



Data Interpretation Guidelines

The Purpose and Ethical Use of Colorado Student Assessment Data

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Introduction

This manual was created as a collaborative project between the Assessment, Standards Support, Federal Programs, Regional Services, Information Management Services, Language Culture and Equity, and Exceptional Student Leadership units at the Colorado Department of Education.

How to Use this Manual

Use this document to train and inform district and school personnel as well as parents in using the state student assessment results for their intended purposes. This manual may be helpful as a reference when discussing:

- the meaning of student performance ratings with parents.
- the meaning of school and/or district data with stakeholders.
- how to examine district curricular and program alignment to the state standards.
- How to locate existing resources for district and school personnel to access to best utilize state assessment data.

Peer Review requirements

As part of our guidance from the United States Department of Education, we have been encouraged to provide guidance to districts in the use of state assessment data. The state must provide information to districts on how to use and interpret state assessment results in an ethical and appropriate manner.

As a local control state, it has been the responsibility of districts to disseminate assessment results and communicate their meaning to all stakeholders, including district and school personnel, parents, students and the community. This has been done by various methods throughout the state, resulting in different interpretations as to the actual meaning of the data.

This manual will provide standardized guidance to districts in the appropriate use of data, information, and reports relative to state assessment results as they come from CDE.

Section 1: Purpose of Manual

This manual is intended to provide guidance to district and school personnel as well as parents and other interested stakeholders in the appropriate use of assessment data.

Part of ensuring the validity of any assessment is to guarantee that the purpose of the assessment matches the ways in which the data are used; the decisions that are made based on that data.

General principles of test use as set forth in the Standards for Educational and Psychological Testing by the American Educational Research Association (AERA), American Psychological Association (APA), the National Council on Measurement in Education (NCME) (1999) and the Code of Professional Responsibilities in Educational Measurement by the National Council on Measurement in Education (1985) are followed herein.

This manual details the

- purpose of the data and various data reporting,
- how to use these data and reports,
- and cautions when making decisions/judgments using these data for each type of data or report provided for the various Colorado student assessments.

Additionally, for each assessment, this document provides questions that will help stakeholders make meaning of the data. These questions can be used to facilitate discussions at every level relative to the effective use of state assessment data.

Section 2: Tools to Access This Information

Colorado Educational Data Analysis and Reporting System (CEDAR)

Purpose

Colorado Educational Data Analysis and Reporting System (CEDAR) provides access to analytical and managed Reports to help you obtain information to answer questions in minutes, not hours or days, in the areas of:

- Proficiency Level Over Academic Years
- Class Performance Over Academic Years
- District Comparison By Proficiency Level By Year
- Comparison of Schools to District and State Averages
- CSAP Assessment details and comparisons

Additional Filters and Prompts help you to examine these data by such groupings as:

- Districts and Schools - Subjects - Proficiency Levels - AYP
Proficiency Levels
- Academic Years - Proficiency Levels - IEP Status - Ethnicities
- Gender and Ethnicities - Graduating Class - Congressional Districts - Grades
- District FARM Ranges - Regions - District ELL Continuity - Free – Reduced Meal
- School FARM Range - Bi-lingual Status - Disability - Homeless
- Migrant - Gifted – Talented - Time in District & School - Title 1 Status

CEDAR is essentially a window into the State Education Data Warehouse. Superintendent authorization is required, as CEDAR contains student-level data. More information about CEDAR can be found at:

<https://cedar.cde.state.co.us/> or by e-mailing CEDAR@cde.state.co.us.

Radar Graphs

Purpose

The 'Radar Graph for Assessment Framework Standards' report is designed to show how a school compares to the state average (or other schools) per each Assessment Framework Standard for a given grade and subject.

How they are used

Administrators and teachers find this report very useful for identifying areas of academic strengths and weaknesses, as measured by CSAP. Comparisons are based on percentage of points earned divided by points possible for each framework standard. The second part of the report lists the framework code, framework description, and the points earned and total points possible for the framework. The total points possible helps determine how thoroughly the framework was assessed.

Cautions

It's important to note that subsequent CSAP tests may differ and assess/emphasize different assessment frameworks.

Section 3: Ethical Practices in the Use and Interpretation of Assessment Results

Interpretation and Ethical Use of Assessment Results

Making good decisions when interpreting and reporting assessment results is critical. Examples of ethical and unethical assessment practices are provided below to illustrate the standards and principles of professionally responsible practices in the use and interpretation of the results from the state assessments (Standards for Educational and Psychological Testing, 1999).

Ethical Behavior/Practice in the Use and Interpretation of Assessment Results

1. Using CSAP, CSAPA, and CELApro results as part of a body of evidence in making educational decisions about individuals or programs.
2. Helping identify strengths and gaps in the curriculum, so that future instruction is improved.
3. Providing teachers and counselors with the information they need to interpret CSAP, CSAPA, and CELApro results.
4. Communicating the assessment results to appropriate audiences in an honest, clear and understandable manner, including correct interpretation of results and explanation of any common misinterpretations.

Unethical Behavior/Practice in the Use and Interpretation of Assessment Results

1. Basing student retention or promotion decisions on CSAP, CSAPA, and CELApro results alone.
2. Basing decisions regarding a student's 504, Individualized Education Plan (IEP), or other formal educational plan on CSAP, CSAPA, and CELApro results alone.
3. Using only CSAP, CSAPA, and CELApro results alone to evaluate teachers, schools and districts.
4. Knowingly using CSAP, CSAPA, and CELApro results to provide a misleading picture of the district's/school's educational programs, instruction, or student population.
5. Not reporting the assessment results for all students, including those not tested.

6. Not reporting any apparent misuses of CSAP, CSAPA, and CELApro results to those responsible for the assessment process in the school, district and state.
7. Revealing the test scores of one student to another student or to others not directly involved with the education of that student (Family Educational Rights and Privacy Act – FERPA <http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>).
8. Using CSAP, CSAPA, and CELApro results in a manner or for a purpose for which they were not designed.

Section 4: Colorado Model Content Standards Overview

State assessments measure student progress on our standards. Colorado Model Content standards provide the cornerstone of the Colorado State assessment system. Any analysis, interpretation, reporting, or other use of assessment data requires an understanding of our standards.

Colorado Model Content Standards

The Colorado Model Content Standards were adopted in 1995 by the Colorado State Board of Education. They were developed by Colorado educators and community members during a two-year process. These standards represent a consensus of thousands of parents, educators, administrators, business and other interested community members.

The standards are statements of academic content each student is expected to learn. The standards describe what students should know and be able to do as a result of their education. They are intended to focus the education system on common, well-defined goals. The Colorado Model Content Standards ensure that high expectations are in place for all students.

