



Growth Report
User's Guide

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Support with your Growth Report

To access the Growth Reports, we create multiple district- and school-level user IDs and passwords to provide access to your growth data between the two academic terms you select. The purchase of a Growth Report also includes one hour of virtual consulting provided by Professional Development Sr. Consultants. We offer this support to help you understand how to use the Growth Report, and we will guide you through the exploration of your actual data to help build your confidence and self-sufficiency with your data.

Once the Growth Report is delivered to you, Professional Development will be contacting you to schedule the virtual consulting.

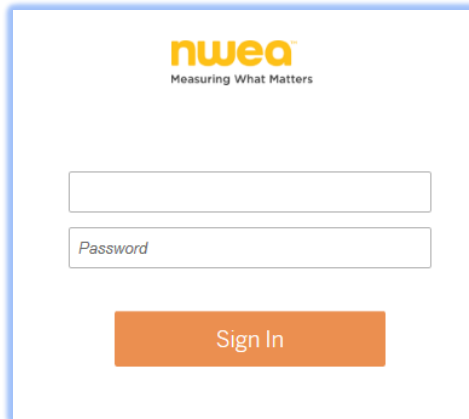
For further problems or questions, contact Partner Support by filling out the form found here: <https://www.nwea.org/contact-us/support/> or calling 877-469-3287

Getting Started

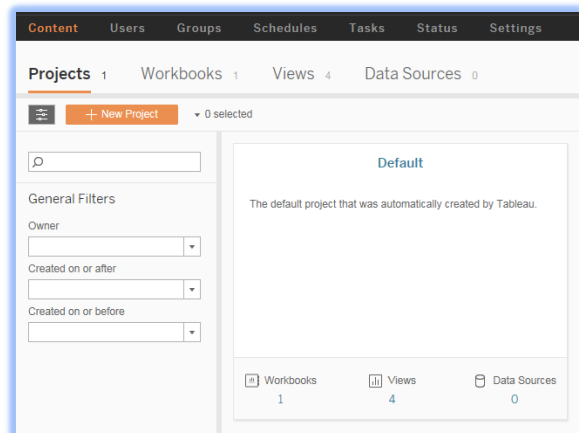
NWEA™ uses a business intelligence platform called Tableau to display custom reports. The reports include a series of worksheets (or visualizations) that display data in an interactive and user-friendly platform. Tableau allows for user interaction on any device with a browser and internet access. This platform allows access to special reports through our special reports server.

Logging into the Special Reports Server

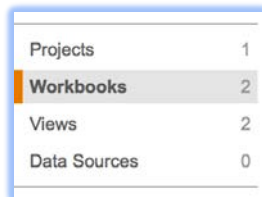
- 1) To log into our special reports server using your unique username and password, access the website: <https://specialreports.nwea.org>



- 2) Once logged in, you will arrive at a site with projects listed



- 3) On the left or top, select “Workbooks” to show reports that are available for view.

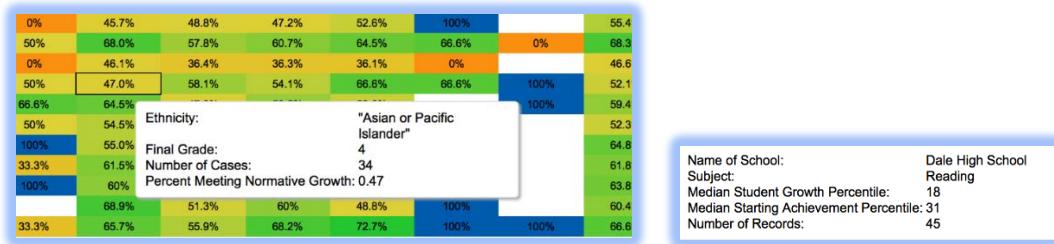


Projects	1
Workbooks	2
Views	2
Data Sources	0

- 4) Reports will be generated on the screen. Select a report.
- 5) The visualizations will display within the browser. The navigation bar at the top of the page displays the different visualizations that are available to view.



The visualizations allow for user customization and interaction. The visualizations can be customized using specific filters (e.g., school, subject, and grade) that will generate data visuals based on the criteria selected. All of the visuals are interactive; hovering and clicking on a field will display additional information.



Additionally, Tableau provides the opportunity to save customized views for future use. To do this, select on the "Remember my changes" dropdown menu on the top right. This will allow you to see previous saved views as well as add an additional view. Checking the box "Make it public" will allow all users with access to the report to use that save view.



Accessing the underlying data file

The underlying data within the Growth Report can be directly downloaded for integration into a school/district data system using the following steps:

- 1) Select the “Export Data” tab on the far right end of the navigation bar.



- 2) Mouse-over or select the “Abc” shown next to the district name, which elicits a pop-up text box with the district name.
- 3) To the right of “Exclude” is a small icon that resembles a series of columns. Hover over that icon to see a “View Data” message. Select “View Data”.
- 4) A window should appear that shows two tabs entitled “Summary” and “Underlying”. Select the “Underlying” tab and click the box that says, “Show all columns”.
- 5) Select the hyperlink with the text, “Download all rows as a text file”
- 6) A csv file entitled, “Sheet_25_data” will begin to download. That data can be imported into excel, or any desired data/statistical program or database.

Growth Report

What are Growth Reports?

The NWEA™ web-based Growth Reports, are reported to school districts in a series of visualizations that evaluate the academic growth of your students relative to NWEA's nationally representative growth norms, as demonstrated by student performance on MAP Growth®. Growth Reports show student growth and student growth percentiles relative to other students across the nation with similar initial achievement who received similar amounts of instruction.

A web-based Growth Report includes a data dashboard and a series of data visualizations that permit the user to evaluate growth patterns across different groups of students. The web-based Growth Report includes individual students' observed growth scores between two specified testing seasons and information about normative growth, including each student's observed growth percentile. The data visualizations display aggregations of student-level growth information across schools, grades, achievement bands, and other student groupings.

