachers and leaders to access more kids

The strategies outlined above along with others implemented over the course of the past three years point to effective human capital management as an integral part of improving access to excellent teachers. We know that teacher effectiveness matters if we want to improve outcomes for all students, and that we must employ the right policies, systems, and programs to support districts in human capital management. It is not enough to simply focus on those teachers currently in the classroom; we must have a holistic view and consider the entire educator human capital continuum, outlined in Figure 11 below.

Figure 11: Human Capital Continuum



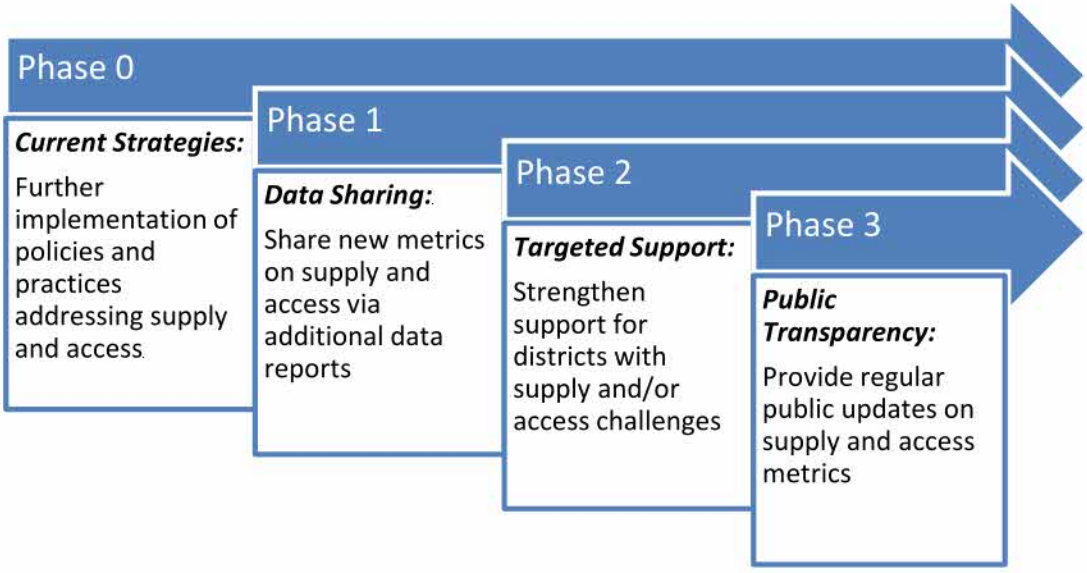
[7] TDOE. Strategic Plan. 2011

We must focus on strategies that effectively address all parts of this educator continuum from preparation through leadership if we want to ensure that all districts have a high quality supply of educators and that all students have equitable access to those educators.

Since the adoption of the state's bold student performance goals and corresponding strategic plan in 2011, we have focused on supporting districts in human capital management by laying the policy groundwork and providing data and best practices. This plan to ensure equitable access to excellent educators aligns with the state's current policies and initiatives that span the educator continuum. With robust data sources available, we have been able to refine and provide additional nuance to how we look at issues of equity, moving past input measures and focusing on effectiveness. This has been integral to achieving our ambitious performance goal of becoming the fastest improving state. The additional analyses examining supply and distribution of effective teachers described in the previous "Data and Performance" section above will help us to strengthen the strategies already proven effective and target support in the areas of greatest need.

The strategies we propose in the following sections fall into several phases designed to allow state and district opportunities to analyze new data metrics, build off of successful practices, and design local solutions. As Figure 12 outlines, the sequence of supports ranges from ensuring fidelity of implementation for current policies and programs, to a focus on sharing new data and information, to providing a series of targeted supports for those districts with the greatest need, and finally to sharing progress publicly.

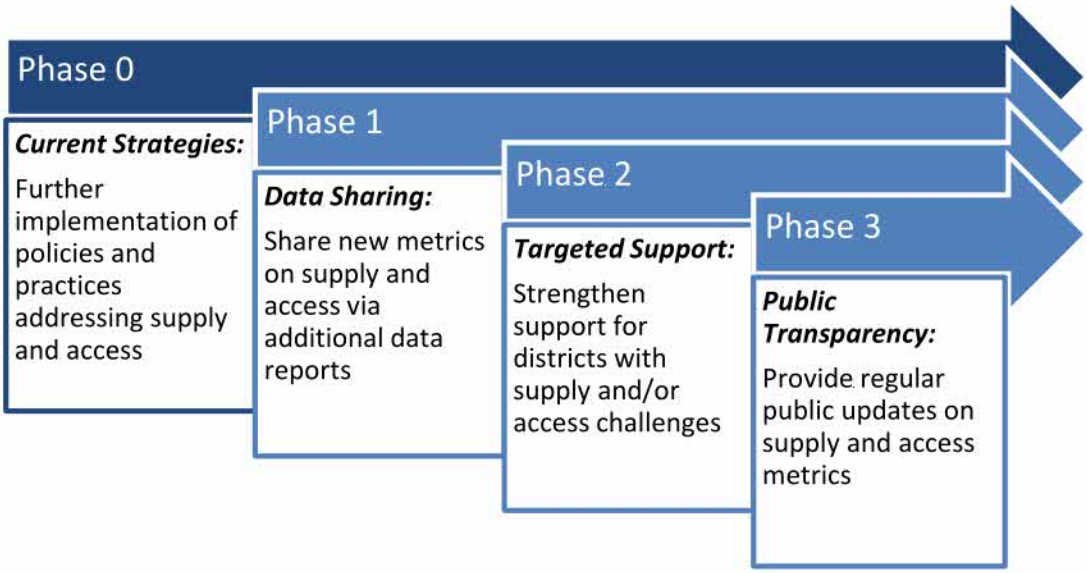
Figure 12: Equitable Access Strategy Sequence



The state believes that our existing policies and programs have laid a strong foundation for addressing issues of equity evidenced by the minimal state-level gaps in access described in the data section. Going forward, department's strategic plan, Tennessee Succeeds, will focus on the five priority areas of early foundation and literacy, high school and bridge to postsecondary, all means all, educator support, and

district empowerment to build on this foundation and further strengthen the state's commitment to equity for all students. The Phase 0 section below will outline these existing strategies in more detail, and our goal is for this plan to reinforce existing initiatives. In the Phase 1 section, we describe our proposed strategy for sharing new data metrics with districts that will allow for ongoing access to robust human capital information. In the Phase 2 section a proposed system of targeted supports will be described. Finally in the Phase 3 section, we will publicly report on our progress in closing equity gaps.

Phase 0: Current State Strategies



The state and districts have worked diligently together over the last several years to implement a broad range of policies and programs to address issues of teacher effectiveness and human capital management. As outlined in the data section, the state is proposing for the purposes of this plan to examine equitable access in terms of the overall supply and quality and quantity of educators, and the distribution of those teachers (whether within or between school effective teaching gaps are present). Ensuring a high quality supply of teachers focuses not just on ensuring that we prepare and select high quality incoming teachers, but also that we continue to focus on development and improvement of our existing educators. Strategies to address the distribution of educators across and within schools are not focused on forced placements or transfer but rather that we have the right incentives and support structures to encourage our best teachers to serve in the areas of greatest need. The various initiatives currently implemented by the state address one or both of these supply and access challenges are described in the following sections.

<u>Strategies Addressing Both Supply and Access</u>

Several strategies implemented by the state span the continuum of educator human capital management focusing on both ensuring a high quality supply of teachers and equitable access to those educators.

Evaluation

The foundation of our equity plan rests on our theory of action that access to effective teachers matters for all students, particularly our students who are furthest behind. This theory of action makes imperative the identification of effective teachers as the key strategy of our plan to ensure equitable access. Without a mechanism in place to identify our most effective teachers, we are unable to assess our equity gaps or begin to employ other strategies to address them. Like the rest of our work to improve student outcomes, we know that an effective evaluation system is the key to improving teacher effectiveness. Four years into our revised evaluation implementation, we continue to assess and improve our efforts.

In 2011-12, Tennessee became one of the first states in the country to implement a comprehensive, student outcomes-based, state-wide educator evaluation system. Implementing a statewide evaluation system for teachers and principals was a key tenet of Tennessee's First to the Top Act, passed in January 2010 with bipartisan support in the Legislature, from educator unions, community leaders, business leaders and public education advocates. The resulting Tennessee Educator Acceleration Model (TEAM) is a comprehensive evaluation tool designed to improve instructional practices. The evaluation model has become the foundation for much of our work to increase students' access to effective teaching.

The TEAM model gives educators a roadmap to instructional excellence, a process to guide reflection, and a common language for collaborating to improve instructional practice and student outcomes. Designed to include frequent observation for teachers and principals, the model facilitates constructive conversation between teachers and school leaders about improving practices and student results. Under the TEAM model, 50 percent of the educator's final effectiveness rating is based on observations conducted by trained LEA officials (principals, LEA employees, other administrators, etc.); 35 percent of the rating is based on a student growth measure (25 percent for those teachers without an individual growth measure); and 15 percent is based on an achievement measure that is cooperatively agreed upon between the educator and evaluator. Experienced teachers are observed four times annually, and novice teachers are observed six times annually. The TEAM model differentiates educator performance into a one through five scale (from "significantly below expectations" to "significantly above expectations"), based on observational data, student growth data and achievement data.

The TEAM model is in marked contrast to the pre-existing system. Previously, student achievement data was not considered, and there was insufficient differentiation of performance. In contrast, TEAM uses student growth data for up to 35 percent of the overall evaluation, and student achievement data for up to 50 percent, and allows for a clear distribution of results across five categories. Under the past system, tenured teachers were evaluated only twice over a 10-year period (in contrast with annual evaluations under TEAM). In contrast, TEAM provides frequent observation and feedback for all teachers. Furthermore, teachers were not treated as professionals with unique strengths and developmental needs, but instead as a monolithic group with no regard for individual differences. TEAM addresses these variations, enabling school leaders to provide tailored feedback that teachers can immediately use to improve their practices. Finally, in addition to providing differentiated, meaningful feedback, TEAM

also allows us to identify Tennessee's most outstanding classroom leaders, through the full model of both quantitative and qualitative measures. This enables school and district leaders, for the first time, to tap into the state's greatest educational resource – our most outstanding teachers. We are learning what makes them successful and how we can share, replicate, and reward their best practices.