Expanded Benchmarks

Expanded Benchmarks are an interpretation of state content standards and grade level expectations at the most foundational level, providing a framework for students with significant disabilities to access the general curriculum.

Teachers and content experts interpreting state content standards at this level have found it helpful to first determine over-arching concepts foundational to obtaining the state content standards and then narrow each concept into specific benchmarks.

Expanded benchmarks are available in reading, writing, math and science and available on the CDE website
<http://www.cde.state.co.us/cdesped/StuDis-Sub2.asp#Content>.

English Language Development (ELD) Standards

The ELD Standards are used with ELL students who have been identified as needing linguistic and academic support in English. These standards support students until they demonstrate sufficient skills on the English language proficiency assessment instrument.

The indicators are the critical elements of the standards and provide the information, skills, and performance activities expected of all English language learners. They spiral throughout the various grade levels and within the respective standards.

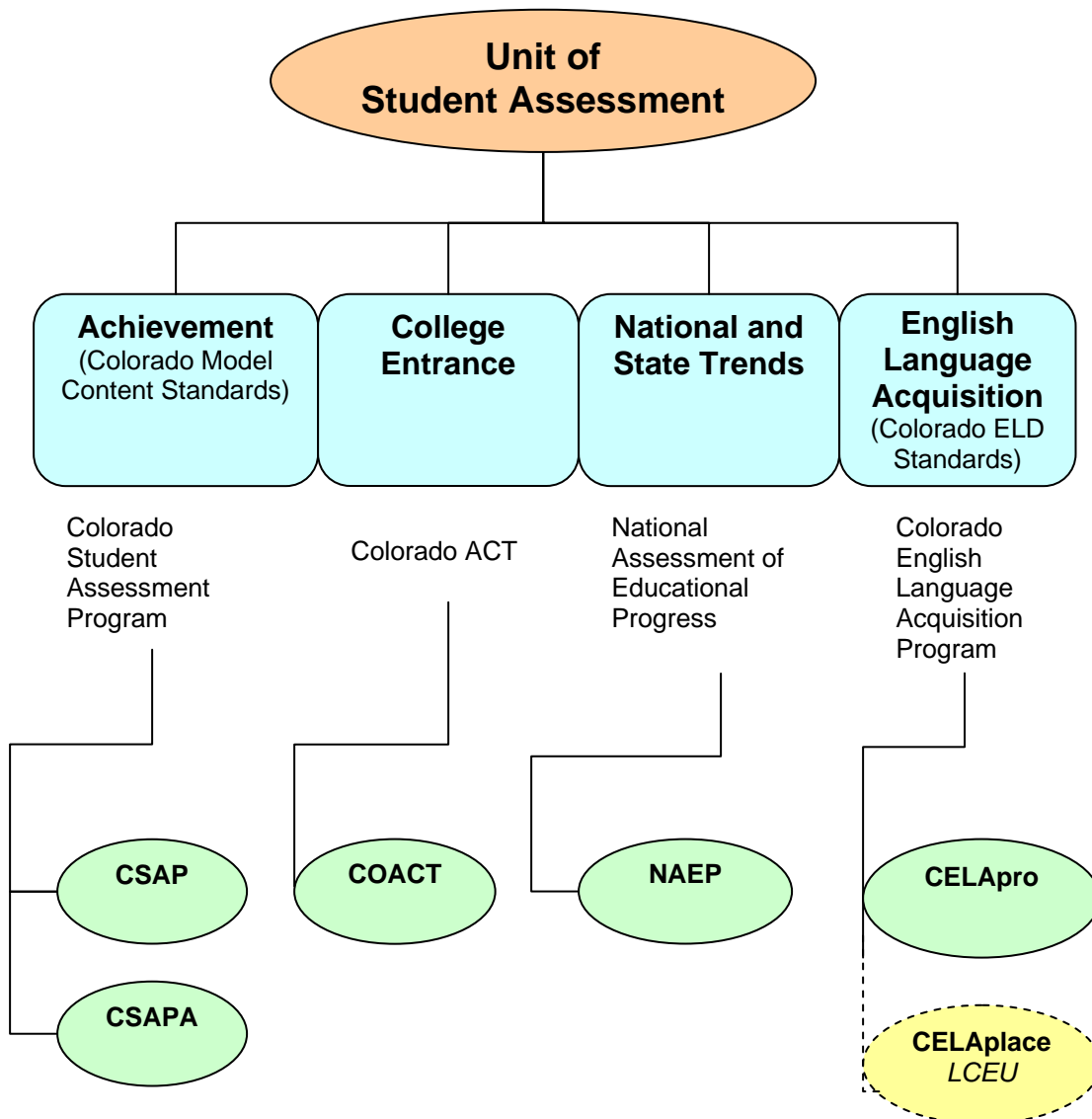
ELD Standards were developed so that the teachers can work with their students at the appropriate grade and proficiency level within the four domains (Reading, Writing, Speaking and Listening). The benchmarks of each domain assume literacy in the student's first language. If literacy is limited, proficiency levels need to be matched with the lower grade-level benchmarks.

Specifically the CELApro is aligned to the Colorado Department of Education English Language Development Standards available at: http://www.cde.state.co.us/cde_english/download/ELDStandardsApril2005.pdf

Standard 1	English Language Learners listen for information and understanding, using a variety of sources, for academic and social purposes.
Standard 2	English Language Learners speak to convey information and understanding, using a variety of sources, for academic and social purposes.
Standard 3	English Language Learners read for information and understanding using a variety of sources, for academic and social purposes.
Standard 4	English Language Learners write to convey information and understanding, using a variety of sources, for academic and social purposes.

Section 5: Colorado Student Assessment System Overview

The Colorado State Assessment system has a range of tools meant to collect data on how our students are progressing toward state defined goals. The following chart shows the different elements of the Colorado assessment system, each with a different but related purpose.



Section 6: CSAP

CSAPs provide a yearly “snapshot” of student performance relative to the Colorado Model Content Standards. Students are assessed in reading, writing, and math in grades 3-10, and science in grades 5, 8 and 10. While the CSAP is aligned to the Colorado Model Content standards, not everything that is included in the Local Education Agency (LEA) adopted curriculum is included on the annual CSAP. You will find essential skills and objectives that are appropriate to assess on a large scale, paper and pencil test (CSAP).

As with any assessment that captures a snapshot of student performance, the scores must be used appropriately in order for them to be valid reflections of what students know and are able to do relative to the benchmarks Colorado educators have established.

The CSAP is collaboratively developed by the Colorado Department of Education, Colorado educators and CTB/McGraw-Hill.