Growth Reports evaluate observed student growth against NWEA norms. These norms consider a student's grade, subject, initial score, and the number of instructional weeks between testing to establish a growth distribution against which a student's observed progress can be evaluated. The mean, or average, of this growth distribution is commonly referred to as "typical" or "expected" growth. The Growth Report includes a series of interactive visualizations or storyboards displaying each student's observed growth and a series of evaluative growth metrics (discussed below).

Growth Report Metrics

Student growth is evaluated using a number of growth metrics, each of which provides different types of information for understanding different aspects of student growth and performance. The metrics follow:

Average Growth – In this context, growth is defined as the observed change in RIT score between the first and second MAP Growth test administrations. The RIT scale is an equal interval scale, meaning that a change in RIT score from, for example, 170 to 175 implies an increase in achievement that is equal in magnitude to an increase from 250 to 255. In Growth Reports, average growth is computed across all students within the designated parameters (e.g., male first graders).

Growth Index – The growth index is the difference between a student’s observed growth and typical growth. Values greater than zero imply that the student exceeded typical growth. Negative values imply that the student showed less than typical growth. In the Growth Reports, an average growth index is computed across all students within the specific group. The growth index retains the interval RIT scale, so that a student with a growth index score of 1.5 exceeded typical growth by 1.5 RIT points.

Observed Raw Growth – The observed raw growth is the change in a student’s achievement between times 1 and 2 as measured by the MAP Growth assessment. Values greater than zero indicate that a student’s achievement increased over the duration between the two test events. While the observed raw growth conveys the extent to which a student’s achievement changed, it provides no normative context by which to understand how that change compares to the growth of other similar students.

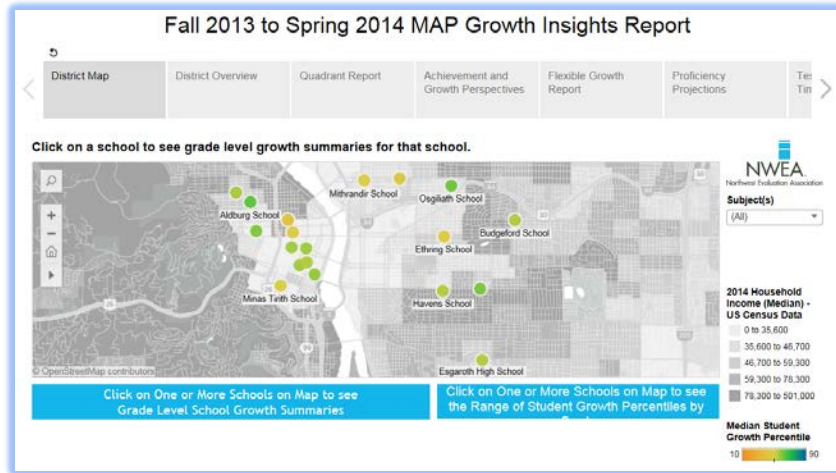
Percent Meeting Normative Growth – The percent meeting normative growth metric simply reports the proportion of the group whose observed growth met or exceeded “typical” or “expected” values, as defined by NWEA norms.

Aggregate Conditional Growth Index – The conditional growth index (CGI) expresses a student’s observed growth as a standardized z-score, in which observed growth is compared to typical growth. A student with a CGI score of +1 showed growth that exceeded typical growth by about 1 standard deviation in magnitude, while a student with a score of -1 showed growth that was about 1 standard deviation less than typical growth. In the Growth Reports, aggregate CGI scores are computed across all students within the user-designated grouping as weighted averages. The CGI is more appropriate than the Growth Index or observed raw growth for comparing growth across different grades or groups of students because the CGI corrects for distributional differences in typical, or “normative” growth that the Growth Index or raw growth do not.

Median Student Growth Percentile – The growth percentile provides an indicator of where a student’s observed growth lies relative to the distribution of normal growth for that student, given her/his starting achievement level, grade, and the number of weeks of instruction received. A 20th percentile growth metric for a student indicates that about 80% of comparable students within the normative population would have produced greater growth. A 99th percentile growth metric means the student’s growth exceeds the growth of 99% of similar students. At the group level, the median student growth percentile is reported.

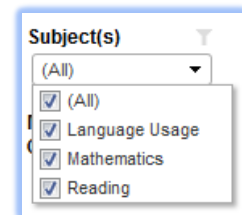
District Map

This worksheet shows a map of district schools and provides additional information of grade-level growth summaries and student growth percentiles to compare relative performance and examine grade-level details within a selected school.



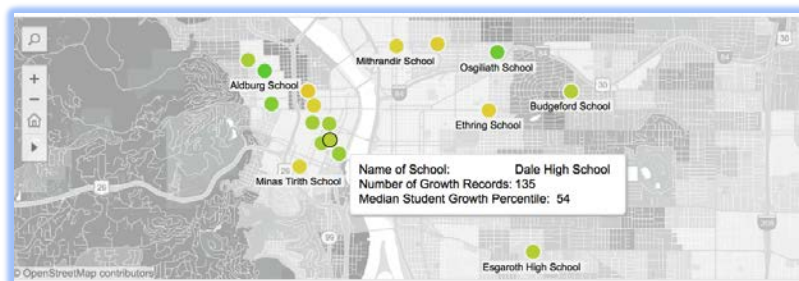
Page Features – The page features an interactive map to display school location, a grayscale color range to represent median household income levels by area, and a color range to represent median student growth percentiles. The color keys are displayed on the right side of the visualization.

Filters – The page contains a subject filter to generate visualizations by subject (e.g., reading, mathematics, science). This filter is displayed on the right side of the visualization.



Visualizations – The page contains three visualizations that show school-level growth summaries.

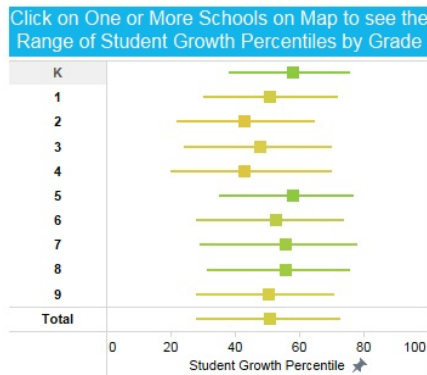
The map displays school location, median student growth percentile, and median household income. A school must be selected to display grade-level school growth summaries and grade-level inner quartile ranges of the student growth percentile.