The state's implementation of the evaluation model has evolved and significantly improved in the past four years. Under Commissioner McQueen, we plan to further improve the accuracy of the educator evaluation process and work to improve the quality of feedback that educators receive. The following list highlights some of the major modifications made to the state's evaluation system:

- *Changes to school-wide growth scores*. The General Assembly unanimously passed legislation, on the TDOE's recommendation, changing the weighting of school-wide value added scores for those teachers without individual growth from 35 percent of a teacher's evaluation score to 25 percent.
- *TEAM coaches.* Beginning in the 2012-13 school year, TEAM coaches were contracted to work through the state's regional CORE offices to provide support directly to schools.
- *Students with disabilities included in individual teacher value-add data.* Under prior statute, special education students were barred from inclusion in individual teacher growth scores.
- *Non-tested grades and subjects.* We have continued to pilot and adopt new models for assessing growth in Fine Arts, Physical Education, and World Languages, allowing teachers in these areas to have individual growth despite not having TVAAS. In 2015-16, a new portfolio model for Pre-K and Kindergarten has been approved for districts to adopt.
- *Student surveys.* We have continued to support districts in piloting and implementing student surveys as part of the formal evaluation system, comprising five percent of the overall score.

Because we have identified school leadership and the evolving expectations as a potential root cause of our equity gaps, we are investing more in a new evaluation tool that will clarify expectations and provide more targeted feedback to leaders. This is especially true for those leaders failing to retain or develop their best teachers. The state's implementation of administrator evaluation has evolved since its inception in 2011. The components of the administrator evaluation model mirror those of the teacher model with a 50 percent qualitative measures based on an observation rubric and 50 percent quantitative measures. The quantitative measures are composed of 15 percent achievement measure and 35 percent student growth. We underwent an extensive process to revise the administrator evaluation rubric in 2013-14 so that it better aligns with the state's revised Tennessee Instructional Leadership Standards (TILS). The revised TILS, adopted in 2013, focus on four key standards:

- Standard A: Instructional Leadership for Continuous Improvement
- Standard B: Culture for Teaching and Learning
- Standard C: Professional Learning and Growth
- Standard D: Resource Management

The Administrator Evaluation Advisory Council met monthly to inform the rubric revisions, and ten districts piloted the revised rubric and provided feedback to the state during the 2013-14 school year. All

districts are implementing the revised version in the 2014-15 school year. Given the wide range of administrator responsibilities, the revised rubric focuses on the importance of evidence collection over time rather than in a single school visit or observation. Administrators are scored via two cycles: the first semester cycle covering standards A, B, and C makes up one-third of the qualitative score while the second semester cycle covers all standards makes up two-thirds of the qualitative score. Districts are also required to implement a stakeholder or teacher perception survey as part of the evidence gathered to inform scoring. Finally, a bridge conference is conducted at the conclusion of the school year and is intended to serve as a summative conversation about qualitative and quantitative data as well as a mechanism for developing individual growth plans and school goals. Sixteen regional administrator evaluation coaches were in place during the 2014-15 school year to facilitate content sessions on the evaluation rubric and to support principal evaluators.

The state has also heavily invested in data systems and prioritized district reporting of evaluation data. Beginning with the first year of evaluation implementation, the state has provided all districts with the optional, no-cost use of a data system. The system which has evolved over time includes an option for observation entry and scoring, and also serves as the location for achievement and growth measure selections. The system provides teachers with access to view observation feedback and summative evaluation scores. Districts are also able to access a variety of data reports about system level progress and scoring.

Given the critical nature of evaluation data reporting, the state is constantly seeking to improve its data system functionalities. We are currently in the midst of a large scale data system project designed to build a comprehensive educator data management system. In its first phase, scheduled for release in fall 2015, this new system will connect our evaluation and licensure data systems, allowing for a holistic view of an educator's preparation and teaching profile.

We recognize that there is not a perfect evaluation system and the department is committed to the process of continuous improvement and making modifications to the evaluation system in response to data and feedback. Most recently, in a spring 2015 annual survey to teachers statewide, approximately 68% of teachers reported that the teacher evaluation process has led to improvements in their teaching and 63% of teachers reported that the evaluation process has led to improvements in student learning. In the fall of 2014, the evaluation team met with districts leaders and teachers throughout the state during a feedback tour to gather this information. We will continue to improve our implementation of the evaluation system by assessing impact and responding to feedback. We know that this work on teacher effectiveness is the most critical state lever for ensuring that teachers receive the quality of feedback and development needed to continually improve student achievement.

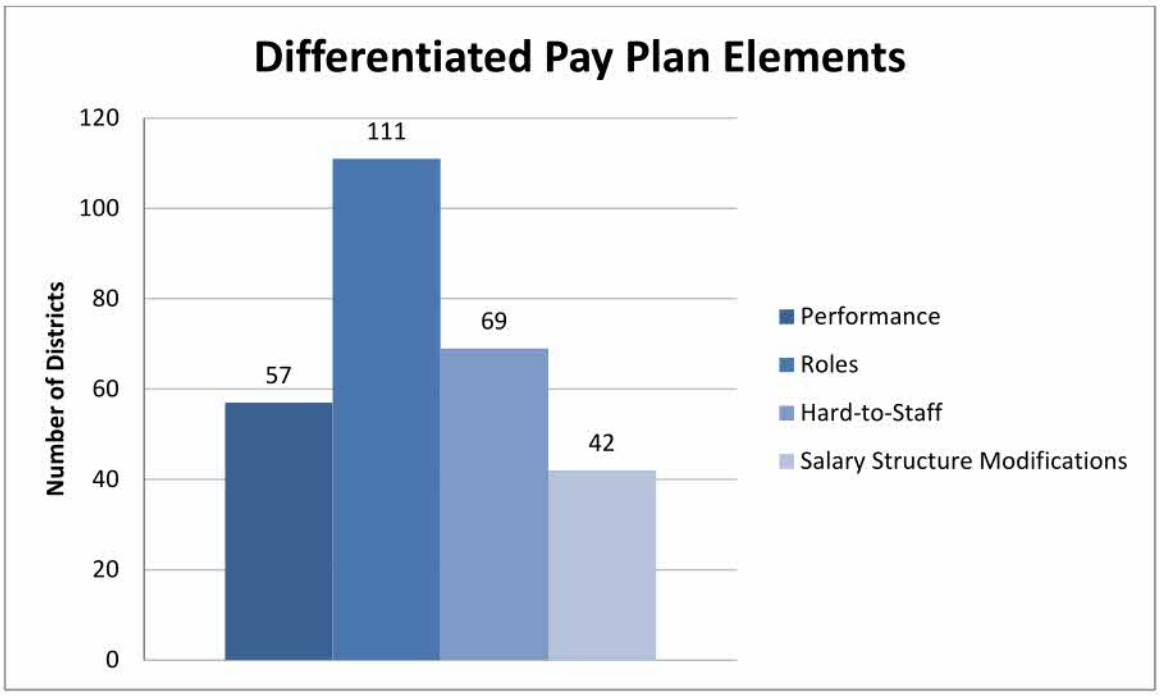
Compensation

Another current, critical strategy in addressing equity issues is the state's recently updated compensation policy. Ensuring a competitive salary is a key component of a human capital system designed to attract and retain highly effective teachers. Previously, the rigid nature of the state

minimum salary structure limited the ways that districts could recognize teachers for exceptional performance. In June 2013, the State Board of Education, after more than a year of discussion and research, passed a more streamlined version of the state minimum salary schedule and revised the state's differentiated pay policy. The policy was updated to provide additional guidance and clarity for the law, originally passed in 2007, requiring all school districts to implement some form of differentiated pay for educators. The state provided a number of technical assistance offerings to support district planning, including a series of intensive workshops for a select group of interested districts as well as statewide training sessions.

Between January and June 2014, districts submitted their differentiated pay plans and updated salary schedules. Districts proposed a range of innovative strategies to ensure that effective teachers have the opportunity to earn additional pay through performance-based compensation, taking on additional instructional responsibilities, or serving in hard-to-staff schools or subjects. Figure 13 highlights the variety of differentiated pay elements implemented by districts.

Figure 13: Summary of Differentiated Pay Plan Elements



More than one hundred districts developed plans to recognize teachers taking on additional responsibilities, and nearly half of districts included hard to staff elements. One-third of districts included some type of individual, school, or district performance incentive. These changes indicate that Tennessee districts are increasingly moving away from a "one size fits all" approach to compensation. Given the diversity of the state, districts were encouraged to develop plans that help solve the unique

challenges they face in recruiting, retaining, and recognizing the talented educators needed to reach student achievement goals.

These new flexibilities provided to districts currently help them to address supply and access issues. Both the changes to base salary in some districts, as well as the hard to staff incentives help to attract a high quality supply of candidates. Hard-to-staff school stipends offer a way for districts to address access by incenting highly effective teachers to serve where they are most needed. The performance bonuses also help to address teacher retention affecting both supply and access. We plan to continue working with districts to strengthen and expand their differentiated pay plans. Technical assistance resources and individual consulting are available to districts as they draft future year plans.

Strategies Addressing Supply

Preparation

Highly effective preparation programs are critical for ensuring that districts have a high quality supply of educators in the grades and subjects most needed, and we believe that the state plays an integral role in setting the bar for effective teacher preparation. The Teachers and Leaders division has spent significant time working with education preparation providers (EPP) to develop a revised process for program review. This effort is an integral part of the state's strategy to improve the quality of incoming teachers. The previous review process to approve or deny EPP programs was cumbersome and overly focused on inputs to the program without significant attention to outcomes, recruitment and selection strategies, clinical partnerships, and impact of program completers.

