

Evaluation of Tennessee's High School Uniform Grading Policy

Susan Mattson, Senior Legislative Research Analyst
(615) 401-7884/ Susan.Mattson@tn.gov

September 2011

Key Points

In 2006, Tennessee implemented a Uniform Grading Policy to standardize the grading scales used by Local Education Agencies (LEAs or school districts) to calculate high school grade point averages (GPAs). Prior to the Uniform Grading Policy, school districts calculated high school GPAs using different letter grade ranges. The differing letter grade ranges among districts meant that students' chances of qualifying for Tennessee Education Lottery Scholarships (TELS) based on their high school GPA could vary from district to district. This report is in response to Public Chapter 679 of 2004, which directs the Comptroller's Offices of Research and Education Accountability (OREA) to evaluate the uniform grading system four years after the policy's implementation.

Impact on Tennessee Education Lottery Scholarship Eligibility

- The number of students eligible for TELS based on GPA alone appears to have stayed the same or increased slightly since the implementation of the uniform grading policy.
- While the new policy has made calculation of GPA for TELS eligibility more uniform, other factors may create either an advantage or disadvantage for students in qualifying for scholarships. These other factors include the varying availability of advanced placement, honors, or other similar classes among school districts, and local discretion to provide additional points toward GPAs for such classes.

Other Issues to Consider

- The Tennessee Student Assistance Corporation (TSAC) does not audit GPAs or require LEAs to certify that GPAs are calculated correctly under the Uniform Grading Policy.
- The Uniform Grading Policy does not specifically address the inclusion or weighting of dual enrollment or dual credit classes in the calculation of high school GPA to determine TELS eligibility.
- Private schools are not required to use the Uniform Grading Policy to calculate GPA for TELS eligibility.
- Because uniform grading scales cannot standardize grades among teachers, schools, and districts, TELS eligibility based on GPA alone can vary for students with similar academic ability.
- LEAs vary in how course grades are presented and how GPA is calculated on student high school transcripts. The GPA on a student's transcript in some systems may differ from the GPA used to determine TELS eligibility. These transcripts are submitted to postsecondary institutions for enrollment and financial aid decisions and, thus, can affect a student's acceptance and financial aid awards at some universities in Tennessee. In addition, some employers use high school transcripts when making hiring decisions.

Introduction

In 2004, the General Assembly passed Public Chapter 679 (PC 679) requiring the State Board of Education to establish a task force to develop a uniform grading policy.¹ PC 679 grew out of concern that the state was not using a standardized grading scale to distribute Tennessee Education Lottery Scholarships (TELS).²

The original TELS law required students to have a final high school Grade Point Average (GPA) of at least 3.0 on a 4.0 scale (A=4.0, B=3.0, C=2.0, and D=1.0) to qualify.³ But school districts used different grading scales to calculate GPAs— in one district a 90 was the minimum number grade for an “A” while in another district, a 92 or a 95 was the minimum. The differing letter grade ranges among districts meant that a student’s chances of qualifying for a lottery scholarship could vary from district to district. PC 679 required a Tennessee State Board of Education task force to establish uniform ranges for letter grades.

The original TELS law required districts to award grades based on an unweighted scale— that is, “without additional points awarded for advanced placement, honors, or other similar courses.”⁴ PC 679 modified that policy, requiring the State Board of Education task force to recommend an appropriate weighting of courses in an attempt to reward students for taking more challenging material.

PC 679 also directed the task force to define honors courses in an attempt to standardize course classification in the state. Finally, PC 679 required the task force to determine the courses and weightings that should be used in calculating class rank.

Tennessee Uniform Grading Policy

The uniform grading task force consisted of superintendents, principals, teachers, and others. On April 15, 2005, the State Board of Education passed Uniform Grading Policy 3.301,⁵ which validated the recommendations made by the task force. The policy states:

- Eligibility for TELS scholarships should be based on a 4.0 GPA scale that allows districts to weight classes based on level of difficulty. Weighting for honors and National Industry Certification (NIC) courses can add three

points to the final semester grade. Weighting for Advanced Placement (AP) and International Baccalaureate (IB) courses can add five points to the final semester grade. Local districts have the option of whether to weight such advanced level classes.

- Tennessee’s Uniform Grading System to determine eligibility for TELS should consist of the following, effective July 1, 2006:
 - o A – 93-100
 - o B – 85-92
 - o C – 75-84
 - o D – 70-74
 - o F – 0-69

The Uniform Grading Policy includes a framework for honors course expectations in an attempt to standardize them and ensure that honors courses are more rigorous than standard state-approved courses. The task force stated its belief that standard courses should move toward meeting the rigor of honors classes and recommended a review in five years to determine if the weighting of honors courses is still needed. As of June 2011, the Tennessee State Board of Education has not discussed such a review.⁶

Because class rank is not related to TELS scholarship eligibility, the task force recommended that class rank decisions be left to local discretion. School districts have discretion on the grading scale and weighting used to determine class rank and how grades are reported and GPA is calculated on a student’s high school transcript. The GPA on a student’s transcript in some systems may differ from the GPA used to determine TELS eligibility.

Scope and Methodology

PC 679 requires the Comptroller’s Offices of Research and Education Accountability (OREA) to evaluate the uniform grading system four years after implementation and report any findings to the Education Oversight Committee. PC 679 also requires OREA’s evaluation to include an analysis of the relationship of high school GPAs to ACT and SAT scores.

The purpose of this study is:

- to determine what effect the Uniform Grading Policy has had on student eligibility for TELS scholarships;
- to determine the relationship between GPAs under the Uniform Grading Policy and ACT scores.

The information presented is based on:

- a survey of LEA superintendents;
- analysis of data on Tennessee high school graduates and first-time college freshmen in Tennessee postsecondary schools, including TELS eligibility and GPA and ACT scores;
- a review of laws and policies related to uniform grading and Tennessee Education Lottery scholarships;
- interviews with a sample of Tennessee college and university admission directors; and
- a review of research related to grading and other states' use of uniform grading policies.

This report's analysis of college admission tests is limited to ACT scores only, because all Tennessee LEAs offer and most students take the ACT, and only a minority of students in Tennessee report SAT scores.

This report's analysis is also limited to those

Tennessee Education Lottery Scholarships with high school GPA as one of the eligibility criteria, as described in Exhibit 1.

Background

Tennessee Education Lottery Scholarships (TELS)

The Tennessee Education Lottery funds several postsecondary scholarships and grants to Tennessee students attending eligible public or private colleges and universities.⁷ The lottery began in January 2004; the first scholarships were awarded for the fall semester of 2004. Eligibility criteria for most of the scholarship awards are based on a student's high school GPA and/or ACT/SAT scores; renewal criteria are based on postsecondary academic performance. Eligibility and renewal criteria have changed since the inception of the program.⁸

Exhibit 1 gives an overview of five TELS that include a minimum high school GPA in the current eligibility criteria. These are:

1. HOPE Scholarship
2. ASPIRE (HOPE with need supplement)
3. HOPE with General Assembly Merit Scholarship (GAMS)
4. ACCESS Award
5. HOPE Foster Care Tuition Grant

OREA Uniform Grading Policy Survey

From November 2010 through January 2011, the Comptroller's Offices of Research and Education Accountability (OREA) electronically surveyed the 136 superintendents of LEAs and four special schools in Tennessee. The survey queried superintendents regarding:

- their perceptions of the impact of the Uniform Grading Policy on students' GPAs and eligibility for lottery scholarship purposes;
- their concerns or suggestions related to the policy;
- information on their grading scales before the policy's implementation;
- local policies in areas left to local discretion under the uniform policy, such as weighting of advanced classes and how the GPA that appears on student transcripts is calculated.

OREA received 121 responses. Statistics reported are limited to the 106 responding LEAs that include a high school. The total number of responses to some questions was less than 106 because some LEAs did not answer every question. Eighteen LEAs with high schools did not respond to the survey. These include three large districts: Memphis City Schools, Hamilton County, and Sumner County. The 15 smaller LEAs that did not respond are: Bedford County, Coffee County, Decatur County, Gibson County Special School District, Giles County, Hardin County, Hawkins County, Huntingdon Special School District, Lincoln County, McNairy County, Milan Special School District, Perry County, Polk County, Rhea County, and Richard City Schools.

Six additional scholarships or grants without minimum high school GPA requirements are:

1. the Wilder-Naifeh Technical Grants
2. HOPE Scholarship for Nontraditional Students
3. Helping Heroes Grant
4. Rural Health Loan Forgiveness Program
5. Math and Science Teacher Loan Forgiveness Program
6. Dual Enrollment Grant for high school students taking college-level courses

In FY 2009-10, 97,022 Tennessee students received \$284 million in lottery-funded scholarships or grants. (See Exhibit 2.)

Uniform Grading Policies in Other States

An October 2005 review by the Education Commission of the States (ECS) found five states, including Tennessee, with statewide uniform grading scales and policies for secondary schools.⁹ Exhibit 3 shows the uniform scales used in these states. All of these states have minimum GPA requirements for state merit-based scholarships.