Grade-Level School Growth Summaries displays selected school data categorized by grade level showing number of records, average growth, observed growth index, percent meeting normative growth, aggregate conditional growth index, and median student growth percentiles. Filters can be used to examine or focus on specific subjects.

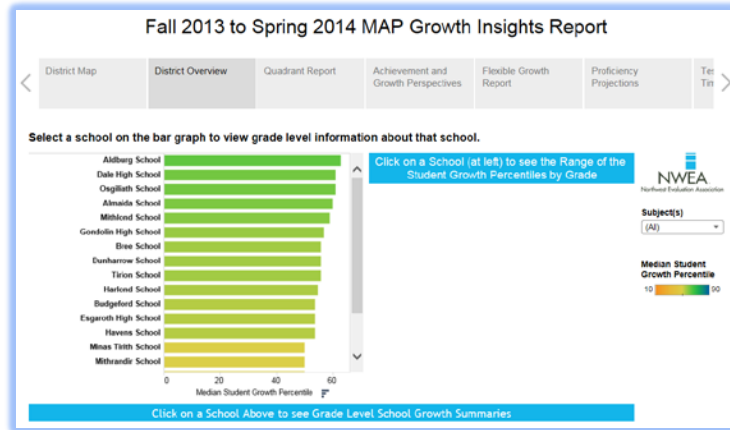
Grade Level School Growth Summaries						
Initial Enrolled Grade	Number of Records	Average Growth	Observed Growth Index	Percent Meeting Normative Growth	Aggregate Conditional Growth Index	Median Student Growth Percentile
K	132	14.9	-1.3	40.9%	-0.2	41
1	132	14.3	-2.5	35.6%	-0.3	39
2	170	14.9	1.7	55.3%	0.2	58
3	252	8.2	-2.1	41.7%	-0.3	36
4	262	7.9	0.3	54.2%	0.1	55
5	282	9.5	3.1	65.2%	0.5	67
Total	1,230	10.7	0.1	50.9%	0.0	50

Range of Student Growth Percentiles by Grade displays the variability of the student growth percentile metric within each grade level grouping. Grades with greater variability show longer lines. Hovering over or selecting a quartile band will display additional information about grade level (bottom, median, and upper quartiles). Colors represent the median student growth percentiles, and filters can be used to examine or focus on specific subjects.



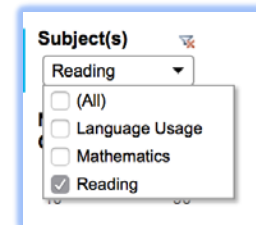
District Overview

This worksheet shows the rank order of schools by median student growth percentile to quickly compare relative performance and examine grade-level details within multiple schools.



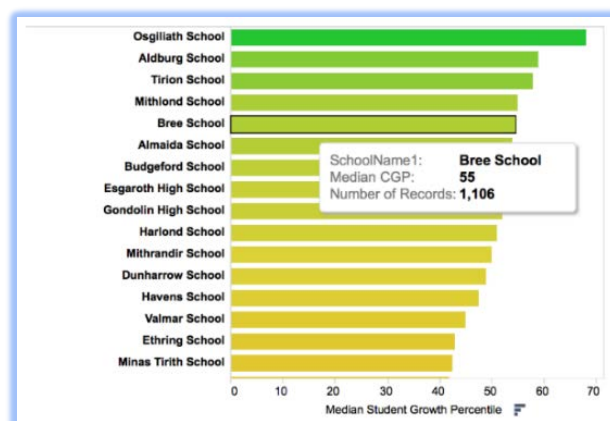
Page Features – The page features a color range to represent median student growth percentiles. The color keys are displayed on the right side of the visualization.

Filters – The page contains a subject filter to modify visualizations by subject. This filter is displayed on the right side of the visualization.

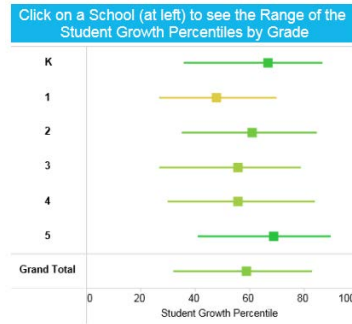


Visualizations – The page contains three visualizations that show school level growth summaries.

The bar graph displays school-level median student growth percentiles by school. A school must be selected to display grade-level inner quartile ranges of the student growth percentile.



Range of Student Growth Percentiles by Grade displays school student growth percentile data categorized by grade level. Hovering over or selecting a quartile band will display additional information about grade level (bottom, median, and upper quartiles). Colors represent the median student growth percentiles, and filters can be used to examine or focus on subject(s).

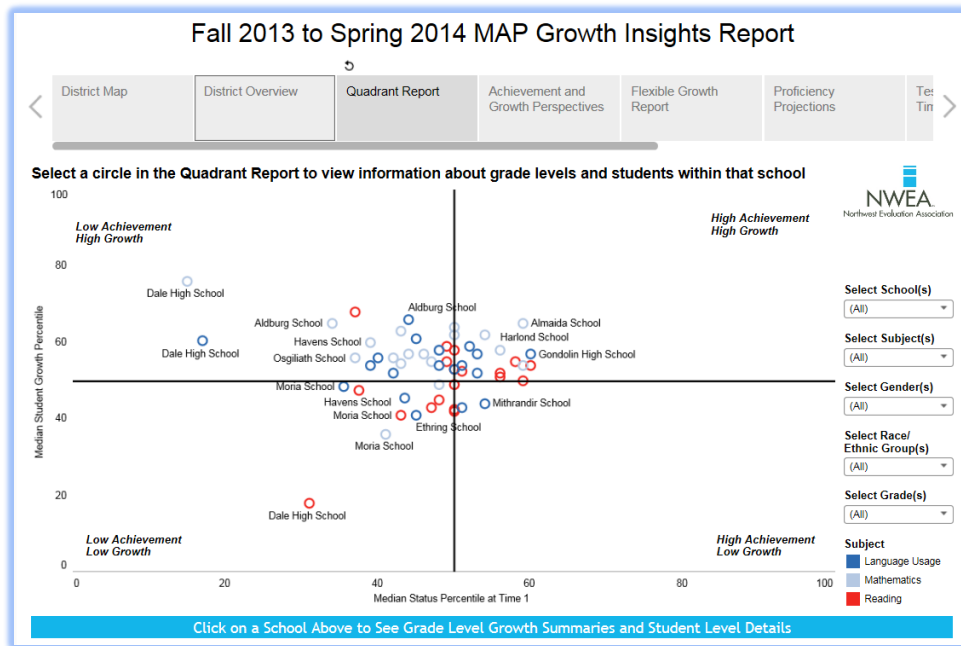


Grade-Level School Growth Summaries displays selected school data categorized by grade level showing number of records, average growth, observed growth index, percent meeting normative growth, aggregate conditional growth index, and median student growth percentiles. Filters can be used to examine or focus on specific subjects.