Purposes of the CSAP

There are three purposes to the CSAP program:

1. **To determine the level at which Colorado students meet the Colorado Model Content Standards in the content areas assessed.** Because each CSAP assessment is designed to measure the standards as delineated in assessment frameworks, the CSAP assessments provide an accurate picture of student achievement relative to the standards.
2. **To measure the progress of Colorado students over time.** In the past, measures of student progress were restricted to comparing one year’s class with another year’s class. With the development of vertical scales for reading, writing, and mathematics, the progress of each student and group of students can be examined each year in those content areas.
3. **To add to a body of evidence to determine 3rd grade students’ literacy levels.** The Colorado Basic Literacy Act (CBLA) requires that the grade 3 reading CSAP assessment be used as part of a body of evidence in determining the literacy levels of 3rd grade students.

Guidance on General Questions CSAP Data May Provide

Stakeholder	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
Students and Parents	<p>How is my child performing relative to the state content standards? What is the performance level (unsatisfactory to advanced)?</p> <p>Where are there gaps in my child's education?</p>	<p>Student Performance Reports</p> <p>Student Performance Reports</p>
School Level	<p>Is instruction aligned to the state standards per the district adopted, standards-based curricula?</p> <p>How are the individual students in our school performing relative to the content standards? Where are the gaps?</p>	<p>Performance Level Summary Reports Item maps Radar Charts</p> <p>Performance Level Summary Reports Student Performance Reports</p>
District Level	<p>How effective is our curriculum?</p> <p>Is our curriculum aligned to the state standards?</p> <p>How are the individual students in our school performing relative to the content standards? Where are the gaps?</p>	<p>Performance Level Summary Reports Item maps Radar Charts</p> <p>Performance Level Summary Reports Item maps Radar Charts</p> <p>Performance Level Summary Reports Student Performance Reports</p>

Stakeholder	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
State-CDE	How are students performing in schools/districts?	State Summary reports State/District Disaggregated Summary Reports
Public	How are students performing in schools/districts?	State Summary reports State/District Disaggregated Summary Reports

Section 6.1: CSAP Reports

Hard Copy Reports provided by CDE

Performance Level Summary Reports (State, District, School)

Who this information is targeted for

- Educators, School and District Administrators

Purpose

These reports provide educators and administrators with the total number and percent of students at each school (school version), in each district (district version), and in the state (state version) who have attained each of the performance levels. The report includes students who had no scores reported because they had incomplete assessments or invalidated assessments that were not legitimate measures of their ability. Also provided are aggregated demographic data about the student population. No student names appear on any version of the Performance Level Summary Report.

How to use it

These reports are best used as tools to examine aspects of district adopted curricula and programmatic inventory and alignment.

These reports can be used to confirm and verify alignment to the Colorado model content standards. Generalizations from district or school level information can be used to evaluate the alignment of the adopted curricula to the Colorado Model Content Standards, but should be regarded at the standard and benchmark level only.

Cautions

Assessment objectives rotate yearly. Practicing items is not an effective, research based educational practice. Each form of the assessment measures a finite set of skills, through a limited number of items and item types. Generalizations regarding student performance, therefore, are limited to the results of that particular test only. Any evaluation of program or curricular alignment must include multiple sources of data and information. The CSAP cannot provide every essential piece of information necessary to comprehensively evaluate school curricula and programs.

Student Performance Report

Who this information is targeted for

- Students, Parents, Educators, School and District Administrators

Purpose

Provides students, parents, educators, and administrators with the individual student's results in the form of a scale score and the performance level demonstrated (Advanced, Proficient, Partially Proficient, Unsatisfactory) on the assessments. This report also provides information about the student's performance on each content standard and subcontent area.

How to use it

Results are reported in terms of the student's proficiency with respect to each standard and subcontent area. These results are useful for providing a snapshot of student performance relative to the Colorado Model Content Standards. Student results provide valuable information used to determine longitudinal growth, and insight into the alignment of a LEA's adopted curricular alignment to the Colorado Model Content Standards.

The student's scale score is also depicted graphically, including a confidence interval, which provides a range within which a student's true score is likely to fall.

The overall performance level (shown at the top of the report) indicates that the student can perform the majority of what is described for that performance level and even more of what is described for the level(s) below. The student also may have performed some of the tasks described in the next-higher level, but not enough to have reached that level of performance. By examining the tasks associated with the next-higher level, one can see the competencies a student should be working on to move to a higher level of performance.

Cautions

Scale score comparisons can only be made within the same grade and content area. For each grade level and content area, the cut scores are set at different locations on the scale. Also, proficiency levels (U, PP, P, A) cannot be compared across content areas.

Subcontent area scores are made up of as few as only ten points from the entire test. These are useful in looking at programmatic alignment for large groups of students; they have less utility when looking at individual students.

Other Available Documents

Guide to Test Interpretation (GTI)

Who this information is targeted for

- Parents, Educators, School and District Administrators

Purpose

The GTI provides an overview of CSAP reporting. It is intended to help educators apply test report data to the needs of individual students as well as the needs of the school and the district.

How to use it

The GTI should be reviewed by all school and district personnel on an annual basis. This guide can be used as a resource to help explain the meaning behind CSAP scores and reports.

Cautions

The GTI is updated on an annual basis. Make sure you are using the most current edition. This guide does not provide detailed instructions in how to use the data, nor all the ways in which the data can and should be used to make decisions for students, schools and districts.

General Research Tape (GRT) layouts

Who this information is targeted for

- District Administrators, possibly School Administrators

Purpose

The GRT layout document provides the blueprint for all the information included in the General Research Tape (GRT) file districts receive from the test vendor. The GRT file includes all the available biographical data and test data for every assessment given by the district. Test scores and item level responses are included in the GRT.

How to use it

The GRT layout document is a technical document intended for districts to make sense of the large amount of data available for every assessment scored by CTB. It provides the key for what data is available for analysis and forms the basis for the summary reports described above.

Additionally, the GRT layout is critical for utilizing Item Maps to analyze student data at the content and subcontent level. More information on Item Maps is discussed below.

Cautions

The GRT layout is a technical document, very specific to the “raw” student level GRT data file districts receive for all CSAP assessments. While it does not have secure information in the actual document, it does detail student level information found in the GRT file. District assessment personnel with understanding of the data collected should work with other staff to use the GRT layouts in the ethical ways.

Item Maps

Who this information is targeted for

- District Administrators, school administrators

Purpose

Historically, item maps were released to provide some insight into the data surrounding CSAP. Over the years, they have evolved to include additional information important in using the data in appropriate ways. The information the item maps contain may be of some assistance examining a school or districts adopted curricular alignment to the state standards. They are not an instructional tool, and cannot be used to develop curriculum.