Conclusions

Impact of Uniform Grading Policy on TELS Eligibility

TELS eligibility appears to have stayed the same or increased slightly since the implementation of the Uniform Grading Policy. For almost all LEAs, the Uniform Grading Policy either meant no change to student GPAs (because the LEA's prior grading scale was identical to the Uniform Grading Scale) or a slight increase in student GPAs (because earning an "A" was more difficult under the LEA's prior grading scale, for example). As a result, TELS eligibility should have stayed the same or should have increased slightly under the uniform scale. However, data is not readily available to determine the specific impact of the uniform grading system on GPAs and TELS eligibility. To estimate the impact, OREA considered:

- 1) the perception of LEA superintendents of the policy's impact on their students' GPAs and TELS eligibility,
- 2) changes in the number of first-time freshmen enrolled in Tennessee postsecondary institutions with a TELS, and

Exhibit 1: Tennessee Education Lottery Scholarships requiring a minimum high school grade point average—FY 2010-11 eligibility criteria

| Program/Criteria | HOPE (base) | HOPE with General Assembly Merit (GAMS) | ASPIRE (HOPE with need supplement) | ACCESS Award | HOPE Foster Child Tuition Grant |
|-------------------------------------|--------------|---|------------------------------------|------------------|---|
| Amount (4-year) | \$4,000 | \$5,000 | \$5,000 | \$2,750 | Average public tuition and fees less gift aid |
| Amount (2-yr.) | \$2,000 | \$3,000 | \$3,500 | \$1,750 | Average public tuition and fees – gift aid \$2,000 |
| Minimum High School GPA | 3.00 | 3.75 | 3.00 | 2.75 | Same as HOPE or ACCESS |
| Minimum ACT/SAT Composite | <u>or</u> 21 | <u>and</u> 29 | <u>or</u> 21 | <u>and</u> 18-20 | Same as HOPE or ACCESS |
| Family Adjusted Gross Income | N/A | N/A | \$36,000 or less | \$36,000 or less | N/A |
| Other | | | | | One year under Department of Children's Services custody after age 14 |

Source: Tennessee Student Assistance Corporation, compiled from http://www.tn.gov/collegepays/mon_college/lottery_scholars.htm (accessed Dec. 2010).

- 3) changes in the percentage of students qualifying for TELS based on GPA only.

LEA Grading Scales Before and After Uniform Grading Scales Policy

While implementation of the Uniform Grading Policy has resulted in more uniformity for public high school GPAs for lottery scholarship determination, TELS eligibility based on GPA alone under the uniform scale should not have changed significantly from prior scales used by LEAs.

Beginning in the fall of 2006, all LEAs were required to use the uniform scale to calculate GPA for TELS scholarship eligibility. Prior to this time, LEAs used a variety of grading scales to calculate students' overall GPA, which was used by TSAC to determine student eligibility for most TELS. As shown in Exhibit 4, for the 106 systems responding to the OREA survey, prior to the uniform grading policy, the minimum numerical score for an "A" ranged from 90 to 96; there were 17 different ranges for a "B," 20 ranges for a "C," and 13 ranges for a "D."

It is important to note that while the uniform scale has resulted in more uniformity in calculating public high school GPAs to determine TELS eligibility, a uniform grading scale cannot completely standardize grades among teachers, schools, and districts. As several survey respondents indicated, even with a uniform grading scale, an "A" in one teacher's class is not always equivalent to an "A" in another teacher's class. TELS eligibility based on GPA alone will not necessarily include all students with a similar level of academic ability.

The grading scale adopted in the Uniform Grading Policy (highlighted in Exhibit 4) either did not change or was slightly more lenient for almost all (about 95 percent of) LEAs responding to the OREA survey. At least half of the LEAs had the same grading scale before and after the uniform policy. For example, the grading range for an "A" in 53 LEAs was identical to the "A" grading range of the uniform grading scale, meaning the shift to uniform grading had no impact on student GPAs. The prior grading range for an "A" used in 46 LEAs was more stringent (i.e., a student had to have greater than a 93 course average to receive an "A") than that of the uniform grading scale. In these cases, the shift to uniform grading likely increased GPAs for some students. The prior grading range for an "A" used in seven LEAs was more lenient than that of the uniform grading scale. In these cases, the shift

Exhibit 2: FY 2009-10 Tennessee Education Lottery Scholarship Awards

| Award | Recipients | Dollars |
|---------------------------------|---------------|----------------------|
| HOPE | 43,056 | \$147,700,000 |
| HOPE w/GAMS | 5,562 | \$26,900,000 |
| HOPE w/ASPIRE | 16,724 | \$78,900,000 |
| HOPE ACCESS | 408 | \$895,000 |
| HOPE Foster Care | 30 | \$126,000 |
| HOPE Non-Traditional | 2,668 | \$6,053,000 |
| Wilder- Naifeh Technical Grants | 13,435 | \$15,900,000 |
| Dual Enrollment Grant | 14,697 | \$6,400,000 |
| Math & Science Teacher | 25 | \$47,000 |
| Helping Heroes Grant | 367 | \$513,000 |
| Rural Health Loan Forgiveness | 50 | \$518,000 |
| Totals | 97,022 | \$283,952,000 |

Source: Tennessee Higher Education Commission, [Tennessee Education Lottery Scholarship Program Summary Report, 2010-11](http://www.tn.gov/CollegePays), <http://www.tn.gov/CollegePays> (accessed June 8, 2011).

Exhibit 3: Uniform grading policies in other states compared to Tennessee

| State | GPA Scale | A Range | B Range | C Range | D Range | F Range |
|----------------|-----------|---------|---------|---------|---------|--|
| Arkansas | 4.0 | 90-100 | 80-89 | 70-79 | 60-69 | 0-59 |
| Florida | 4.0 | 90-100 | 80-89 | 70-79 | 60-69 | 0-59 |
| South Carolina | | 93-100 | 85-92 | 77-84 | 70-76 | 63-69 Partial Credit; 0-62 No Credit |
| Tennessee | 4.0 | 93-100 | 85-92 | 75-84 | 70-74 | 0-69 |
| West Virginia | 4.0 | 93-100 | 85-92 | 75-84 | 65-74 | 0-64 |

Source: Molly Burke, "Statewide Uniform Grading Scales," Education Commission of the States, Oct. 2005, <http://www.ecs.org> (accessed March 8, 2011).

to uniform grading likely decreased GPAs for some students. As a result, GPAs under the uniform scale should either be the same or slightly greater for students in most LEAs.

LEA Perceptions of Impact on TELS Eligibility

Over 70 percent of LEAs responding to the OREA survey reported that GPAs and TELS eligibility either stayed the same or increased following implementation of the uniform grading policy.¹⁰

(See Exhibit 5.) As shown in Exhibit 5, 47 percent of LEAs reported that GPAs appeared to stay the same under the policy and 25 percent reported an increase in GPA. Similarly, 44 percent of LEAs reported that the same number of students were eligible for the lottery scholarship under the uniform scale, and 30 percent indicated that more students qualified for TELS under the uniform scale. Less than six percent of districts reported a decrease in GPA or the number of students eligible for lottery scholarships under the uniform

system. Over 20 percent of LEAs reported that they did not know if the uniform policy affected GPA or TELS eligibility; the survey did not ask for further explanation.

Changes in Number of TELS Recipients After Uniform Grading Policy

An analysis of data from the Tennessee Higher Education Commission (THEC) on the number of first-time freshmen TELS recipients between 2004 and 2009 does not show a sudden increase in TELS eligibility following implementation of the Uniform Grading Policy. Although the number of first-time freshmen receiving a TELS scholarship increased 21 percent between 2004 and 2009, most of these first-time freshmen (73 percent to 75 percent) qualified for a lottery-funded scholarship based on their ACT score, not their GPA.¹¹ Thus, a change in those students' GPAs would not have affected their TELS eligibility. The *number* of first-time freshmen who qualified based solely on GPA did increase during this

Exhibit 4: Tennessee grading scales prior to Uniform Grading Policy

| A | | B | | C | | D | | F | |
|-----------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Grade Range | # of LEAs | Grade Range | # of LEAs | Grade Range | # of LEAs | Grade Range | # of LEAs | Grade Range | # of LEAs |
| 96-100 | 1 | 89-95 | 1 | 83-88 | 1 | N/A | 2 | 0-74 | 6 |
| 95-100 | 27 | 89-94 | 2 | 80-88 | 2 | 75-82 | 1 | 0-72 | 1 |
| 94-100 | 18 | 88-94 | 5 | 80-87 | 4 | 75-79 | 5 | 0-70 | 1 |
| 93-100 | 53 | 88-93 | 2 | 79-85 | 1 | 72-77 | 1 | 0-69 | 94 |
| 92-100 | 2 | 87-94 | 1 | 78-87 | 2 | 70-79 | 1 | 0-64 | 2 |
| 91-100 | 1 | 87-93 | 1 | 78-85 | 3 | 70-77 | 5 | 0-60 | 1 |
| 90-100 | 4 | 86-94 | 2 | 78-84 | 1 | 70-76 | 10 | 50-69 | 1 |
| | | 86-93 | 9 | 77-87 | 1 | 70-75 | 11 | | |
| | | 86-92 | 1 | 77-86 | 1 | 70-74 | 66 | | |
| | | 85-94 | 16 | 77-85 | 2 | 70-73 | 1 | | |
| | | 85-93 | 7 | 77-84 | 6 | 70-71 | 1 | | |
| | | 85-92 | 52 | 76-86 | 1 | 65-74 | 1 | | |
| | | 85-91 | 1 | 76-85 | 2 | 65-69 | 1 | | |
| | | 83-91 | 1 | 76-84 | 7 | | | | |
| | | 83-89 | 1 | 75-85 | 4 | | | | |
| | | 81-90 | 1 | 75-84 | 62 | | | | |
| | | 80-89 | 3 | 75-82 | 1 | | | | |
| | | | | 74-82 | 1 | | | | |
| | | | | 72-80 | 1 | | | | |
| | | | | 70-79 | 3 | | | | |
| Total Responses | 106 | | 106 | | 106 | | 106 | | 106 |

Note: Excludes the 15 LEAs without high schools and the 18 LEAs that did not respond to the OREA survey.