Grade Level School Growth Summaries						
Initial Enrolled Grade	Number of Records	Average Growth	Observed Growth Index	Percent Meeting Normative Growth	Aggregate Conditional Growth Index	Median Student Growth Percentile
6	351	3.0	-1.1	45.9%	-0.2	46
7	379	5.7	2.2	64.9%	0.3	65
8	376	3.3	0.2	50.3%	0.0	50
Grand Total	1,106	4.0	0.5	53.9%	0.1	55

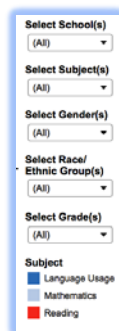
Quadrant Report

This worksheet shows a quadrant displaying school achievement and growth. The additional visualizations also provide information on grade- and student-level growth summaries to compare relative performance and examine grade- and student-level details within selected schools.



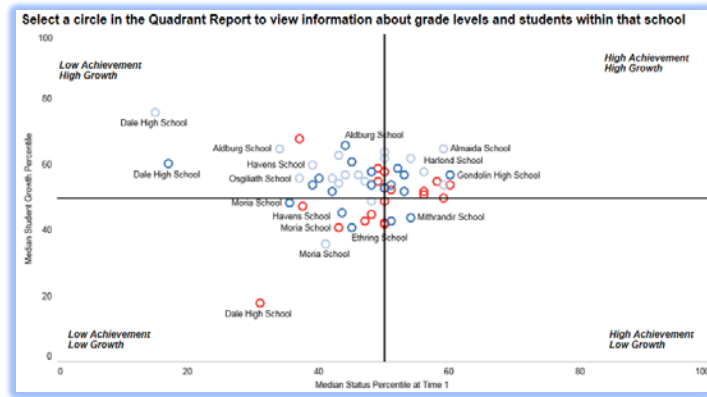
Page Features – The page features colors to represent each subject. The color codes are displayed on the right side of the visualization.

Filters – The page contains filters to modify visualizations by school(s), subject(s), gender(s), race/ethnicity group(s), and grade(s). The filters are displayed on the right side of the visualization.



Visualizations – The page contains visualizations summarizing school- and student-level growth.

The Quadrant Report displays starting school-level median student achievement percentile as it relates to median student growth percentile. School placement within the quadrants represent high/low achievement and high/low growth. Hovering over or selecting a school will display school name, subject, specific percentile information, and number of records. Colors are used to identify subject(s).



Grade-Level Growth displays school data categorized by grade level showing final enrolled grade level (at test time 2), number of records, starting RIT score, final RIT score, average growth, growth index, percentage meeting normative growth, aggregate conditional growth index (CGI), and median student growth percentile. Filters can be used to examine or focus on specific subjects, genders, race/ethnic groups, and grades.

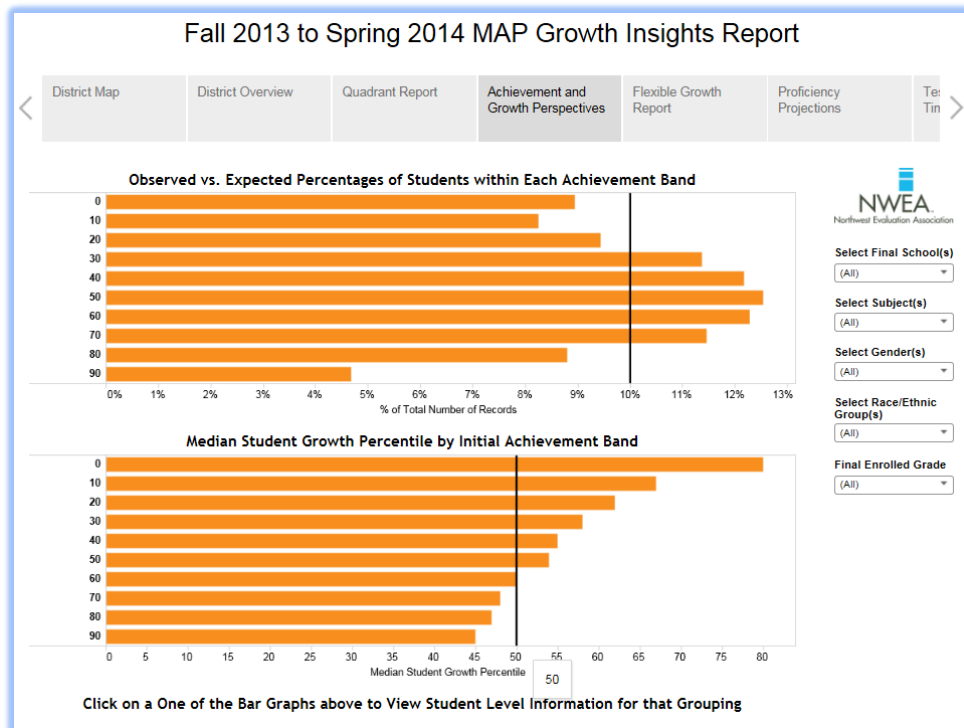
Grade Level Growth								
Final Enrolled Grade	Number of Records	Starting RIT	Final RIT	Average Growth	Percent Meeting Normative Growth	Observed Growth Index	Aggregate Conditional Growth Index	Median Student Growth Percentile
1	78	157	179	22.5	61.54%	3.40	0.44	66

Student-Level Growth displays selected student-level data sorted by student name showing starting RIT score, final RIT score, observed raw growth, growth index, conditional growth index (CGI), and student growth percentile. Filters can be used to focus on specific subjects, genders, race/ethnic groups, and grades. Users with District IDs will have access to all student level information. Users with School IDs can view student data within their schools.