Superintendents must work with the District Assessment Coordinator (DAC) relative to the Standards for Educational Testing and Research requirements for ethical and appropriate use of data, including the item maps.

How to use the item maps

Item maps are linked to a specific form and year of the test. They are useful in a broader sense of ensuring curricular and or programmatic alignment to the standards and benchmarks assessed on that particular form of the assessment.

Use item maps in conjunction with student performance data to ask questions about a district’s adopted curriculum and program of instruction.

For District and School administration:

- Is this benchmark included in key concepts within your adopted district curriculum?

For Teachers:

- Is this benchmark taught within the larger scope of concepts included in the district adopted curriculum?
- How have I assessed this concept?

- Can students demonstrate understanding of these broader concepts contained within the benchmarks and standards in a variety of ways?

To examine curricular alignment:

- How are the varying levels of DOK reflected in curriculum and instruction?
- Classroom/school/district level: conduct adopted curricular inventory

The fields contained in the item maps are:

Item number- Indicates the actual item number within the test booklet. If an item number is missing, the item may have been suppressed. An item is suppressed, or removed from the calculations, if it is recognized as not operational as a quality measure of the assessment objective. Any suppressed items are not used in calculations of student scores.

Order of difficulty – These were used as a standard setting tool for individuals that set cut points for overall proficiency levels. This information does not guide interpretation of current results and does not reflect student performance on the items.

Scale Location- These were used as a standard setting tool for individuals that set cut points for overall proficiency levels. This information does not guide interpretation of current results and does not reflect student performance on the items.

Test Session – Indicates the session in which the item was located. For example: G3 MA S1 is Grade 3, Math, Session 1.

*****Item type** - MC = Multiple Choice; SCR = Short Constructed Response; CR = Constructed Response; ECR = Extended Constructed Response (Writing CSAP only)

*****Points for item** - 1 of 'x' means that 1 point out of 'x' possible points for constructed response items. Example: 1 of 3, 2 of 3, 3 of 3.

*****DOK** - Indicates the Depth of Knowledge (complexity) the item requires of students.

Note: The DOK level is assigned to each ITEM and not to each score point. This means that an item may have one point that requires a low complexity, but has an overall DOK level that is high level because there are score points requiring more complex skills. DOK

does not rate the difficulty of an item; a relatively easy item in terms of order of difficulty may have a DOK of three. Likewise, a very difficult item may be a DOK 1.

*****Subcontent area** - Items are developed to measure each Assessment Objective within a Standard. Following test construction, each item is reviewed for their alignment to subcontent areas. Subcontent areas are required to have a minimum of ten points on each test. Given the small number of points assigned within each subcontent area, the standard error of measurement is too large to accurately diagnose an individual student need, but may be used to point educators in the direction of need for more in-depth diagnostic assessments to be used at the school or district level. These areas are provided to enable districts and schools to further diagnose the needs at a curricular or program level where large numbers of students will reduce the standard error of measurement.

*****Benchmark-** Indicates the Assessment Objective the item is measuring.

Assessment Objective - Indicates the specific skill or aspect of the construct being measured.

*****indicates those components of the item map useful in conducting curricular/program inventory.**

Cautions

Item maps must not be used to create yearly instructional targets. Please keep in mind that objectives are assessed on a cyclical basis. Item focused instruction based on item map information is not only ineffective, it is an unethical use of the information provided, the data included in item maps is not intended for this purpose.

Technical Reports

Who this information is targeted for

- District Administrators, primarily district assessment staff

Purpose

The Technical Report provides detailed analysis of the results of all CSAP assessments, including descriptions of the content standards and sub-content areas, test development, and test configuration, as well as descriptions of important psychometric information such as scaling and scoring procedures, correlations and test reliability, and detailed item analysis results

How to use it

The Technical Report can be used to better interpret large, statewide patterns in the assessment data, providing a comparison for district and school results. District assessment personnel in conjunction with state assessment staff should help with using the Technical Report.

Cautions

The Technical Report is a highly technical document. District assessment personnel with understanding of the data collected should work with other staff to use the Technical Report in the ethical ways.

Section 6.2: Colorado Growth Model

Who this information is targeted for

- Students, parents, educators, school and district administrators

Purpose of Colorado's Growth Model

The purpose of Colorado's Growth Model is to support teaching and learning in Colorado.

With the passage of HB 07-1048: Colorado's Growth Model was defined to be:

- The cornerstone of the state's accountability system
- The model used for the Governor's Improvement Award
- The measure to determine if students are on track to proficiency within 3 years or 10th grade

Definition of Colorado's Growth Model

Colorado's Growth Model serves as a way for educators to understand how much growth a student makes from one year to the next relative to a student's "academic peers." More specifically, Colorado's Growth Model compares each student's performance to students in the same grade throughout the state who had similar CSAP scores in past years. The model then produces a **Student Growth Percentile**, much like children's height and weight percentiles that pediatricians share with parents. If a student grew as well or better than 60 percent of her academic peers, she would have a growth percentile of 60.

Individual Student Growth Percentiles are categorized in three levels:

- Low Growth (a Student Growth Percentile between 1 and 35)
- Typical Growth (a Student Growth Percentile between 35 and 65)
- High Growth (a Student Growth Percentile between 65 and 99)

Median Growth Percentiles

To summarize student growth rates by district, school, grade-level, or disaggregated group, individual student growth percentiles are aggregated and summarized by finding the median score (the middle score if you rank the scores from highest to lowest).

Median Growth Percentiles are categorized into two levels:

- Less Than Typical Growth (a median growth percentile less than 50)
- Greater Than Typical Growth (a median growth percentile equal to or greater than 50)

Colorado's Growth Model answers three main questions.

- What is?
- What should be?
- What could be?

These questions can be answered with the growth model data, but by looking at the data in slightly different ways.

What is?

What is the academic growth of an individual student? What is the growth for a school or district?

“What is?” is answered by looking at Student Growth Percentiles and Median Student Growth Percentiles.

What should be?

What should the growth be in order for a student to reach desired achievement goals in the future, as set by laws and policies? The goal, legislatively in Colorado, is that all children will be proficient or advanced by 10th grade—so we want to be able to clearly show the progress necessary to reach these goals each year and evaluate whether the student's progress is adequate.