= Scale in the Uniform Grading Policy

Source: OREA Survey of LEAs, Nov. 2010 to Jan. 2011.

five-year period, as shown in Exhibit 7. However, the *percentage* of students qualifying based solely on GPA did not change substantially during this time period: it ranged from 25 percent to 27 percent of all recipients.

Notably, the largest increase in the number of first-time freshmen who qualified for a lottery scholarship based on GPA alone occurred during the 2005-06 school year, before implementation of the Uniform Grading Policy, when the number of students rose from 4,460 to 5,114 (an increase of 654 students). The following year (2006-07) was the first year in which the Uniform Grading Policy for high school students was in effect. In the following fall of 2007, the number of first-time freshmen with HOPE scholarships who qualified based on GPA alone increased by 297 students.

The number of first-time freshmen with ASPIRE scholarships decreased slightly (-1 percent) following implementation of the Uniform Grading Policy, and the percentage of students who qualified for the ASPIRE scholarship based on GPA alone remained at 35 percent.

Limitations of Uniform Grading Scales

Uniform grading scales cannot standardize grades among teachers, schools, and districts. Grading and reporting often involve some degree of subjectivity.

Teachers have discretion on how grades are determined. Grades may reflect not only student achievement and knowledge of a particular subject, but also student effort, work habits, and behavior. The requirements and rigor of a class can vary and there is a degree of subjectivity involved in assigning grades for creative projects and essays. Teachers also have discretion when giving credit for homework and class work. Extra credit can also influence grades. Some teachers grade on a “curve,” which distributes grades relative to how other students perform in the class rather than according to objective criteria.¹²

An analysis of GPAs and ACT scores found that, on average, high school students with higher GPAs have higher ACT scores. However, ACT scores vary by district and by students with the same GPA. A high GPA does not always result in a high ACT score; a student with a low GPA may do well on the ACT.

Standardized assessments, such as the ACT, typically are designed to measure proficiency based on a set of common standards for student learning. ACT is a measure of a student’s cognitive ability to do college work and is a measure of educational achievement in college preparatory classes. GPA measures achievement as well, but can include many other factors. It may also be reflective of a student’s work

Exhibit 5: OREA survey of LEA results: impact of Uniform Grading Policy

What impact did the Uniform Grading Policy have on student GPAs for lottery scholarship purposes in your district?

| Response | # of LEAs Reporting | % of LEAs Reporting |
|------------------------|---------------------|---------------------|
| Increased Student GPAs | 25 | 25% |
| Decreased student GPAs | 6 | 6% |
| No change | 48 | 47% |
| Don't know | 23 | 23% |

What was the impact of the Uniform Grading Policy on lottery scholarship eligibility in your district?

| Response | # of LEAs Reporting | % of LEAs Reporting |
|---|---------------------|---------------------|
| More students qualified for the lottery scholarship | 30 | 30% |
| Some students no longer qualified for the lottery scholarship | 5 | 5% |
| No change | 45 | 44% |
| Don't know | 21 | 21% |

Number of districts with high schools responding to these questions = 101.
 LEA – Local Education Agencies
 Source: OREA Survey of LEA Superintendents, Nov. 2010 to Jan. 2011.

Exhibit 6: First-time freshmen TELS recipients, fall 2004 through fall 2009

| Fall | HOPE | GAMS | ASPIRE | ACCESS | Total |
|-----------------|--------|-------|--------|--------|--------|
| 2004 | 13,544 | 1,064 | 5,721 | 110 | 20,449 |
| 2005 | 13,278 | 1,229 | 5,034 | 263 | 19,804 |
| 2006 | 14,245 | 1,210 | 5,915 | 344 | 21,714 |
| 2007 | 15,281 | 1,315 | 5,830 | 358 | 22,784 |
| 2008 | 16,089 | 1,407 | 5,638 | 423 | 23,557 |
| 2009 | 16,416 | 1,389 | 6,606 | 245 | 24,656 |
| % Change | | | | | |
| 2004-2005 | -2% | 16% | -12% | 139% | -3% |
| 2005-2006 | 7% | -2% | 18% | 31% | 10% |
| 2006-2007 | 7% | 9% | -1% | 4% | 5% |
| 2007-2008 | 5% | 7% | -3% | 18% | 3% |
| 2008-2009 | 2% | -1% | 17% | -42% | 5% |
| 2004-2009 | 21% | 31% | 15% | 123% | 21% |

= First year of implementation of the Uniform Grading Policy.

Note: Eligibility for HOPE and ASPIRE lottery scholarships is based on either minimum high school GPA or ACT; GAMS and ACCESS scholarship eligibility is based on both.

Source: OREA analysis of data provided by the Tennessee Higher Education Commission.

Exhibit 7: HOPE and ASPIRE recipients qualifying on GPA alone, fall 2004 through fall 2009

| Fall | HOPE | | ASPIRE | | Both | |
|-----------------|-------|-----|--------|-----|-------|-----|
| | # | % | # | % | # | % |
| 2004 | 2,676 | 22% | 1,699 | 36% | 4,375 | 26% |
| 2005 | 2,834 | 22% | 1,626 | 34% | 4,460 | 25% |
| 2006 | 3,108 | 22% | 2,006 | 35% | 5,114 | 26% |
| 2007 | 3,405 | 23% | 1,980 | 35% | 5,385 | 26% |
| 2008 | 3,665 | 23% | 1,931 | 35% | 5,596 | 26% |
| 2009 | 3,779 | 24% | 2,171 | 34% | 5,950 | 27% |
| % Change | | | | | | |
| 2004-2005 | 6% | | -4% | | 2% | |
| 2005-2006 | 10% | | 23% | | 15% | |
| 2006-2007 | 10% | | -1% | | 5% | |
| 2007-2008 | 8% | | -2% | | 4% | |
| 2008-2009 | 3% | | 12% | | 6% | |
| 2004-2009 | 41% | | 28% | | 36% | |

= First year of implementation of the Uniform Grading Policy.

Note: Eligibility for HOPE and ASPIRE lottery scholarships is based on either minimum high school GPA or ACT.

Source: OREA Analysis of data provided by the Tennessee Higher Education Commission.

ethic or a teacher's grading policy where effort, attendance, conformity, and motivation are rewarded.

Complete data on high school GPAs and ACT scores was not readily available for Tennessee high school graduates. (See Appendix A for a complete description of the data used for this analysis and for more detailed results.) OREA limited its analysis to a sample of 16 Tennessee school districts with valid ACT and GPA data available for 75 percent or more of their public school graduates in 2008-09 and 2009-10. ACT scores can range from a 36 to a 1; GPAs range from a 4.0 for an "A" to a 1.0 for a "D."¹³

Overall, students with higher GPAs tend to score higher on ACT tests. As shown in Exhibit 8, the average ACT score for graduates in the sample districts increased from a 15 for "D" students to a 28 for "A" students. However, average ACT scores varied by district and among students with similar GPAs in different districts. As shown in Exhibit 9, average district ACT scores for graduates with similar GPAs ranged from three to five points in the 16-district sample. For example, the average ACTs for "A" graduates ranged by five points—from 25 to 30 for the sample districts.

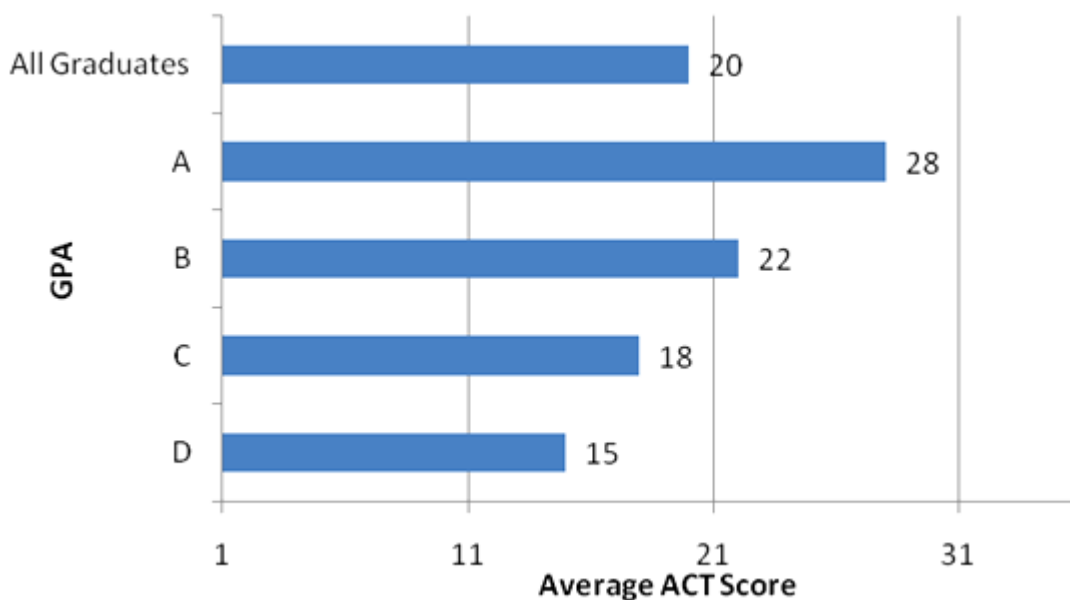
ACT scores range widely for graduates with similar GPAs. Appendix A includes the range of ACT scores for individual graduates with similar grades. For "B" graduates, ACT scores ranged from 8 to 35 with an average of 22.