Student Level Growth							
Student Name	Final Enrolled Grade	Starting RIT	Final RIT	Observed Raw Growth	Observed Growth Index	Conditional Growth Index	Student Growth Percentile
901	K	136	160	24.0	6.27	0.7	76
1396	2	189	214	25.0	13.11	1.9	97

Achievement and Growth Perspectives

This worksheet shows the percentage of students whose initial achievement fell within each of the ten achievement deciles and whether students within each achievement decile are producing above- or below-average growth. The additional visualization also provides student-level summaries within a selected achievement band.



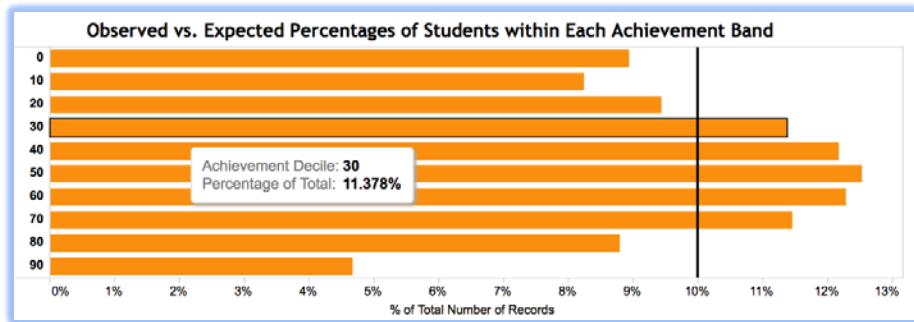
Filters – The page contains filters to modify visualizations by school(s), subject(s), gender(s), race/ethnicity group(s), and grade(s). The filters are displayed on the right side of the visualization.

A close-up view of the filter panel on the right side of the report. It contains five dropdown menus, each with '(All)' selected:

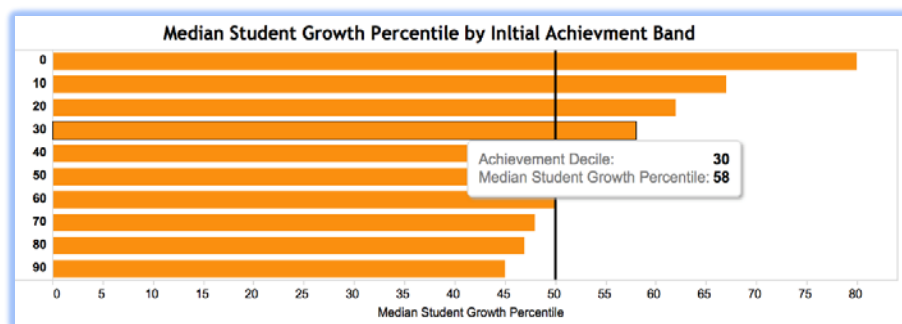
- Select Final School(s)
- Select Subject(s)
- Select Gender(s)
- Select Race/Ethnic Group(s)
- Final Enrolled Grade

Visualizations – The page contains three visualizations that compare growth and achievement within the district to national norms.

Observed vs. Expected Percentages of Students within Each Achievement Band provides a visual snapshot of how district achievement compares to the national distribution of achievements. If the school/district resembles the country, each decile (or 10 percentile grouping) would contain about 10% of the school/district student population (as indicated by the black line.) A decile band containing substantially more or less than 10% of the district population indicates a departure the typical national distribution of student achievement within the group of students selected. Hovering over or selecting a bar will display the decile and percentage of the total school/district student population whose achievement fell within that band. Selecting a bar will also generate a third student-level information visualization. Filters can be used to examine or focus on specific schools, subjects, genders, race/ethnic groups, and grades.



Median Student Growth Percentile by Initial Achievement Band displays the median student growth within each of the ten achievement deciles and allows for examination of typical growth between achievement bands. The black vertical band displays typical, or 50th percentile-growth. Hovering over or selecting a bar will display the percentile band and median SGP. Selecting a bar will also generate a third student-level visualization. Filters can be used to examine or focus on specific schools, subjects, genders, race/ethnic groups, and grades.

