

Introduction to the Data

In response to Tennessee Code Annotated 49-5-108, the State Board of Education collaborated with the Governor's Office of State Planning and Policy to commission a study of teacher effect data, performed by SAS Institute, Inc.

The goals of the study were:

- to identify teacher training programs that tend to produce new teachers who are highly effective as well as to identify programs that tend to produce new teachers who are very ineffective.
- to determine if a teacher training program is above or below the reference distribution for each level of effectiveness with a fair and reliable statistical test.

This year's report allows programs to differentiate between the performance of traditionally licensed and alternatively licensed teachers (1 to 3 years experience) in comparison to three reference populations. The reference populations are as follows¹:

- the 2008- 2009 state distribution of teacher t-value of effects (grades 4 – 8).
- the 2008 – 2009 mean t-value effects of beginning teachers compared to the mean of the means for other Tennessee teacher training programs.
- the 2008 – 2009 mean t-value of teacher effect for beginning teachers compared to the mean of veteran teachers (i.e. teachers possessing more than 3 years experience).

The following institution report card is based on the following demarcations:

- **Green** indicates a ***statistically significant positive difference*** in relationship to the reference population or state distribution.
- **Red** indicates a ***statistically significant negative difference*** in relationship to the reference population or state distribution.

¹ The technical report for the study can be found on pages 16 – 27.

**Tennessee Technological University:
Teacher T-Value Effects (Grades 4 – 8)**

One year estimates of T-value of teacher effects (2008 – 2009)

**Percentage of Effective Teachers (1 to 3 Years Experience) based on
the 2008-2009 State Distribution of Teacher T-Value of Effects**

Traditionally Licensed Teachers (2002 - 2008)

Math (N=50)

% Below the 20 th Percentile	% Above the 80 th Percentile
14.0%	20.0%

Reading / Language Arts (N=82)

% Below the 20 th Percentile	% Above the 80 th Percentile
19.5%	15.9%

Science (N=60)

% Below the 20 th Percentile	% Above the 80 th Percentile
10.0%	20.0%

Social Studies (N=59)

% Below the 20 th Percentile	% Above the 80 th Percentile
11.9%	15.3%

Alternatively Licensed Teachers (2003 – 2009)

Math (N=5)

% Below the 20 th Percentile	% Above the 80 th Percentile
20.0%	40.0%

Reading / Language Arts (N=8)

% Below the 20 th Percentile	% Above the 80 th Percentile
12.5%	25.0%

Science (N=6)

% Below the 20 th Percentile	% Above the 80 th Percentile
33.3%	33.3%

Social Studies (N=5)

% Below the 20 th Percentile	% Above the 80 th Percentile
-	-

**Tennessee Technological University:
Teacher T-Value Effects (Grades 4 – 8)**

One year estimates of T-value of teacher effects (2008 – 2009)

**Comparison of the 2008 – 2009 Mean T-Value of Teacher Effect
Among Beginning Teachers as Compared to the Mean of Means for
All Institutions**

Key

- NSSD - No Statistically Significant Difference
- (-) – Statistically significant negative difference
- (+) – Statistically significant positive difference

Traditionally Licensed Teachers: Mean T-Value

Math

(-)	NSSD	(+)
	0.1763	

Science

(-)	NSSD	(+)
	0.1142	

Reading / Language Arts

(-)	NSSD	(+)
	-0.0049	

Social Studies

(-)	NSSD	(+)
	0.0557	

Alternatively Licensed Teachers: Mean T-Value

Math

(-)	NSSD	(+)
	0.0210	

Science

(-)	NSSD	(+)
	0.1711	

Reading / Language Arts

(-)	NSSD	(+)
	0.0777	

Social Studies

(-)	NSSD	(+)
	-	

**Tennessee Technological University:
Teacher T-Value Effects (Grades 4 – 8)**

One year estimates of T-value of teacher effects (2008 – 2009)

**Comparison of the 2008 – 2009 Mean T-Value of Teacher Effect for
Beginning Teachers as Compared to the Mean of Veteran Teachers
from the Statewide Distribution of 2008- 2009 Teacher Value-Added
Data**

Key

- NSSD - No Statistically Significant Difference
- (-) – Statistically significant negative difference
- (+) – Statistically significant positive difference

Traditionally Licensed Teachers: Mean T-Value

Math

(-)	NSSD	(+)
	-0.1231	

Science

(-)	NSSD	(+)
	-0.0022	

Reading / Language Arts

(-)	NSSD	(+)
	-0.1154	

Social Studies

(-)	NSSD	(+)
	-0.0576	

Alternatively Licensed Teachers: Mean T-Value

Math

(-)	NSSD	(+)
	0.19781	

Science

(-)	NSSD	(+)
	0.3060	

Reading / Language Arts

(-)	NSSD	(+)
	-0.0728	

Social Studies

(-)	NSSD	(+)
	-	

Tennessee Technological University: Placement & Retention

2002 – 03 Completers in the Personnel Information Reporting System (PIRS)				
% of state total	Year 1	3 consecutive years	2 out of 3 Years	4 out of 5 years
8.1%	64.9%	56.9%	78.5%	80.2%

2003 – 04 Completers in the Personnel Information Reporting System (PIRS)				
% of state total	Year 1	3 consecutive years	2 out of 3 Years	4 out of 5 years
8.3%	63.0%	68.2%	78.1%	81.5%