Availability and Weighting of Advanced Classes

The varying availability of advanced courses and local discretion to weight grades earned in these courses can give some students an advantage in qualifying for TELS based on GPA alone. The Uniform Grading Policy¹⁴ allows LEAs to add a set number of additional points to a student's numerical grades in the following advanced level courses: Honors, Advanced Placement (AP), International Baccalaureate (IB), and National Industry Certification Courses (NIC).¹⁵

While the number of districts offering advanced classes and the number of students in advanced classes have increased since the Uniform Grading Policy was implemented in 2006, many school districts did not offer advanced level courses in 2010-11. Based

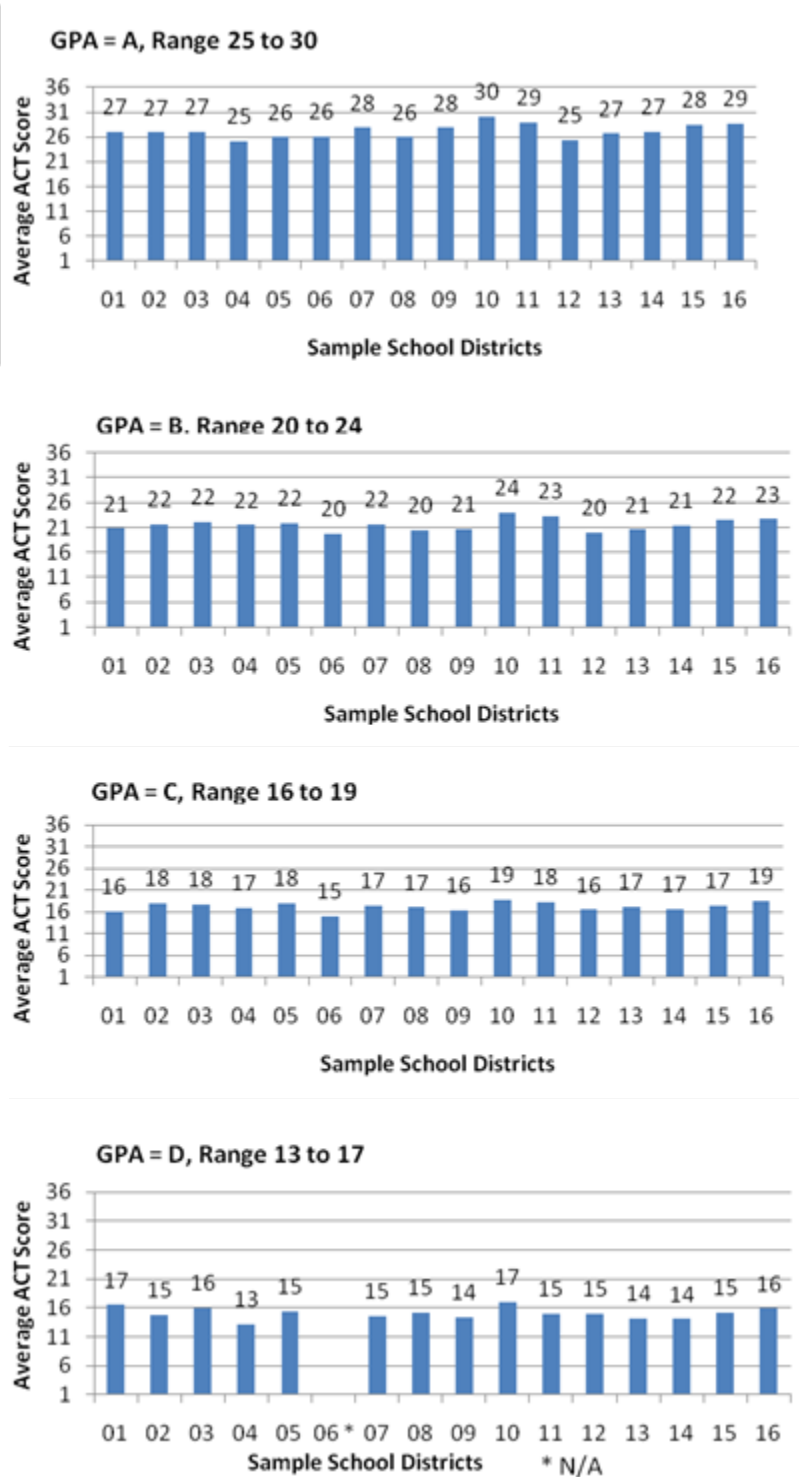
Exhibit 8: Average ACT score by GPA for Tennessee high school graduates in 2008-09 and 2009-10 in select school districts



Note: Includes 16 sample districts with available valid ACT and GPA data for 75 percent or more graduates.

Sources: Data compiled by the Tennessee Higher Education Commission for 2008-09 and 2009-10 public high school graduates from data sent to the Tennessee Student Assistance Corporation from ACT, from LEAs through the XAP system, and from students through the FAFSA application to determine financial aid eligibility or reported by postsecondary schools to THEC.

Exhibit 9: Average ACT Score, by GPA and LEA in 2008-09 and 2009-10 in select school districts



Note: Includes 16 sample districts with available valid ACT and GPA data for 75 percent or more graduates.

Sources: Data compiled by the Tennessee Higher Education Commission for 2008-09 and 2009-10 public high school graduates from data sent to the Tennessee Student Assistance Corporation from ACT, from LEAs through the XAP system, and from students through the FAFSA application to determine financial aid eligibility or reported by postsecondary schools to THEC.

on the OREA survey, most LEAs (60 percent) indicated that the number of advanced courses has increased since the implementation of the policy in 2006. Only five percent indicated a decrease in advanced courses. However, in 2010-11, 17 percent of LEAs did not offer any honors classes and 40 percent did not offer any AP classes. (See Exhibit 10.) Less than five percent offered the International Baccalaureate program and 13 percent offered NIC programs.

Most LEAs add points to a student’s semester grade for advanced courses, as allowed by the policy. Of the LEAs that offered advanced courses, 79 percent allowed the additional points to be added to the semester grade in 2010-11. This is an increase from the 59 percent of LEAs that weighted grades for advanced courses prior to the Uniform Grading Policy implementation in 2006.

Other Issues to Consider

No GPA Certification

The Tennessee Student Assistance Corporation (TSAC) does not audit GPAs or certify that GPAs are calculated correctly under the Uniform Grading Policy. TSAC uses information from three sources to determine eligibility for TELS: high school GPA, ACT and/or SAT scores, and the Free Application for Federal Student Aid (FAFSA). Individual schools are responsible for calculating GPAs and reporting them electronically to TSAC’s eligibility determination system. TSAC receives test scores from ACT and the College Board (SAT) directly. This data is merged with data supplied by students on the FAFSA to determine eligibility for TELS.¹⁶

Private Schools Exclusion

The Uniform Grading Policy and statute apply only to Tennessee public schools and LEAs, even though private school students are eligible for TELS. Private schools report student GPAs to TSAC using their own adopted grading scales.¹⁷ OREA did not attempt to determine the grading scales used by private schools. TSAC accepts the GPAs as reported by the private school with no determination of the scale used.¹⁸

Dual Enrollment and Dual Credit Courses

Based on the OREA survey, LEAs differ in whether they weight dual enrollment and dual credit courses in the calculation of GPAs and whether they include such courses on transcripts. The Uniform Grading Policy does not specifically refer to dual enrollment or dual credit courses. The policy addresses the issue of weighting for such courses by noting that weighting is only allowed for courses approved by the State Board.

Dual enrollment courses are postsecondary courses taught by postsecondary faculty, and thus are not approved by the State Board of Education. They are not eligible for weighting under the Uniform Grading Policy. Local policy allows students to earn both secondary and postsecondary credits for such courses, which are available to high school students who meet admission criteria from the postsecondary institution.

Dual credit classes are high school courses taught by high school faculty for high school credit. They are approved by the State Board of Education and are eligible for weighting under the Uniform Grading Policy.

