

Changing the Distribution of Effective Teachers: Lessons Learned from Tennessee

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Thinking Strategically Across ARRA Funds Forum

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Call to Action

“There is great optimism and hope in our data that shows that no matter who you are or where you have come from, if a child is in front of an excellent teacher, and more importantly, a series of excellent teachers, he will make progress and perform well.”

*Governor Phil Bredesen
U.S. Chamber of Commerce
Institute on a Competitive Workforce Summit
September 2007*

Tennessee's Bold Action Plan: Focus on the distribution of effective teachers and prioritize districts for interventions

- 1. Moving from studying distribution of teachers' characteristics (e.g. experience and education levels) to increasing teacher effectiveness**
- 2. Implementing a statewide plan, while targeting districts with the most teachers and largest teacher equity gaps**
- 3. Focusing on human capital in our struggling schools**

Tennessee's Value-Added System and Teacher Effect Scores

- **What is value-added?**
- **How are teacher effect scores generated?**
- **SAS – Dr. William Sanders**

Teacher Effect Score

- A teacher's effect score is an indicator of how much the teacher influences his or her students' academic progress
 - For Example, Level Three, Average Effectiveness, is the category for teachers whose students' assessment results are near the state's growth standard, on average

Teacher Effectiveness Levels

- Level Five, Most Effective – substantially above growth standard
- Level Four, Above Average Effectiveness – above growth standard
- Level Three, Average Effectiveness – at growth standard
- Level Two, Approaching Average Effectiveness – below growth standard
- Level One, Least Effective – substantially below growth standard

Teacher Effectiveness Studies

Findings from 2007 Research Brief

- A clear equity problem existed: students in high poverty, high minority schools had less access to the state's most effective teachers and more access to the state's least effective teachers.
- Findings from 2009 Research Brief,
 - Students in High Priority Schools have:
 - Less access to the state's most effective teachers in reading/language arts, English II, and Algebra I
 - More access to the state's least effective teachers in reading/language arts and math than students in other schools across the state.

Tennessee's Strategy - Focus on the Six Largest Districts to Effect Change

- Memphis, Nashville, Jackson, Shelby County, Knox, Hamilton (Chattanooga)
- SEA partnered with LEAs, ARCC and NCCTQ
- Example: Memphis City Schools: Gates Grant of \$90 million: Teacher Effectiveness Initiative (TEI)
 - Includes a Teacher Effectiveness Measure (TEM)
 - Based on value-added data, such as TVAAS teacher effect scores
 - Used for evaluation, tenure, retention bonus, compensation, differentiated roles

State Level Next Steps

Race to the Top Proposal

- ***Electronic Reports***
- ***Working Conditions Survey***
- ***Role of principal***
 - ***Recruit and retain effective teachers***
 - ***Guide teachers to professional development that will improve effectiveness***
 - ***Establish working conditions for teachers to reach their potential***
 - ***Dismiss ineffective teachers***
- ***Teacher evaluations (50% student growth)***
- ***Achievement School District***

Reports of Teacher Effectiveness Data

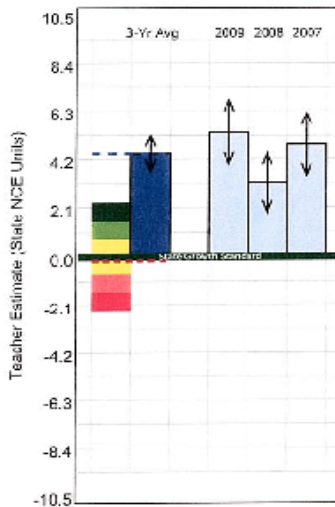
- **Electronic Teacher Effect Reports** -password-protected access
- **Electronic Dashboard** – to analyze student data for interventions
- **School-level Report of Distribution of Teacher Effectiveness** –
 - **Principal can see year to year progress**



3-Year-Average Estimated Progress = 4.5
(Standard Error = 0.8)

3-Year-Average Effectiveness Level = FIVE

TVAAS Teacher Graph



Legend



TVAAS Teacher Table

State Growth Standard	0.0
State Average (3-Yr)	-0.2
System Average (3-Yr)	4.5

Teacher Progress Estimates and Standard Errors				
	Estimate	StdErr	Index	
- Teacher 3-Yr Avg	4.5	0.8	5.80	Level 5
- Teacher 2009	5.4	1.4	3.92	Level 5
- Teacher 2008	3.2	1.3	2.48	Level 5
- Teacher 2007	4.8	1.3	3.60	Level 5

(All metrics expressed in state NCEs reflecting a base year of 2009)

What is a teacher value-added estimate?
It is an indicator of how much the teacher influences his or her students' academic progress. The associated standard error is a measure of the uncertainty around the teacher's estimate.