In July 2013, the Council for the Accreditation of Educator Preparation (CAEP) was formed as the new accrediting agency for educator preparation programs; CAEP convened a board of experts to develop a new set of standards that are more focused on EPP outcomes and impact. Armed with the new CAEP standards, we sought to revise and update the EPP review policy. Over the course of year, we engaged stakeholders to consider what changes needed to be made to the review process for education preparation providers and programs. In October 2014, the State Board of Education passed a revised version of the Tennessee Educator Preparation Policy that encompassed the new CAEP standards and accounted for program impact and outcomes by establishing annual reporting categories. The specific metrics and benchmarks are being developed and will be used as part of the approval process in 2017.

The more rigorous standards will have a focus on program and student outcomes. EPPs are subject to more frequent reviews under this policy. Annual reports will also be developed and in addition to more standard metrics like recruitment, selection, placement, and retention, the annual reports will also include information on the following:

- Completer Satisfaction – The EPP will report or verify results from a completer satisfaction survey.
- Employer Satisfaction – The EPP will report or verify results from an employer satisfaction survey. All primary partner LEAs will be surveyed.

- Completer Outcomes – The EPP will verify on completer outcomes as measured by components, such as:
    - Graduation rates
    - First time pass rates on required content assessments
    - Ability of completers to meet licensing requirements
- Completer Impact – Completer performance will be measured by performance, including:
    - The distribution of overall evaluation scores
    - The distribution of observation scores
    - The distribution of individual growth scores

These annual reports will be an important aspect of sharing feedback with preparation providers to improve their performance.

In addition to the changes to EPP approval, the department has also been working to improve supply by elevating expectations for content knowledge. When tests are regenerated by Educational Testing Services (ETS), a new recommended cut score is determined. Previously the state often approved cut scores that were within one or two standard deviations below the ETS nationally recommended cut score. However, now as several Praxis tests are regenerated each year, the State Board of Education is approving the nationally recommended cut scores. This effort will continue to raise expectations about what it means to be a teacher with strong content knowledge and pedagogy, allowing districts a better quality of teacher candidates.

Recruitment and Hiring

Identifying and scaling up effective recruitment and hiring practices will help address issues of supply, and in the last several years the state has devoted additional resources to determine what supports it can provide to districts for improve this area of human capital management. Through Race to the Top, the state contracted with Teachers-Teachers.com, one of the largest educator databases available in the country, in order to provide Tennessee school districts with access to job seekers, to support districts in automating the application, outreach, and screening processes and to develop proactive recruitment strategies. All districts are able to use the site for recruitment and its applicant tracking software. Teachers-Teachers.com provided a dedicated Recruitment Coordinator who assists districts with registration, postings, and campaigns based on the districts' level of need. The Recruitment Coordinator has built relationships with the 42 Tennessee higher education institutions to increase awareness and connect with potential graduates/job seekers. The Recruitment Coordinator also attends state and national conferences and job fairs in order to increase the number of licensed candidates in the database who may be interested in teaching in Tennessee. In the most recent quarter, Teachers-Teachers portal usage climbed to:

- 152 districts and charters with accounts
- 127 active districts or charters (posting or messaging during the quarter)
- 3,000 job postings
- 50,000 messages sent to potential candidates

- 39,000 candidates expressing interest in teaching in Tennessee (include 3,900 Tennessee residents)

It is clear that this type of recruitment support is an integral part of the state's strategy to support districts in improving their supply of educators. The support has been well received thus far and many districts have been able to transition away from paper application processes for the first time.

The state also contracted with New Leaders to develop a set of selection tools for assistant principals and train district leadership on using the tools. New Leaders already developed and launched a set of rigorous principal selection tools, creating a demand for a similar suite of interview and screening processes. Recognizing the selection and hiring of assistant principals to be key levers in improving leadership pipelines, the state purchased an Assistant Principal Selection Process tailored for Tennessee context and offers the tools at no cost to districts. New Leaders also provided six trainings across the state to demonstrate the tools for district leaders. CORE offices were also provided with training to support districts that adopt the tools in the future. The tools are now in place in many districts who were early adopters. We plan to continue working with districts to use these new selection tools and the Teachers-Teachers site. Phase 2 will also highlight some of the additional work we hope to engage in around recruitment and selection.

Professional Learning

Ensuring access to effective professional learning that helps teachers improve instructional practices is integral to increasing the number of effective teachers. Opportunities for growth and development of the current workforce must be addressed if we are to improve all students' likelihood of being taught by an effective teacher. The state has invested in a variety of educator professional learning programs designed to improve instruction.

One example of this high-quality professional learning is the state's training strategy for the transition to new college- and career-ready standards. To aid in this transition the state developed the core coach training model to "develop a network of teachers with a deep content and pedagogical knowledge of the [new standards] who could pass the knowledge on to their peers during formal training sessions and informal interactions throughout the year. Coaches were Tennessee teachers selected via a competitive application and interview process. Coaches received eight days of intensive grade-level training provided by the Institute for Learning at the University of Pittsburgh, engaging with the material first as learners and then as teacher trainers. Coaches then delivered training to participants at three-day, grade-level workshops held throughout the summer."[8]

The state "consistently found positive and significant effects of the TNCore math training on participants' instructional practice and on their effectiveness at raising student test scores. These results remain consistent using methods that control for previous year scores, school-level inputs, and for the fixed characteristics of teachers.

[8] The Impact of the 2012 TNCore Math Training on Teaching Practices and Effectiveness http://tn.gov/education/data/doc/impact_of_TNCore_Training.pdf.

- Participants' gains on observation scores were equivalent to about half of the gains made by the average teacher between the first and second year of teaching.
- The gains in instructional practice ratings were largest for the practices emphasized in the training sessions, including skills such as questioning, providing academic feedback, and teaching problem-solving techniques.
- Participants' gains in effectiveness as measured by the Tennessee Value-Added Assessment System (TVAAS) translate into the equivalent of approximately one extra week of learning for each of their students than we would have expected had they not attended the training sessions.
- Participants who had a Core Coach working at their school made significantly greater estimated increases in questioning practices compared to participants without this support."

Many districts have also capitalized on this model of professional learning, working with coaches in their district to provide ongoing professional development. This type of professional learning holds promise for improving teachers' instructional practice and student outcomes.

In addition to efforts focused on teacher professional learning, the state has also devoted resources to improving administrator professional learning. The state-run Tennessee Academy of School Leaders (TASL) is a state provided professional development program and one of two pathways for beginning administrators to advance their licenses. Previously this program was primarily outsourced to a variety of professional development providers; however, since 2012 the state has made significant changes to the coursework ensuring its relevance and alignment to the Tennessee Instructional Leadership Standards (TILS) which are the foundation of the administrator evaluation tool. Through this targeted, cohort-based program we reach 50 percent of administrators in their first three years providing an important lever for supporting administrator professional learning.

Revised sessions focus on many of the critical human capital management skills that principals need to address issues of supply and access in their schools. The prioritized skills and session content includes:

- Importance of human capital and hiring decisions connected to the TILS and related indicator in the administrator rubric
- Response to Instruction and Intervention strategies connected to the TILS and related indicator in the administrator rubric
- Feedback and coaching strategies for the teacher TEAM rubric connected to the TILS and related indicator in the administrator rubric
- Creating a school based mission and vision connected to the TILS and related indicator in the administrator rubric

Strategies Addressing Access

Staffing and Assignment

The state has invested in several strategies to address issues of access through innovative school staffing and student assignment decisions. One such strategy was the 2013 inclusion of the Supplemental Scope of Work in our First to the Top plan. The state reallocated approximately $8,000,000 from the state portion of RTTT funds, to award LEAs that agree to implement a specific set of reforms. Districts chose to implement specific options within each of three categories: evaluation, standards, and student assignment. The student assignment options outlined below represented a significant attempt to direct highly effective teachers to those students in greatest need:

- Assign students to classes ensuring that no students who are Below Basic in either reading or math on TCAP in the 2012-13 school year are assigned to a Level 1 (on final evaluation score *or* on TVAAS individual growth metric) teacher.
- Assign students so that Level 5 teachers will teach at least 10 percent more students, on average, than Level 1 teachers. The district will stay within the mandates of the state class-size restrictions, but will differentiate size to ensure top teachers reach more students. Stipends or other recognition plan for the Level 5 teachers are encouraged and would be created by the LEA.
- On average, ensure that at least 80 percent of all students with disabilities are assigned to a general education classroom environment for at least 80 percent or more of the school day in the 2014-15 school year.

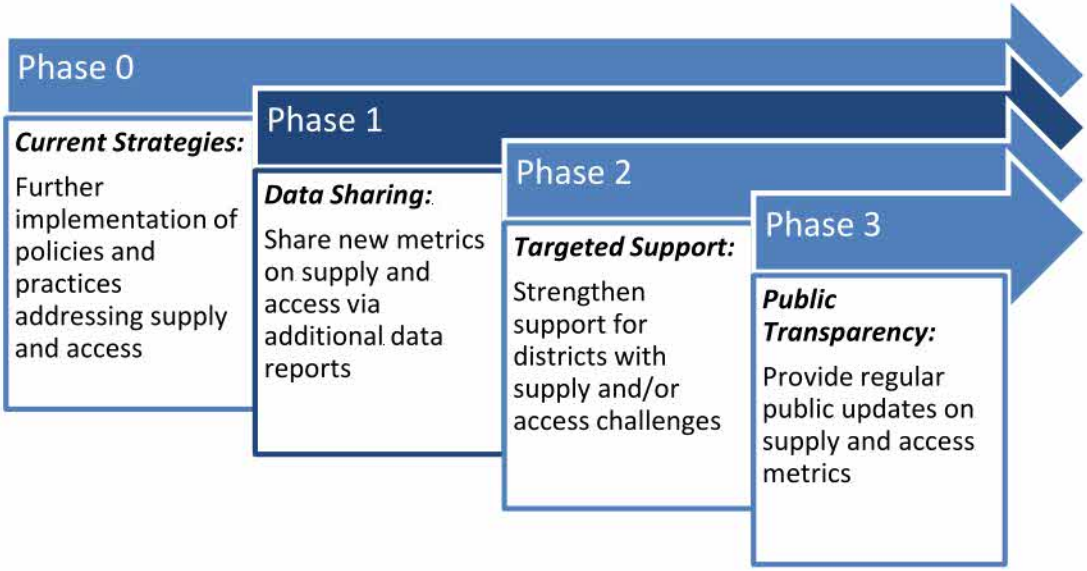
Participating districts implemented one of these strategies during the 2014-15 school year. Initially, the majority of participating districts selected the last of the three options listed above, the state plans to gather evidence about the impact of these strategies in the fall of 2015.