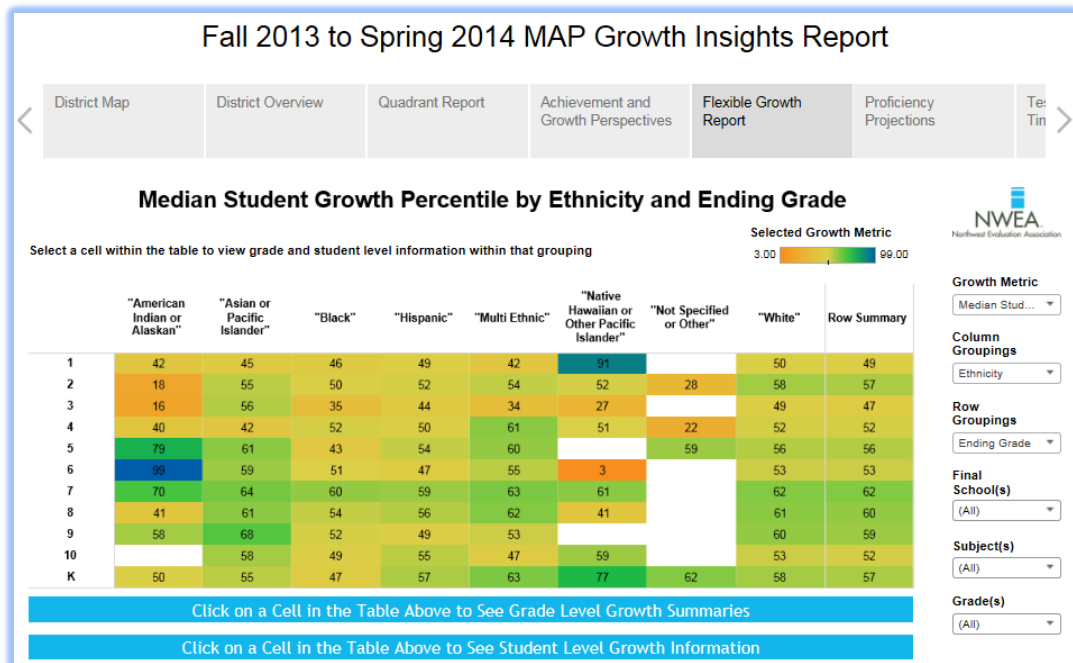


Student-Level Information displays student-level information, as selected by one of the achievement bands in the visualization above. The information shows student name, final enrolled grade, starting RIT score, final RIT score, observed raw growth, observed growth index, conditional growth index, and student growth percentile. Filters applied to the above visualizations will be automatically applied to the student-level information visualization.

Student Level Information							
Student Name	Final Enrolled Grade	Starting RIT	Final RIT	Observed Raw Growth	Observed Growth Index	Conditional Growth Index	Student Growth Percentile
1	8	224	229	9.4	2.19	0.3	62
6	8	223	229	5.8	3.40	0.6	71
7	7	222	225	3.6	0.41	0.1	52
15	7	225	230	10.4	1.15	0.2	55
16	7	221	221	0.2	-2.48	-0.4	33
18	8	226	224	-1.9	-4.63	-0.7	25
24	8	230	239	18.3	5.70	0.9	80
28	8	235	243	7.6	3.00	0.4	67

Flexible Growth Report

This worksheet allows the user to develop most of the growth related comparisons for which there is interest. Additional visualizations provides information on grade- and student-level growth summaries to compare relative performance and examine grade- and student-level details within selected schools.



Page Features – The page features a color range to represent various growth metrics. The range of the scale will change, depending on the selected metric and grouping. The color keys are displayed on the top of the visualization.

Filters – The page contains filters to modify visualizations. The filters are displayed on the right side of the visualization. The top filter specifies the growth metric to display (observed raw growth, growth index, aggregate CGI, median student growth percentile, or percent meeting normative growth). The second filter selects the data to display in the column grouping (none, district, ethnicity, gender, achievement band, achievement quartile) while the third filter selects the data to display in the row grouping (none, district, initial grade, final grade, achievement band, achievement quartile). Additional filters can be applied to filter the data within the table visualization and include school(s), subject(s), and grade(s).

Growth Metric
Percent Meeti...

Column Groupings
Ethnicity

Row Groupings
Final Grade

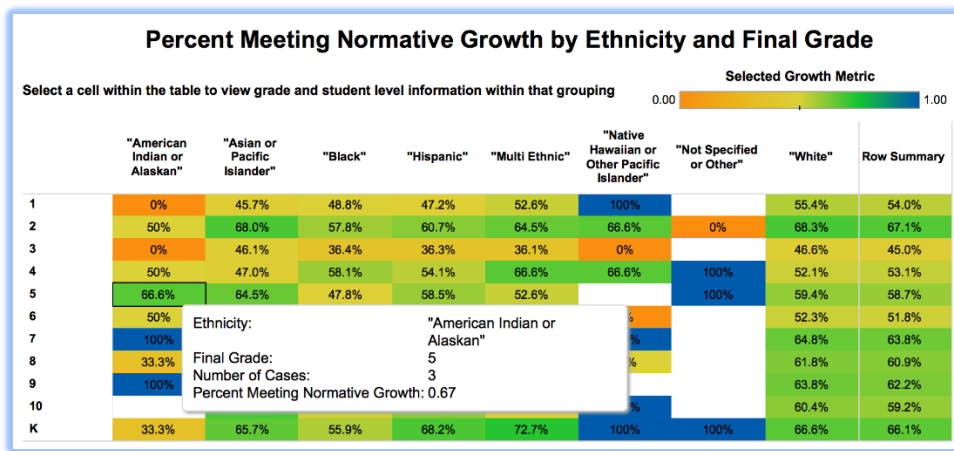
Final School(s)
(All)

Subject(s)
Mathematics

Grade(s)
(All)

Visualizations – The page contains three visualizations that show various growth metrics. Selecting a row heading, column heading, or cell within the top visualization will generate additional grade- and student-level tables.

The growth table displays data using the specified growth metrics, and selected columns and rows. Hovering over or selecting a row heading, column heading, or cell within this visualization will display the growth metric data; hovering over or selecting a cell will display the row and column grouping information, and the value of the selected growth metric. Selecting a row heading, column heading, or cell will also generate the two additional student-level information visualizations. Filters can be used to examine or focus on specific schools, subjects, and grades.



Grade-Level Information displays data categorized by grade level showing final enrolled grade, number of records, starting RIT score, final RIT score, average growth, growth index, percentage meeting normative growth, aggregate conditional growth index (CGI), and median student growth percentile. Filters can be used to examine or focus on specific schools, subjects, and grades.

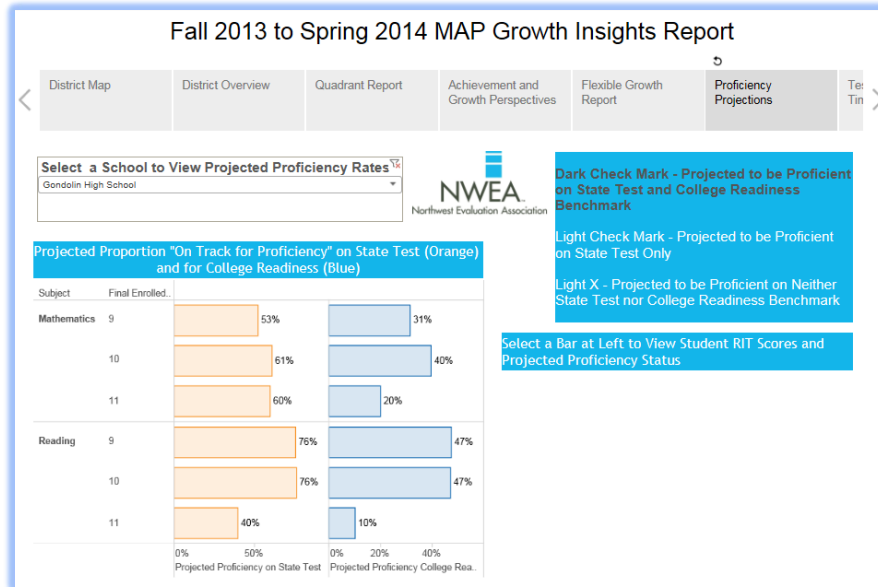
Grade Level Information								
Final Enrolled Grade	Number of Records	Starting RIT	Final RIT	Average Growth	Percent Meeting Normative Growth	Observed Growth Index	Aggregate Conditional Growth Index	Median Student Growth Percentile
5	3	197	210	12.7	66.67%	4.48	0.71	96