Exhibit 10: Number of Local Education Agencies offering advanced courses, SY2010-11

| Number of Courses | Honors | | Advanced Placement (AP) | | International Baccalaureate (IB) | | National Industry Certification (NIC) | |
|-------------------|--------|-----|-------------------------|-----|----------------------------------|-----|---------------------------------------|-----|
| | # LEAs | % | # LEAs | % | # LEAs | % | # LEAS | % |
| 0 | 18 | 17% | 41 | 40% | 98 | 95% | 90 | 87% |
| 1-10 | 32 | 31% | 49 | 48% | 1 | 1% | 1 | 1% |
| 11-20 | 22 | 21% | 7 | 7% | 2 | 2% | 5 | 5% |
| >20 | 31 | 30% | 6 | 6% | 2 | 2% | 7 | 7% |
| Respondents | 103 | | 103 | | 103 | | 103 | |

Source: OREA Questionnaire of LEAs, Nov. 2010 to Jan. 2011.

Students may also receive postsecondary credit if they successfully complete the course, enroll at the granting institution, and pass the appropriate course content assessment.¹⁹ A dual credit course may be taught as an honors course, and be weighted accordingly, by implementing the standards for honor courses contained in the Uniform Grading Policy.

Based on the OREA survey, 95 percent of LEAs that offer dual enrollment or dual credit courses include the course and grade on the high school transcript. Four LEAs reported that they allow additional weight for dual enrollment courses on the LEA transcript and GPA.

Grades and GPAs on Student Transcripts Differ in Some LEAs

Although LEAs use the Uniform Grading Policy to calculate overall GPAs for TELS eligibility, some LEAs use separate calculations for letter grades and student transcripts. The Uniform Grading Policy allows LEAs discretion in the presentation of grades and the calculation of overall GPA for purposes other than TELS eligibility (student transcripts, class rank, etc.). While this does not affect TELS eligibility, it can result in differences in the calculation of overall GPA on transcripts. Such differences can affect those selection decisions of postsecondary schools and employers that are based on high school grades.

LEAs vary on how they present course grades on student transcripts. Variations include one or a combination of the following:

- numerical average
- letter grade (A, B, C, D, F)

- graduated letter grade (e.g., A+, A, A-, etc.)
- grade points, (A=4.0, B=3.0, C=2.0, D=1.0)
- graduated grade points (e.g., A=4.0, A=3.7, A-=3.2)

As shown in Exhibit 11, based on the OREA survey, 88 percent of LEAs report semester course grades with a numerical average on the transcript and 12 percent report letter grades without a numerical average. Within those two categories, LEAs vary on whether they include numerical averages, letter grades, and/or grade points on the transcript. Districts vary on whether they use graduated letter grades (e.g., A+, A, A-, etc.) and how grade points are assigned to different numerical or letter grades.

LEAs also use different methods to calculate the overall GPA included on student transcripts. Basically, a student’s overall GPA is equal to the number of grade points earned by the student divided by the number of course credits taken.²⁰ Factors that can affect GPAs include:

- Additional points added to a course grade for advanced level classes,
- Different grade point scales (four- vs. five-point maximum),
- Different scales used to convert numerical points to letter grades and grade points,
- Additional grade points added for advanced level classes, and/or
- Exclusion of certain classes from the calculation.

Exhibit 11: Course Semester Grades and GPAs on Student Transcripts

| | # LEAs | % |
|--|-----------|------------|
| Numerical Average Included | 90 | 88% |
| Numerical Average Only | 63 | 62% |
| Numerical Average and Letter Grade | 11 | 11% |
| Numerical Average and Letter Grade with + or - | 1 | 1% |
| Numerical Average and Grade Point Average | 9 | 9% |
| Numerical Average and Letter Grade and Grade Point Average | 6 | 6% |
| No Numerical Average Included | 12 | 12% |
| Letter Grade Only | 8 | 8% |
| Letter Grade with + or – Only | 1 | 1% |
| Letter Grade and Grade Point Average | 3 | 3% |

Total responses = 102
Source: OREA Questionnaire to LEAs, Nov. 2010 to Jan. 2011.

Almost all school systems either adopted the uniform grading scale (78 percent) or were already using the adopted scale (19 percent) to assign letter grades to numerical averages when the policy was adopted in 2006. As allowed by the policy, some systems record grades, assign quality points, and calculate overall transcript GPAs differently.

The calculation of GPA begins with a student's numerical percentage average earned in a course. Some LEAs add three or five points to the numerical average for advanced courses. Based on the LEA's grading scale, each numerical average is assigned a number of grade points. The grade points usually range from 0 ("F") to 4.0 ("A"), but some systems use a five-point scale to reward students for taking advanced courses. Sometimes this is in addition to the extra points added to the semester grade. Some districts also assign and record on the transcript a letter grade for each course based on their defined grading scale. Some districts exclude some courses from the calculation of the overall GPA, e.g., pass/fail classes and dual credit courses. These factors allow some students to graduate with grade point averages greater than 4.0.

The case study on page 14 illustrates the calculation of GPA under the Uniform Grading Policy used for TELS eligibility and by most LEAs on student transcripts. The illustration also includes one LEA's alternative grading policy for transcripts and for determining class rank ("LEA Z" in the case study). In the case study, a student earning an 86 in an AP class could earn between 3.0 and 4.5 grade points depending on the transcript grading policy used by the LEA. If the LEA used the uniform system and did not add additional points for advanced classes, the student would receive 3.0 grade points and a "B" on the transcript. If the district does allow the five additional points for an AP class, for the same grade (86) the student would

receive 3.0 grade points, but the grade might be recorded as a "B+" on the transcript (if the LEA uses graduated letter grades). On LEA Z's transcript, for an 86 earned in an AP class, the student would receive a 91—five additional points toward their semester course grade for taking the AP class. A 91 is an "A" and 3.5 grade points on LEA Z's more lenient grade point scale compared to a "B" and 3.0 grade points on the uniform scale. In addition, LEA Z awards an additional grade point toward the GPA for an AP class, for a total of 4.5 grade points for the AP class.

The Uniform Grading Policy removes these differences, other than the LEA discretion to weight course grades in advanced classes, from the calculation of GPA for TELS eligibility. However, differences in the GPA calculation on high school transcripts can affect a student's acceptance and financial aid awards at some universities in Tennessee. OREA interviews with a small sample of college admissions staff at Tennessee postsecondary institutions confirmed the variation in the transcript grades and calculation of GPA among high schools. Universities with more selective admission criteria (e.g., the University of Tennessee-Knoxville and Belmont University) recalculate a common GPA for all applicants using the same grade point conversion scale for numerical semester grades on the transcripts for selected core academic classes. This recalculation, along with other criteria, ensures a more uniform comparison of academic achievement to assess applicants. Other universities interviewed (Middle Tennessee University and Austin Peay State University) use the GPA included on the transcript from the high school (without recalculation) to determine general university and honors college acceptance. The universities interviewed do not use the lottery GPA, which is calculated more uniformly, in their admission decisions. Community colleges accept all high school graduates, so GPA is not a major factor for admission.

Case Study: Uniform Grading Policy Grade Points vs. LEA Grading Policy Grade Points on Student Transcript used to calculate Grade Point Average

Uniform Grading System to determine Tennessee Education Lottery Scholarship eligibility:

| Uniform Grading System | | | | | |
|------------------------|------------------|-----|---|---|--------------|
| | Percentage Range | | Weighting for Honors Course And National Industry Certification | Grade | Grade Points |
| A | 93 | 100 | May include the addition of 3 points to the grade used to calculate the semester average | May include the addition of 5 points to the grades used to calculate the semester average. | 4.0 |
| B | 85 | 92 | | | 3.0 |
| C | 75 | 84 | | | 2.0 |
| D | 70 | 74 | | | 1.0 |
| F | 0 | 69 | | | 0 |

“LEA Z” Grading System used on Student Transcripts and to determine Class Rank:

| “LEA Z” Grading System | | | | | | | |
|------------------------|------------------|-----|---|--|--------------|--------|-------|
| Grade | Percentage Range | | Weighting for Honors Course And National Industry Certification | Weighting for Advanced Placement and International Baccalaureate Courses | Grade Points | | |
| | | | | | Regular | Honors | AP/IB |
| A | 97 | 100 | Addition of 3 points to each grading period grade | Addition of 5 points to each grading period grade | 4.0 | 4.5 | 5.0 |
| | 94 | 96 | | | 3.7 | 4.2 | 4.7 |
| | 91 | 93 | | | 3.5 | 4.0 | 4.5 |
| B | 87 | 90 | | | 3.3 | 3.8 | 4.3 |
| | 84 | 86 | | | 3.0 | 3.5 | 4.0 |
| | 81 | 83 | | | 2.7 | 3.2 | 3.7 |
| C | 77 | 80 | | | 2.3 | 2.8 | 3.3 |
| | 72 | 76 | | | 2.0 | 2.5 | 3.0 |
| D | 70 | 71 | | | 1.0 | 1.5 | 1.9 |
| F | 0 | 69 | 0.0 | 0.0 | 0.0 | | |

Note: The official high school transcript includes only the letter grade, not the numerical grade, which does not allow postsecondary institutions to standardize qualifying GPAs for admissions.