In the fall of 2013, the state piloted an innovative package of financial incentives to help attract and retain the most effective teachers in Priority Schools, schools in the bottom five percent of performance in the state. With this program the state provided funding, with School Improvement 1003(a) funds, to districts for recruitment and retention bonuses. Districts were provided $7,000 per Level 5 teacher newly recruited to a Priority School and $5,000 per Level 5 teacher retained in a Priority School. We developed this program to provide district and school leaders in those schools that traditionally struggle with issues of access with substantially more leverage in the recruiting and retention cycle.

Another element in ensuring equitable access to excellent educators is the state's revised tenure policy. The First to the Top statute passed in 2010 states that teacher and principal evaluations "shall be a factor in employment decisions, including, but not necessarily limited to, promotion, retention, termination, compensation and the attainment of tenure status." All personnel decisions are continued to be made by LEAs. The state does not mandate that LEAs make any employment decisions based on educators' final TEAM effectiveness ratings, but instead gives districts meaningful data in order to inform their personnel decisions.

Tennessee also passed tenure reform legislation that extends the teacher tenure probationary period from three to five years, and requires teachers to perform "above expectations" (level four of five) "or "significantly above expectations" (level five of five) for two consecutive years before receiving tenure.26 Similarly, tenured teachers who perform "below expectations" (level two of five) or "significantly below expectations" (level one of five) for two consecutive years may be dismissed by their districts. With these changes tenure becomes an important policy lever for districts seeking to ensure that they retain an effective teacher for every student within and across their schools.

Phase 1: Sharing Human Capital Data



Continuing to share human capital data and providing new and more frequent reports is a key strategy in the state's plan to ensure equitable access to excellent educators. As a state agency, we recognize that one of our biggest levers to drive improvement in student outcomes and teacher effectiveness is data transparency. We have devoted considerable resources to improving the quality of our data systems and ensuring we have internal capacity to conduct data analysis and answer key research questions.

By providing districts with improved data reporting, we are able to call attention to new trends and identify areas of strength and challenge. The state firmly believes that when given access to data, schools and districts will act. With the change in accountability systems under the state's ESEA Flexibility Waiver, districts and schools have responded to new annual measureable objectives (AMOs), which included for the first time metrics on achievement gaps between groups of students. Beginning with the state's First to the Top grant, school working conditions data was available via TELL (Teaching, Empowering, Leading and Learning) survey. The sharing of teacher effectiveness data is another example. The state not only has a long history of providing student growth and teacher effectiveness data through the TVAAS system that has been in place since the 1990s, but new data reporting began

with the 2011-12 implementation of the new evaluation model. Finally, other data reports shared with districts include information on overall teacher retention as well as differential retention based on effectiveness data.

As previously described, the department provides all districts a state data system to capture educator evaluation data. Annually, each district receives a summary report, called the Evaluation Data Completion Report, which contains district and school evaluation distribution information and alignment information between TVAAS Individual Evaluation Composites and Observation Scores. Additionally, district and school leaders have access to a wealth of information on educator effectiveness through the data system. The data system also has a number of reports which allow administrators to analyze and track performance of educators by observation indicator, by school, by observer, etc. Throughout the last three years, the Teachers and Leaders division has worked to train and encourage educators to review this data regularly guide their human capital decisions, ranging from hiring and placement to professional development to compensation and advancement.

This Phase 1 strategy of improving human capital data sharing between the state and districts is critical to moving the practice of evaluation beyond the mechanics and operational aspects and toward using longitudinal data to make better and smarter human capital decisions. The state plans to streamline some of the existing data reports available to districts as well as provide new human capital data through a new human capital data report.

The proposed human capital data report will incorporate information previously reported in disparate district reports. Evaluation reports on distribution of teacher effectiveness by observation, individual growth, and overall level of effectiveness will be integrated with other data reports on teacher retention and working conditions. This report will also incorporate the newly analyzed supply and access data described in earlier sections of this plan.

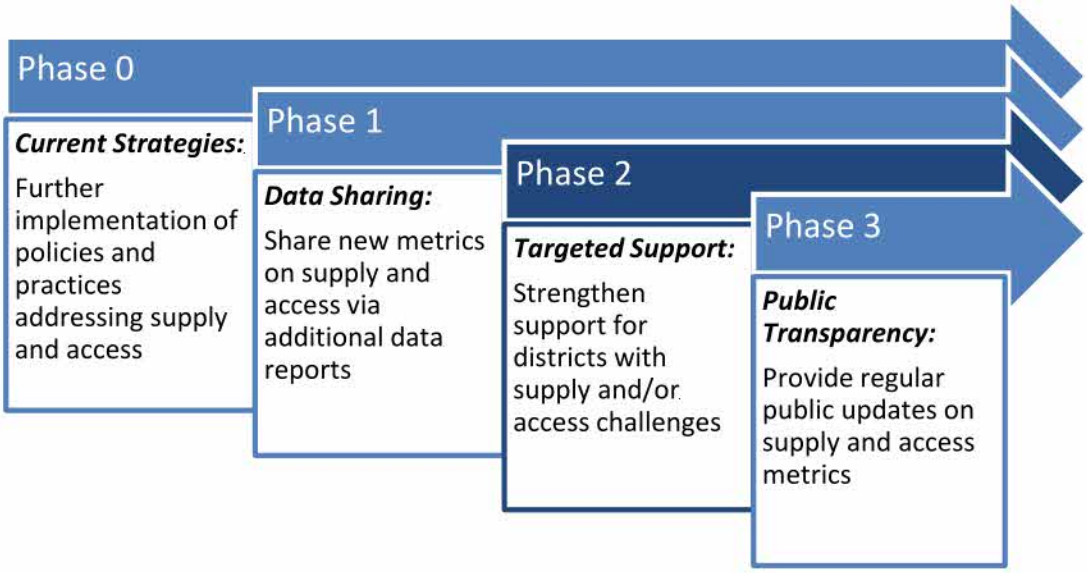
As mentioned previously in the stakeholder engagement section, the state has already developed a draft of this report for district feedback. This draft takes the first step at incorporating existing evaluation metrics, developing some new evaluation based data metrics like percentages of persistently high and low performing teachers, and integrating teacher retention data. This initial draft was shared with a small group of stakeholders during a November 2014 Compensation Convening. Early stakeholder feedback was overwhelming positive and interest in seeing additional metrics and refined reporting was expressed.

The state continued to seek feedback on the reports from the Centers of Regional Excellence (CORE) offices and in spring 2015 provided each CORE director a complete set of reports for his/her region to begin initial conversations with district leaders on how to interpret the reports and how to identify trends at a regional and district level. We intend to make additional edits and iterations of this report over the next year. The state has also developed a district equity gap report which will be incorporated into the next iteration of the human capital data reports in 2015-16. The state aims to include information on working conditions, supply, and access as part of those additions to the human capital data report. We will convene representatives to provide additional feedback on future iterations of the

report and data metrics. The next iteration of the report is planned for late fall 2015. As previously mentioned, the state is also in development of a new Educator Management Data System, which will combine data entry and management for evaluation and licensure. A key component of the project plan includes the accessibility of view-on-demand reports at the district level.

The Division of Consolidated Planning and Monitoring will also include human capital and equity gap information as part of its annual LEA risk assessment process. The annual LEA risk assessment incorporates over 65 indicators of risk that prioritize LEAs and identify those that will have conditions placed on grant awards and/or will require an on-site Results-based Monitoring visit by a cross-departmental team. The on-site Results-based Monitoring protocol is described in more detail in the Ongoing Monitoring and Support section.

Phase 2: Targeted Support



The state believes that continued data transparency and access to new data metrics on supply and access will allow districts with specific equity challenges to act. It is essential to allow time for districts to respond to new data, determine root causes, and assess current and needed strategies. While much of this work is best situated at the local level, it also important for state resources to be readily available.

Phase 2 of the state's plan to ensure equitable access to excellent educators is designed to provide targeted supports for those districts in greatest need. The state plans to continue discussions with stakeholders and conduct further analyses to determine how to best identify a need for more targeted support. The following are strategies that could be deployed in instances where a district has been identified or requests additional support.

Centers of Regional Excellence (CORE) Office Strategic Support

In 2012, the state restructured its existing regional offices, Field Service Centers, from a primarily compliance function, to one focused on districts' student achievement outcomes. Each CORE office is staffed with a Director charged with direct support of district leadership, a data analyst, and a team of math, reading, and intervention specialists. The CORE offices provide a wealth of support offerings for districts and utilize a yearly process of identifying districts with the highest needs to devote more direct assistance to. Incorporation of new equity data metrics will allow CORE Directors additional data points to determine and sequence interventions and services. These could include assistance with disaggregating and analyzing school level data, refining a district's Response to Instruction and Intervention (RTI^2) plan, or additional professional development offerings for district leadership.

TEAM Coaches

As mentioned earlier in the strategies section, one of our existing supports for evaluation implementation is the voluntary, but suggested assignment of a TEAM coach. With this initiative, school leaders struggling with scoring accuracy and feedback and coaching have access to job-embedded professional development. Responses to the program have been overwhelmingly positive, and internal data shows great improvement in scoring accuracy in participating schools after the TEAM coach intervention.

