

DATE: November 10, 2011

SUBJECT: 2011 Report Card on the Effectiveness of Teacher Training Programs

ACTION RECOMMENDED: Information

BACKGROUND INFORMATION: Staff will present information on the 2011 *Report Card on the Effectiveness of Teacher Training Programs* released on Tuesday, November 1. This is the fourth year that the state has made data available to the public regarding the effectiveness of graduates from teacher training programs in the state. The report card has been significantly changed and improved for the 2011 publication as part of the state's First to the Top initiatives.

Over the past year, THEC staff have worked in collaboration with the teacher training programs, the State Board of Education, the State Department of Education, and other key stakeholders to redesign the report card. The report provides information on teacher education completers' placement and retention rates, Praxis II exams, and the Tennessee Value-Added Assessment System teacher effect scores. Key findings of the report include information related to the academic preparation of Tennessee's teachers and how well programs' completers perform in the classroom. Attached is the executive summary and the Tennessee state profile. The full report including individual program reports is available on the THEC website.

EXECUTIVE SUMMARY

Introduction

The Tennessee General Assembly passed legislation in 2007 requiring that the State Board of Education produce an assessment on the effectiveness of teacher training programs. The law requires that the report includes data on the performance of each program's graduates in the following areas: placement and retention rates, Praxis II results, and teacher effect data based on the Tennessee Value-Added Assessment System (TVAAS) scores. This year's report card includes several additional indicators for each program; more information on the changes and additions can be found in the following section.

The information contained herein is to establish a baseline for teacher training programs and for the public to evaluate and review program effectiveness, based on specific measures of quality as defined by Tennessee Code Annotated 49-5-108.

Tennessee is working to improve teacher preparation with several First to the Top initiatives. As part of this work, the *Report Card on the Effectiveness of Teacher Training Programs* has been redesigned so that it is a more effective tool for evaluating the state's teacher preparation programs. The Tennessee Higher Education Commission (THEC) was given primary responsibility for the redesign process as well as future publication of the report card because of the agency's relationships with the higher education programs as well as data collection ability.

Redesign Process

Over the past year, the Tennessee Higher Education Commission has worked in collaboration with the teacher training programs, the State Board of Education, the State Department of Education, and other key stakeholders to redesign and improve the report card.

The following changes have been put into effect for the 2011 report:

- The individual program reports include a summary page with information about the teacher training program as well as demographic and academic information on program completers.
- The program reports also include a map of where the most recent cohort of completers is currently teaching.
- There are additional documents to help the reader understand the data – the *Glossary of Terms* and *How to Read the Program Reports*.
- The Executive Summary includes specific findings from the data.
- There is now a Tennessee State Profile with statewide data and program comparisons.

- Teacher training programs reported student data directly to THEC, ensuring that programs have the ability to accurately claim completers.

The following changes are in progress:

- The report will be available online in a user-friendly portal that will enable comparisons across programs and years (December 2011).
- Teacher training programs will receive individual feedback reports in addition to the public report card to help identify specific strengths and weaknesses and areas that can be improved (April 2012).
- Teacher effect data will be included for all completers as new value-added measures are developed for the teacher and principal evaluation system (November 2012).

Explanation of Data

Teacher Effect Data

The SAS Institute, Inc. performed the analysis of teacher effect data for beginning teachers (defined as those with 1 to 3 years of experience) from all teacher preparation programs in the state. The goals of the study were: (1) to identify teacher training programs that tend to produce new teachers who are highly effective and programs that tend to produce new teachers who are very ineffective, and (2) to determine if a program is above or below the reference distribution for each level of effectiveness with a fair and reliable statistical test. The report differentiates between the performance of traditionally licensed and alternatively licensed teachers in comparison to three reference populations. A more detailed explanation of how to interpret the reference populations can be found in *How to Read the Program Reports*.

