



# Tennessee Teacher Equity Plan

to ensure that poor or minority children  
are taught by effective teachers  
at the same or higher rate as other children

September 2006

Tennessee's equity plan is designed to ensure that poor or minority children are not taught by inexperienced, unqualified, or out-of-field teachers at higher rates than are other children. The plan analyses where inequities in teacher assignment exist, finding statewide disparities as well as disparities within larger, more urban districts. In addition, it maps out two major strategies for addressing these disparities and presents evidence that these strategies are promising avenues for connecting effective teachers with the children who need them the most. Finally, the plan outlines how the State will monitor Local Education Agency (LEA) implementation of teacher equity plans.

NOTE: The State is aware that this data needs to be analyzed more in depth. The Office of Teacher Quality and Development is submitting a request to the Commissioner of Education to provide a contract for a correlation study to determine if there are any factors, or combination of factors, which contribute to the success or lack thereof of students, schools and LEAs that have been identified as being "High Priority" due to their lack of Adequate Yearly Progress (AYP). The data analysis will allow us to identify, prioritize, and focus our efforts in the most appropriate manner.

It is very important that policymakers understand the problem with equitable distribution and retention of "highly-effective" teachers in high-poverty, high-minority schools. To establish an effective recruitment of high quality teachers, we will need to increase salaries and institute incentives for recruitment of new teachers and retention of highly effective teachers in low performing schools. It is increasingly difficult for our state to compete in recruitment with surrounding states that have higher salaries, greater resources, and incentive packages. This problem exists statewide and is multiplied in the high-poverty areas as well as urban and rural LEAs. We must keep these issues in the 'public eye' and continue to seek support for providing a 'highly effective' teacher for every classroom in Tennessee.

## **A. Inequities in Teacher Assignment**

### Statewide Data

Across both elementary and secondary levels, a lower percentage of core academic courses are taught by highly qualified teachers in high poverty schools compared with low poverty schools (Table 1). At the elementary level, the gap is 6.6% while at the secondary level it is 10.3%.

**TABLE 1: Statewide Percentage of Core Academic Course Taught by Highly Qualified Teachers for School Year 2004-2005 Disaggregated by High Poverty vs. Low Poverty Schools in Tennessee**

<b>School Type</b>	<b>Percentage of Core Academic Courses Taught by Highly Qualified Teachers</b>
All Schools in the State	80.9
<b>Elementary Level (Grades K – 6)</b>	
High Poverty Schools	81.3
Low Poverty Schools	87.9
<b>Gap Between High Poverty and Low Poverty Elementary Schools</b>	<b>6.6</b>
<b>Secondary Level (Grades 7-12)</b>	
High Poverty Schools	71.0
Low Poverty Schools	81.3
<b>Gap Between High Poverty and Low Poverty Secondary Schools</b>	<b>10.3</b>

This gap between the characteristics of teachers assigned to high poverty schools compared with low poverty schools exists in other areas as well. For example, “novice” teachers, defined as those with 3 years or less teaching experience, are assigned disproportionately to high poverty schools compared with low poverty schools at both the elementary and secondary levels (Table 2). This pattern becomes more pronounced when comparing “inexperienced” teachers, defined as those with 5 years or less experience. In high poverty elementary and secondary schools, there is great disproportionality of placement of the least experienced teachers compared with low poverty elementary and secondary schools. At both the elementary and secondary levels, there is more than a 5% gap between the percent of teachers with 3 years or less teaching experience in high poverty schools compared with low poverty schools. This gap increases to at least 7% when comparing “inexperienced” teachers, those with 5 years or less of experience, in high poverty schools compared with low poverty schools.