- Nearly 90 percent of support schools identified reduced misalignment
- Nearly 70 percent of support schools identified reduced misalignment by more than 10 percentage points
- 13 support schools dropped from double digit misalignment to 0 percent misalignment

TEAM coaches represent an important lever in the equity plan, as one of the key strategies in many schools and districts will be to improve existing teachers' effectiveness through feedback and coaching. The TEAM coaches provide in-depth support in the places where administrators need assistance in improving the accuracy of their feedback and supports for improvement. We anticipate that in districts and schools with an identified equity challenge who determine through a root cause analysis that improving evaluation implementation is a key need might be offered the placement of a TEAM coach during upcoming school years.

In 2015-16, the TEAM coaches are reviewing and analyzing the teacher and administrator evaluation data (TEAM and TILS) to prioritize district and school(s) support. Specifically, the coaches are identifying districts and schools for additional support based using the following information:

- High percentage of misalignment between individual growth scores and observation scores
- High percentage of non-differentiating observers
- Survey responses from teachers specifically on evaluation
- Administrator evaluation rubric scores for TILS Standard C1 (Evaluation) that are Below Expectations

Recruitment, Selection, Staffing Cohort

While there are a number of state strategies aimed at improving teacher recruitment and selection, this is a relatively new portfolio of work. Through supporting districts on the differentiated pay policy as well as through the human resources interviews conducted by the Educator Talent team mentioned in previous sections, it became clear that districts desired additional resources and tools in thinking about this area of human capital. The development of this plan and examination of the supply data has also highlighted the need for more direct state and district engagement on recruitment, selection, and staffing best practices. We plan to offer a series of training sessions to address this need and plan to focus on practices like workforce data analysis of turnover and staffing trends, developing a district brand and recruitment strategy, and improving the quality of selection process and tools. This training will be piloted in spring 2015 for interested and suggested districts. We believe this type of training will be integral for those districts grappling with supply challenges.

Targeted Differentiated Pay Elements

Another opportunity for targeted strategies is the use of specific differentiated pay elements. Mentioned as a Phase 0 strategy that impacts both supply and access, the state's differentiated pay policy laid the groundwork for districts to develop local incentives for a variety of areas including retention of highly effective teachers and hiring bonuses for particular schools or subject areas. The policy is flexible and does not prescribe specific types of incentives beyond the broad pay criteria. Working with districts determined to have a specific supply or access challenge to develop a pay plan designed to target that area of need, is an important lever in this work. The state plans to analyze current differentiated pay plans for those districts identified for targeted support and develop pay plan recommendations and modifications for district leadership. While we recognize changing pay alone is unlikely to solve an equity issue, we believe its competitiveness is integral to attracting and keeping great teachers in the profession.

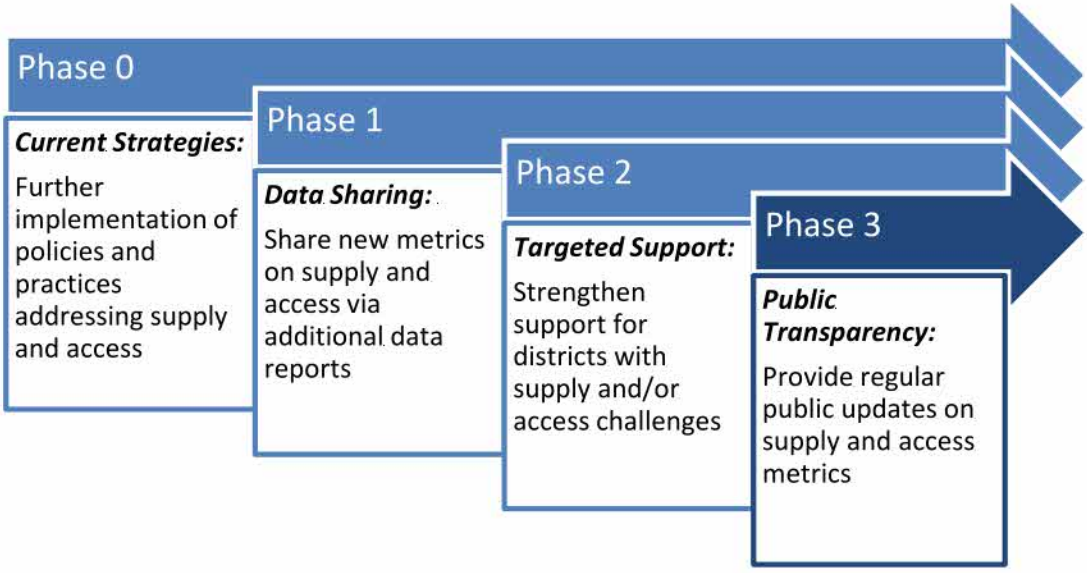
Identify and Scale Up Effective Local Initiatives

Finally, we know that there are many successful strategies at the local level, designed to focus on improving both supply of and access to effective teachers. As the state, it is our responsibility to identify these strategies, spread their best practices, and assist other districts in scaling up their usage. For example, districts like Metropolitan Nashville Public Schools (MNPS) have instituted an aggressive recruitment campaign called the Turnaround Corps[9] to recruit highly effective teachers to their neediest schools. Other districts have focused on identifying those teachers most effective at growing students in the bottom quartile of proficiency to factor into student placement decisions. Partnership programs with student teachers from local universities, Teach For America, and specialized degree programs like ELL certification have also been established in several districts to proactively address issues of teacher supply. As we shine a spotlight on issues of supply and access through the availability of new data reporting, we anticipate a great number of new local strategies to address equity issues will develop

[9] http://www.mnpsturnaroundcorps.org/

throughout the next school year. We plan to remain in frequent communication with our districts to identify these practices, assess their impact, and spread this knowledge to others.

Phase 3: Public Data Sharing



Finally, in Phase 3 of our plan, we recognize that accountability is often an impetus for action. Public accountability allows us to celebrate our success in addressing critical challenges, but it also provides a necessary lens for external stakeholders to shine a light on issues where progress is not expedient enough. While we believe that the majority of districts will respond to newly shared data metrics around supply and access and others will turn to the targeted support options for assistance, the need for public transparency still prevails. As part of the Tennessee Succeeds strategic plan, we plan to create a new district report card in 2016-17 which will include new data such as the district equity gap information.

In places where either supply or access issues are persistent, parents and community members have a right to know about the specific challenges and strategies that have been used to address those challenges. The state plans to share progress with districts annually via the human capital data report. We plan to allow a period of time for districts to develop and implement strategies to address specific equity issues and to engage with state offered supports prior to making information on equity gaps publicly available, because we know that many districts might not yet be aware of these issues and with knowledge will handily address them. However, in the future we plan to provide annual updates to key external stakeholders, including the State Board of Education. Public data sharing represents a key state lever to address inequity and will hold both the state and districts accountable for improvement.

Ongoing Monitoring and Support

We firmly believe that effective strategies and supports are not one-size-fits-all. Our goal in establishing this plan to ensure equitable access to excellent educators for all students is to examine outcomes data in a nuanced way to determine equity issues and refine our data sharing mechanisms with districts all with the intent to allow for a variety of strategies and supports. Our data reveals that the specific challenges facing our districts vary throughout the state as do the root causes. Because of this variety, we feel the most important role the state can play in ongoing monitoring is one of data transparency and continuation of existing support structures.

It is important to provide this data transparency at both the state and district levels. At the state level, we anticipate continuing to provide stakeholder groups updated information about human capital data, which going forward will include updates on our equity supply and access metrics. The state department will also be responsible for providing updates about both our data and strategies to the State Board of Education. These updates will allow for even greater public awareness about our state progress in addressing issues of inequitable access. We have also invested in several state level structures that aid in the monitoring and ongoing evolution of this work. Our internal Office of Research and Policy provides innovative and timely analysis of these key metrics.

At the district level, our primary mechanism for continued awareness and monitoring will be through our human capital data reports. As one of our key strategies, these reports will be available on a yearly basis to districts and include a wealth of data regarding evaluation, retention, working conditions, supply, and access data. This LEA-level data will be summarized and analyzed to determine the progress that each LEA is making to ensure equitable access to highly effective teachers. This data will be shared with the Division of Consolidated Planning and Monitoring (CPM) and utilized as part of the annual LEA risk-assessment. The annual LEA risk assessment incorporates over 65 indicators of risk that prioritize LEAs and identify those that will have conditions placed on grant awards and/or will require an on-site Results-based Monitoring visit by a cross-departmental team.

The Results-based Monitoring conducted by CPM is a comprehensive on-site process that looks at effective program implementation, not just compliance. The review instrument focuses on specific levers that affect student academic achievement, not specific funding sources. The in-depth review of teacher equity issues by will focus on areas such as quality leadership, instructional practices, and effective teachers. LEAs and schools will be required to provide documentation for and discuss:

- Strategies to attract highly qualified teachers
- Strategies for ensuring that low achieving students have access to highly effective, highly qualified teachers
- Existing partnerships with local teacher preparation institutions to ensure a continuous pipeline of highly qualified teachers
- Strategic and equitable distribution of highly effective teachers within the LEA and schools

- Processes and procedures implemented to provide quality feedback and support to new and/or struggling teachers.
- Professional development opportunities related to effective teaching strategies for students with disabilities, English learners and other targeted subgroups
- Retention strategies such as, incentive pay, differentiated pay scales, career pathways and leadership opportunities for highly effective teachers.
- Strategies to address between school and within school equity gaps
- Process to review and act upon human capital data regarding evaluation scores and misalignment of observation data and teacher growth data

LEAs that are unable to document and demonstrate the implementation of these processes, practices, procedures and strategies are required to develop corrective action plans with specific action steps and deadlines that must be met. Necessary support is provided to address the areas of deficiency and follow-up visits are conducted to ensure that all corrective actions are addressed within the specified timeframe(s).

