

# TVAAS Restricted Site Reports

## 1. System Value Added Reports

From this report, you can:

- Observe the average progress of students in a system.
- Compare a system's progress rate for a grade to the expected growth standard and the Tennessee 3-year average rate. The expected growth rate is the state average growth in 1998.
- Compare a system's achievement level to the state's achievement in 1998 and the most recent state 3-year average.

### System Progress Rates

Each year, systems and schools add value to student achievement. Effective ones add at least a year's worth of growth in every grade. Some systems and schools in Tennessee are very effective, while others need to improve.

The Tennessee Comprehensive Assessment Program (TCAP) provides estimates of student achievement in grades three through eight. The Tennessee Value-Added Assessment System uses the results from the math, reading/language, science, and social studies tests to measure the progress students make from one grade to the next.

Mean NCE Gain over Grades Relative to	
Growth Standard	State

**Mean NCE Gain Over Grades** measures the progress of a system's average student in grades four through eight. This value represents the average gain across grades compared to either the **Growth Standard** or the **State 3-Year Average**.

3-Yr-Avg NCE Gain:
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Farther down within these two columns, the row labeled **3-Year Average NCE Gain** provides a robust estimate of how well the system helps students progress.

2004 Mean NCE Gain:
Std Error:

**Standard Errors** appear below each individual year and 3-year average.

- If the **3-Year Average** is greater than zero, the average student in this system has achieved a year's worth of academic growth in a year.
- If the **3-Year Average** is less than zero, the average student in the system has achieved less growth than expected.

### Grade Progress Rates

The **Growth Standard** represents the minimum amount of progress you should expect students in a system to make in a grade. The **State 3-Year Average** provides an additional reference point. **Mean Gains** for the system appear immediately below these references. **Standard Errors** for each gain appear below each estimated mean. Compare the **Growth Standard** with the gain in an individual year or the average of three years to see how well the system helps students learn.



**G (Green):** students made at least a year's worth of growth. The system is effective with this grade.



**Y (Yellow):** students achieved somewhat less progress than expected (gain is within one standard error of the Growth Standard). The yellow shading

provides a caution warning to the system.

 **R (Light Red):** students in this system fell behind their peers in this grade (gain is within two standard errors of the Growth Standard). Light red is a stronger caution than yellow.

 **R\* (Dark Red):** students made little progress (gain is more than two standard errors below the Growth Standard). Dark Red is the most serious of all warnings.

State Base Year (1998):	
State 3-Yr-Avg:	
2001 Mean:	

#### Student Achievement Levels

Student achievement levels appear at the bottom of the report in the **Estimated Mean NCE Scores** section. The **State Base Year (1998)** is by definition set at 50.0. The **State 3-Year Average** shows the achievement level of students throughout Tennessee. Estimated Means, basis 1998, for the system for specific years follow. [Prior to the analyses, individual student scale scores were converted to state NCEs, basis 1998.]

Compare the estimated grade/year mean for a system to either the **State Base Year** or the **State 3-Year Average**. If the system mean is greater, the average student in the system is performing at a higher achievement level than the average student in the comparison group.

#### Success on the TCAP CRT

Tennessee Department of Education and a committee of Tennessee educators determined proficiency levels for the TCAP CRTs through a benchmarking process. Proficient or Advanced levels indicate student performance required for making AYP. The CRTs were administered to students in grades 3-8, beginning in 2004.

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## Test Changes and How They Affect Value-Added Reports

The norm referenced tests administered in grades three through eight in 2004 differed from those administered in previous years. These tests lacked the "Plus" subtests for math, reading and language. Additionally, Tennessee administered CRT's for the first time in all grades (three-eight) in math, reading/language, science and social studies. Since all students took all tests in their grade, the 2004 administration provided a perfect equating opportunity to allow the transition of NRTs to CRTs in value-added analyses. Refer to *History of Testing in Tennessee, Grades Three through Eight* for the steps necessary to make this transition in the **Help** file on the **Home** page.

## SAS® EVAAS® Methodology

### 1. How are system means estimated?

The SAS EVAAS **Estimated Means** provide a better indicator of achievement than reporting based on a single year's testing. SAS EVAAS methodology uses up to five years of available scores for individual students to provide the best estimates of student achievement for a system. Scores for all students, even those with partial data, are included in the analyses. All subjects are analyzed at the same time, improving the precision of the estimates.

### 2. Why are standard errors reported?

The standard error allows the user to establish a confidence band around the estimate.

### 3. What about fairness?

Questions concerning fairness usually come from systems with many students scoring below grade level or systems with many high achieving students.

When tests do not adequately measure achievement for very low or very high achieving students or when reporting is too simplistic, systems may appear to be ineffective. The combination of TCAP tests administered and SAS EVAAS reporting alleviates both concerns: 1) TCAP tests provide appropriate measures of student achievement across a broad range of student differences; 2) The SAS EVAAS reporting provides more than a snapshot of average achievement level. It identifies systems where students make adequate progress. In this reporting, you will find many examples of systems with high achieving students making excellent progress and also many examples of systems with low achieving students making excellent progress. With more traditional reporting of student achievement levels, it is possible for systems whose students start at a higher level to look effective when their students made little progress. Systems whose students started at a lower level may look ineffective, even though their students made excellent progress. SAS EVAAS reporting corrects this distorted view.

### 4. How can an assessment system based on test scores encourage innovation in the classroom?

SAS EVAAS was conceived as a method of estimating the academic growth of each student over his or her school career in each subject. It does not suggest or prescribe a particular method for encouraging this growth. Typically, students perform well on standardized tests whenever good teachers, day after day, promote scholarship and make sound instructional decisions.

## 2. State Summary Report

This table shows you the value school systems in the state of Tennessee add to student achievement. Systems appear alphabetically. To compare your system with others across the state in a particular subject, choose from the list under the red Subjects tab.

### Mean NCE Gain Over Grades Columns

**Mean NCE Gain Over Grades** measures the progress of a system's average student in grades four through eight. The system's three-year average NCE Gain is compared to both the **Growth Standard** and the **State** three-year average.

- Students in systems with a Mean NCE Gain less than 0.0 lost ground.
- Students in systems with a Mean NCE Gain greater than 0.0 learned faster than the average students.

### Total Progress of Current 8th Graders

These two columns show how students in a system compare to other students in Tennessee. The percentiles represent Tennessee students, rather than a national sample. Compare the columns to see if today's eighth-graders have maintained their third-grade position (Note: substitute the highest grade served if the system does not offer eighth grade).

- **Average Tennessee Percentile as 3rd-Graders:** Tennessee percentile ranking of this year's eighth-graders when they were third-graders.
- **Average Tennessee Percentile Today:** Tennessee percentile ranking of this year's eighth-grade students.

In very effective systems with stable student demographics, the eighth-grade percentile is greater than the third-grade percentile. An eighth-grade percentile that is markedly less than the third-grade percentile indicates that the system is less effective than other Tennessee systems in helping students learn.

## School Search

This feature allows you to find and compare the progress of similar schools.

*To search for a specific school, type the school's name and click **Search**.*

*To find all schools that begin with a particular letter or series of letters, type the letter(s), select **School name starts with**, and click **Search**.*

*To find all schools that contain a particular word, type the word, select **School name contains**, and click **Search**.*

A list of schools that meet your search criteria will be displayed. To see demographic information for a school, click on the school name. You will be able to select search criteria for a comparison group once you have selected a school.