Grade Point Calculation Examples:

86 in AP Calculus

Uniform System with Weighting: $86 + 5 \text{ AP points} = 91 = B = 3.0 \text{ Grade Points}$

With graduated letter grades on transcript = B+

Uniform System without Weighting: $86 = B = 3.0 \text{ Grade Points}$

“LEA Z” Policy: $86 + 5 \text{ AP points} = 91 = A = 4.5 \text{ Grade Points}$

91 in English III

Uniform Scale with Weighting: $91 = B = 3.0 \text{ Grade Points}$

Uniform Scale without Weighting: $91 = B = 3.0 \text{ Grade Points}$

“LEA Z” Policy: $91 = A = 3.5 \text{ Grade Points}$

Policy Alternatives

Grade Point Average Calculation

Under current practice, eligibility for Tennessee Education Lottery Scholarships is determined in part by GPAs as submitted by public school systems (using the Uniform Grading Policy) and private schools (using policies of their choosing). The Tennessee Student Assistance Corporation does not verify the accuracy of GPA calculation. If the General Assembly were to consider policies to require verification of GPAs, the following alternatives might be discussed:

1. Requiring LEA superintendents to certify GPAs.
 - o This would formalize procedures at the LEA level, but should have a minimum fiscal impact.
2. Conducting random audits of GPAs submitted by LEAs.
 - o This would require establishing procedure and may have a fiscal impact on the entity responsible for conducting the audits.
3. Requiring TSAC to calculate GPAs from full electronic transcripts submitted by LEAs.
 - o This would likely have a fiscal impact at the LEA level to develop procedures for submitting electronic transcripts.
 - o This would likely have a fiscal impact on TSAC to develop procedures to calculate GPAs from electronic transcripts.
4. Requiring private schools to calculate GPAs according to the uniform grading policy.

Dual Enrollment and Dual Credit

Under current practice, LEAs use different methods to assign grade points for dual enrollment and dual credit courses. The State Board of Education should consider clarifying the policy on the inclusion and weighting of dual enrollment and dual credit courses in the calculation of TELS eligibility GPA. Questions the board should clarify in the Uniform Grading Policy include:

- Is the final course letter grade based on the Uniform Grading Policy or the college's grading scale?

- Are dual enrollment and dual credit courses included in the calculation of GPA to determine TELS eligibility?
- Assuming that a college course is more advanced than a standard high school course, should students receive additional points to their numerical average for dual enrollment and dual credit courses, as they do for the more advanced honors, AP, or IB high school courses? If so, how many points should be added to the final semester numerical grade?

Transcript GPAs

The State Board of Education may wish to consider whether high school grades and GPAs presented on high school transcripts should be more uniform among school districts. The uniform grading policy applies only to the calculation of GPA to determine TELS eligibility. LEAs have discretion on the presentation of course grades and calculation of GPA on transcripts. Transcripts are used by postsecondary institutions to compare students and make admission and financial aid decisions. Employers may use transcripts to make employment decisions. Different calculations for the same numerical grades could result in different decisions for students with similar academic performance.

Previous Task Force Recommendation: Honors Classes Review

As recommended by the task force that developed the Uniform Grading Policy, the State Board of Education may wish to review whether the weighting of honors courses is still justified. The task force stated that standard courses should move toward meeting the rigor of honors classes.

Endnotes

- ¹ 103rd Tennessee General Assembly, Public Acts, 2004, [Chapter No. 679](#), An act relative to grading systems in schools, <http://www.tn.gov/sos> (accessed June 13, 2011).
- ² OREA review of tapes of legislative deliberations of Tennessee Public Chapter 679 of 2004.
- ³ 103rd Tennessee General Assembly, Public Acts, 2003, [Chapter No. 298](#), An act relative to educational programs and purposes funded from proceeds of the state lottery, <http://www.tn.gov/sos> (accessed June 13, 2011) and *Tennessee Code Annotated* §49-4-902(16) and 49-4-907.
- ⁴ 103rd Tennessee General Assembly, Public Acts, 2003, [Chapter No. 298](#), An act relative to educational programs and purposes funded from proceeds of the state lottery, <http://www.tn.gov/sos> (accessed June 13, 2011).
- ⁵ Tennessee State Board of Education, Approved Board Policies, Standards, and Guidelines, [3.301 Uniform Grading Policy](#), adopted 4/15/2001, <http://www.state.tn.us/sbe> (accessed July 22, 2011).
- ⁶ Art Fuller, Research Associate, Tennessee State Board of Education, telephone interview, June 7, 2011.
- ⁷ Tennessee Student Assistance Corporation, http://www.tn.gov/collegepays/mon_college/lottery_scholars.htm (accessed Dec. 2010).
- ⁸ Tennessee Higher Education Commission, “[Tennessee Education Lottery Scholarship Program Annual Report: Outcomes through Fall 2009](#),” pp. 1-3, <http://www.tn.gov/thec> (accessed June 13, 2011).
- ⁹ Molly Burke, “[Statewide Uniform Grading Scales](#),” Education Commission of the States, Oct. 2005, <http://www.ecs.org> (accessed March 8, 2011).
- ¹⁰ The OREA survey asked LEA superintendents for their opinions on the Uniform Grading Policy’s impacts. Superintendents were not asked to recalculate student GPAs and TELS eligibility under both policies to determine the specific impact.
- ¹¹ HOPE and ASPIRE scholarship eligibility are based on a minimum GPA (3.0) or ACT score (21).
- ¹² Thomas R. Guskey, “Making High School Grades Meaningful,” *Phi Delta Kappan*, Vol. 87, No. 9, 2006, pp. 760-675; Thomas R. Guskey, “Making the Grade: What Benefits Students?,” *Educational Leadership*, Vol. 52, No. 2, 1994, pp. 14-20.
- ¹³ An “A” graduate had a 4.0 Grade Point Average (GPA), a “B” may result in a GPA between 3.0 through 3.9, a “C,” 2.0 through 2.9,” and a “D,” 1.0 through 1.9.
- ¹⁴ Tennessee State Board of Education, Approved Board Policies, Standards, and Guidelines, [3.301 Uniform Grading Policy](#), adopted 4/15/2001, <http://www.state.tn.us/sbe> (accessed July 22, 2011).
- ¹⁵ Students may receive an additional three points for Honors or NIC courses, and an additional five points for AP and/or IB courses. These points may either be added in with the student’s course grades prior to calculation of the final semester grade, or added after calculation of the student’s final semester grade. As an example of the latter practice, students with a final semester grade of 88 in an AP class would see their final grade rise to a 93.
- ¹⁶ Tim Phelps, Associate Executive Director, Grants and Scholarship Programs, Tennessee Student Assistance Corporation, and David Wright, Associate Executive Director, Policy, Planning, and Research, Tennessee Higher Education Commission, personal interview, Sept. 17, 2010.
- ¹⁷ Tim Phelps, Associate Executive Director, Grants and Scholarship Programs, Tennessee Student Assistance Corporation, and David Wright, Associate Executive Director, Policy, Planning, and Research, Tennessee Higher Education Commission, personal interview, Sept. 17, 2010; follow-up with a private high school college counselor.
- ¹⁸ Homeschool students are eligible for TELS based on ACT/SAT scores. See http://www.tn.gov/collegepays/mon_college/lottery_scholars.htm.
- ¹⁹ Tennessee Department of Education, “[Dual Credit and Dual Enrollment](#),” <http://www.tn.gov/education> (accessed May 13, 2011) and TCA 49-15-102(2).
- ²⁰ A course’s credit can vary depending on the amount of time a course is scheduled to meet during a semester.

Appendix A: Analysis of the Relationship of ACT and GPAs in Tennessee

As part of an evaluation of the uniform grading policy, PC679 (2004) directs the Comptroller's Offices of Research and Education Accountability to analyze the relationship of high school GPA to ACT and SAT scores.

This report's analysis of college admission tests is limited to ACT scores only, because all Tennessee LEAs offer and most students take the ACT, and only a minority of students in Tennessee report SAT scores.^a Data was obtained with the cooperation of THEC, which compiled a database from several existing sources for the Tennessee Department of Education's database of public high school graduates in SY2008-09 and SY2009-10 with a regular diploma. Data was organized by school district and school. The Tennessee Department of Education does not maintain comprehensive GPA data or ACT scores.

ACT scores came from one of three sources: reported by ACT to the Tennessee Student Assistance Corporation (TSAC); reported on the Free Application for Federal Student Aid (FAFSA) sent to TSAC; or in THEC databases on students in Tennessee public postsecondary schools.

Graduates' high school GPAs were reported to the TSAC through its XAP system or the FAFSA applications, which are used to determine eligibility for Tennessee Education Lottery Scholarships and other financial aid eligibility. Other GPAs were available through THEC's databases on students in Tennessee public postsecondary schools. The uniform grading policy for TELS eligibility gives school districts discretion to add points to the final semester grades for certain advanced level classes. THEC did not have the ability to identify whether the GPAs reported by the school districts were adjusted in this manner.

Complete GPA and ACT data was available only for 63 percent (77,556) of the 123,130 Tennessee public high school graduates in SY2008-09 and SY2009-10.

In many cases GPA or ACT scores were not available; in other cases, the reported scores did not fall within the valid values for ACTs or GPAs. Eighty-one percent of graduates (100,292) had a valid ACT score (reported scores between 6 and 36); 70 percent of graduates (85,847) had a valid GPA (>0 and LE 4.0). Sixty-three percent of graduates had both valid GPAs and ACT scores.