As mentioned in previous sections, the state has done extensive work over the last three years to reimagine and restructure our district support function. Both the CORE offices and the Division of Consolidated Planning and Monitoring (CPM) will play integral roles in supporting districts with specific equity issues. CORE offices conduct yearly data deep-dives with each district to identify yearly priorities and develop their CORE office plan for support. This information is then used to inform each district's strategic plan and school improvement plans to which federal and state resources must be aligned. The CPM office collects, reviews, and approves the consolidated federal funding applications that outline the use of ESEA and IDEA funds. Both the strategic planning process (LEA and school) and the consolidated federal funding application are aligned and integrated within the new ePlan system. This shared, web-based system allows for planning and budgeting of available funds to be fully integrated and transparent to all stakeholders.

By using these existing structures to monitor and support both state and district level implementation of strategies to address equity, we are ensuring that this plan is not a standalone effort, but rather an embedded aspect of the human capital data we expect ourselves and districts to address each year.

Conclusion

In order to fulfill our vision of a college- and career- ready workforce, we must ensure that all students have access to highly effective teachers. Tennessee's plan to ensure equitable access laid forth in this draft builds off the state's existing foundation of policies and initiatives aimed at growth for all students and closing achievement gaps. Our aim is that this work, with new efforts to address issues of inadequate supply or inequitable access, becomes integrated into our larger efforts to improve human capital management.

We carefully analyzed both supply and access data revealing a great deal of district variation in the percentage of highly effective teachers employed as well as the type and size of equity gaps. This data highlights the need for us to focus on the key state levers for increasing the supply of effective teachers and improving access, while also allowing for district-level analysis of root causes and locally developed strategies. We believe our phased sequence of supports will do just this. The plan also identifies several key state levers for improvement through specific state policies and programs and increased data sharing and transparency while providing districts with the time and targeted support to implement local strategies. We look forward to continuing to refine our plan over time and in close partnership with stakeholders, especially district and school leaders.

Appendix

Definitions

Between-School Gap - when more effective teachers are assigned or selected to teach in schools that serve certain groups of students in mass, dependent on characteristics such as socio-economic background or prior achievement.

Equity Gap – the difference in the percent of students in one subgroup who receive highly effective teachers compared to the percent of students in a comparison group who receive highly effective teachers.

Highly Qualified - a status which occurs when an educator is fully licensed to teach in the Tennessee and does not have any licensure requirements waived on an emergency, temporary or provisional basis and who has subject content knowledge verified for federal reporting purposes under No Child Left Behind (NCLB)

Inexperienced – a status which occurs when an educator has less than three years of teaching experience.

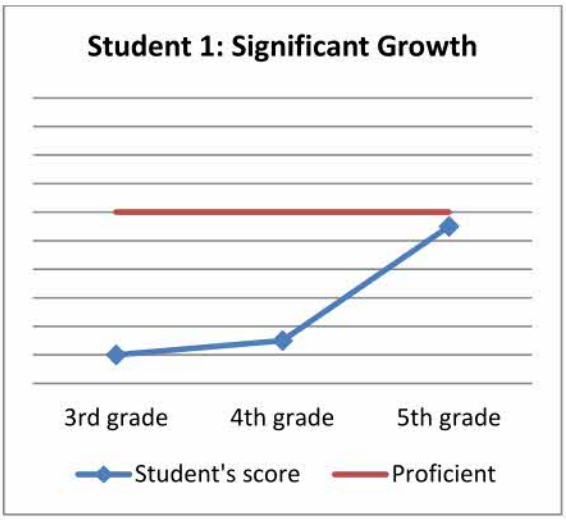
Out of Field – a status which occurs when an educator holding an Apprentice, Transitional, or Professional License is scheduled to teach more than one course or more than two sections of one course outside the area of endorsement.

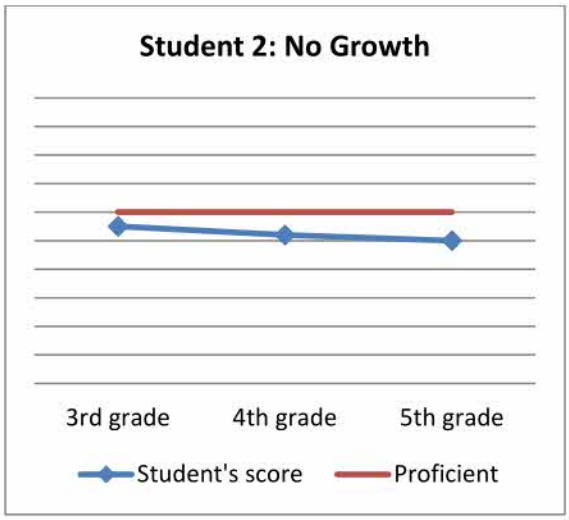
TVAAS – Tennessee Value Added Assessment System which measures student growth and the impact that schools and teachers have on students' academic progress.

Within-School Gap - when certain students are assigned to more or less effective teachers in their school, dependent on characteristics such as socio-economic background or prior achievement.

Three Facts about TVAAS

1. **TVAAS measures student *growth*, not whether the student is proficient on the state assessment.** For example, a student who is behind academically may show significant academic growth but not be proficient on the end of year test. Another student may also not be proficient on the end of year test, but not show any growth. The teacher added a lot of value to the first student's academic development (and increased their likelihood of being proficient in 6th grade), and little value to the second student's academic development. TVAAS allows educators to consider their students' **achievement** (their score on the end of year assessment), as well as their **growth** (the progress students make year to year).





2. **Low-achieving students can grow <u>and</u> their teachers can earn strong TVAAS scores.** When students grow more than expected, that growth is reflected in a teacher's TVAAS score – regardless of whether the student earned below basic, basic, proficient or advanced on the state assessment. For example, Treadwell Middle School in Memphis had low entering achievement in middle school math (students performed in the 33rd percentile compared to their peers across the state), yet they were among the top 20% of schools in the state on growth in 7th and 8th grade math in 2013-14.

3. **High-achieving students can grow <u>and</u> their teachers can earn strong TVAAS scores.** Just as children grow in height each year, they also grow in academic ability. If a second grader is tall in relation to her peers, she will need to continue to grow each year to be tall relative to her peers in fifth grade. A tall second grader who does not continue to grow will soon be a short fifth grader. Likewise, our highest performing students still have room to grow academically and their teachers can still earn high TVAAS scores. Even students who consistently earn advanced scores can demonstrate growth. For example, Ravenwood High School in Williamson County had among the highest entering achievement in the state among their Chemistry I students. They also had strong growth, and made substantially more progress than the state average in Chemistry in 2013-14.

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Human Capital Data Report
Mock District

This Human Capital Data Report was compiled using 2013-14 data and covers a range of human capital topics, including evaluation, retention, and hiring data. It includes data previously shared via the fall Evaluation Completion Reports, but also incoporates new metrics not previously available. This report is intended to be used in coordination with the Human Capital Self-Assessment Tool which is designed to aid in data analysis, present possible strategies for improving human capital management, and aid in prioritizing implementation of those strategies.

Section I: Evaluation

Table 1: Distribution of Scores

	Teachers w/ Data	Percent 1s	Percent 2s	Percent 3s	Percent 4s	Percent 5s
Overall Level of Effectiveness	100 of 100	10.0%	30.0%	20.0%	10.0%	30.0%
Overall Level of Effectiveness (*State*)		0.8%	11.2%	25.2%	31.5%	31.3%
Observation Average	100 of 100	10.0%	20.0%	10.0%	30.0%	30.0%
Observation Average *(State)*		0.3%	2.7%	22.4%	43.3%	31.3%
Growth Score: All Teachers	100 of 100	10.0%	10.0%	30.0%	20.0%	30.0%
Growth Score: All Teachers *(State)*		22.5%	9.0%	19.4%	10.6%	38.5%
Growth Score: Teachers w/ Individual Growth	100 of 100	10.0%	30.0%	10.0%	30.0%	20.0%
Growth Score: Teachers w/ Individual Growth *(State)*		19.7%	9.6%	24.2%	11.5%	35.1%
Achievement Measure	100 of 100	10.0%	10.0%	30.0%	20.0%	30.0%
Achievement Measure *(State)*		10.6%	5.9%	17.7%	15.8%	50.1%

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Guiding Questions:

1. Is this the distribution you expected?
2. Do you see any measures that seem out of line with the rest of the measures? If so, why do you think this may be?
3. Do you anticipate this distribution changing notably this school year? If yes, why? If no, why not?
4. How does your district's distribution compare to the distribution at the state level? Why do you think this may be?

Table 2: Alignment between Individual Growth Scores and Observation Scores

Number of Teachers with Observation Scores and Individual Growth Scores	District Average Percent Aligned or within Two Levels	District Average Percent Misaligned by Three or More Levels	State Average Misaligned by Three or More Levels
40 out of 50	90.0%	10.0%	12.5%

Guiding Questions:

1. Are you concerned about the level of misalignment in your district? Why or why not?
2. Can you identify why there might be a discrepancy between individual growth and observation scores?
3. Do you have some schools where misalignment might be more of an issue than others? If so, what are you doing to combat misalignment in those schools?
4. Are you concerned about the quality of feedback teachers are receiving? Are you more concerned about this in your schools with higher rates of misalignment?

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Section 2: Growth and Development

Table 3: Change in Individual Growth Scores from 2012-13 to 2013-14

In this chart, cells highlighted in green represent teachers whose individual growth score improved between 2012-13 and 2013-14. Also highlighted in green is the cell showing teachers who maintained an individual growth score of 5 between 2012-13 and 2013-14.