## Student Search

From this page, you may search for individual students, or you may search for groups of students with similar characteristics. You may restrict the search by school, grade, race, sex, demographics, alternative assessment, and/or projected proficiency levels. You may choose any combination of these characteristics to limit your search.

### Finding Students by Name

Enter the student's name (Last Name, First Name) in the space provided. Then click **Search**.



A search box with a dropdown arrow on the left and the text "Student Last Name:" above it. Below the text is a rectangular input field.

You will receive a list of students whose names begin with the string of letters you entered. For example, if you enter "Smith" the list will include all students with the last name "Smithers" as well as "Smith." If you enter "Smith, John" the list will include only students named John Smith.

Students who tested in two different schools in the same year will appear twice. Students who took alternative assessments will appear once for each subject area tested.

The list also displays the district and school where each student was tested and the student(s)' demographic characteristics.

*To see a Student Report, click on the student's name.*

### Restricting Your Search by District, School, or Grade

To restrict your search by any of the options listed on the search page, click Yes. For more information, rollover the question mark icon.



Three radio buttons labeled "Yes", "No", and a question mark icon. The "No" button is selected.

To limit your search to a single district, choose the district's name from the drop-down menu.

To search for students within one school, choose the school's name from the drop-down menu.

To search for students within all schools to which you have access, choose **All Schools** from the menu.



A search box with a dropdown arrow on the left and the text "Restrict Search by District and/or School?" above it. Below the text are two dropdown menus: "School District" and "All Schools".

To limit your search to a single grade, choose the grade from the **Grade** pull-down menu. Choose **All Grades** to search for students in all grades to which you have access.

**NOTE:** When a student's grade was not included with his/her test data, grade has been assigned as follows:

- EOC Math Foundations - Grade 9
- EOC English I - Grade 9
- Gateway Algebra I - Grade 10
- Gateway Biology I - Grade 10
- Gateway English II - Grade 10



A search box with a dropdown arrow on the left and the text "Restrict Search by Grade?" above it. Below the text is a dropdown menu with "All Grades" selected.

- ACT - Grade 12

When a student had data for two or more of these tests but no grade information, the highest grade was assigned. For example, if a student with no grade information had data for both Math Foundations and Gateway English II, grade 10 was assigned.

### Restricting Your Search by Race, Sex, Demographics, or Alternative Assessment

Sometimes it is helpful to find students by shared characteristics rather than by name. The search functionalities allow you to customize your search to identify groups of students who meet your criteria.

▶ **Restrict Search by Race?**

White |  Black |  Hispanic

To limit your search to students of one or more races, click the checkbox next to the race(s) you would like to include in the search.

▶ **Restrict Search by Sex?**

Male |  Female

To limit your search to students by sex, click the checkbox next to the sex you would like to include in the search.

▶ **Restrict Search by Demographics?**

Limited English Proficiency |  Ed

To limit your search to students who meet certain demographic criteria, click the checkbox next to the demographics you would like to include in the search.

▼ **Restrict Search by Alternative Assessment?**  Yes

To limit your search to students who took TCAP-Alt or Portfolio Assessments, click Yes for this option.

You may limit your search by any combination of race, sex, demographic, and alternative assessment characteristics. If you choose *Black*, *White*, and *Hispanic*, for example, the search results will include all students who are **either** Black, White, or Hispanic. If you also choose *Female*, the results will include only Black, White, or Hispanic girls. If you also choose *Students with Disabilities*, your results will include only Black, White, or Hispanic girls who are designated as Students with Disabilities. Clicking Yes for Alternative Assessment limits your search to Black, White, or Hispanic female Students with Disabilities who took a form of Alternative Assessment.

### Searching by Projected Proficiency Level

▼ **Restrict Search by Projected Proficiency Level?**

-Tests-    -Subject (Level)-    lower:  %    upper:  %

You may also search for students by their projected probability for achieving various levels of proficiency on future tests. Projections are not available for TCAP-ALT or Portfolio Assessments.

First, select a test from the drop-down list. Choose the subject and the proficiency level. Then, enter the range of probability for the students you want to find.

For example, to find all students with a 20% - 40% probability of being Proficient on the Gateway I Algebra test,

1. Select **Gateway** from the test list
2. Select **Algebra I (Proficient)**
3. Type in values for the range (**Lower: 20%, Upper 40%**)

You may search by multiple projected proficiency levels. To do so, click on the **--and/or--** box. If you choose **and**, your results will be limited to those students who meet the criteria for both of the tests and ranges you enter. If you choose **or**, your search will find those students who meet the criteria for either of the tests and ranges you enter. You can select up to four projected proficiency levels for each search.

When you've finished selecting the search criteria, click the **Search** button.

### Success in College Courses

The ACT cut scores you see in the **Subject (Level)** drop-down list were selected for the following reasons:

Tennessee state colleges and universities require students to have an ACT Composite Score of 19 to be admitted.

Tennessee Board of Regents requires an ACT Math score of 19 to enroll in freshman level math courses.

ACT research establishes the following cut scores for a 50/50 probability of an "A" or "B" in freshman courses at the average college or university in the country:

- College Algebra for freshman liberal arts major - ACT Math score of 23 or greater
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### Search Results

By default, students are listed alphabetically by last name. If a student took the same test at two different schools in the same year, his or her name will appear twice. Students who took alternative assessments will be listed once for each subject area tested. Underlined column headings allow sorting. *Click on a student's name to link to the Student Report for that student.*

If you restricted your search based on Projected Proficiency Levels, the students' Achievement Probabilities for the academic milestone you selected will appear in the last column(s) on the right.

If you restricted your search to students who tested with an alternative assessment, students will appear in the results once for each subject in which they tested. The Portfolio and TCAP ALT columns will indicate by subject which type of alternative assessment was administered. The Subject and Performance Level are also listed.

A key to abbreviations is provided below the list of students.

Search results are limited to 100 students per page. If your search results in more than 100 students, click on **>>Next** at the top or bottom of the page. You can go back to an earlier page by clicking **<<Previous**.

Add	Student
<input type="checkbox"/>	SMITH
<input type="checkbox"/>	SMIT

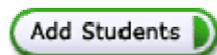
### Adding Students to Your Custom Report

If you are creating a Custom Student Report, you may select students from the search results for the custom report. To select particular students from the list for your custom report, click the box next to the students' names in the **Add Students** column. When you have clicked the box for all the students you wish to add to the report, click the **Add Students** button at the bottom of the page. *Note: For students with multiple entries, such as students tested in more than one school in the same year or on more than one alternative assessment subject, it is only necessary to choose the student's name one time.*

Always **Add Students** before going to another page. Students selected are deselected when you move to the next or previous page.



If you want to add all the students on the list to your Custom Student Report, click the **Select All** button at the bottom of the page and then click **Add Students**.



If you want to clear all selected students, click the **Deselect All** button at the bottom of the page.

## 3. Custom Student Reports

From this page, you will be able to create and/or access Custom Student Reports. Reports will include only those students who meet the criteria you or your administrator define. Depending upon the permissions assigned to you, you may

- View only the Custom Student Reports assigned by your administrator. (You cannot create reports of your own).
- Create Custom Student Reports and view only the reports you create.
- View Custom Student Reports assigned by your administrator and create reports of your own.