**TABLE 2: Statewide Percentage of “Novice” and “Inexperienced” Teachers for School Year 2004-2005 Disaggregated by High Poverty vs. Low Poverty Schools in Tennessee**

<b>School Type</b>	<b>Percentage of Teachers with 3 years or less experience (Novice)</b>	<b>Percentage of Teachers with 5 years or less experience (Inexperienced)</b>
All Schools in the State	20.0	30.0
<b>Elementary Level (Grades K – 6)</b>		
High Poverty Schools	22.3	32.2
Low Poverty Schools	16.9	25.2
<b>Gap Between High Poverty and Low Poverty Elementary Schools</b>	<b>5.4</b>	<b>7.0</b>
<b>Secondary Level (Grades 7-12)</b>		
High Poverty Schools	23.4	34.7
Low Poverty Schools	17.8	27.1
<b>Gap Between High Poverty and Low Poverty Secondary Schools</b>	<b>5.6</b>	<b>7.6</b>

Another teacher characteristic that affects the amount of salary teachers earn is their educational degree. Negotiated salary agreements between school districts and teacher unions reflect higher salaries for those teachers with more education. In Tennessee, a higher percentage of teachers in low poverty schools have a master’s degree or above compared with their counterparts in high poverty schools (Table 3). This is true at both the elementary and secondary levels; however, the discrepancy is larger at the secondary level compared with the elementary level.

**Table 3: Statewide Percentage of Teachers With a Master’s Degree or Above for School Year 2004-2005 Disaggregated by High Poverty vs. Low Poverty Schools in Tennessee**

<b>School Type</b>	<b>Percentage of Teachers with a Master’s Degree or Above</b>
All Schools in the State	52.0
<b>Elementary Level (Grades K – 6)</b>	
High Poverty Schools	48.5
Low Poverty Schools	52.1
<b>Gap Between High Poverty and Low Poverty Elementary Schools</b>	<b>3.6</b>
<b>Secondary Level (Grades 7-12)</b>	
High Poverty Schools	50.2
Low Poverty Schools	57.0
<b>Gap Between High Poverty and Low Poverty Secondary Schools</b>	<b>6.8</b>

As most teachers obtain their master’s after teaching for some time, the correlation between years of experience and educational level is obvious. Both of these variables, years of experience and educational level, are built into the teacher salary schedules in school districts. As districts staff their schools based on the teaching positions needed, this means that the biggest expenditure at the school level, teachers’ salaries, will be higher in low poverty schools compared with high poverty schools. The actual budget for low poverty schools, based on a per pupil expenditure, will inevitably be greater than the actual budget for high poverty schools. Hence, schools with large percentages of students from poverty actually receive fewer state and local resources to address the needs of their students compared with schools with low percentages of students from poverty. The strongest variable that correlates with lower student achievement in a school is the percent of students from poverty. In Tennessee, the schools that generally struggle the most with student achievement have high numbers of economically disadvantaged students, yet these are the same schools that have a higher percentage of inexperienced teachers with less education.

In Tennessee, higher poverty schools are also correlated with schools with a higher minority student body. Hence, the data for high minority schools, defined as those in the top 25% of schools based on their percent of minority students, compared with low minority schools, defined as those in the bottom 25% of schools based on their percent of minority students, mirrors the results found in high poverty and low poverty schools.

In high minority schools, there are more inexperienced teachers compared with low minority schools (Table 4). However, the percentage of teachers with a master’s degree or above does not show this discrepancy (Table 5). Many of Tennessee’s alternative licensure programs are located in high poverty, high minority schools in urban areas. These urban districts also have a higher percentage of minority students compared with rural and suburban districts. Many of the individuals holding an alternative license may be second career professionals who have an advanced degree but not teaching preparation and experience. This may explain why the percentage of teacher’s with a master’s degree or above is approximately the same in both high minority and low minority schools, but the percentage of teachers with more than 5 years of experience is more in low minority schools.

**Table 4: Statewide Percentage of “Novice” and “Inexperienced” Teachers for School Year 2004-2005 Disaggregated by High Minority vs. Low Minority Schools in Tennessee**

<b>School Type</b>	<b>Percentage of Teachers with 3 years or less experience (Novice)</b>	<b>Percentage of Teachers with 5 years or less experience (Inexperienced)</b>
All Schools in the State	20.0	30.0
<b>Elementary Level (Grades K – 6)</b>		
High Minority Schools	20.1	31.9
Low Minority Schools	16.5	25.9
<b>Gap Between High Minority and Low Minority Elementary Schools</b>	<b>3.6</b>	<b>6.0</b>
<b>Secondary Level (Grades 7-12)</b>		
High Minority Schools	25.0	36.3
Low Minority Schools	18.8	27.6
<b>Gap Between High Minority and Low Minority Secondary Schools</b>	<b>6.2</b>	<b>8.7</b>