		2013-14 Individual Growth Scores				
		1	**2**	**3**	**4**	**5**
2012-13 Individual Growth Scores	**1** 20 teacher(s)	5.0% (1)	25.0% (5)	10.0% (2)	10.0% (2)	50.0% (10)
	2 10 teacher(s)	20.0% (2)	10.0% (1)	20.0% (2)	40.0% (4)	10.0% (1)
	3 50 teacher(s)	20.0% (10)	0.0% (0)	20.0% (10)	20.0% (10)	40.0% (20)
	4 10 teacher(s)	0.0% (0)	0.0% (0)	0.0% (0)	40.0% (4)	60.0% (6)
	5 5 teacher(s)	0.0% (0)	0.0% (0)	40.0% (2)	0.0% (0)	60.0% (3)

Guiding Questions:

1. Did more of your teachers improve their individual growth scores than not?
2. Which group of teachers were you most effective at growing?
3. Are there any district-wide practices that have led you to be more effective at moving some groups of teachers?
4. Do you know which teachers had big growth score changes and why?
   (NOTE: This change could be in either direction and may be related to changes in grade and subject taught.)

TENNESSEE DEPARTMENT OF EDUCATION

Section 3: Retention

Table 4: Persistently High vs. Low Performing Teachers

	Persistently Low Performing	Persistently High Performing
District	25.0% (5 out of 20)	75.0% (15 out of 20)
State	8.9% (1,331 out of 14,924)	45.3% (6,757 out of 14,924)

There are many ways to define to persistently high and low performing teachers, for the purpose of this report they are defined as follows:

A ***persistently high performing teacher is defined as a teacher who has three years of individual growth with a sum greater than or equal to thirteen (13).*** For example, a teacher who scored a 4 in 2011-12, a 4 in 2012-13, and a 5 in 2013-14 would have a sum of 13, making this teacher persistently high performing. To be considered persistently high performing, a teacher had to have an individual growth score of 5 for at least one year, and could not have received an individual growth score of 2 in any of the three years.

A persistently low performing teacher is defined as a teacher who has three years of individual growth with a sum less than or equal to four (4). A teacher who scored a 1 in 2011-12, a 2 in 2012-13, and a 1 in 2013-14 would have a sum of 4, making this teacher persistently low performing. To be considered persistently low performing, a teacher could not have received an individual growth score of 3 in any of the three years.

Guiding Questions:

1. Is this distribution what you would expect?
2. Do you know who these teachers are?
3. Do your persistently high performing teachers know who they are?
4. Do you have any recognition or retention practices in place, specifically for teachers who have demonstrated strong performance over time?
5. Do you have any practices in place to develop and support your persistently low performing teachers?

TENNESSEE DEPARTMENT OF EDUCATION

Table 5: Teachers who Left District Based on 2013-14 Overall Level of Effectiveness

Overall Level of Effectiveness	Total Teachers	Total Teachers Retained	Total Teachers who Left	Moved Districts	Not Rostered[1]
1	10	2	8	2	6
2	15	7	8	1	7
3	12	1	11	0	11
4	10	8	2	2	0
5	6	5	1	0	1

- **Teachers who moved from your district went to**: District A (3), District B (2)

Guiding Questions:

1. Are you retaining your high performing teachers at a higher rate than your low performing teachers?
    a. If so, how are you accomplishing that?
    b. If not, why do you think this might be and what could you do to change it?
2. What is the primary reason teachers are exiting your district?
3. Are teachers exiting your district to go to other districts at a rate that is concerning?
4. Which districts are your teachers leaving for and why? Are these the districts you would have expected?

[1] Teachers may fall into this category for a number of reasons, including but not limited to: retirement, exiting the profession, exiting the state, maternity leave, medical leave, leave of absence.

TENNESSEE DEPARTMENT OF EDUCATION

Table 6: Teachers who Stayed in District but Moved Schools
Based on 2013-14 Overall Level of Effectiveness

Overall Level of Effectiveness	1	2	3	4	5
10 Teacher(s)	0	2	4	3	1

Guiding Questions:

1. Which teachers are moving schools within your district? High performing teachers or low performing teachers? Why is this?
2. Is the movement of high performing teachers resulting in better access to great teachers for low performing students?
3. Do you know which schools are recruiting teachers from within the district and why?
4. Why do you think teachers are accepting these within district transfers (Ex. school culture, teacher leader opportunities, other leadership opportunities, physical location, etc.)?

TENNESSEE DEPARTMENT OF EDUCATION

Section 4: Hiring

Table 7: New Hires in 2014-15 Based on 2013-14 Overall Level of Effectiveness

	District: Total Teachers	District: Percent of Teachers	State: Percent of Teachers
Newly Hired in Tennessee	40	80.0%	45.3%
Level 1	0	0.0%	5.0%
Level 2	2	4.0%	5.4%
Level 3	1	2.0%	12.3%
Level 4	1	2.0%	15.4%
Level 5	6	12.0%	16.6%
Total New Hires	50	100.0%	100.0%

- **Teachers who moved to your district came from:** District A (7), District B (3)

Guiding Questions:

1. Where are you getting most of your new teachers? Why is this?
2. Do you have a robust support system for teachers who are new to teaching in Tennessee?
3. From which district do most of your new teachers come?
4. Did you ask teachers to share previous evaluation data as part of your hiring process? If yes, what information did they share? If no, why did you not ask for this information?
5. What recruitment strategies do you have in place to insure you are attracting high performing teachers?

TENNESSEE DEPARTMENT OF EDUCATION

Table 8: Level 1 Observation Hours Breakdown

Task	Total Hours
Initial Coaching Conversation	0.5
Announced[2] Observation 1	2.0
Unannounced[3] Observation 1	1.5
Announced Observation 2	2.0
Unannounced Observation 2	1.5
Summative Conference	0.5
Total	8.0

Table 9: Level 1 Observation Hours 2014-15[4]

	Total Teachers	Percent of Teachers	Observation Hours	Total Hours
District: Level 1	5	3.8%	8 per teacher	40

Guiding Questions:

1. Does this align with the amount of support you are prepared to provide to struggling teachers?
2. How are these hours of work distributed amongst your evaluation team?
3. What additional supports are you providing to these teachers outside of the required minimum?
4. What percentage of these teachers do you anticipate improving based on this support? (*NOTE: It may be helpful to look at the chart on pg. 4.*)

[2] *Announced Observation*: Pre-Conference-0.5 hrs., Observation-1 hr., Post-Conference-0.5 hrs.

[3] *Unannounced Observation*: Observation-1 hr., Post-Conference-0.5 hrs.

[4] A teacher is on the Level 1 track if he or she received a 1 on individual growth or Overall Level of Effectiveness.

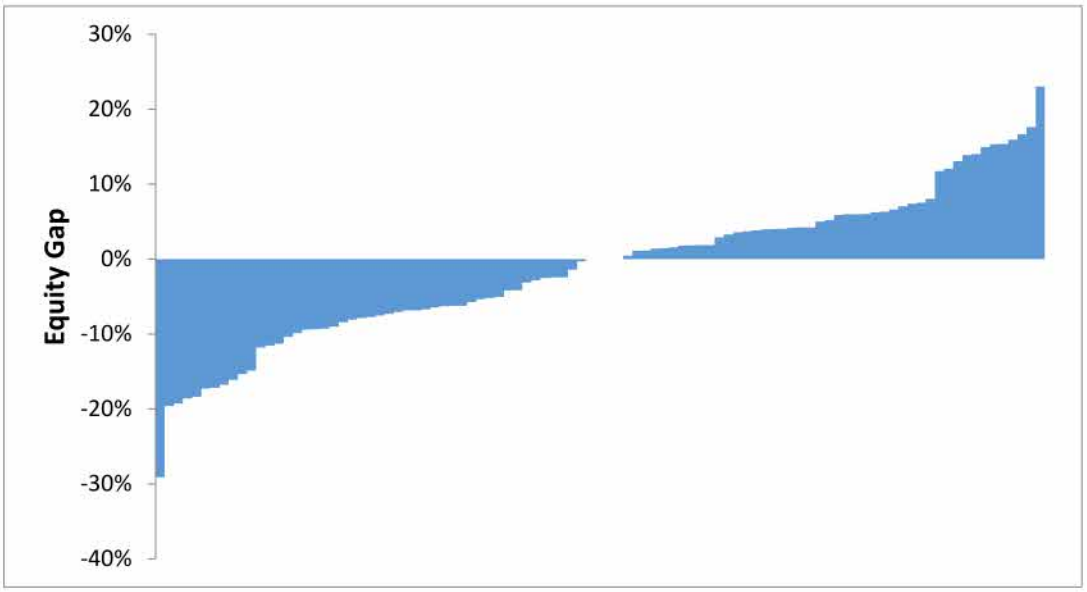
District: District A

Subject: Reading

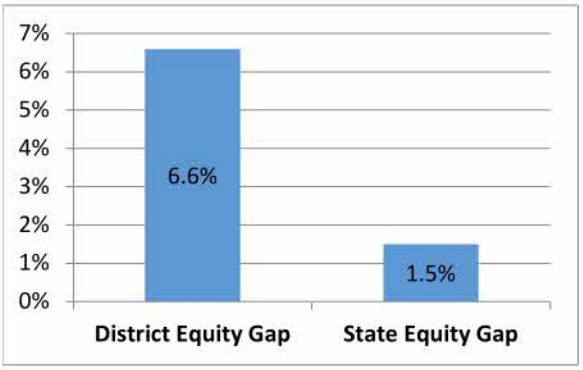
Grades: 4-8

TENNESSEE DEPARTMENT OF EDUCATION

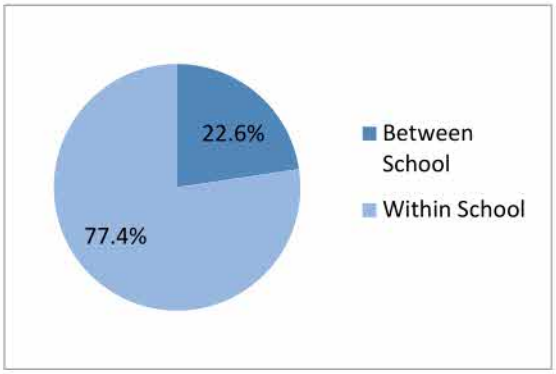
District Number 930



Each bar in the above graph represents a district in the state. The height of the bar represents the size of the district's RLA equity gap. The district's equity gap is calculated by subtracting the percent of students who scored advanced on the prior year's RLA TCAP and receive a highly effective RLA teacher from the percent of students who scored below basic on the prior year's RLA TCAP and receive a highly effective RLA teacher.