### Viewing an Existing Report

Select the report name from the list. Click **View/Edit Report**.

### Creating a New Report

If you have access to individual Student Reports, you can make Custom Student Reports of your own.

To create a new report, click the **Create Report** button. Type in a name for your report, and click **Finish**. Your new report will appear in the list.

### Adding Students to a Custom Report

You cannot alter reports assigned to you by your Administrator, but you can change reports you've created, yourself.

Select a report from the list and click the **View/Edit Report** button. If you have just created this custom report, it will be blank. To add students, click the **Add Students** button. This will take you to the Student Search page, where you can define the criteria for this report. For detailed instructions on how to search for students for your custom report, see the [Student Search](#) page 5.

### Renaming and Deleting Reports

Custom reports may be removed or renamed by choosing the report name from the list and clicking the appropriate button.

## 4. System Value Added Reports

From this report, you can:

- Observe the average progress of students in a system.
- Compare a system's progress rate for a grade to the expected growth standard and the Tennessee 3-year average rate. The expected growth rate is the state average growth in 1998.
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Farther down within these two columns, the row labeled **3-Year Average NCE Gain** provides a robust estimate of how well the system helps students progress.

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Std Error:

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-  **G (Green):** students made at least a year's worth of growth. The system is effective with this grade.
-  **Y (Yellow):** students achieved somewhat less progress than expected (gain is within one standard error of the Growth Standard). The yellow shading provides a caution warning to the system.
-  **R (Light Red):** students in this system fell behind their peers in this grade (gain is within two standard errors of the Growth Standard). Light red is a stronger caution than yellow.
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State 3-Yr-Avg:	
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## 5. System Diagnostic Report for (TCAP CRT)

This report disaggregates progress for students at different levels of previous achievement. Use the Diagnostic Report to identify patterns or trends. On the graph, the green line represents the state growth standard. If a group is below the green line, the average student in the group fell below the state growth standard. Familiarity with curricular standards below grade level, at grade level and above grade level is critical to success for all students. The strategy should be "all students make excellent progress every year."

***Use this report for diagnostic purposes only and not for accountability.***

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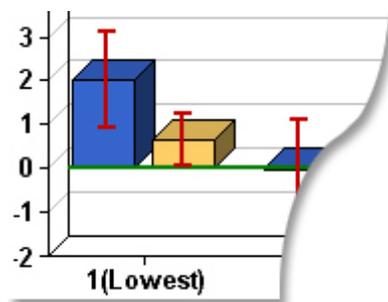
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### Interpreting the Chart

The chart at the top offers a visual representation of the data presented in the table below.

The Reference Line in green on the chart represents the amount of progress students in each subgroup must make in order to maintain their level of achievement from year to year.

Blue bars show the gain in the most recent year. Gold bars show the gain for up to three previous years, when data are available.

No bar is presented for subgroups with fewer than eight students.

### System Gain

Reference Line
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The Reference Line in the table indicates the gain necessary for students in each achievement level to keep up, and it reflects the growth standard selected by the Commissioner and approved by the State Board of Education. When Gain is reported in NCEs, as it is here, the growth standard is 0.0.

Math	2006	Gain
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The observed gain for students in each achievement level, for current year and previous years, is displayed in the rows labeled **Gain**. They measure the relative progress of the system's students in each Prior-Achievement Subgroup compared to the state's growth standard.

Progress is shown in State NCE units, basis 1998.

- A large negative value indicates that students within a subgroup made less progress than the state growth standard.
- A large positive value indicates that students within a subgroup made more progress than the state growth standard.
- A value of approximately 0.0 indicates that students within a subgroup made about the same amount of progress as the state growth standard.

When available, the System Gain for up to three previous years is also provided. As you look at the report, ask yourself these questions:

- Did students at all achievement levels make enough gain this year, compared to the state average?
- Does the progress pattern for this year match the pattern for students in this grade in previous years?

If you see a negative number for the same achievement level every year, a change in teaching strategies, resource allocation or a broader curriculum might be helpful to improve the learning experience for the students who lacked gain.

### Student Assignment

Prior-Achievement Subgroups		
1 (Lowest)	2	3 (Middle)

A student becomes a member of a prior-achievement subgroup based on the average of his or her current and previous year scores. A single student score contains measurement error. Using the average of two years allows a more appropriate assignment.

Nr of Students
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The **Nr of Students** row shows the number of students in a subgroup. Some subgroups may contain more students than others because students are assigned to groups on a statewide basis. The assignment pattern shows systems how their students are distributed compared to other students in the same grade across the state.

When there are fewer than eight students in a subgroup, the number of students in the group is reported, but the Gain is omitted.

Click on the underlined numbers in the **Gain** or **Nr of Students** rows to see a list of the students assigned to that subgroup.

### Standard Errors



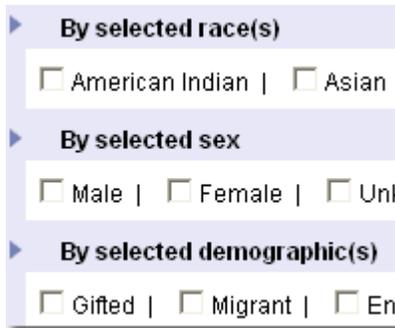
Standard errors appear beneath the Gain for each achievement group. The standard error allows the user to establish a confidence band around the estimate.

### Viewing the report for a subset of students

By default, the report is for all students included in the analyses. You may choose to see this report for a subset of students based on race, sex, or other demographics.



To see a subset of students, click Yes at the top of the report.



Then, check the boxes for all characteristics you would like to select. You may choose any combination of characteristics. If you choose Black and Hispanic, then the report will include only Black students and Hispanic students. If you also choose Male, then the report will include only Black and Hispanic boys. If you choose Black, Hispanic, Male, and Gifted, then the report will include only Black and Hispanic Males who are designated Gifted.

When you have made your selections for a subset of students, click the Submit button.

To erase your selections and return to the default state, which includes all students, click the Reset button.



To view the Gain for another grade, select from the drop-down list under the Grades tab.



To view the **Performance Diagnostics Report**, click on the link below the table or choose from the drop-down list under the Reports tab.

NOTE: When interpreting this report, use caution; the subgroup means come from a liberal statistical process and are less conservative than the estimates of a system's influence on student progress found in the **System Value Added Report**.

## **6. System Performance Diagnostic Report for (TCAP CRT)**

Use this report to identify patterns or trends of progress among students at different proficiency levels.

When interpreting this report, use caution; the subgroup means come from a liberal statistical process and are less conservative than the estimates of a system's influence on student progress found in the Value-Added Report.

***Use this report for diagnostic purposes only and not for accountability.***

### **Success on the TCAP CRT**

Tennessee Department of Education and a committee of Tennessee educators determined proficiency levels for the TCAP CRTs through a benchmarking process. Proficient or Advanced levels indicate student performance required for making AYP. The CRTs were administered to students in grades 3-8, beginning in 2004.

### **Success on End of Course (EOC) Tests**

Current End of Course tests include Math Foundations, English I, Physical Science, and U.S. History. Probabilities are based on the most recently approved percent correct.

### **Success on Gateway Tests**

Gateway proficiency in Math (Algebra I), Science (Biology I), and English (II) is required for a high school diploma. Probabilities are based on the most recently approved percent correct.