Student-Level Information displays data categorized by student showing final enrolled grade, starting RIT score, final RIT score, observed raw growth, growth index, conditional growth index (CGI), and student growth percentile. Filters can be used to examine or focus on specific schools, subjects, and grades.

Student Level Information							
Student Name	Final Enrolled Grade	Starting RIT	Final RIT	Observed Raw Growth	Observed Growth Index	Conditional Growth Index	Student Growth Percentile
5189	5	218	237	19.0	10.89	1.9	96
5467	5	199	195	-4.1	-12.27	-2.1	1
8684	5	176	199	23.2	14.82	2.4	99

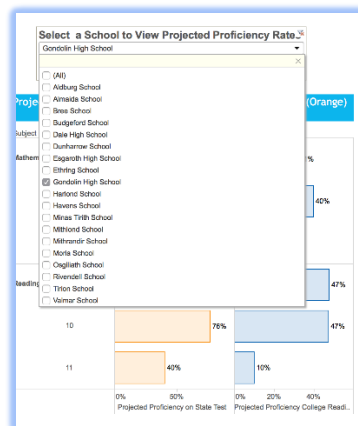
Proficiency Projections

This worksheet shows the grade-level percentage of students who are on track for proficiency on the state test and/or College Readiness Benchmark. The additional visualization provides student-level projected proficiency. Refer to NWEA linking study documents for more information on how these estimates are computed.



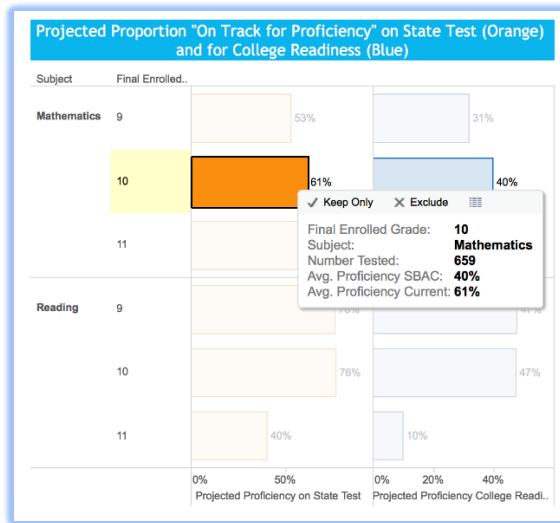
Page Features – The page features coloring coding to represent selected proficiency projections; orange projects “on track for proficiency” on the state test while blue projects College Readiness.

Filters – The page contains filters to modify visualizations by school(s). The filters are displayed at the top of the visualization page.



Visualizations – The page contains two visualizations that show projected proportion “on track for proficiency” on state test and for College Readiness Benchmark at the grade- and student-level.

Projected Proficiency displays grade-level percentages, by subject, outlining “on track proficiency” on the state test (in orange) and College Readiness Benchmark (in blue). Hovering over or selecting a cell will display the final enrolled grade, subject, number of students tested, average percentage on Smarter Balanced Assessment, and average current proficiency.

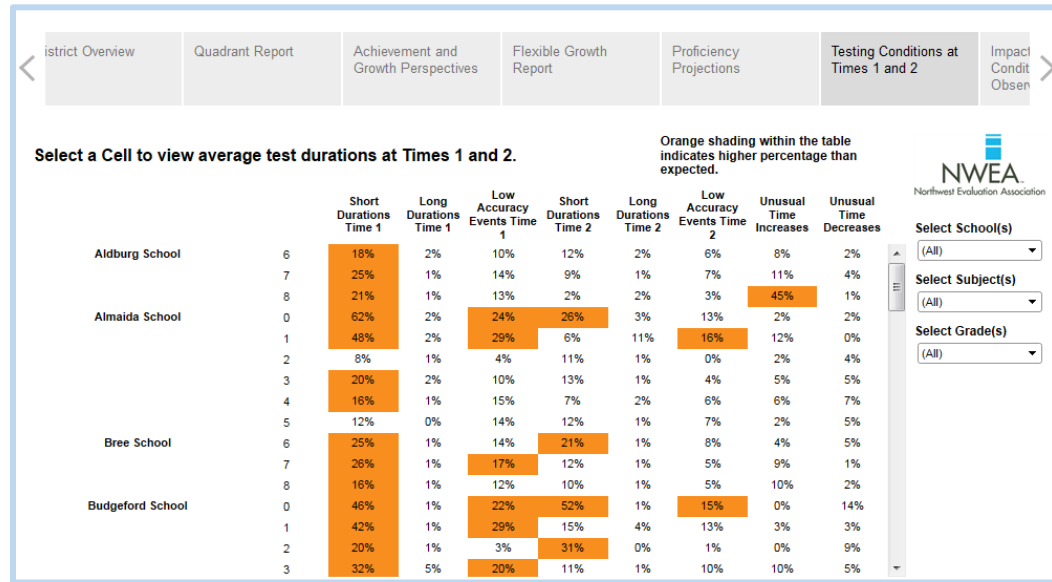


Predictive Analytics displays projected proficiency status at the student-level. A bar from the projected proficiency visualization must be selected in order to generate the student-level table. The visualization includes the student name, subject selected, and final RIT score. A dark check mark indicates that the student is projected to be proficient on both the state test and College Readiness Benchmark. A gray checkmark indicates that the student is projected to be proficient on the state test only. A gray X indicates that the student is not projected to reach proficiency on the state test or College Readiness Benchmark.