How is this used to determine an effectiveness level?
The ratio of the teacher's estimate to its standard error (shown in the column labeled 'Index') is used to determine the teacher's effectiveness level based on the rules shown below.

What is my teacher effectiveness level?
The teacher's effectiveness level is 'FIVE,' most effective, because the teacher's index is greater than 2. The educational outcome for the average student taught by this Level 5 teacher is that the student made decidedly more progress than the state growth standard of 2009.

Rules for Effectiveness Level Determination

- Level Five, Most Effective: The teacher's index is 2 or greater.
- Level Four, Above Average Effectiveness: The teacher's index is greater than 1 but less than 2.
- Level Three, Average Effectiveness: The teacher's index is greater than 1 but less than 1.
- Level Two, Approaching Average Effectiveness: The teacher's index is greater than -2 but less than -1.
- Level One, Least Effective: The teacher's index is less than -2.

3-Year Frequencies in the Reported Subject/Grade

Level Five, Most Effective	248
Level Four, Above Average Effectiveness	132
Level Three, Average Effectiveness	308
Level Two, Approaching Average Effectiveness	133
Level One, Least Effective	240

Teacher Effect Report Draft

- Electronic report to teachers
- Based on progress of teacher's students for subject/grade
- Teacher's estimate and level for each year and for three-year average
- Compares teacher's score to state growth standard, state average, and system average
- This teacher's level is Level 5, Most Effective
 - students made substantially more progress on average than the growth standard for TN's fifth grade social studies students

PRINCIPAL'S REPORT

District Name: Large Urban
 School Name: ABC High School

Teaching Effectiveness Category	Below Reference, Ineffective			Below Reference, Approaching Average Effectiveness			At Reference, Average Effectiveness			Above Reference, Above Average Effectiveness			Above Reference, Most Effective		
Levels	I			II			III			IV			V		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
School	19%	18%	14%	8%	12%	14%	27%	35%	21%	15%	6%	21%	31%	29%	31%
System	14%	15%	10%	22%	20%	14%	44%	46%	46%	9%	9%	13%	10%	9%	16%
State	15%	15%	16%	15%	15%	14%	43%	43%	42%	13%	13%	13%	14%	15%	15%

Notes: The reference for high school teachers is the state average teacher. For grades 4-8, it is the gain based on the state growth standard set in 2008-2009. Percentages are based on the number of teacher/subjects across grades. Teachers who teach in multiple tested subjects are counted separately for each subject in this report. The public reporting uses a composite estimate based on all of the teacher's tested subjects.

Teacher Effectiveness Levels

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- Level Four, Above Average Effectiveness
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- Level One, Least Effective

PUBLIC REPORTING

District Name: Large Urban
 School Name: ABC High School

Percent of Teachers by Teaching Effectiveness Category Across All Subjects and Grades, 2007 - 2009

Level	Levels 1 and 2	Level 3	Levels 4 and 5
School	30%	26%	44%
System	28%	49%	23%
State	29%	43%	28%

Strategies: Teacher Working Conditions Survey

- Administer statewide to teachers
- Find out about
 - school climate, culture, leadership
- Use results to plan improvements in
 - recruitment
 - assignment
 - retention and
 - development of highly effective teachers

Achievement School District

- State district of lowest-achieving schools – Tier 1 and Restructuring 2 or beyond
- Commissioner's discretion
- 13 schools eligible this year
- State contracts with national partners to staff and run the school academically
- District provides facility, transportation, food service, etc.
- Reason – break the district barriers to staffing the school

For More Information: TDOE Website

- Tennessee's Teacher Equity Plan 2010
 - <http://state.tn.us/education/nclb/doc/TeachEquityPlanDec2009.pdf>
- Teacher Effectiveness Research Brief 2009
 - <http://www.state.tn.us/education/nclb/doc/TeacherEffBrief1209.pdf>
- Tennessee's Race to the Top Proposal
 - <http://www.tennessee.gov/education/recovery.shtml#RTTT>