**Table 5: Statewide Percentage of Teachers With a Master’s Degree or Above for School Year 2004-2005 Disaggregated by High Minority vs. Low Minority Schools in Tennessee**

<b>School Type</b>	<b>Percentage of Teachers with a Master’s Degree or Above</b>
All Schools in the State	52.0
Elementary Level (Grades K – 6)	
High Minority Schools	52.1
Low Minority Schools	48.8
<b>Gap Between High Minority and Low Minority Elementary Schools</b>	<b>-3.3</b>
Secondary Level (Grades 7-12)	
High Minority Schools	52.6
Low Minority Schools	53.3
<b>Gap Between High Minority and Low Minority Secondary Schools</b>	<b>0.7</b>

#### Inter-District Data

The State examined the discrepancy between teacher experience and education across districts and by high-poverty vs. low-poverty districts, and did not find an equity issue based on these variables. This mirrors findings from The Education Trust Funding Gap 2005 Report that Tennessee high-poverty and high-minority districts have higher per-pupil state and local funding than low-poverty and low-minority districts.

#### Intra-District Data

To better understand which districts in the state demonstrate a discrepancy in the distribution of their teachers between their high poverty and low poverty schools, an intra-district analysis repeating the same teacher variables was conducted. Districts with at least 4 schools at their elementary and 4 schools at their secondary levels were included in the analysis. Tennessee’s larger, more urban districts showed gaps between teacher experience and education in high poverty and low poverty schools (Tables 6 and 7). Districts with the largest gaps, such as Shelby County and Hamilton County, have a diverse mixture of high-poverty and low-poverty, high-minority, and low-minority schools. Memphis City, in contrast, has primarily high-poverty schools so its “gap” is of lower magnitude.

**Table 6: Districts that Show Significant Gaps at the Elementary Level Between High Poverty and Low Poverty Schools**

<b>District</b>	<b>Percent Gap of “Novice” Teachers in High Poverty compared with Low Poverty Schools</b>	<b>Percent Gap of “Inexperienced” Teachers in High Poverty compared with Low Poverty Schools</b>	<b>Percent Gap of Teachers with Master’s Degree or Above in High Poverty compared with Low Poverty Schools</b>
<b>Metropolitan Nashville</b>	5.1	10.2	10.5
<b>Memphis City</b>	-1.7	3.9	4.7
<b>Shelby County</b>	21.5	33.8	18.9
<b>Hamilton County</b>	21.6	26.6	9.9
<b>Knox County</b>	12.6	13.9	-6.5
<b>Madison County</b>	8.3	9.4	20.7

**Table 7: Districts that Show Significant Gaps at the Secondary Level Between High Poverty and Low Poverty Schools**

<b>Name of District</b>	<b>Percent Gap of “Novice” Teachers in High Poverty compared with Low Poverty Schools</b>	<b>Percent Gap of “Inexperienced” Teachers in High Poverty compared with Low Poverty Schools</b>	<b>Percent Gap of Teachers with Master’s Degree of Above in High Poverty compared with Low Poverty Schools</b>
<b>Metropolitan Nashville</b>	6.4	9.2	2.0
<b>Memphis City</b>	5.8	3.9	4.7
<b>Shelby County</b>	12.3	17.0	6.5
<b>Hamilton County</b>	21.1	24.3	12.7
<b>Knox County</b>	9.9	10.1	-0.1
<b>Madison County</b>	4.0	3.7	5.2

## B. Specific Strategies for Addressing Inequities in Teacher Assignment

Tennessee will pursue two statewide strategies for addressing inequities in teacher assignment.