We answer the questions “What should be” by looking at the growth necessary for students to reach different levels of proficiency, in different time frames. Specifically, we examine the growth necessary for each student to see the transitions between the following levels:

- *Unsatisfactory to Partially Proficient*
- *Unsatisfactory to Proficient*
- *Partially Proficient to Proficient*
- *Unsatisfactory and Partially Proficient to Proficient or Above*
- *Proficient to remain Proficient*
- *Proficient to Advanced*
- *Proficient or Advanced to Proficient or Advanced*

There are two ways to measure and conceptualize “what should be?” First, we need to look at the “growth needed” to reach the desired proficiency. To do this, we look out three years, or to 10th grade (whichever comes first), and calculate the growth percentiles needed by each student to reach each CSAP proficiency level. These percentiles let us know how much growth is needed to get the student where we want them to go and keep them away from where we don't want them to go. In particular, we use this data to determine if a student made enough growth to be “on track” to reach proficiency. If a student in the current year meets or exceeds the “growth needed” determined in the prior year, then we say that the student is “on track” to reach proficiency.

Level of Analysis	Growth Needed	On Track
<i>Individual Level</i>	<i>What kind of growth/growth percentile is necessary to reach the desired proficiency level?</i>	<i>Is this student on track to reach the desired proficiency level?</i>
<i>Group Level</i>	<i>What is the median student growth percentile needed to reach the desired proficiency level?</i>	<i>What percent of students are on track to reach the desired proficiency level?</i>

These numbers can be aggregated at the group level in either way. We can calculate the median growth percentile necessary for the group to summarize the “growth needed.” Or we can calculate the percent of students within a group that are “on track” to reach the desired achievement level.

While these two approaches are very similar, the different messages they send at the individual level can be used in potentially limiting and unethical ways. There is a fine line between saying what kind of growth a student needs to reach proficiency, what resources they need to get there, and whether or not a student will be proficient. The growth data is intended to motivate students and schools; it is crucial that the conversations around this data are used to determine who needs the most assistance and resources and not as a determination for what a student can or cannot accomplish.

What could be?

For individual students, “what could be” means what is a realistic goal: How far can we help each student to improve in a given time frame? In the bigger picture, “what could be?” is answered by establishing and communicating to stakeholders what exemplary looks like and putting in place the support mechanisms necessary to bring these high rates of growth for all students. On the district level and the state level, “what could be” challenges us to consider whether we are satisfied with the results we get from “typical” growth. It asks us “how can we improve our practices so that today’s highest rates of growth become tomorrow’s typical growth?”

To answer “what could be” we need to use the growth model data in conjunction with other evidence and research. Starting with “what is” as a description of current reality, we endeavor to discover what practices

and systems are needed so that “what is?” results transform over time into “what should be.”

Use of the Growth Model

The Growth Model will be used to determine the recipients of the Governor’s Improvement Awards and the Improvement rating on the School Accountability Reports (SAR). It will also be used as an integral part of district Accreditation decisions.

Guidance on Specific Questions/Answers the Growth Model Can Provide

	Questions the Model Can Answer Alone	Where to Find the Answer (need to provide links to where the data will be)	Questions the Model Can Answer with other pieces of evidence*
Students and Parents	How much growth did I show relative to other students starting at the same place?	Student Growth Percentile	Is my school able to help students, especially students like me, grow as much as I need to?
	How much growth do I need to get to the next proficiency level?	Growth Percentiles needed to reach specific proficiency levels.	What kinds of support do I need to get to reach my goals for proficiency?

	Questions the Model Can Answer Alone	Where to Find the Answer (need to provide links to where the data will be)	Questions the Model Can Answer with other pieces of evidence*
School Level	<p>How much does an “average” student at our school grow?</p> <p>How does student growth at our school compare to other schools?</p> <p>How does student growth differ between groups of students?</p> <p>How much extra growth do our students need to reach proficiency?</p> <p>Do we see exceptionally high or low growth anywhere in our school? (certain grades, content areas, classrooms)</p>	<p>School Median Student Growth Percentile.</p> <p>Median Student Growth Percentiles for different schools. (bubble charts)</p> <p>Median Student Growth Percentiles for disaggregated groups.</p> <p>Percent of students on track to reach proficiency.</p> <p>Distribution of student growth percentiles.</p>	<p>Are certain intervention programs used in our school associated with greater student growth percentiles?</p> <p>Is our school more/less effective at educating students than other schools.</p> <p>Is the group the student belongs to the cause of the exceptionally high or low growth?</p> <p>How can we share what is working well for us?</p> <p>What are realistic school improvement goals for student growth?</p>

	Questions the Model Can Answer Alone	Where to Find the Answer (need to provide links to where the data will be)	Questions the Model Can Answer with other pieces of evidence*
District Level	<p>What is the median student growth percentile in our district?</p> <p>How does it compare with other similar districts?</p> <p>How does the median student growth percentile differ between different groups of students?</p> <p>What percent of students are making growth adequate to reach proficiency within 3 years?</p> <p>How much extra support do our students need to reach proficiency?</p> <p>Do we see exceptionally high or low growth anywhere in our district?</p> <p>How are the different schools in our district doing? Are there any patterns?</p>	<p>District median student growth percentile.</p> <p>Median student growth percentiles for different districts.</p> <p>District median student growth percentiles by disaggregated group.</p> <p>Percent of students on track to reach proficiency.</p> <p>Percent of students on track to reach proficiency and individual student growth needed.</p> <p>Distribution of student growth percentiles.</p> <p>Distribution of median school growth percentiles. (bubble plots).</p>	<p>Are certain programs used in our district correlated with greater student growth percentiles?</p> <p>Are these programs leading students to reach proficiency?</p> <p>What may be causing exceptionally high or low growth in our district?</p> <p>How can we share what is working well for us?</p> <p>How do the median growth percentiles impact school accreditation decisions?</p>

	Questions the Model Can Answer Alone	Where to Find the Answer (need to provide links to where the data will be)	Questions the Model Can Answer with other pieces of evidence*
State-CDE	<p>What are the median growth percentiles for schools, districts?</p> <p>How does the median student growth percentile differ between different groups of students?</p> <p>Which districts and schools are showing exceptionally high or low median growth percentile?</p>	<p>Median Growth Percentiles.</p> <p>Median growth percentiles for disaggregated groups.</p> <p>Distribution of district/school median growth percentiles.</p>	<p>Where are limited fiscal and personnel resources most needed?</p> <p>Are our School Improvement Grants having an impact on student growth?</p> <p>Do Supplemental Educational Services increase student median growth percentiles?</p> <p>Which schools and districts are showing the greatest median growth percentiles for different student groups?</p> <p>What can we learn from them about what works?</p>

	Questions the Model Can Answer Alone	Where to Find the Answer (need to provide links to where the data will be)	Questions the Model Can Answer with other pieces of evidence*
Public	<p>Which schools and districts in Colorado have the highest median student growth percentiles?</p> <p>Which schools and districts have the highest median student growth percentiles for different groups of students?</p> <p>What percent of students are making growth adequate to reach proficiency with in three years?</p> <p>How much support do we need to provide our students in order to reach proficiency in one, two or three years?</p>	<p>Distribution of median student growth percentiles.</p> <p>Distribution of median student growth percentiles for disaggregated groups.</p> <p>Percent of students on track to reach proficiency.</p> <p>Percent of students on track to reach proficiency and individual student growth needed.</p>	<p>Which schools and districts are “best”?</p> <p>Which schools and districts are “best” for different students’ needs?</p> <p>What resources do we need to provide, as a state, to ensure all of Colorado’s students can reach proficiency by 10th grade?</p>

** Other information consists of formative assessment results, knowledge of student and teacher needs, analysis of student work, etc.*

Cautions

When making any kind of higher stakes decision, the growth model data should be used as one piece of evidence. The data should be supported with consistent information from other sources in order to be used for decision making purposes.

