Analyzing Performance Over Time (Longitudinal Analysis)

About Longitudinal Analysis
Longitudinal Analysis is a flexible, interactive report that allows you to select any significant group of students and analyze the change in their performance over a series of high-stakes assessments. The Longitudinal Tool offers three types of analysis:

- **Cross sectional** compares the scores of students in the same grade, but in different years. How do this year’s third graders compare to last year’s?
- **Cohort unmatched** compares the scores of students in successive years. How do this year’s fourth graders compare to last year’s third graders? The group is unmatched because students may have transferred in or out of the district.
- **Cohort matched** compares the scores of the same group of students in successive years. How do scores for this year’s fourth graders compare to the scores of the same students when they were third graders last year.

Defining a Longitudinal Analysis report
When you use Longitudinal Analysis, you can quickly generate a report based on just the basic report options and then use the Options Dashboard to refine the selection of students later.

To define a Longitudinal Analysis report:
1. Click the State Analysis tab. Click the Longitudinal Analysis link or icon.
2. In the Select a Test for Longitudinal Analysis page, click Continue beside the exam you want to use.
3. Use these settings to define the initial report.
   - Select the school and grade you want to display.
   - Select the range of exam data you want to display.
   - Use the student demographic option links on the lower half of the page to select other students.
4. Click Continue.
5. Choose the specific content area you want to analyze. Click Continue.
6. Select the analysis type you want to use (cross sectional, cohort unmatched, or cohort matched). Click Continue.

After a brief pause, the Comparison Tool page appears.
Working with Longitudinal Analysis

The longitudinal analysis page is composed of three sections:

- The Options Dashboard at the top of the page shows you the current set of options.
- The Longitudinal Analysis Options in the middle of the page shows the current analysis settings (the range of exams, content areas, and analysis type).
- The longitudinal analysis section in the lower half of the page shows the current comparison and score type settings, as well as the scores and percent of change.

You can use the links on this page to:

- Change the group of students.
- Change the analysis options or the display of data.

Changing the group of students

The Options Dashboard at the top of the Longitudinal Analysis page displays the same options that were available when you first defined the longitudinal analysis. Once you’ve generated the report, you can change these options to include a subset of the initial group of students. For example, you might want to look at just elementary school students to see if students in a class size reduction program showed improved performance.

To change the group of students:

1. Click a link in the Options Dashboard.
2. Click check boxes in the options page for the students you want to include, and click **Continue**. Or, click the **Clear Page** link and click **Continue** to select all options on a page.

   The Options Dashboard displays the new selections, and the longitudinal report displays the corresponding data.

Changing analysis options or data display

The longitudinal report shows you performance data year-over-year to help you monitor and identify performance trends. You can easily change both the longitudinal analysis options and the data that is displayed.

- In the Longitudinal Analysis Options, you can change the range of exams, the content areas, and the analysis type.
- In the data display, you can change the comparison basis and the score type. You can also drill down to the supporting data for any group.

To change analysis options or data display:

1. Click a link to change any of the Longitudinal Analysis Options.
2. To change the basis for comparison, select in the Compare By list. Click **Go**.
3. To change the type of scores displayed, choose a different type of score from the Score Type menu. Click **Go**.
4. To drill down to the supporting information for a group, click the link for that group.