Placement and Retention Results

The report contains placement and retention analysis for the 2006-07 through the 2009-10 cohorts of completers teaching in public K-12 schools in Tennessee. The Center for Business and Economic Research at the University of Tennessee, Knoxville compared data on the 2009-10 completers as reported by the programs to THEC against the Tennessee Personnel Information Reporting System (PIRS) database in order to determine the placement and retention of teachers from specific programs. The reports include the percent of completers teaching in their first year after program completion as well as those teaching in their second year, which helps to capture those who waited a year before beginning to teach. The report also includes the percentage of completers teaching for three consecutive years, and retention for three out of four years, which again helps to capture those who may take a year off but return to teaching in Tennessee public K-12 schools.

Praxis Results

Teacher candidates are required to take the Praxis II exams in order to be eligible to teach in Tennessee. Praxis II exams are offered in multiple content areas. Tennessee requires that teacher candidates take Praxis examinations to be recommended for licensure and receive endorsements in specific fields. More detailed information on Praxis results can be found on the state's annual Title II report to the federal government.

Limitation of the Data

Currently, the value-added analysis is only available for teachers in the tested subjects and grades, which represents about 35% of the 2009-10 completers from teacher training programs. The state is working on developing value-added measures for all educators as part of the new teacher and principal evaluation system; these measures will be included on the report card as soon as they are available. The placement and retention rates do not represent all graduates who continued in the teaching field because the PIRS database is limited to those teaching in public K-12 schools in Tennessee; information is not included on teachers who went on to work in private schools or schools out of state. Additionally, there are missing data for the majority of charter schools in the state. The State Department of Education is working with the Local Education Agencies to remedy the gaps in reporting.

Findings

Profile Information

- There are data for about 30% of 2009-10 completers for ACT Composite scores. These data show that the average ACT Composite score for traditionally licensed teachers is 22.7 while it is 23.9 for alternatively licensed teachers. The scores range from 13 to 36 for all completers, with an average of 22.9. The following programs had completers with an ACT Composite score of 14 or less: Middle Tennessee State University, UT Martin, East Tennessee State University, and University of Memphis.
- The majority of 2010 graduates from teacher training programs in the state are white females from Tennessee. Of the 5,090 completers, 87% are white, 76% are female, and 89% are from Tennessee.
- 1,818 completers received the Elementary K-6 endorsement. Early Childhood Education PK-3 had the next highest number of completers, with 372. Tennessee indicated its commitment to improving STEM education in the state's Race to the Top application. This year, only 446 total completers received one or more endorsements in a STEM field.

Placement and Retention

- Teacher retention within the first four years after completing the teacher training program is comparable to the national trends. About 60% of graduates teach in a public school in the

state in their first eligible year, and about 60% continue teaching for three out of the following four years. About 50% teach for three consecutive years.

Teacher Effect Data

- Traditionally licensed teachers, which represent the majority of completers, have lower student achievement gains than veteran teachers in grades 4-8 Math, Reading/Language Arts, Social Studies, as well as the overall TCAP Composite score.
- Traditionally licensed teachers in high school courses tend to perform at the same level as veteran teachers with the exception of Biology I, where they tend to have higher student achievement gains.
- Alternatively licensed teachers tend to perform at the same level as veteran teachers in all grade levels and subjects with the exception of Science, where they tend to have higher student achievement gains.
- Only three programs tend to produce teachers (traditionally and alternatively licensed teachers combined) with higher student achievement gains than veteran teachers – Teach for America Memphis, Teach for America Nashville, and Lipscomb University.
- Significantly more programs have a tendency to produce teachers (traditionally and alternatively licensed teachers combined) with lower student achievement gains as compared to veteran teachers (see page 13 for a list of those 14 programs).
- When comparing beginning teachers to other beginning teachers (traditionally and alternatively licensed teachers combined), there are nine programs that have a tendency to produce teachers with higher student achievement gains.
- Several programs are producing teachers that are not performing as well other beginning teachers in that state. The programs that have a tendency to produce teachers with lower student achievement gains in comparison to other beginning teachers are: TN State University, TN Technological University, UT Martin, South College, TN Wesleyan, Middle Tennessee State University, Memphis Teacher Residency, Trevecca Nazarene University, and Union University.