### **Success in College Courses**

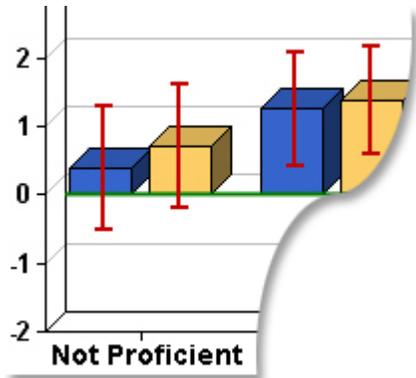
Tennessee state colleges and universities require students to have an ACT Composite score of 19 to be admitted.

Tennessee Board of Regents requires an ACT Math score of 19 to enroll in freshman level math courses.

To be eligible for the lottery scholarship in Tennessee, students must have an ACT Composite score of 21 or greater.

ACT research establishes the following cut scores for a 50/50 probability of an "A" or "B" in freshman courses at the average college or university in the country:

- College Algebra for freshman liberal arts major - ACT Math score of 23 or greater
- Freshman Math in a technical major - ACT Math score of 27 or greater
- Standard Freshman English Composition - ACT English score of 17 or greater
- Advanced English Composition - ACT English score of 22 or greater
- Biology - ACT Science Reasoning score of 23 or greater
- Chemistry - ACT Science Reasoning score of 25 or greater
- Reading, set same as state Composite requirement - ACT Reading of 19 or greater



### Interpreting the Chart

The chart at the top offers a visual representation of the data presented in the table below.

The Reference Line in green on the chart represents the amount of progress students in each proficiency level must make in order to maintain their level of achievement from year to year.

Blue bars show the gain in the most recent year. Gold bars show the gain for up to three previous years, when data are available. No bar is presented for subgroups with fewer than eight students.

Reference Line
----------------

The Reference Line in the table indicates the gain necessary for students in each proficiency level to keep up, and it reflects the growth standard selected by the Commissioner and approved by the State Board of Education. When Gain is reported in NCEs (basis 1998), as it is here, the growth standard is 0.0.

Math	2006	Gain
------	------	------

The observed gain for students in each proficiency level, for current year and previous years, is displayed in the rows labeled **Gain**. They measure the relative progress of the system's students in each Proficiency Level compared to the state's growth standard.

Progress is shown in State NCE units, basis 1998.

- A large negative value indicates that students within a subgroup made less progress than the state growth standard.
- A large positive value indicates that students within a subgroup made more progress than the state growth standard.
- A value of approximately 0.0 indicates that students within a subgroup made about the same amount of progress as the state growth standard.

When available, the System Gain for up to three previous years is also provided.

Predicted Proficiency Group		
Not Proficient	Proficient	Advanced

### Student Assignment to Subgroups

As a part of the analyses, students are assigned to Proficiency Groups based on their predicted state NCEs. A student's predicted score is an expected score, based on his or her performance on previous tests, assuming the student is in an average school.

When there are fewer than eight students in a subgroup, the number of students in the group is reported, but the mean is omitted.

*Click on the underlined number in the **Gain** or **Nr of Students** row for a subgroup to see the names of the students assigned to that subgroup.*



### Standard Errors

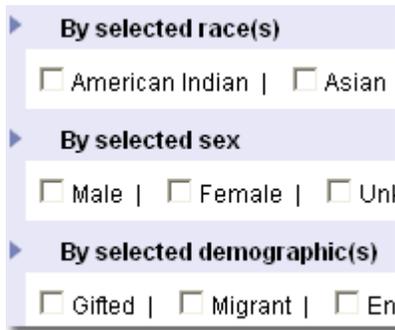
Standard errors appear beneath the Gain for each achievement group. The standard error allows the user to establish a confidence band around the estimate.

### Viewing the report for a subset of students

By default, the report is for all students included in the analyses. You may choose to see this report for a subset of students based on race, sex, or other demographics.



To see a subset of students, click Yes at the top of the report.



Then, check the boxes for all characteristics you would like to select. You may choose any combination of characteristics. If you choose Black and Hispanic, then the report will include only Black students and Hispanic students. If you also choose Male, then the report will include only Black and Hispanic boys. If you choose Black, Hispanic, Male, and Gifted, then the report will include only Black and Hispanic Males who are designated Gifted.

When you have made your selections for a subset of students, click the Submit button.

To erase your selections and return to the default state, which includes all students, click the Reset button.



To view this report for another grade, select from the drop-down list under the Grades tab.



To view the **Diagnostic Report**, click on the link below the table or choose from the drop-down list under the Reports tab.

## 7. Value Added Summary Report (TCAP CRT)

This report indicates how effective each school in the system has been in the most recent year. It also provides a three-year average of each school's gain. All grades for the currently selected test and subject are displayed in the table. The Mean Gain for the school is provided for each grade for the current year and the average of the most recent three years, when available.



**G (Green):** students made at least a year's worth of growth. The school is effective with this grade.

-  **Y (Yellow):** students achieved somewhat less progress than expected (gain is within one standard error of the Growth Standard). The yellow shading provides a caution warning to the school.
-  **R (Light Red):** students in this school fell behind their peers in this grade (gain is within two standard errors of the Growth Standard). Light red is a stronger caution than yellow.
-  **R\* (Dark Red):** students made little progress (gain is more than two standard errors below the Growth Standard). Dark Red is the most serious of all warnings.

**White cells** indicate that the school does not have data for this subject and grade.



To view the Value Added Summary Report for another subject, select from the red **Subjects** tab above the table.

## 8. Diagnostic Summary Report (TCAP CRT)

This report is a summary of information from the School Diagnostic Reports. It lists the current year's gain and previous year's gain for all subgroups in each school. The report includes all schools whose reporting you are authorized to view.

When interpreting this report, use caution; the subgroup gains come from a liberal statistical process and are less conservative than the estimates of a school's influence on student progress found in the **School Value Added Report**.

*This report is intended for diagnostic purposes only and should not be used for accountability.*

1 (Lowest)	2
<a href="#">Prev</a> <a href="#">2006</a>	<a href="#">Prev</a> <a href="#">2006</a>

### Sorting the Table

By default, the schools in the table are listed alphabetically. You can sort by the current year's gain or the previous year's gain for any subgroup. For example, to sort the schools by the current year's gain for the highest quintile of students, click the current year link for that column.

*To see a school's Diagnostic Report, click on the school's name.*

Reference Line	0.0
----------------	-----

### Reference Line

The **Reference Line** row displays the amount necessary for students in each achievement level to keep up.

Gain (Nr of Students)
-----------------------

### Gains and Number of Students

For each school, you will see the Gain for each subgroup for the current and previous year, when available. Following the Gain you will see the Number of Students in the subgroup in parentheses.

Gains measurably below the Growth Standard suggest a problem. Patterns repeated over time carry more weight than single instances. Again, the primary goal in the use of these reports is the recognition and identification of patterns in progress.

Prior-Achievement Subgroups		
1 (Lowest)	2	3 (Middle)

### Student Assignment to Subgroups

A student becomes a member of a prior-achievement subgroup based on the average of his or her current and previous year scores. A single student score contains measurement error. Using the average of two years allows a more appropriate assignment.



To view this report for another grade or subject, select from the blue **Grades** tab or the red **Subjects** tab.

## 9. Performance Diagnostic Summary Report (TCAP CRT)

This report is a summary of information from the School Performance Diagnostic Reports. It lists the current year's gain and previous years' gain for all subgroups in each school. The report includes all schools whose reporting you are authorized to view.