The percent of valid GPA and ACT data vary significantly among school districts, from 34 percent to 85 percent. OREA could not determine if the graduates with valid ACT and GPA data in districts with low reporting were representative of GPAs and ACT scores for all graduates in the district. OREA excluded districts with valid data for less than 75 percent of graduates in the sample period.

The analysis includes the 16 districts with valid data for ACTs and GPAs for 75 percent or more of graduates. Data for both years is included. The districts and the percentage of students with valid data include:

| | |
|------------------------|-----|
| ▪ Johnson City | 75% |
| ▪ DeKalb County | 75% |
| ▪ Bradley County | 76% |
| ▪ Rutherford County | 77% |
| ▪ Hawkins County | 78% |
| ▪ Lincoln County | 79% |
| ▪ Bradford SSD | 79% |
| ▪ Lewis County | 79% |
| ▪ Knox County | 79% |
| ▪ Hollow Rock-Bruceton | 80% |
| ▪ McNairy County | 80% |
| ▪ Milan | 82% |
| ▪ Decatur Co. | 83% |
| ▪ Elizabethton | 84% |
| ▪ Hamilton County | 84% |
| ▪ Humboldt | 85% |

^a Public Chapter 273 (2007) requires all students to take examinations to assess student readiness to enter and succeed in postsecondary training. According to TDOE, all LEAs have chosen to use ACT products. In 2009, all LEAs began offering the opportunity for high school juniors to take the ACT on a weekday in addition to national test dates on Saturdays. Juniors may opt out of taking the ACT by taking the SAT on a national test date.

These districts include 18,850 graduates: 15 percent of all graduates and 24 percent of graduates with valid data. Three large districts are included (Hamilton, Rutherford, and Knox) and several city or special school districts (Bradford, Johnson City, Elizabethton, Milan, Humboldt, and Hollow Rock Bruceton). Rural county systems include DeKalb (Middle), McNairy (West), Hawkins (East), Lincoln (Middle), Lewis (Middle), and Bradley (East). Districts from different parts of the state are included.

Further analysis was done on the selected sample districts to determine if the availability of ACT scores varied significantly between 2008-09 and 2009-10 and, thus, could bias the results. Overall, the number of graduates with valid data was not substantially different between 2008-09 (8,836) and 2009-10 (10,014). The percentage of graduates without ACT scores was 22 percent in 2008-09 compared to 10 percent in 2009-10; the number of graduates without valid GPAs was six percent in 2008-09 and 10 percent in 2009-10. Including both years of data provides analysis for about twice as many graduates and does not appear to bias the results using the subset of graduates with valid data. The data for 2009-10 includes about 1,200 additional graduates and slightly more “C” and “D” students, 48 percent compared to 42 percent. Average ACT scores were within one point and average GPA was within 0.1 point for the two years.

Data Results^b

Overall, students with higher GPAs tend to score higher on ACT tests. As shown in Exhibit A-1, the average ACT score for graduates in the sample districts ranged from a 15 for “D” students to a 28 for “A” students. The correlation coefficient of 0.68 indicates a fairly strong positive relationship between GPA and ACT in the sample counties (correlation coefficients can vary from -1 for a perfect negative relationship to a +1 for a perfect positive relationship). Based on a simple linear regression of ACT and GPA, GPA explained 47 percent (R-Square) of the variation in ACT scores; other factors explain the other half of the variation in ACT scores.

However, average ACT scores varied by district and among students with similar GPAs in different districts. The average ACT for all graduates in the sample was 20. The average ACT score for graduates by district varied from 18 to 23. (See Exhibit A-2.) As shown in Exhibit A-3, average district ACT scores for graduates with similar GPAs ranged from three to five points in the 16 districts in the sample. For example, the average ACTs for “A” students varied five points—from 25 to 30 for the sample districts.

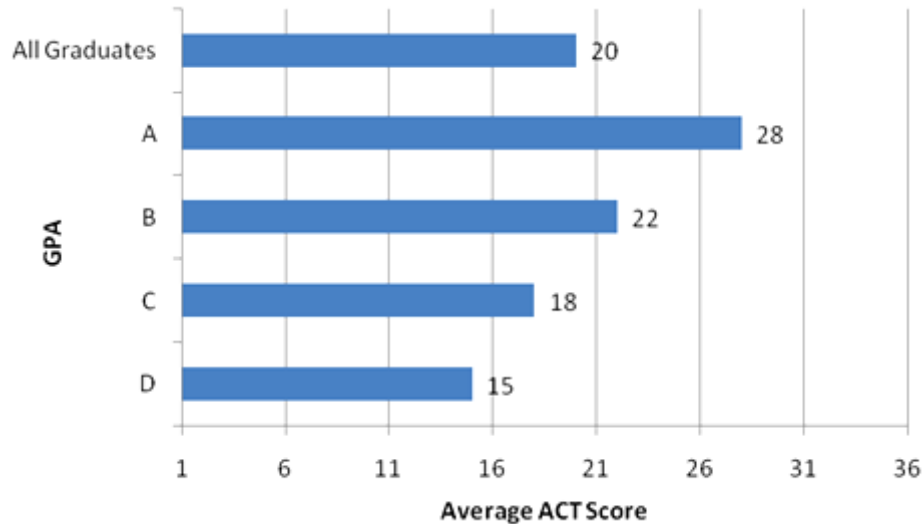
ACT scores range widely for students with similar GPAs. Exhibit A-4 shows ACT scores for individual graduates with similar grades. For “B” students ACT scores ranged from 8 to 35 with an average of 22.

Conclusion

While an analysis of GPAs and ACT scores shows that high school students with higher GPAs have higher ACT scores on average, there is variation by district and by students with the same GPA. A high GPA does not always result in a high ACT score; a student with a low GPA may do well on the ACT.

^b The OREA data analysis follows the format used by the Metropolitan Nashville Public Schools, Department of Research and Evaluation, in its 2003 study of ACT and GPAs for Metro Nashville high school students in 2001-2002.

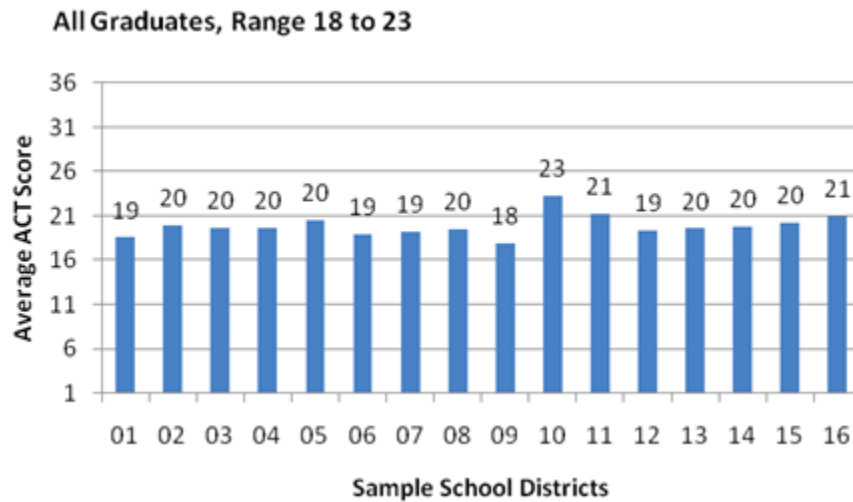
Exhibit A-1: Average ACT Score by GPA for Tennessee High School Graduates in 2008-09 and 2009-10 in Select School Districts



Note: Includes 16 sample districts with available valid ACT and GPA data for 75 percent or more graduates.

Sources: Data compiled by the Tennessee Higher Education Commission for 2008-09 and 2009-10 public high school graduates from data sent to the Tennessee Student Assistance Corporation from ACT, LEAs through the XAP system, and students through FAFSA to determine financial aid eligibility or reported by postsecondary schools to THEC.

