# AMARD Growth Model Webinar Notetaking Guide

Presented by the Analysis, Measurement & Accountability Reporting Division (AMARD)

California Department of Education | September 13, 2021

## Overview

### History of Growth Model Work

* In 2015, work on the growth model began. Stakeholders include:
  + the State Board of Education (SBE);
  + the California Department of Education (CDE); and
  + Educational Testing Service (ETS).
* In the May 2021 SBE meeting, growth model methodology was approved.

### Release of Aggregated Growth Scores

Data from the 2016–17, 2017–18, and 2018–19 Smarter Balanced Summative Assessments was used to test and validate California’s adopted student growth methodology.

On September 22, 2021, the CDE is publicly releasing   
these aggregated growth scores at the district,   
school, and student group levels.

The next release of new growth scores is likely to be in 2024, and will incorporate assessment scores from:

* 2021–22;
* 2022–23; and
* 2023–24.

## Student Growth Toolkit

### Resources to Support Local Educational Agencies (LEAs) with Public Release

For the public:

* Growth Model Fact Sheet
* “What is a Growth Model” video

For schools and districts:

* Appropriate Uses vs Inappropriate Uses flyer
* Data Definitions and File Layout flyer
* FAQs (posted on CDE Growth page)

#### Where Can I Find These Toolkit Resources?

Resources will be posted on September 20, 2021, on the **CDE Growth Model web page at** <https://www.cde.ca.gov/ta/ac/acctgrowthmod.asp>.

### Growth Model 101

#### What is a Growth Model?

The growth model is a way of **measuring students' growth** **between the current year assessment scores and the previous year assessment scores**.

The individual growth score looks at the difference between the students' expected test score and their actual test score.

When using growth scores for accountability purposes, an aggregate growth score can provide a picture of average growth for students within a school, LEA, or student group.

#### Why did California Develop a Growth Model?

The growth model measures student learning and is an additional way to **see where improvement is needed**. It can show districts and schools how growth varies among student groups (i.e., one group of students had growth that was higher than, similar to, or lower than the growth for another group).

#### For Which Grade Levels are Growth Scores Calculated?

Growth Scores are calculated for grade four through grade eight.

Statewide test results from grades three through eight are included in the calculation. Grades three and eleven do not have growth scores because there are no prior year test scores.

#### How Does the Growth Model Calculate Growth Scores?

**Individual Growth Score:**

**Step #1**: Determine student’s **expected test score**

**Step #2**: Calculate the difference between the student's **expected test score** and their **actual test score** to arrive at their **individual growth score**.

**Aggregated Growth Score:**

Simple or Weighted average for district, school, or student group.

### When Will Growth Scores Be Released?

Due to COVID-19, the growth scores released in 2021 were calculated based on historical data **and are not actionable**.

Growth scores will be calculated and released again in 2024, once three consecutive years of test scores are available (i.e., assessment scores from the 2021–22,   
2022–23, and 2023–24 school years).

### How Can I Find Out About My Student’s Learning?

Parents should access their child’s **Student Score Report** to get information about their current performance on the statewide assessments. Parents can also reach out to teachers to discuss classwork, grades, and other measures of student success.

**“What is a Growth Model?” Video**

[Insert notes here.]

**Appropriate Uses vs. Inappropriate Uses flyer**

[Insert notes here.]

### Individual Student Level Growth Scores

#### Appropriate Uses:

NONE!

#### Inappropriate Uses

Sharing individual growth scores with students, parents, or guardians.

### Aggregated Growth Scores

#### Appropriate Uses

* Increase understanding of aggregated growth scores
* Evaluate how aggregated growth scores compare to other 2019 California Assessment of Student Performance and Progress (CAASPP) measures
* Consider what information would be helpful to communicate with stakeholders once data is actionable

#### Inappropriate Uses

* Use aggregated growth scores to target schools or student groups for improvement
* Produce reports or communications for external audiences that contain 2021 growth data

#### Data Definitions and File Layout flyer

[Insert notes here.]

## Frequently Asked Questions

### What is the California Student Growth Model?

#### What is CA’s Approved Growth Model Methodology?

Student-Level Growth Model Uses​

* Residual Gain (RG) for growth at the student level​
* Empirical Best Linear Prediction (EBLP) hybrid approach to report aggregate growth data at the local educational agency (LEA), school, and student group levels

Growth scores are available only for grades four through eight​.

* Traditional (grades nine through twelve) high schools will not receive growth scores.

#### What Assessment Data Are Used to Calculate California’s Growth Scores?

Smarter Balanced Summative Assessments in English language arts/literacy (ELA) and mathematics from students in grades four through eight.

#### What Are the Two Different Growth Scores?

Individual Growth Scores

* Calculated for all students in grades four through eight with two years of assessment data

Aggregate Growth Scores

* Calculated for all schools, LEAs, and student groups with grades four through eight that have individual growth scores
* Needs two years of growth scores, which is three years of assessment data

#### How Are Individual Growth Scores Calculated?

Calculate **expected score** using regression analysis

* Student’s current year score in one subject
* Student’s prior year scores in both ELA and mathematics

Compare their **current year score** to the **expected score** calculated via regression analysis.