When interpreting this report, use caution; the subgroup gains come from a liberal statistical process and are less conservative than the estimates of a school's influence on student progress found in the **School Value Added Report**.

*This report is intended for diagnostic purposes only and should not be used for accountability.*

Proficient	Advanced
<a href="#">Prev 2006</a>	<a href="#">Prev 2006</a>

### Sorting the Table

By default, the schools in the table are listed alphabetically. You can sort by the current year's gain or the previous years' gain for any subgroup. For example, to sort the schools by the current year's gain for Advanced students, click the current year link for that column.

*To see a school's Performance Diagnostic Report, click on the school's name.*

Reference Line	0.0
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### Reference Line

The **Reference Line** row displays the gain necessary for students in each achievement level to keep up.

Gain (Nr of Students)
-----------------------

### Gains and Number of Students

For each school, you will see the Gain for each subgroup for the current and previous year(s), when available. Following the Gain you will see the Number of Students in the subgroup in parentheses.

Gains measurably below the Growth Standard suggest a problem. Patterns repeated over time carry more weight than single instances. Again, the primary goal in the use of these reports is the recognition and identification of patterns in progress.

Predicted Proficiency Group		
Not Proficient	Proficient	Advanced

### Student Assignment to Subgroups

As a part of the analyses, students are assigned to Proficiency Groups, based on their predicted state NCEs. A student's predicted score is an expected score, based on his or her performance on previous tests, assuming the student is in an average school.

When there are fewer than eight students in a subgroup, the number of students in the group is reported, but the mean is omitted.



To view this report for another grade or subject, select from the blue **Grades** tab or the red **Subjects** tab.

## 10. System Progress Report

Early TVAAS research identified inequities in academic growth rates based on student achievement levels. These inequities varied, depending on the school or system. Since fairness to students is a primary concern in public education, having this valuable information available each year has allowed educators to better focus their efforts to make sure that all students achieve desirable progress.

This report includes three categories of student achievement. Each category allows you to observe the progress of a specific group of students within a system. Three percentile rankings within the system appear in the far left column. The corresponding state percentile rankings for comparable students in grades three through eight from 1991 through the current year appear under the heading **Percentile Ranking within Tennessee**.

- **System 25<sup>th</sup> Percentile** shows the progress of low achieving students within a system as they move from grade to grade. If the state percentile is greater than 25, the students in this group are at a higher achievement level than low achieving students statewide.
- **System 50<sup>th</sup> Percentile** provides information concerning the system's average students. If the state percentile is greater than 50, the students in this group are at a higher achievement level than average students statewide.
- **System 75<sup>th</sup> Percentile** allows you to follow the progress of the system's high achieving students. If the state percentile is greater than 75, the students in this group are at a higher achievement level than high achieving students statewide.

Follow the progress for a group of students within a category by looking diagonally across the grade columns. The shaded areas within each category show the percentile ranking for the current year's eighth graders at a given achievement level for this year and for previous grades. (Note: substitute the highest grade served if the system does not offer eighth grade.) If you follow the percentiles diagonally, you can see if the system's students at the three levels kept pace with similar students in Tennessee throughout the course of their academic career.

You would expect students to be at least in the same percentile ranking in eighth grade that they were in as third graders. Observing the percentile changes for the same students as they progress across grades allows you to determine how effectively your system provides instruction for an achievement level. For instance, students who were at the 34<sup>th</sup> percentile in grade three but at the 45<sup>th</sup> percentile in grade eight progressed more rapidly than similar students across the state. On the other hand, students who were at the 38<sup>th</sup> percentile in grade three but at the 32<sup>nd</sup> percentile in grade eight are losing ground when compared to similar Tennessee students.

To compare percentiles for a given year, refer to the row for that year. These percentiles will not be for the same group of students, and some fluctuation may be due to demographic changes.

To compare percentiles for a grade over time, refer to the column for that grade. Again, some of the variation in these percentiles may be due to demographic changes.

## 11. School Value Added Reports

From this report, you can:

- Observe the average progress of students in a school.
- Compare a school's progress rate for a grade to the expected growth standard and the Tennessee 3-year average rate. The expected growth rate is the state average growth in 1998.
- Compare a school's achievement level to the state's achievement in 1998 and the most recent state 3-year average.

### School Progress Rates

Each year, systems and schools add value to student achievement. Effective ones add at least a year's worth of growth in every grade. Some systems and schools in Tennessee are very effective, while others need to improve.

The Tennessee Comprehensive Assessment Program (TCAP) provides estimates of student achievement in grades three through eight. The Tennessee Value-Added Assessment System uses the results from the math, reading/language, science, and social studies tests to measure the progress students make from one grade to the next.

Mean NCE Gain over Grades Relative to	
Growth Standard	State

**Mean NCE Gain Over Grades** measures the progress of a school's average student in grades four through eight. This value represents the average gain across grades compared to either the **Growth Standard** or the **State 3-Year Average**.

3-Yr-Avg NCE Gain:
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Farther down within these two columns, the row labeled **3-Year Average NCE Gain** provides a robust estimate of how well the school helps students progress.

2004 Mean NCE Gain:
Std Error:

**Standard Errors** appear below each individual year and 3-year average.

- If the **3-Year Average** is greater than zero, the average student in this school has achieved a year's worth of academic growth in a year.
- If the **3-Year Average** is less than zero, the average student in the school has achieved less growth than expected.

### Grade Progress Rates

The **Growth Standard** represents the minimum amount of progress you should expect students in a school to make in a grade. The **State 3-Year Average** provides an additional reference point. **Mean Gains** for the school appear immediately below these references. **Standard Errors** for each gain appear below each estimated mean. Compare the **Growth Standard** with the gain in an individual year or the average of three years to see how well the school helps students learn.

-  **G (Green):** students made at least a year's worth of growth. The school is effective with this grade.
-  **Y (Yellow):** students achieved somewhat less progress than expected (gain is within one standard error of the Growth Standard). The yellow shading provides a caution warning to the school.
-  **R (Light Red):** students in this school fell behind their peers in this grade

(gain is within two standard errors of the Growth Standard). Light red is a stronger caution than yellow.

- **R\* (Dark Red):** students made little progress (gain is more than two standard errors below the Growth Standard). Dark Red is the most serious of all warnings.

State Base Year (1998):	
State 3-Yr-Avg:	
2001 Mean:	

#### Student Achievement Levels

Student achievement levels appear at the bottom of the report in the **Estimated Mean NCE Scores** section. The **State Base Year (1998)** is by definition set at 50.0. The **State 3-Year Average** shows the achievement level of students throughout Tennessee. Estimated Means, basis 1998, for the school for specific years follow. [Prior to the analyses, individual student scale scores were converted to state NCEs, basis 1998.]

Compare the estimated grade/year mean for a school to either the **State Base Year** or the **State 3-Year Average**. If the school mean is greater, the average student in the school is performing at a higher achievement level than the average student in the comparison group.

#### Success on the TCAP CRT

Tennessee Department of Education and a committee of Tennessee educators determined proficiency levels for the TCAP CRTs through a benchmarking process. Proficient or Advanced levels indicate student performance required for making AYP. The CRTs were administered to students in grades 3-8, beginning in 2004.

#### Success on End of Course (EOC) Tests

Current End of Course tests include Math Foundations, English I, Physical Science, and U.S. History.