Section 6.3: Colorado Basic Literacy Act

Purpose of CBLA

The Colorado Basic Literacy Act (22-7-501 through 22-7-506) declares that all students can succeed in school if they have the basic skills in reading and writing that are appropriate for their grade level. Reading is the most important skill, closely followed by writing and mathematics. The General Assembly stated that after the completion of the third grade no student may be placed at a grade level or other level of schooling that requires literacy skills not yet acquired by the student.

The Colorado Basic Literacy Act was enacted in 1997 in order to:

- Provide students with the literacy skills essential for success in school and life.
- Help all schools improve the educational opportunities for literacy and performance for all students.
- Promote high literacy standards for all students in K-3rd grade.
- Ensure that all students are adequately prepared to meet Colorado's 4th grade Reading Standards and Benchmarks.

Research shows that reading is an acquired skill and it is essential to identify students early for reading difficulties. By the time that students are identified in 3rd grade, they are too far behind making it difficult to close the gap.

Based on a convergence of research; the essential components or Reading instruction should include:

- Phonemic awareness
- Phonics
- Fluency
- Vocabulary and
- Text comprehension

How to use the information from the assessments

On May 10, 2007 the State Board of Education identified and approved three assessments for the annual CBLA outcome measure, for grades K-3, from which districts may choose one. The three approved assessments are:

- DIBELS (Dynamic Indicators of Early Literacy Skills)
- PALS (Phonological Awareness Literacy Screening)
- DRA2 (Developmental Reading Assessment)

It is recommended that assessment tools be used for the purpose for which they were designed and that they be administered in accordance with the assessment manual provided by the publishers.

Teachers need appropriate training on:

- Assessment tool administration
- Scoring
- Interpretation of data to guide instruction

The purpose of the CBLA end-of-year proficiency assessment is to provide an early indicator of whether or not Kindergarten, 1st, 2nd and 3rd grade students are on track to be successful on later assessments of reading comprehension.

End-of-year CBLA tests may assist in identifying students at-risk of reading difficulties. The information gained from the CBLA assessment tools is insufficient in determining whether or not a student needs an Individual Literacy Plan (ILP). It is critical that end-of-year CBLA assessments be only one part of a comprehensive plan or body of evidence. This collection of data about a student is used to:

- Inform reading instruction
- Provide information about student growth
- Yield information regarding student proficiency

Cautions

When making any decisions about student literacy skills, multiple data sources should be used to support the decision making process. The CBLA assessments reflect a sampling of performance indicators; they do not include a comprehensive list of all necessary reading skills.

CBLA legislation (22-7-501) speaks only to what is required for students who are permitted by the school district to pass from 3rd grade to 4th grade and are not reading at or above grade level. Identifying and addressing the needs of other students in the 4th-12th grades is the responsibility of the local district and is not governed by CBLA.

Section 7: CSAPA

The Colorado Student Assessment Program Alternate (CSAPA) is a standards-based assessment designed specifically for students with significant cognitive disabilities and is meant to provide a picture of student performance relative to the Expanded Benchmarks and Colorado Model Content Standards. Students are assessed in reading, writing and math in grades 3-10 and science in grades 5, 8 and 10. The CSAPA is collaboratively developed by the Colorado Department of Education, Colorado educators and CTB/McGraw-Hill.

Purpose of the CSAPA

The primary purpose of the assessment program is to determine the level at which Colorado students meet the Expanded Benchmarks which are linked to the Colorado Model Content Standards in the content areas assessed.

- Expanded Benchmarks- Are alternate achievement standards which are linked to the Colorado Content Standards. These alternate achievement standards are the foundational skills toward the benchmarks.
- Level of Independence/Student Response- For CSAPA the teacher rates each student's response on two data points. The first data point collected is whether the student's response to an item is correct, incorrect, other or no response. The second data point gathered is the Level of Independence a student needs to respond to an item. The test examiner, using the Level of Independence Rating Protocol, identifies the amount of support that the student needed in order to respond to an item. These levels are as follows: 4-Independent, 3-Partial Independence, 2-Limited Independence and 1-No Response.

Guidance on General Questions the Data/Reports May Provide

	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
Students and Parents	<p>How is my child performing relative to the critical concepts in the Expanded Benchmarks?</p> <p>What is my child's performance level (Inconclusive to Novice)?</p>	<p>- Student Report</p> <p>-Student Report</p>
School Level	<p>Is instruction aligned to the expanded benchmarks per the district adopted, standards based curriculum?</p> <p>How are individual students in our school performing?</p>	<p>-Student Report</p> <p>-School Performance Level Summary Report</p> <p>-Expanded Benchmarks</p> <p>-Student Report</p> <p>-School Roster Report</p>
District Level	<p>How effective is our curriculum?</p> <p>Is our curriculum aligned to the Expanded Benchmarks?</p>	<p>-Student Report</p> <p>-School Performance Level Summary Report</p> <p>-District Performance Level Summary Report</p> <p>-Student Report</p> <p>-School Performance Level Summary Report</p> <p>-District Performance Level Summary Report</p>

	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
State-CDE	How are students performing in schools and districts?	-State performance level Summary Reports -State Disaggregated Data
Public	How are students performing in schools and districts?	-State Performance Level Summary Reports -State Disaggregated Data

District and School Summary Reports (State, District and School)

Who this information is targeted for

- **Educators, School and District Administrators**

Purpose

These reports provide educators and administrators with the total number and percent of students at each school (school version), in each district (district version) and in the state (state version) who have attained each of the performance levels. The report includes students who had a no score reported. Also, these reports contain aggregated demographic data about the student population. No student names appear on any version of the Performance Level Summary Reports.

How to use it

These reports are best used to examine aspects of district adopted curricula and programmatic inventory and alignment.

Cautions

CSAPA cannot provide every essential piece of information necessary for curricular decisions as it does not assess every Expanded Benchmark and critical concept.