The above graph displays the size of the state RLA equity gap, as well as your district's RLA equity gap. Your district has a positive RLA equity gap. This means a smaller percentage of below basic students in your district receive a highly effective RLA teacher compared to advanced students.

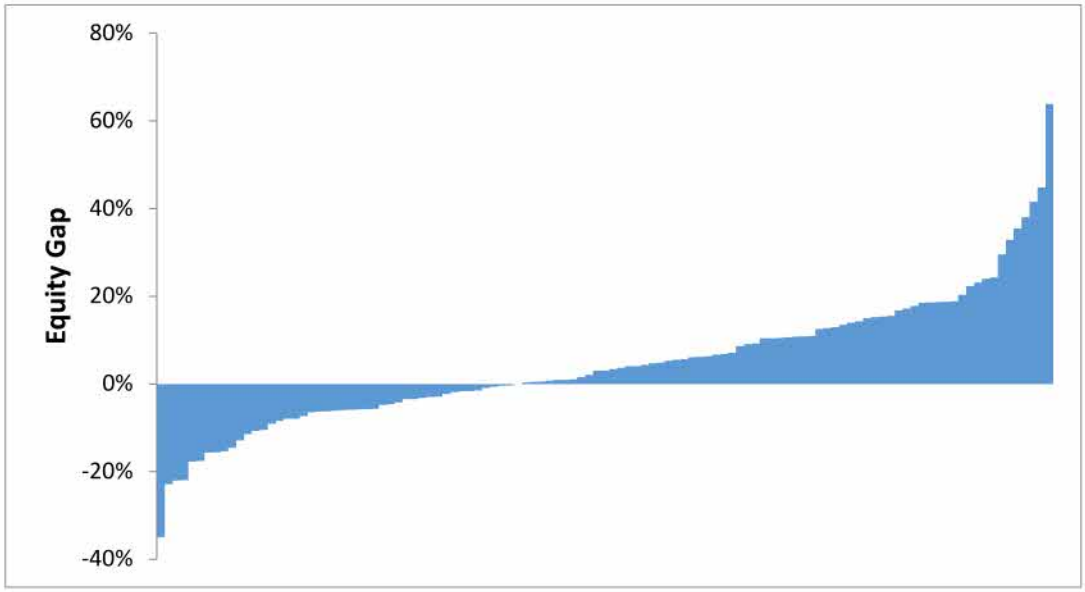


The above graph displays the portions of your RLA equity gap that are explained by within and between school placement. When a positive equity gap is mostly explained by within school placement it means that highly effective RLA teachers in the district are located throughout the schools in the district but placement decisions within schools lead to smaller percentages of below basic students receiving highly effective RLA teachers.

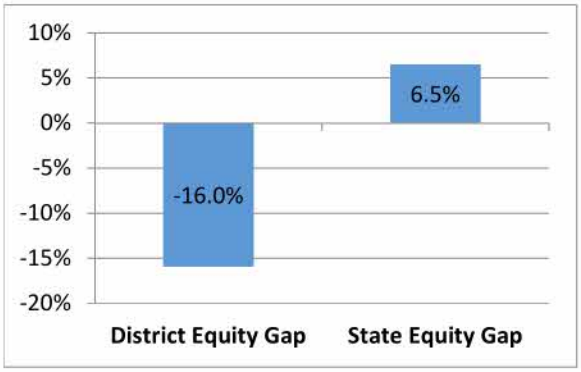
District: District A

Subject: Math

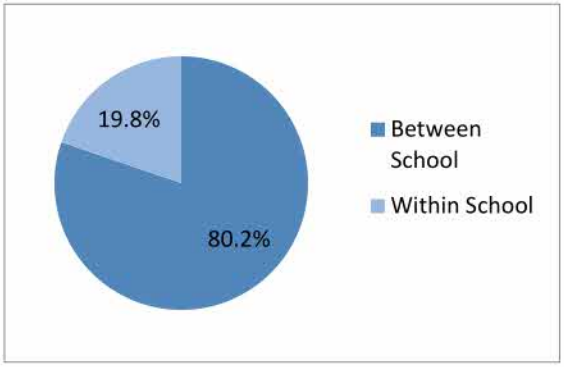
Grades: 4-8



Each bar in the above graph represents a district in the state. The height of the bar represents the size of the district's mathematics equity gap. The district's equity gap is calculated by subtracting the percent of students who scored advanced on the prior year's math TCAP and receive a highly effective teacher from the percent of students who scored below basic on the prior year's math TCAP and receive a highly effective teacher.



The above graph displays the size of the state math equity gap, as well as your district's math equity gap. Your district has a negative math equity gap. This means a greater percentage of below basic students in your district receive a highly effective math teacher compared to advanced students.



The above graph displays the portions of your math equity gap that are explained by within and between school placement. When a negative equity gap is mostly explained by between-school placement it means that highly effective math teachers in the district are located in schools that serve higher percentages of below basic students.

Sylvia Flowers
Executive Director of Educator Talent
Tennessee Department of Education
710 James Robertson Parkway
Nashville, TN 37243

May 29, 2015

Dear Ms. Flowers:

Thank you for the opportunity to provide input regarding the draft report, "Equitable Access to Excellent Educators." We can all agree that a qualified teacher is essential to a child's academic success. We believe there are several facets to improving access to qualified educators in Tennessee. Those areas include recruitment and hiring, retention, and professional development.

Recruitment and Hiring

The Tennessee Education Association (TEA) believes that strong teacher recruitment programs are necessary to maintain and enhance the teaching profession.

Partnerships: It is important to maintain strong relationships with teacher education programs. Establishing partnerships with colleges and universities can help bring education students into district school buildings. This exposure, often through student teaching, helps strengthen the applicant pool. This approach should be part of a comprehensive marketing and outreach campaign.

Future Teachers of America: Programs targeting middle, high school, and community college students is a great way to encourage talented young people to pursue teaching as a career. TEA has continued to support Future Teachers of America (FTA), a program that promotes teaching to high school students. We currently have active chapters across Tennessee and award annual scholarships to FTA high school students planning to attend college in Tennessee and major in education.

Retention

Preparation: We need to prepare teachers adequately to enter the profession. We applaud that the Department revised the process for reviewing and approving Education Preparation Providers (EPP). Having more frequent reviews and detailed analysis will help us move toward having a higher quality supply of teachers. TEA believes that teacher education programs must be approved at the State level and through a national accreditation body (CAEP).

Part of the EPP analysis should identify areas that many new teachers struggle with. For example, cultural competency should be an integral component of any teacher education program. This needs to be considered when moving teachers between districts and schools.

Working conditions: Surveys have shown that working conditions are the most significant factor in retaining teachers, particularly in hard-to-staff schools. Schools with energetic leadership in which teachers feel like valued members of a learning community attract and maintain their staff while those lacking these qualities do not. The 2013 Tennessee TELL survey highlighted a few areas that need heightened focus such as: providing sufficient non-instructional time, opportunity to collaborate with colleagues, differentiated professional development, and strategies to involve parents and community members as active partners in their children's education.

Financial Incentives: While most financial incentives are targeted primarily at recruiting new teachers, such incentives can also be used to encourage experienced teachers to increase their skills and expertise and take on additional leadership responsibilities.

TEA believes that a single salary schedule is the most transparent and equitable system for compensating teachers. The development of models that provide additional compensation beyond the single salary schedule should be accomplished through a bilateral decision-making process. In addition, any performance based compensation model shall not be used solely on student achievement as measured by standardized tests; rather such models shall be designed to encourage collaboration rather than competition; and shall be criterion-based so that everyone meeting an agreed-upon standard earns the award.

We believe that any system providing compensation beyond the single salary schedule may:

(a) Be based upon knowledge or skill-based systems which support and reward the acquisition of critical skills that contribute to professional competency;
(b) Include incentives to attract and retain teachers with special qualifications and teachers who are willing to work in high priority schools;
(c) Be based on recognition or designation of teachers as "lead teachers", "mentoring teachers", or "accomplished teachers" provided the criteria used to determine these designations are clearly stated and subject to objective measurement.

The Association believes any compensation model should be funded without re-prioritizing existing resources and done in a sustainable manner.

Professional Development

TEA believes that continuous high quality, job-embedded professional development is required for teachers to achieve and maintain the highest standards of student learning and professional practice.

Quality Professional Development: TEA believes that professional development should be designed, directed, and differentiated to meet the needs of individual teachers. In addition, TEA supports professional development that is standards-referenced and incorporates current research on best practices. Another key component to improving teacher support is to evaluate the professional development and communicate those results to teachers.

Evaluation Feedback: TEA believes that the ultimate goal of any evaluation model of professional educators is to improve instruction. The structure of an evaluation model should encourage and promote a common vision of effective teaching and collaboration among educators to support student achievement. Teachers need more specific feedback to understand how they can improve their

instruction according to these models. In addition to meaningful feedback, we believe there should be targeted support for teachers to improve upon their evaluation.

Placement

TEA supports the principle that teachers should be promoted or assigned to preferred positions on the basis of education preparation, experience, and ability. We believe policies should place the education employee in the school and assignment for which his/her preparation, experience, and skills may best be employed and the needs of the school system may best be served.

Cultural competency training should be considered as a factor in teacher preparation and placement. Furthermore, TEA supports high quality, job-embedded professional development for beginning and experienced teachers. It is important that the professional development be tailored to the individual teacher needs based on placement and years of experience.

We appreciate the opportunity to provide feedback on the draft report. We look forward to future conversations on this important issue.

Sincerely,

(b)(6)

President Barbara Gray