Tennessee State Profile

Teacher Training Programs Statewide Distribution

	State	East TN	Middle TN	West TN
Total Number of Teacher Preparation Programs	41	14	15	13
Tennessee Board of Regents	6	1	4	1
University of Tennessee	3	2	0	1
Tennessee Independent Colleges and Universities Association	27	11	9	8
Alternative Providers	5	0	2	3

Tennessee Teacher Training Program Completers

System	Total Completers	Licensure Status	Total Completers
TBR	2198	Traditional License	3788
UT	729	Alternative License	975
TICUA	1898	Beginning Admin License	206
Alternative Provider	265	Special Group License	117

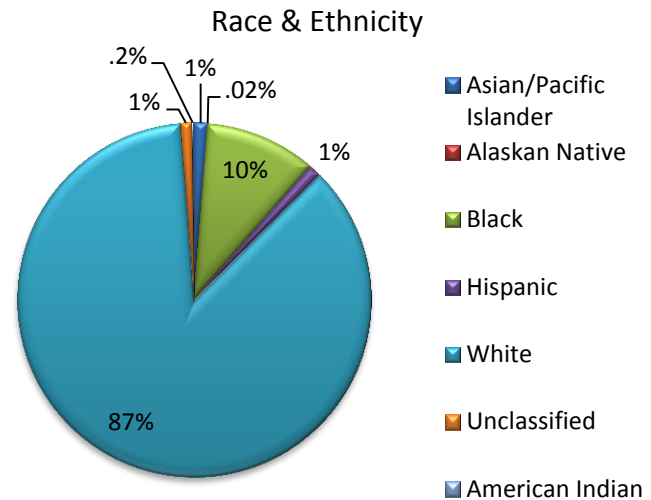
Placement and Retention

Data reflect the placement and retention rates of graduates for each cohort year listed. These data are based on the program completers in the Personnel Information Reporting System (PIRS). The years refer to the number of years since the completers have graduated and been eligible to teach. Therefore, these data help to inform the rate at which an institution's graduates enter and remain in the teaching field in Tennessee public schools. The number teaching 3 out of 4 years is included to account for the teachers who may leave the profession for a year but do return (e.g. for maternity leave or FMLA).

Cohort Year	Number of Completers	Teaching in Year 1	Teaching in Year 2	Teaching 3 Consecutive Years	Teaching 3 out of 4 years
2006 - 07	3801	62.2%	61.7%	51.0%	59.5%
2007 - 08	3651	56.1%	60.6%	47.9%	
2008 - 09	4289	54.3%	60.0%		
2009 - 10	5090	61.3%			

Demographic Information

Total Number	5090
Male	24%
Female	76%
In-state	89%
Out-of-state	11%



Academic Background Information

	Average Traditional	Average Alternative	Average All Completers	Completers Reported
Final GPA	3.53	3.66	3.57	5015
Major GPA	3.49	n/a	3.55	1558
High School GPA	3.38	3.50	3.39	1549
ACT Composite	22.7	23.9	22.9	1498
ACT Reading	23.5	22.5	23.5	1284
ACT Science	21.8	20.3	21.8	1283
ACT English	23.3	22.5	23.2	1310
ACT Math	20.8	20.6	20.8	1323
SAT Cumulative	1155	1274	1182	247
SAT Math	539	648	560	121
SAT Verbal	534	649	557	121

Teacher Assessments

Praxis Results (2008-2009)	Number Tested	Number Passed	Pass Rate
Summary Pass Rates - Traditional	3550	3511	98.9%
Summary Pass Rates - Alternative	383	357	93.2%

Endorsement Areas Earned by 2009-10 Teacher Training Program Completers

Teacher training programs reported the initial endorsement areas that they approved for each completer. Programs could report up to nine endorsement areas per completer. The numbers below do not represent any add-on endorsement that teachers may have received after program completion.