Individual Student Report

Who this information is targeted for

- Parents, Educators, School And District Administrators

Purpose

Provides parents, educators and administrators with the individual student's results in the form of points attained out of the total points and the performance level demonstrated (Inconclusive, Exploring, Emerging, Developing and Novice) on the assessments. This report also provides information about the student's performance on each critical concept.

How to use the data

Results are reported in terms of the student's proficiency with respect to the critical concepts in each content area. Student results provide valuable information in regards to a student's learning in the content areas.

The overall performance level (shown at the top of the report) indicates that the student can perform the majority of what is described for that performance level and even more of what is described for level(s) below.

While results provide a snapshot of the student's content knowledge, this information can be used to guide curricular decisions and IEPs when used in conjunction with other pieces of evidence.

Cautions

CSAPA cannot provide every essential piece of information necessary for curricular and IEP decisions as it does not assess every Expanded Benchmark.

Do not compare total points attained from year to year. For each grade level and content area, the proficiency level cut scores are set at different points.

GRT layouts

Who this information is targeted for

- District Administrators, possibly School Administrators

Purpose

The GRT layout document provides the blueprint for all the information included in the General Research Tape (GRT) file districts receive from the test vendor. The GRT file includes all the available biographical data and test data for every assessment given by the district. Test scores and item level responses are included in the GRT.

How to use it

The GRT layout document is a technical document intended for districts to make sense of the large amount of data available for every assessment scored by CTB. It provides the key for what data is available for analysis and forms the basis for the summary reports described above.

Additionally, the GRT layout is critical for utilizing Item Maps to analyze student data at the content and subcontent level. More information on Item Maps is discussed below.

Cautions

The GRT layout is a technical document, very specific to the “raw” student level GRT data file districts receive for all CSAPA assessments. While it does not have secure information in the actual document, it does detail student level information found in the GRT file. District assessment personnel with understanding of the data collected should work with other staff to use the GRT layouts in the ethical ways.

Section 8: CELApro and CELAplace

The Colorado English Language Acquisition Proficiency Assessment (CELApro) is an annual test designed to provide a picture of students' English Language Development. The primary purpose of the assessment program is to determine the level at which Colorado NEP and LEP students meet the Colorado English Language Development Standards in four domains (listening, speaking, reading and writing). The CELApro is collaboratively developed by the Colorado Department of Education, Colorado educators and CTB/McGraw-Hill.

Each domain is designed to measure a component of language development, recognizing that language develops along a continuum. This assessment is designed to assist educators in preparing ELLs for academic success. The results from the CELApro give a robust profile of a student's skills and needs on a language acquisition continuum from January to January. Over time, scores will show the individual student's progress.

The CELApro consists of four domains, each of the domains contain subtests:

- **Reading** (Analyze Words, Read Words, Read for Understanding)
- **Writing** (Use Conventions, Write About, Write Why, Write in Detail)
- **Listening** (Listen for Information, Listen in the Classroom, Listen and Comprehend)
- **Speaking** (Speak in Words, Speak in Sentences, Make Conversation, Tell a Story)

Proficiency Level Descriptors are detailed explanations of what skills a student may demonstrate at each proficiency level. They are meant to give teachers a profile of a student's performance on the CELApro at each grade level. Proficiency Level Descriptors are included in the Guide to Test Interpretation (available from the District Assessment Coordinator).

Purposes of the CELApro

There are three purposes to the CELApro program:

1. **To determine the level at which Colorado students meet the Colorado English Language Development Standards.** Because the CELApro assessment is designed to measure the standards, the CELApro assessment provides an accurate picture of student achievement relative to the standards.

2. **To measure the progress of Colorado students over time.** The CELApro is vertically scaled (ranging from 200 to 800) and criterion-referenced cut scores are represented on a common scale, allowing comparisons from one grade or grade span to another.
3. **To add to a body of evidence to determine student designations (NEP, LEP or FEP).** The CELApro should be used as part of a body of evidence to determine a student's designation (NEP, LEP or FEP) and educational services.

Guidance on General Questions the Data/Reports May Provide

	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
Students and Parents	<p>How is my child performing relative to the state English Language Development standards? What is the proficiency level (beginning to advanced)?</p> <p>How do I know if my child is increasing in proficiency levels?</p>	<ul style="list-style-type: none"> • Student Proficiency Report <p>District level data (progress monitoring or other internal assessments)</p>
School Level	<p>Is instruction aligned to the state English Language Development standards per the district adopted, standards-based curricula?</p> <p>How are the individual students in our school performing relative to the eld standards? Where are the gaps?</p>	<ul style="list-style-type: none"> • Student Proficiency Report • SDSA- Performance Level Summary Report by School • GLR- Group List Report Summary by School

	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
District Level	<p>How effective is our curriculum?</p> <p>Is our curriculum aligned to the state English Language Development standards?</p> <p>How are the individual students in our school performing relative to the English Language Development standards? Where are the gaps?</p>	<ul style="list-style-type: none"> • SDSA- Performance Level Summary Report by School • GLR- Group List Report Summary by School • SDSA- Performance Level Summary Report by District
State-CDE	How are students performing in schools/districts?	<ul style="list-style-type: none"> • SDSA- Performance Level Summary Report by District <p>State data on USA website</p> <p>State of the State for ELLs Report</p>
Public	How are students performing in schools/districts?	State of the State for ELLs Report

CELA Reports

- SDSA-Performance Level Summary Report by District
- SDSA-Performance Level Summary Report by School
- GLR- Group List Report Summary by School
- Student Proficiency Report

Hard Copy Reports

Performance Level Summary Reports (District, School)

Who this information is targeted for

- State, District and Schools

Purpose

These reports provide educators and administrators with the total number and percent of students at each school (school version), and in each district (district version), who have attained each of the performance levels. The report includes students who had no scores reported because they had incomplete assessments or invalidated assessments that were not legitimate measures of their ability. Also provided are aggregated demographic data about the student population. No student names appear on any version of the Performance Level Summary Report.

How to use it

These reports are best used as tools to examine aspects of district adopted curricula and programmatic inventory and alignment.

These reports can be used to confirm and verify alignment to the Colorado English Language Development standards. Generalizations from district or school level information can be used to evaluate the alignment of the adopted curricula to the Colorado English Language Development standards.

Cautions

Generalizations regarding student performance are limited to the results of that particular test. Any evaluation of program or curricular alignment must include multiple sources of data and information. The CELApro cannot provide every essential piece of information necessary to comprehensively evaluate school curricula and programs.

Group List Report Summary by School

Who this information is targeted for

- Schools, Teachers

Purpose

Provides students, parents, educators, and administrators with student results including scale scores and proficiency levels for the Speaking, Listening, Reading, Writing, Overall, Comprehension and Oral categories.