Individual growth score = **current year score** *minus* **expected score**

#### How are Aggregate Growth Scores Calculated?

EBLP Hybrid Approach

* Simple average
* One year of student growth
* Student groups with more than 500 students

EBLP Statistical Method

* Weighted average of two years of growth scores (three years of assessment results)
* All other LEA & school levels

#### Why Do You Weight the Scores When Using the EBLP?

Individual growth scores are imprecise. Assessments in two different years causes more statistical noise than a single year score.

EBLP weighting balances the need for score stability from year to year.

#### What Assessment Data are Used to Calculate California’s Growth Scores?

Smarter Balanced Summative Assessments in ELA and mathematics from students in grades four through eight.

### What Does California’s Aggregate Growth Look Like?

#### What Growth Scores Will the Aggregate File Contain?

The aggregate file will contain aggregate student growth scores by subject matter.

* School & LEA Level
  + All students
  + Race/ethnicity student groups
    - African American, American Indian, Asian, Filipino, Hispanic, Multiple Races, Pacific Islander, White
  + Program student groups
    - Foster, Homeless, Socioeconomically Disadvantaged, Students with Disabilities
  + English Learner (EL) student groups
    - EL (Academic Accountability designation includes current ELs *plus* reclassified fluent English proficient (RFEP) students from the past four years), English Learner Only (current ELs), English Only, Reclassified English Learners

#### What Else Will the File Contain?

* Number of students with growth scores at each level
* Decile rankings at each level
* Explanation of which statistical method from the California growth methodology was applied to that score
* EBLP, simple average, not enough data

#### Will The Results Be Visualized?

Historical release (2016–17, 2017–18, 2018–19 data)

* Excel file

Future releases (as early as 2024)

* May be summarized visually for the public upon release

#### What Is the Value of An Aggregate Score?

Growth scores are for informational purposes only.

A score of 100 indicates that, on average, the students are meeting their expected growth.

#### What Is a Decile Score?

A decile score is a way to break down the data.

The highest decile score is a decile rank of 10.

### Growth Score for Individual Students

#### How Do LEAs Access Individual Student Growth Scores?

CDE has a report available to download via the Test Operations Management System (TOMS). CAASPP Coordinators have access to this file for LEAs.

#### Can I Use the Individual Score File to Measure Student Progress?

Individual student growth scores should **NOT** be used for measuring individual student progress.

#### Will Individual Growth Reports Be Shared with Parents?

Parents will *not* receive individual growth score reports   
for their students.

Individual student growth scores should *not* be used for measuring individual student progress. Just like the assessment target reports from the Smarter Balanced assessments, the data are more robust and usable at the school, LEA, and student group levels. Individual student growth scores should not be used or shared with others such as teachers or families. Individual student growth scores are computed as one step of the methodology for creating aggregate growth scores at the school, LEA, and student group levels.

Instead, parents should access their child’s Student Score Report to get information on their current performance on the statewide assessments. Parents can also reach out to teachers to discuss classwork, grades, and other measures of student success.

### Student Growth Beyond 2021

#### When Will the Next Release of Growth Scores Take Place?

Growth scores will be released once three consecutive years of assessment scores are available. The soonest this will be available is 2024, which will incorporate assessment scores from the 2021–22, 2022–23, and 2023–24 school years.

#### Will The Aggregated Growth Score Ever Factor into a School's Academic Indicator on the California School Dashboard?

Action would need to be taken by the SBE to add growth scores to the Academic Indicator on the California School Dashboard, or to replace Distance from Standard (DFS) with any other measurement such as growth scores.

### Additional Questions

#### Do The Growth Scores Account for Student Demographics?

**No**. When growth scores are calculated, the groups of students are not separated by any demographic factors (e.g., all grade four students are grouped together in the calculation). This allows us to see differences in growth between demographic groups once all final scores are calculated.

#### How Are Growth Scores Different from Using Interim Assessments?

**Interim assessments** are typically used several times throughout the school year to inform teaching and learning.

The growth model score is based on **summative assessment** growth for an entire year and shows the expected assessment score compared to the actual student assessment score.

#### Are Growth Scores Computed for DASS Schools?

While most Dashboard Alternative School Status (DASS) schools are high schools and would not receive a growth score, if a DASS school has the appropriate grade range and at least 11 students in the reporting year, they will receive a growth score.

#### What If a Student Is Attending a Different LEA In the Year Prior?

Growth scores for LEAs are calculated on an annual basis using a student’s current year score at the LEA where they tested and calculating an expected score and growth score from their previous year test information no matter where they tested.

## Question and Answer

[Insert notes here.]

## Closing Thoughts

CDE Growth Model web page: <https://www.cde.ca.gov/ta/ac/acctgrowthmod.asp>

* Growth Model Toolkit will be released on September 20, 2021
* Aggregate Growth files will be released on September 22, 2021

For any additional questions and all matters related to the Student Growth Model, send an email to [cagrowthmodel@cde.ca.gov](mailto:cagrowthmodel@cde.ca.gov).