**Strategy 1:** Continuous analysis and dissemination of data on the distribution of teachers in high-poverty and low-poverty schools and in high-minority and low-minority schools by experience, education, and other characteristics. These analyses will be disseminated through:

- **The state’s website**
- **WebEx meetings with LEAs**
- **Reports to the State Board of Education**

As previously stated in the introduction to the Tennessee Teacher Equity Plan, it is very important that policymakers understand the problem with equitable distribution and retention of “highly-effective” teachers in high-poverty, high-minority schools. To establish an effective recruitment of high quality teachers, we will need to increase salaries and institute incentives for recruitment of new teachers and retention of highly effective teachers in low performing schools. It is increasingly difficult for our state to compete in recruitment with surrounding states that have higher salaries, greater resources, and incentive packages. This problem exists statewide and is multiplied in the high-poverty areas as well as urban and rural LEAs. We must keep these issues in the ‘public eye’ and continue to seek support for providing a ‘highly effective’ teacher for every classroom in Tennessee.

**Strategy 2:** Technical assistance to districts in choosing and implementing specific policies and practices to address inequities in teacher assignment. The technical assistance will be provided through WebEx meetings with LEAs, webpages with links to promising strategies, and individual meetings with districts. These policies and practices may include:

- **Pay incentives** for experienced, effective teachers to teach in high-poverty, high-minority schools
- **Tuition incentives** for teachers in high-poverty, high-minority schools to complete content-area coursework
- **Preparation programs** to train pre-service teachers to succeed in high-poverty, high-minority schools
- **Retention programs** to support current teachers working in high-poverty, high-minority schools
- **Pathways** to recruit qualified professionals to teach in high-poverty, high-minority schools

## C. Evidence for the Probable Success of the Strategies

Through the research of Dr. William Sanders and others, Tennessee has long recognized that teachers have the strongest impact on students’ academic progress while an individual student’s income or race/ethnicity has no effect on his or her academic growth. With

access to highly-effective teachers, poor and minority students, who often begin school at a disadvantage, will learn at accelerated rates and achievement gaps will close.

The Tennessee Teacher Equity Plan is built around two strategies – give districts access to data to identify areas of need and the discretion to implement the policies best suited to address these needs.

**Strategy 1:** The State will analyze and disseminate data on the distribution of teachers by education, experience, and other characteristics, such as teacher effect scores from the Tennessee Value-Added Assessment System (TVAAS). This data will be reported on the state’s website and in annual reports to the State Board of Education. This is the first time that the State has analyzed this data and its dissemination will impact districts with significant disparities. The data will give great support to policy changes designed to improve teacher quality in schools that serve high numbers of low-income or minority students. It will also be available to district teams in preparing plans under the Tennessee Comprehensive Systemwide Planning Process (TCSP), which includes a data analysis and equity component.

**Strategy 2:** The State will provide districts technical assistance in choosing and implementing policies to eliminate inequities in teacher quality. The policy options are different approaches to giving poor and minority children greater access to effective teachers, either by moving teachers to their schools, improving their current teachers’ content knowledge, preparing their future teachers to be successful, retaining good teachers in their schools, or recruiting new teachers from other fields into their schools. These policies have been implemented in numerous states and school districts throughout the nation. By providing a menu of options, the State will give districts the flexibility to make the policy decisions that have the greatest likelihood of success given the district’s needs, resources, and political environment.

One indication that these policy options will be successful in Tennessee districts is that the state and several districts have already implemented targeted policies to address these issues, such as:

#### **Pay Incentives**

- The Hamilton County (Chattanooga) school district, under the Benwood Initiative, offers pay incentives to effective teachers to teach in nine elementary schools that serve predominately low-income, minority children. This pilot program targets teachers with high teacher effect (TVAAS) scores. The pay incentives include a one-time bonus for moving to the school, and annual bonuses if the teacher effect scores remain high.
- The Memphis City school district offers pay incentives to teachers in its Fresh Start schools -- the schools that have been restructured due to NCLB. The pay incentive is in the form of a financial reward to the school if it meets its performance targets. A school committee then decides how the reward will be distributed to teachers.
- The Metro Nashville school district, in partnership with the National Center on Performance Incentives at the Peabody College at Vanderbilt University, is the site of a major study on the impact of performance pay on student achievement.

### **Tuition Incentives**

- The Memphis City school district, under the Middle School Highly Qualified Initiative, offers free tuition and a \$1,000 honorarium to middle school teachers to complete 15 hours of content coursework.