How to use it

These results are useful for providing a snapshot of student performance relative to the Colorado English Language Development Standards. Student results provide valuable information used to determine longitudinal growth, and insight into the alignment of a LEA's adopted curricular alignment to the Colorado Colorado English Language Development Standards

- The overall performance level is an average of the Speaking Listening Reading and Writing Scores.
- The comprehension score is based on designated items in Listening and Reading skill areas
- The oral score is based on all items in Listening and Speaking skill areas.
- Mean and median scale scores are also provided by skill area.

Cautions

Mean and median scale scores are useful in looking at programmatic alignment for large groups of students.

Student Proficiency Report

Who this information is targeted for

- School, Teachers, Parents and Students

Purpose

Score reports contain information about students' performance relative to the Colorado English Language Development (ELD) Standards. They also contain information about students' performance relative to the four domains of language, as well as, comprehension, oral and overall proficiencies.

How to use it

Results are reported in terms of the student's proficiency with respect to each standard. These results are useful for providing a snapshot of student performance relative to the Colorado English Language Development Standards. Student results provide valuable information used to determine longitudinal growth, and insight into the alignment of a LEA's adopted curricular alignment to the Colorado English Language Development Standards.

The overall proficiency indicates that the student can perform the majority of what is described for that proficiency level and even more of what is described for the level(s) below. The student also may have performed some of the tasks described in the next-higher level, but not enough to have reached that level of proficiency. By examining the tasks associated with the next-higher level, one can see the competencies a student should be working on to move to a higher level of performance.

Student results provide valuable information used to determine language proficiency and program placement.

Student results, when combined with a larger body of evidence, can be used to re-designate a student into monitor status.

Cautions

A body of evidence should be used to make decision about student designation (NEP, LEP, or FEP), student educational services or supports etc.

Student results should not be used in isolation. The scores received are a one point in time measurement, using a blunt instrument, results should be used as a trigger for further investigation into proficiency.

Other Reports

Guide to Test Interpretation

Who this information is targeted for

- Districts, Schools and Teachers

Purpose

The GTI provides an overview of CELApro reporting.

How to use it

The GTI should be reviewed by all school and district personnel on an annual basis. This guide can be used as a resource to help explain the meaning behind CELApro scores and reports.

Cautions

The GTI is updated on an annual basis. Make sure you are using the most current edition. This guide does not provide detailed instructions in **how to use** the data, nor all the ways in which the data can and should be used to make decisions for students, schools and districts.

GRT layouts

Who this information is targeted for

- District Administrators, possibly School Administrators

Purpose

The GRT layout document provides the blueprint for all the information included in the General Research Tape (GRT) file districts receive from the test vendor. The GRT file includes all the available biographical data and test data for every assessment given by the district. Test scores and item level responses are included in the GRT.

How to use it

The GRT layout document is a technical document intended for districts to make sense of the large amount of data available for every assessment scored by CTB. It provides the key for what data is available for analysis and forms the basis for the summary reports described above. Additionally, the GRT layout is critical for utilizing Item Maps to analyze student data at the content and subcontent level. More information on Item Maps is discussed below.

Cautions

The GRT layout is a technical document, very specific to the “raw” student level GRT data file districts receive for all CSAPA assessments. While it does not have secure information in the actual document, it does detail student level information found in the GRT file. District

assessment personnel with understanding of the data collected should work with other staff to use the GRT layouts in the ethical ways.

CELAplace

The Colorado English Language Assessment for Placement (CELA place) is an initial screener designed to give districts baseline data on students regarding their language proficiency. This assessment is administered and rated by district personnel and results and test booklets are kept at the district. Students who are new to the district in grades K-12 are assessed in the four domains of language: listening, speaking, reading and writing.

Purposes of the CELA place

The two main purposes for the CELA place are:

- To confirm the Primary Home Language Other Than English (PHLOTE) status of students as defined by the districts Home Language Survey (HLS).
- To trigger further investigation with a body of evidence (i.e. parent interview, district intake assessments, etc.) to confirm the proper placement of the student.

Types of Data

The data that is collected by district personnel is quantitative because the numbers can be tabulated to get a final score, but also qualitative because rubrics are used for the speaking and writing portions of the assessment. In the end the administrator of the assessment has created a student profile sheet with the student's level of proficiency.

How to use the data

The student data should be a part of a larger body of evidence collected at intake in order to place the student in the Fluent English Proficient (FEP) category or into the proper program where the student can receive the most assistance towards becoming FEP.

Cautions

The CELA place is not a deep test; it is a quick screener to confirm the HLS. Students should not be placed in programs solely based on this one score.

Section 9: Colorado ACT

Guidance on General Questions the Data/Reports May Provide

	Questions you may ask to make meaning of the data	To which report/data set could I refer as a starting place?
Students and Parents	What is considered a perfect or acceptable score for colleges and universities?	Individual student score report delivered by Act.
School Level	How will this data help me help the students score better on the ACT? What areas in the student curriculum are identifiable for additional instructional development?	School/district summary reports delivered by ACT
District Level	How does my district compare to other districts?	Visit the ACT summary results page on the CDE website.
State- CDE	How did schools do on the SAR?	Visit the SAR page on the CDE website.
Public	How do 11th graders perform on ACT across the state and in individual schools?	Visit the ACT summary results page on the CDE website.

Who this information is targeted for

Students that are college bound; school administrators responsible for the SAR; and the public for determining a student placement when moving into the school/district.

Purposes of the COACT

The Colorado ACT requires all students enrolled in the eleventh grade in a Colorado public school to take the Colorado ACT. The ACT is the standardized, curriculum-based, achievement, college entrance examination selected by the department of education pursuant to this

statute meeting the following criteria outlined in the statute

C.R.S. 22-7-409 (1.5) (a) :

- selected by the Colorado Department of Education
- administered throughout the United States
- relied upon by institutions of higher education that at a minimum test in the areas of reading, writing, mathematics, and science

How to use the data

The Colorado ACT is used as a college entrance exam that every 11th grader must participate in. The ACT is used in the School Accountability Report (SAR) for Reading, Math, and English.

How to use the Colorado and National Summary reports are best answered by attending the ACT Interpretive workshops.

Cautions

Incorrect administrations result in invalidations of the ACT for the school/district. State allowed accommodations results in non-reportable scores for colleges and universities. Incorrect timing codes for accommodations result in invalidated student scores.

Additional information:

- ACT website: www.act.org
- CDE ACT web page:
http://www.cde.state.co.us/cdeassess/documents/COACT/coact_index.htm
- CDE ACT summary results:
http://www.cde.state.co.us/cdeassess/documents/COACT/coact_summary.html