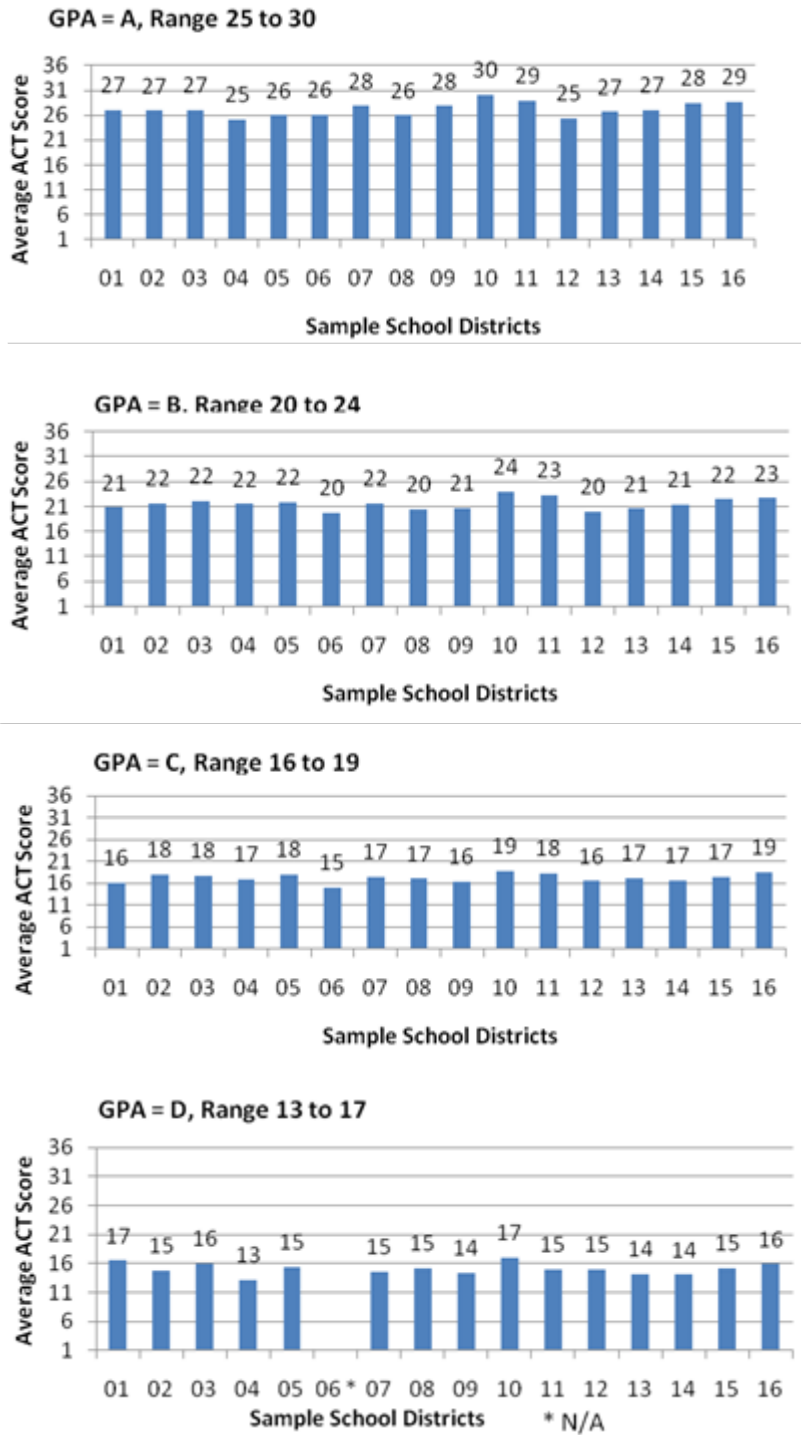
Exhibit A-2: Average ACT score by school district in 2008-09 and 2009-10 in select school districts



Note: Includes 16 sample districts with available valid ACT and GPA data for 75 percent or more graduates.

Sources: Data compiled by the Tennessee Higher Education Commission for 2008-09 and 2009-10 public high school graduates from data sent to the Tennessee Student Assistance Corporation from ACT, LEAs through the XAP system, or students through FAFSA to determine financial aid eligibility or reported by postsecondary schools to THEC.

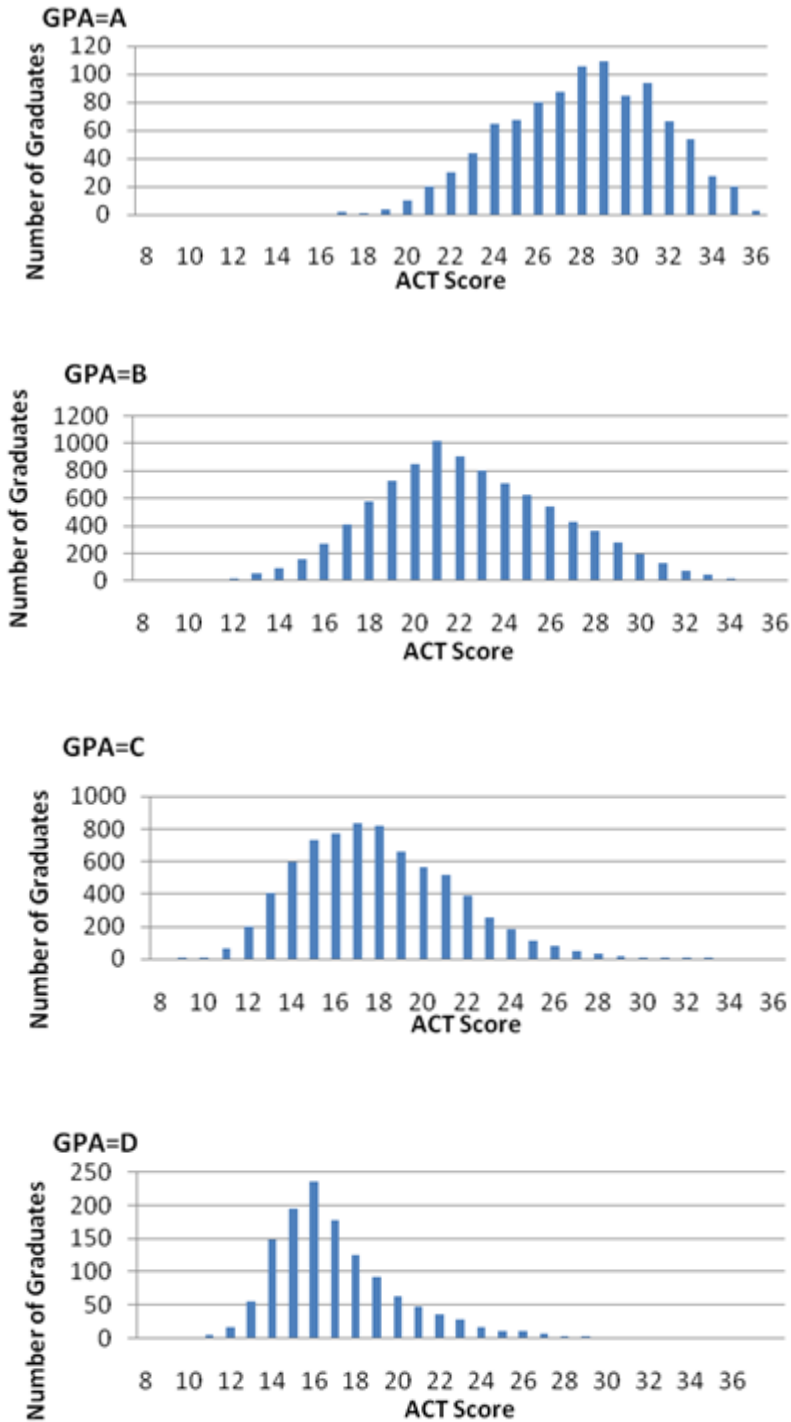
Exhibit A-3: Average ACT score by GPA and school district in 2008-09 and 2009-10 in select school districts



Note: Includes 16 sample districts with available valid ACT and GPA data for 75 percent or more graduates.

Sources: Data compiled by the Tennessee Higher Education Commission for 2008-09 and 2009-10 public high school graduates from data sent to the Tennessee Student Assistance Corporation from ACT, LEAs through the XAP system, or students through FAFSA to determine financial aid eligibility or reported by postsecondary schools to THEC.

Exhibit A-4: Distribution of ACT scores by GPA for graduates in 2008-09 and 2009-10 in select school districts



Note: Includes 16 sample districts with available valid ACT and GPA data for 75 percent or more graduates.

Sources: Data compiled by the Tennessee Higher Education Commission for 2008-09 and 2009-10 public high school graduates from data sent to the Tennessee Student Assistance Corporation from ACT, LEAs through the XAP system, or students through FAFSA to determine financial aid eligibility or reported by postsecondary schools to THEC.

Appendix B: Response Letter from State Board of Education



Bill Haslam
GOVERNOR

STATE OF TENNESSEE
STATE BOARD OF EDUCATION
9th FLOOR, ANDREW JOHNSON TOWER
710 JAMES ROBERTSON PARKWAY
NASHVILLE, TN 37243-1050
615-741-2966
www.state.tn.us/sbe

GARY L. NIXON
EXECUTIVE DIRECTOR

August 30, 2011

Phillip E. Doss, Ph. D
Director
Tennessee Comptroller of the Treasury
Offices of Research and Education Accountability
Suite 1700, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0268

Dear Dr. Doss:

The State Board of Education commends the Office of Education Accountability in preparing a comprehensive report and thorough analysis of the Uniform Grading Policy. This review includes many helpful scenarios, outlining the impact of uniform grading on students, local districts, and state agencies that support institutions of higher education.

Based on the conclusions of the report, there are two priority areas where the Board will provide additional guidance.

Dual Enrollment and Dual Credit: The Board will clarify, through amendment, that the Uniform Grading Policy is designed to apply only to State Board approved courses.

Uniform Transcripts: The Board will convene a working group to learn directly from post-secondary institutions how transcripts are used in admissions and financial aid decisions. This will include feedback from institutions on the perceived value of establishing a uniform process for high school transcripts across school districts.

This report has provided our agency with the opportunity to revisit key issues related to college and career-ready degree attainment. We believe that these two specific actions will assist in providing the maximum opportunity for more students to pursue and attain a post-secondary degree.

Respectfully,

A handwritten signature in black ink that reads 'Gary Nixon'.

Gary Nixon



OFFICES OF RESEARCH AND EDUCATION ACCOUNTABILITY
Phillip Doss, Director
Suite 1700, James K. Polk Building ▪ 505 Deaderick Street
Nashville, Tennessee 37243 ▪ (615) 401-7911
www.tn.gov/comptroller/orea