### **Preparation Programs**

- The Hamilton County school district and the University of Tennessee-Chattanooga have collaborated, through the Urban IMPACT program, to redesign the curriculum for pre-service teachers to better prepare them to succeed in urban schools.

### **Retention Programs**

- The Hamilton County school district and the University of Tennessee-Chattanooga offer an Urban Specialist Certificate program to prepare and retain teachers of low-income children in a diverse, urban environment.

### **Pathways**

- The State offers several programs to attract qualified professionals into the classroom, including the Teach Tennessee program which has successfully trained 89 new math and science teachers in the last two years, and activities under the state's Transition to Teaching grant.

Beginning September 2007, the State will conduct an annual evaluation to correlate district policy adoptions with trends in statewide and district teacher equity data. The results of this evaluation will be used to inform the state's technical assistance plan and will be published in the annual report to the State Board of Education.

## **D. SEA Plan to Examine the Issue of Equitable Teacher Assignment In Monitoring LEAs**

According to the State's analysis of data related to the percent of core academic courses taught by highly qualified teachers and related to teacher equity, the Department will prioritize specific technical assistance to LEAs which have either failed to meet their benchmarks for percent of core academic courses taught by highly qualified teachers or have demonstrated large disparities in teacher characteristics between their high poverty and low poverty schools. The Department will convene special professional development activities for the LEAs which have been identified. These activities will then be followed by regional and on-site technical assistance for the identified LEAs by their assigned field service center. The Department's 9 field service centers across the state provide direct technical assistance to the State's 136 LEAs. These field service centers work as teams to address the needs of schools and districts in their regions.

Objective	Action Steps	Time Frame
Require LEAs that show inequities in teacher assignment to analyze their data to determine causes and develop specific steps to address gaps	<ul style="list-style-type: none"> <li>• Identify LEAs with most significant gaps</li> <li>• Provide training to LEAs on analyzing their data and developing specific steps to address the gaps</li> <li>• LEAs analyze data and develop their teacher equity plan</li> <li>• LEAs submit their equity plan to the State for review and approval</li> <li>• LEAs reanalyze their data and revise their equity plans annually</li> </ul>	<ul style="list-style-type: none"> <li>• September 2006 and annually</li> <li>• December 2006 and annually</li> <li>• January 2007 – April 2007 and annually</li> <li>• April 2007 and annually</li> <li>• December – March annually</li> </ul>
Target specific intervention strategies for schools identified as “high priority”, i.e. not making AYP	<ul style="list-style-type: none"> <li>• Identify LEAs with most significant gaps and high priority schools</li> <li>• Provide specialized training to assist identified LEAs with analyzing the teacher quality data in these high priority schools and identifying strategies that will attract and retain high quality teachers to their high priority schools</li> <li>• Require the LEAs to develop an analysis of the teaching staff of high priority schools compared with their other schools in the district</li> <li>• Require the LEAs to develop specific strategies to attract and retain their most highly effective teachers to these schools</li> <li>• Require the LEAs to submit these specialized plans for high priority schools with their equity plans to the State annually</li> <li>• Require the LEAs to gain state approval of their plans, including the use of available resources to implement the plans, to receive approval for the use of their NCLB Consolidated Application</li> </ul>	<ul style="list-style-type: none"> <li>• December annually</li> <li>• December 2006 and annually</li> <li>• January 2007 – April 2007 and annually</li> <li>• January 2007 – April 2007 and annually</li> <li>• June 2007 and annually</li> <li>• July 1, 2007 and annually</li> </ul>
Redirect the federal education resources in LEAs that have not reduced the gaps in teacher distribution and have high priority schools to target improvements	<ul style="list-style-type: none"> <li>• Identify LEAs that are not reducing the gap in teacher distribution and who also have high priority schools</li> <li>• Redirect their NCLB Consolidated Application funds, school improvement funds, and IDEA funds to target improvement in teacher quality in their high poverty schools and/or high priority schools</li> </ul>	<ul style="list-style-type: none"> <li>• December 2007 and annually</li> <li>• December – May 2007 and annually</li> </ul>