#### Success on Gateway Tests

Gateway proficiency in Math (Algebra I), Science (Biology I), and English (II) is required for a high school diploma.

#### Success in College Courses

Tennessee state colleges and universities require students to have an ACT Composite score of 19 to be admitted.

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ACT research establishes the following cut scores for a 50/50 probability of an "A" or "B" in freshman courses at the average college or university in the country:

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#### Test Changes and How They Affect Value-Added Reports

The norm referenced tests administered in grades three through eight in 2004 differed from those administered in previous years. These tests lacked the "Plus" subtests for math, reading and language. Additionally, Tennessee administered CRT's for the first time in all grades (three-eight) in math, reading/language, science and social studies. Since all students took all tests in their grade, the 2004 administration provided a perfect equating opportunity to allow the transition of NRTs to CRTs in value-added analyses. Refer to *History of Testing in Tennessee, Grades Three through Eight* for the steps necessary to make this transition in the **Help** file on the **Home** page.

## **SAS® EVAAS® Methodology**

### **1. How are school means estimated?**

The SAS EVAAS **Estimated Means** provide a better indicator of achievement than reporting based on a single year's testing. SAS EVAAS methodology uses up to five years of available scores for individual students to provide the best estimates of student achievement for a school. Scores for all students, even those with partial data, are included in the analyses. All subjects are analyzed at the same time, improving the precision of the estimates.

### **2. Why are standard errors reported?**

The standard error allows the user to establish a confidence band around the estimate.

### **3. What about fairness?**

Questions concerning fairness usually come from schools with many students scoring below grade level *or* schools with many high achieving students.

When tests do not adequately measure achievement for very low or very high achieving students *or* when reporting is too simplistic, schools may appear to be ineffective. The combination of TCAP tests administered and SAS EVAAS reporting alleviates both concerns: 1) TCAP tests provide appropriate measures of student achievement across a broad range of student differences; 2) The SAS EVAAS reporting provides more than a snapshot of average achievement level. It identifies schools where students make adequate progress. In this reporting, you will find many examples of schools with high achieving students making excellent progress and also many examples of schools with low achieving students making excellent progress. With more traditional reporting of student achievement levels, it is possible for schools whose students start at a higher level to look effective when their students made little progress. Schools whose students started at a lower level may look ineffective, even though their students made excellent progress. SAS EVAAS reporting corrects this distorted view.

### **4. How can an assessment system based on test scores encourage innovation in the classroom?**

SAS EVAAS was conceived as a method of estimating the academic growth of each student over his or her school career in each subject. It does not suggest or prescribe a particular method for encouraging this growth. Typically, students perform well on standardized tests whenever good teachers, day after day, promote scholarship and make sound instructional decisions.

## **12. Diagnostic Report for Schools (TCAP CRT)**

This report disaggregates progress for students at different levels of previous achievement. Use the Diagnostic Report to identify patterns or trends. On the graph, the green line represents the state growth standard. If a group is below the green line, the average student in the group fell below the state growth standard. Familiarity with curricular standards below grade level, at grade level and above grade level is critical to success for all

students. The strategy should be "all students make excellent progress every year."

**Use this report for diagnostic purposes only and not for accountability.**

### Success on the TCAP CRT

Tennessee Department of Education and a committee of Tennessee educators determined proficiency levels for the TCAP CRTs through a benchmarking process. Proficient or Advanced levels indicate student performance required for making AYP. The CRTs were administered to students in grades 3-8, beginning in 2004.

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Current End of Course tests include Math Foundations, English I, Physical Science, and U.S. History.

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### Success in College Courses

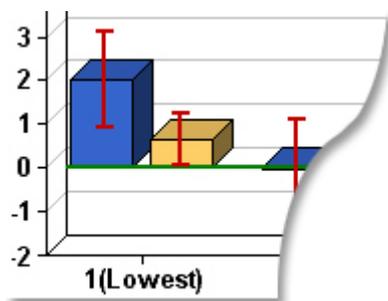
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### Interpreting the Chart

The chart at the top offers a visual representation of the data presented in the table below.

The Reference Line in green on the chart represents the amount of progress students in each subgroup must make in order to maintain their level of achievement from year to year.

Blue bars show the gain in the most recent year. Gold bars show the gain for up to three previous years, when data are available. No bar is presented for subgroups with fewer than eight students.

Reference Line
----------------

### School Gain

The Reference Line in the table indicates the gain necessary for students in each achievement level to keep up, and it reflects the

growth standard selected by the Commissioner and approved by the State Board of Education. When Gain is reported in NCEs, as it is here, the growth standard is 0.0.

Math	2006	Gain	
------	------	------	--

The observed gain for students in each achievement level, for current year and previous years, is displayed in the rows labeled **Gain**. They measure the relative progress of the school's students in each Prior-Achievement Subgroup compared to the state's growth standard.

Progress is shown in State NCE units, basis 1998.

- A large negative value indicates that students within a subgroup made less progress than the state growth standard.
- A large positive value indicates that students within a subgroup made more progress than the state growth standard.
- A value of approximately 0.0 indicates that students within a subgroup made about the same amount of progress as the state growth standard.

When available, the School Gain for up to three previous years is also provided. As you look at the report, ask yourself these questions:

- Did students at all achievement levels make enough gain this year, compared to the state average?
- Does the progress pattern for this year match the pattern for students in this grade in previous years?

If you see a negative number for the same achievement level every year, a change in teaching strategies, resource allocation or a broader curriculum might be helpful to improve the learning experience for the students who lacked gain.

Prior-Achievement Subgroups		
1 (Lowest)	2	3 (Middle)

### Student Assignment

A student becomes a member of a prior-achievement subgroup based on the average of his or her current and previous year scores. A single student score contains measurement error. Using the average of two years allows a more appropriate assignment.

<b>Nr of Students</b>
-----------------------

The **Nr of Students** row shows the number of students in a subgroup. Some subgroups may contain more students than others because students are assigned to groups on a statewide basis. The assignment pattern shows schools how their students are distributed compared to other students in the same grade across the state.

When there are fewer than eight students in a subgroup, the number of students in the group is reported, but the Gain is omitted.

*Click on the underlined numbers in the **Gain** or **Nr of Students** rows to see a list of the students assigned to that subgroup.*



### Standard Errors

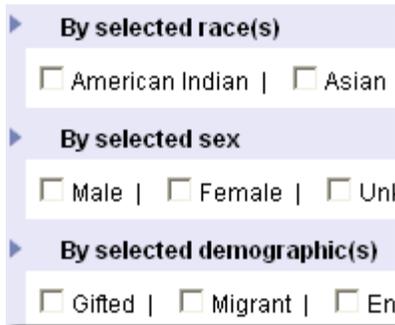
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### Viewing the report for a subset of students

By default, the report is for all students included in the analyses. You may choose to see this report for a subset of students based on race, sex, or other demographics. You may also select the specific students that you want to graph by creating a Student Pattern File.



To see a subset of students, click Yes at the top of the report.



Then, check the boxes for all characteristics you would like to select. You may choose any combination of characteristics. If you choose Black and Hispanic, then the report will include only Black students and Hispanic students. If you also choose Male, then the report will include only Black and Hispanic boys. If you choose Black, Hispanic, Male, and Gifted, then the report will include only Black and Hispanic Males who are designated Gifted.