Top Endorsement Areas

Elementary K-6	1818 completers
Early Childhood Education PK-3	372 completers
Special Education Modified K-12	327 completers
English 7-12	300 completers
Middle Grades 4-8	271 completers
History 7-12	261 completers
Mathematics 7-12	228 completers

Endorsements in STEM Fields

446 Total Completers with one or more endorsements in STEM fields

Mathematics 7-12	228 completers
Biology 7-12	170 completers
Chemistry 7-12	48 completers
Physics 7-12	23 completers
Earth Science 7-12	7 completers
Tech/Engineering Education 5-12	3 completers

Teacher T-Value Effects (includes all grades)*One year estimates of T-value of teacher effects (2010 – 2011)*KEY

- No color: No statistically significant difference
- - Fewer than 5 teachers
- **Green:** Statistically significant positive difference
- **Yellow:** Statistically significant negative difference

Veteran Teacher Comparison: The average effectiveness of beginning teachers (1-3 years of experience) from teacher training programs in Tennessee as compared to the average effectiveness of veteran teachers in terms of contribution to student achievement growth.

Traditionally Licensed Teachers

Subject	Mean T-Value	Teachers in Program	Total Programs Statewide
TCAP Composite (grades 4-8)	-0.5824	1119	30
- Math	-0.2644	613	25
- Reading/Language	-0.1755	697	24
- Science	-0.1192	578	24
- Social Studies	-0.3672	571	23
EOC Composite (High school)	-0.3463	233	17
- Algebra I	-0.0947	42	5
- Biology I	0.8671	13	2
- English I	0.0612	40	4
- English II	-0.1763	30	4

Alternatively Licensed Teachers

Subject	Mean T-Value	Teachers in Program	Total Programs Statewide
TCAP Composite (grades 4-8)	-0.0488	222	15
- Math	0.2187	53	7
- Reading/Language	-0.1559	75	7
- Science	1.2030	68	8
- Social Studies	0.8474	46	5
EOC Composite (High school)	-0.0427	195	18
- Algebra I	0.9688	53	6
- Biology I	-1.0054	25	4

Veteran Teacher Comparison: The average effectiveness of beginning teachers (1-3 years of experience) from teacher training programs in Tennessee as compared to the average effectiveness of veteran teachers in terms of contribution to student achievement growth.

Traditionally & Alternatively Licensed Teachers

Subject	Mean T-Value	Teachers in Program	Total Programs Statewide
TCAP Composite (grades 4-8)	-0.4120	1373	34
- Math	-0.1239	704	29
- Reading/Language	-0.1485	804	27
- Science	0.2161	677	28
- Social Studies	-0.1203	637	25
EOC Composite (High school)	-0.2042	459	26
- Algebra I	0.1709	140	15
- Biology I	-0.1412	66	9
- English I	-0.0962	53	6
- English II	0.0314	39	5
- U.S. History	0.0369	17	3

Statewide Summary of Statistically Significant Results

The following table lists the programs that had **statistically significant positive differences** in the effectiveness of traditionally and alternatively licensed teachers with one to three years of experience.

Subject	Veteran Teacher Comparison	Beginning Teacher Comparison	Statewide Distribution
TCAP Composite (grades 4-8)	TFA Memphis TFA Nashville	TFA Memphis TFA Nashville	TFA Memphis TFA Nashville
- Math	TFA Memphis	Bethel TFA Memphis	
- Reading/Language	TFA Memphis	TFA Memphis Trevecca	TFA Memphis
- Science	TFA Memphis TFA Nashville	TFA Memphis TFA Nashville	TFA Memphis TFA Nashville
- Social Studies	TFA Memphis	TFA Memphis TFA Nashville	TFA Memphis TFA Nashville
EOC Composite (High school)	Lipscomb TFA Nashville	Lipscomb TFA Nashville UT Knoxville	TFA Nashville UT Knoxville
- Algebra I	Lipscomb TFA Nashville	Lipscomb TFA Nashville	TFA Nashville
- Biology I		Carson-Newman	TTU
- English II		U of Memphis	

The following programs produced beginning teachers with comparable effectiveness to all three reference groups (i.e. they did not have any statistically significant results)

- | | |
|---|---|
| <ul style="list-style-type: none"> - Austin Peay State University - Belmont University - Christian Brothers University - Cumberland University - East Tennessee State University - King College | <ul style="list-style-type: none"> - Lee University - Maryville College - TNTP Memphis Teaching Fellows - Vanderbilt University - Victory University |
|---|---|

The following programs had less than 5 teachers in tested subjects and do not have t-values of teacher effect measures:

- | | |
|---|--|
| <ul style="list-style-type: none"> - Aquinas College - Bryan College - Fisk University - Johnson University - Lane College | <ul style="list-style-type: none"> - LeMoyne-Owen College - Memphis College of Art - Southern Adventist University - Free Will Baptist Bible College |
|---|--|

The following table lists the programs that had **statistically significant negative differences** in the effectiveness of traditionally and alternatively licensed teachers with one to three years of experience.