When you have made your selections for a subset of students, click the Submit button.

To erase your selections and return to the default state, which includes all students, click the Reset button.

### Student Pattern Reports

You may choose to graph the progress rates of specific students by creating a Student Pattern Report. The minimum number of students you can graph is fifteen. For detailed information on creating these graphs, consult the help file for the [Student Pattern Report](#) on page 30.



To access the list for creating a Student Pattern Report, click on the subject name on the table, or choose *Student Pattern List* from the Reports tab.



To view the Gain for another grade, select from the drop-down list under the Grades tab.



To view the **Performance Diagnostics Report**, click on the link below the table or choose from the drop-down list under the Reports tab.

To see the list of students for creating a **Student Pattern Report**, click on the subject on the table or choose from the drop-down list under the Reports tab.

NOTE: When interpreting this report, use caution; the subgroup means come from a liberal statistical process and are less

conservative than the estimates of a school's influence on student progress found in the **School Value Added Report**.

### **13. Performance Diagnostic Report for Schools (TCAP CRT)**

Use this report to identify patterns or trends of progress among students at different proficiency levels.

When interpreting this report, use caution; the subgroup means come from a liberal statistical process and are less conservative than the estimates of a school's influence on student progress found in the Value-Added Report.

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#### **Success in College Courses**

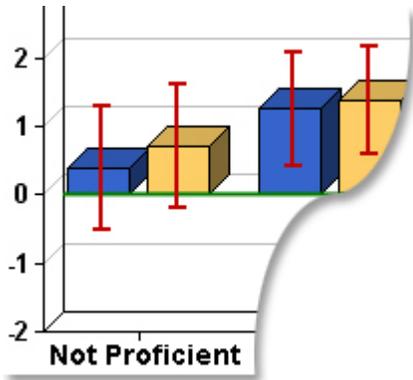
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- Chemistry - ACT Science Reasoning score of 25 or greater
- Reading, set same as state Composite requirement - ACT Reading of 19 or greater



### Interpreting the Chart

The chart at the top offers a visual representation of the data presented in the table below.

The Reference Line in green on the chart represents the amount of progress students in each proficiency level must make in order to maintain their level of achievement from year to year.

Blue bars show the gain in the most recent year. Gold bars show the gain for up to three previous years, when data are available. No bar is presented for subgroups with fewer than eight students.

Reference Line

### School Gain

The Reference Line in the table indicates the gain necessary for students in each proficiency level to keep up, and it reflects the growth standard selected by the Commissioner and approved by the State Board of Education. When Gain is reported in NCEs (basis 1998), as it is here, the growth standard is 0.0.

Math	2006	Gain
------	------	------

The observed gain for students in each proficiency level, for current year and previous years, is displayed in the rows labeled **Gain**. They measure the relative progress of the school's students in each Proficiency Level compared to the state's growth standard.

Progress is shown in State NCE units, basis 1998.

- A large negative value indicates that students within a subgroup made less progress than the state growth standard.
- A large positive value indicates that students within a subgroup made more progress than the state growth standard.
- A value of approximately 0.0 indicates that students within a subgroup made about the same amount of progress as the state growth standard.

When available, the School Gain for up to three previous years is also provided.

Predicted Proficiency Group		
Not Proficient	Proficient	Advanced

### Student Assignment to Subgroups

As a part of the analyses, students are assigned to Proficiency Groups based on their predicted state NCEs. A student's predicted score is an expected score, based on his or her performance on previous tests, assuming the student is in an average school.

When there are fewer than eight students in a subgroup, the number of students in the group is reported, but the mean is omitted.

*Click on the underlined number in the **Gain** or **Nr of Students** row for a subgroup to see the names of the students assigned to that subgroup.*



### Standard Errors

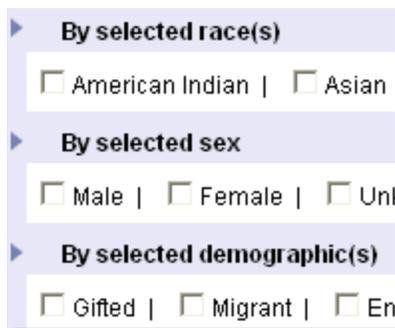
Standard errors appear beneath the Gain for each achievement group. The standard error allows the user to establish a confidence band around the estimate.

### Viewing the report for a subset of students

By default, the report is for all students included in the analyses. You may choose to see this report for a subset of students based on race, sex, or other demographics. You may also select the specific students that you want to graph by creating a Student Pattern Report.



To see a subset of students, click Yes at the top of the report.



The form contains three sections for selecting subgroups:

- By selected race(s)**:  American Indian |  Asian
- By selected sex**:  Male |  Female |  Unk
- By selected demographic(s)**:  Gifted |  Migrant |  En

Then, check the boxes for all characteristics you would like to select. You may choose any combination of characteristics. If you choose Black and Hispanic, then the report will include only Black students and Hispanic students. If you also choose Male, then the report will include only Black and Hispanic boys. If you choose Black, Hispanic, Male, and Gifted, then the report will include only Black and Hispanic Males who are designated Gifted.

When you have made your selections for a subset of students, click the Submit button.

To erase your selections and return to the default state, which includes all students, click the Reset button.

### Student Pattern Reports

You may choose to graph the progress rates of specific students by creating a Student Pattern Report. The minimum number of students you can graph is fifteen. For detailed information on creating these graphs, consult the help file for the [Student Pattern Report](#) on page 30.



To access the list for creating a Student Pattern Report, click on the subject name on the table, or choose *Student Pattern List* from the Reports tab.



To view this report for another grade, select from the drop-down list under the Grades tab.



To view the **Diagnostic Report**, click on the link below the table or choose from the drop-down list under the Reports tab.

To see the list of students for creating a **Student Pattern Report**, click on the subject name on the table or choose from the drop-down list under the Reports tab.

## 14. Student Pattern Reports (TCAP CRT)

This report disaggregates progress for groups of students that you choose. The Student Pattern Report enables you to see how effective the school has been with the lowest, middle, and highest achieving students in the group you have selected. A minimum of fifteen students must be chosen in order to generate a report.

On the graph, the green line represents the state growth standard. If a group is below the green line, the average student in the group fell below the state growth standard. Familiarity with curricular standards below grade level, at grade level and above grade level is critical to success for all students. The strategy should be "all students make excellent progress every year."

**Use this report for diagnostic purposes only and not for accountability.**

### The Student Pattern List

The Student Pattern List is only available from school-level reporting and only to users who have access to student reports. You cannot drill to the list from district-level reports.

You can access the Student Pattern List by choosing it from the Reports Tab or by clicking on the subject name on the School Diagnostic Report Table or the School Performance Diagnostic Report Table. All students tested in the subject in the most recent year will appear in the list.

From the Student Pattern List you have generated, you can access the list for another Test, Subject, or Grade by selecting from the tabs above the current list.

Select	Student Name	2005 State NCE	2006 State NCE	Avg State NCE	2006 Percentile	School Name
<input type="checkbox"/>	<a href="#">MITANI, ZORA</a>	30	40	35.0	20	Dickens Middle School
<input type="checkbox"/>	<a href="#">NORDGREN, SANDI</a>	79	99	89.0	98	Dickens Middle School

The Student Pattern List provides the following information for each student on the list: Name, Previous Year NCE (when available), Current Year NCE, the Average NCE for the two most recent years, the State Percentile for the most recent test year, and the name of the school where the student was most recently tested. Each of these columns may be sorted in ascending order by clicking on the column heading. You can access an individual student's testing history by clicking on the student's name. To the left of each student's name is a box that allows you to select the student for inclusion in your Student Pattern Report.

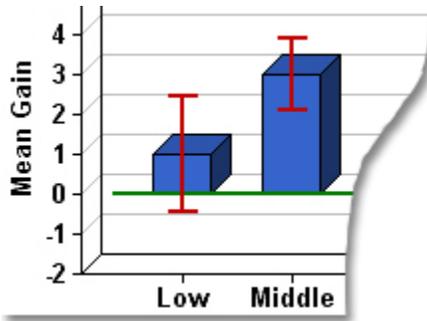
Select	Student Name
<input checked="" type="checkbox"/>	<a href="#">MITANI, ZORA</a>
<input checked="" type="checkbox"/>	<a href="#">NORDGREN, SANDI</a>

### Creating a Student Pattern Report

Select students for your report by clicking the boxes next to their names. In order to create a report, you must select at least 15 students with both current and previous years' NCE scores.

You may choose all students by clicking *Select All* at the bottom of the page. Although check marks will appear next to each student's name, only students with both current and previous years' scores will be included in the report. *Deselect All* clears your selections.

Once you have completed your selections, scroll to the bottom of the page and click *Submit*.



### Interpreting the Report

The chart at the top offers a visual representation of the data presented in the table below.

The green Reference Line represents the amount of progress students in each subgroup must make in order to maintain their level of achievement from year to year. Standard errors are shown in red on the blue gain bar for each group. The standard error allows the user to establish a confidence band around the estimate.

The blue bars on the graph represent the mean gain for each of the three groups of students. The table titled Mean Gain shows the average progress for each group, numerically. Progress is shown in State NCE units, basis 1998.

- A large negative value indicates that students within a subgroup made less progress than the state growth standard.
- A large positive value indicates that students within a subgroup made more progress than the state growth standard.
- A value of approximately 0.0 indicates that students within a subgroup made about the same amount of progress as the state growth standard.

NOTE: When interpreting this report, use caution; the subgroup means come from a liberal statistical process and are less conservative than the estimates of a school's influence on student progress found in the **School Value Added Report**.

Mean Gain		
Low	Middle	High

### Student Assignment

A student becomes a member of the Low, Middle, or High group based on the average of his or her current and previous year scores. The selected students are then split into three equal groups depending upon whether their average score falls in the lowest, middle, or highest third of the resulting distribution. A single student score contains measurement error. Using the average of two years allows a more appropriate assignment.

The names of students included in each subgroup are presented in a table below the Mean Gains

*Click on a Student's Name to see the testing history for the student.*

### Success on the TCAP CRT

Tennessee Department of Education and a committee of Tennessee educators determined proficiency levels for the TCAP CRTs through a benchmarking process. Proficient or Advanced levels indicate student performance required for making AYP. The CRTs were administered to students in grades 3-8, beginning in 2004.

### Success on End of Course (EOC) Tests

Current End of Course tests include Math Foundations, English I, Physical Science, and U.S. History.

### Success on Gateway Tests

Gateway proficiency in Math (Algebra I), Science (Biology I), and English (II) is required for a high school

diploma.

### Success in College Courses

Tennessee state colleges and universities require students to have an ACT Composite score of 19 to be admitted.

Tennessee Board of Regents requires an ACT Math score of 19 to enroll in freshman level math courses.

To be eligible for the lottery scholarship in Tennessee, students must have an ACT Composite score of 21 or greater.

ACT research establishes the following cut scores for a 50/50 probability of an "A" or "B" in freshman courses at the average college or university in the country:

- College Algebra for freshman liberal arts major - ACT Math score of 23 or greater
- Freshman Math in a technical major - ACT Math score of 27 or greater
- Standard Freshman English Composition - ACT English score of 17 or greater
- Advanced English Composition - ACT English score of 22 or greater
- Biology - ACT Science Reasoning score of 23 or greater
- Chemistry - ACT Science Reasoning score of 25 or greater
- Reading, set same as state Composite requirement - ACT Reading of 19 or greater

## 15. Feeder Pattern Report

The Feeder Pattern Report allows you to observe and compare opportunities for student academic progress within specific sequences of schools. Using this report, you can assess strengths and weaknesses in educational delivery across grades and determine whether access to effective schooling is distributed equitably to students assigned to different sequences.

### Creating a Report

Choose **Feeder Pattern Report** from the Reports tab. A window will appear that allows you to choose the district and schools you wish to include in your sequence.

- The Elementary School list includes schools that tested in grades 4 or 5.
- The Middle School list includes schools that tested in grades 6, 7, or 8
- The High School list includes schools that administered a high school test
- Some schools appear in more than one list.

Click **Submit** to create the report.

You may create additional Feeder Patterns by choosing **Yes** for the **Add New Pattern** option above the table. Only systems and schools to which you have access will appear as choices for your Feeder Pattern Reports.

### The Report

The Feeder Pattern Report shows the schooling effect for the subject area chosen across all grades tested in the schools that make up the sequence. Gains are provided for TCAP-CRT tests and are expressed in State NCEs, basis 1998. Means are shown for Gateway, End of Course, Writing Assessment, and ACT tests and are expressed in Scale Score points.

Elementary School			Middle School		High School	
<a href="#">Adrian Elementary School</a>			<a href="#">Erin Middle School</a>		<a href="#">Cristobal High School</a>	
CRT			CRT	GATE	ACT	GATE
(NCEs)			(NCEs)	(SS)	(SS)	
4	5	6	7	8	Alg1	Math
-3.3	3.5	4.3	7.0	1.2	-0.5	12.9

You may access the Value Added Report for the schools in the sequence by clicking on the school's name.

To see the schooling effects for another subject area, choose from the subject areas listed under the Subjects tab at the top of the report. Effects will be shown for those schools in the Feeder Pattern(s) you have created that administered a test within that subject area.

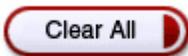
#### Interpretation of Color Coding for TCAP-CRT Tests:

-  **G (Green):** students made at least a year's worth of growth (gain is above the Growth Standard). The school is effective with this grade.
-  **Y (Yellow):** students achieved somewhat less progress than expected (gain is within one standard error of the Growth Standard). The yellow shading provides a caution warning to the school.
-  **R (Light Red):** students in this school fell behind their peers in this grade (gain is within two standard errors of the Growth Standard). Light red is a stronger caution than yellow.
-  **R\* (Dark Red):** students made little progress (gain is more than two standard errors below the Growth Standard). Dark Red is the most serious of all warnings.

#### Interpretation of Color Coding for Gateway, End-of-Course, Writing Assessment, and ACT Tests:

-  **Green:** students in this school made significantly more progress in this subject than students in the average school.
-  **Yellow:** the progress of students in this school was Not Detectably Different from the progress of students in the average school.
-  **R (Light Red):** students in this school made significantly less progress in this subject than students in the average school.

**For All Tests:** **White cells** indicate that the school does not have data for this subject and grade.



To remove all Feeder Pattern Reports, click the **Clear All** button above the report.



To see the report for another subject area, select from the **Subjects** tab above the graph.

#### Printing

For best results, use the Print button in the blue menu bar instead of your browser's Print button.