Subject	Veteran Teacher Comparison	Beginning Teacher Comparison	Statewide Distribution
TCAP Composite (grades 4-8)	LMU MTSU Milligan South College TSU TTU TN Wesleyan Tusculum U of Memphis	TSU	Freed-Hardeman LMU Milligan South College TSU TTU U of Memphis
- Math			
- Reading/Language	MTSU TSU TTU U of Memphis UT Knoxville UT Martin	TSU TTU UT Martin	LMU South College U of Memphis UT Martin
- Science	TSU	South College TSU TN Wesleyan	South College TSU Trevecca
- Social Studies	MTSU TTU Trevecca	MTSU Trevecca	TTU U of Memphis
EOC Composite (High school)	MTR UT Martin	MTR UT Martin	MTR UT Martin
- Algebra I	UT Martin	UT Martin	UT Martin
- Biology I	Union	Union	

Programs at a Glance

Teacher Training Program	Number of Completers 2009-10	Number of Statistically Significant Positive Results	Number of Statistically Significant Negative Results	% of Completers Teaching 3 out of 4 Years	Praxis II Summary Pass Rates 2008-09
Aquinas College	5	-	-	25%	n/a
Austin Peay State University	169	-	-	61.1%	99%
Belmont University	59	-	-	49%	94%
Bethel University	19	3	-	87.5%	100%
Bryan College	19	-	-	22.2%	87%
Carson-Newman College	108	4	-	73.9%	100%
Christian Brothers University	75	-	-	51.7%	91%
Cumberland University	89	-	-	91.7%	88%
East Tennessee State University	278	-	-	50.8%	100%
Fisk University	6	-	-	88.9%	n/a
Freed-Hardeman University	129	-	2	64.7%	100%
Free Will Baptist Bible College	11	-	-	7.7%	100%
Johnson University	21	-	-	15.0%	100%
King College	24	-	-	57.1%	100%
Lane College	1	-	-	66.7%	n/a
Lee University	183	-	-	34.9%	100%
LeMoyne-Owen College	15	-	-	83.3%	100%
Lipscomb University	171	11	-	48.2%	92%
Lincoln Memorial University	131	-	7	60.1%	100%
Martin Methodist College	14	-	1	71.4%	100%
Maryville College	28	-	-	52.0%	100%
Memphis College of Art	41	-	-	n/a	n/a
Memphis Teacher Residency	20	-	6	n/a	n/a
Middle Tennessee State University	608	-	8	70.5%	95%
Milligan College	91	-	4	61.7%	100%
South College	60	-	9	66.7%	100%
Southern Adventist University	26	-	-	7.7%	100%
Teach for America- Memphis	99	32	-	8.9%	n/a
Teach for America- Nashville	46	26	-	n/a	n/a
Teach Tennessee	55	-	1	57.5%	100%
Tennessee State University	96	-	15	46.2%	100%
Tennessee Technological University	611	1	12	67.8%	97%
Tennessee Wesleyan College	35	-	5	68.8%	97%
TNTP: Memphis Teaching Fellows	45	-	-	n/a	n/a
Trevecca Nazarene University	153	2	7	61.2%	99%
Tusculum College	117	-	2	70.9%	100%
Union University	116	-	1	46.7%	99%
University of Memphis	436	1	16	66.7%	97%
University of TN, Chattanooga	210	-	1	56.5%	100%
University of TN, Knoxville	256	7	2	63.1%	97%
University of TN, Martin	263	1	16	64.7%	90%
Vanderbilt University	108	-	-	24.8%	100%
Victory University	41	-	-	66.7%	100%