Select a Bar at Left to View Student RIT Scores and Projected Proficiency Status		
Student Name	Mathematics	
4702	✓	260
4537	✓	240
4023	✓	239
4630	×	227
4052	×	220

Testing Conditions at Times 1 and 2

This worksheet shows the percentage of students who have unusual test events. The additional visualization also provides a student-level summary of test duration at times 1 and 2.



Unusual Test events

Short Durations indicates a student completed a test event (time 1 or time 2) within the bottom 10% of durations produced by a reference population.

Long Durations indicates a student completed a test event (time 1 or time 2) within the top 10% of durations produced by a reference population.

Low Accuracy Events indicates that student accuracy rates at a test event (time 1 or time 2) were within the bottom 10% of rates produced by a reference population.

Unusual Time Increases indicates that the increase in test duration between times 1 and 2 were within the top 10% of time increases produced by a reference population.

Unusual Time Decreases indicates that the decrease in test duration between times 1 and 2 were within the top 10% of time decreases produced by a reference population.

Page Features – The page features orange coloring to represent higher percentages than expected. The threshold values are based on the top or bottom 10% of values produced by a reference population used to understand these phenomena. The report flags those values that are 15% or higher, as a means to identify situations or cases that might require closer scrutiny. A flag does not necessarily indicate that the growth scores are invalid, but extremely high percentages of these conditions could indicate inconsistency in the testing environments over time. This is a great way to keep track of the overall testing program as a set of key performance indicators (KPIs).

Filters – The page contains filters to modify visualizations by school(s), subject(s), and grade(s). The filters are displayed on the right side of the visualization.

Select School(s)

Select Subject(s)

Select Grade(s)

Visualizations – The page contains a visualization that shows percentage of test events along with an additional visualization that shows average test duration.

Test Events displays data about testing conditions at times 1 and 2. Hovering over or selecting a cell will display the measure name and percentage value. Selecting a row heading, column heading, or cell within this visualization will display an additional school-level visualization. Filters can be used to examine or focus on specific schools, subjects, and grades.

Select a Cell to view average test durations at Times 1 and 2. Orange shading within the table indicates higher percentage than expected.

		Short Durations Time 1	Long Durations Time 1	Low Accuracy Events Time 1	Short Durations Time 2	Long Durations Time 2	Low Accuracy Events Time 2	Unusual Time Increases	Unusual Time Decreases
Aldburg School	6	18%	2%	10%	12%	2%	8%	8%	2%
	7	22%	1%	14%	2%	1%	7%	11%	4%
	8	21%	1%	13%	2%	2%	2%	43%	1%
Almaida School	0	4%						0%	2%
	1	4%						12%	0%
	2	6%						2%	4%
	3	26%	2%	10%	12%	1%	4%	3%	8%
	4	18%	1%	16%	7%	2%	6%	6%	7%
Bree School	5	12%	0%	14%	12%	1%	7%	2%	5%
	6	26%	1%	14%	21%	1%	8%	4%	5%
	7	28%	1%	17%	12%	1%	3%	3%	1%
	8	18%	1%	12%	10%	1%	3%	10%	2%
Budgetford School	0	4%	1%	2%	5%	1%	16%	0%	14%
	1	42%	1%	13%	12%	4%	12%	2%	2%
	2	21%	1%	3%	21%	0%	1%	0%	8%
	3	12%	6%	20%	11%	1%	10%	10%	8%

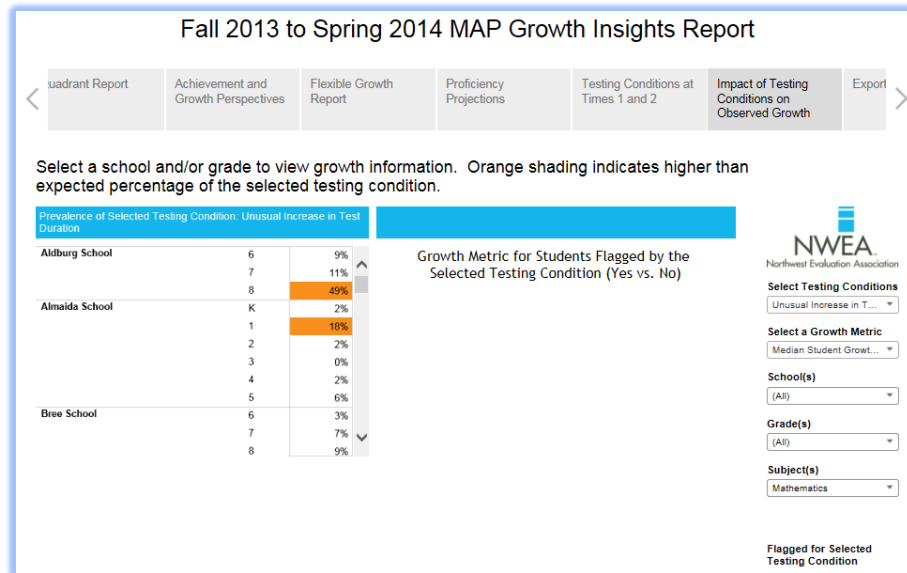
Average Test Duration displays school-level data showing average test duration for times 1 and 2. Filters can be used to examine or focus on specific schools, subjects, and grades.

Click on a Cell in the Table Above to View
Average Test Durations at Times 1 and 2 (in minutes)

		Test 1	Test 2
Aldburg School	8	35	51

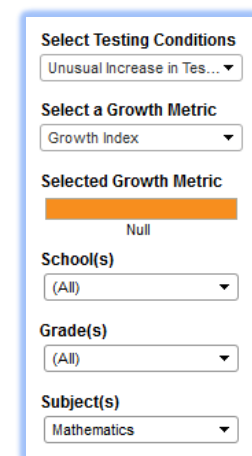
Impact of Testing Conditions on Observed Growth

This worksheet shows an unusual test event at time 1 or 2 by school and grade. The additional visualizations show the impact of the unusual test event as well as a student-level summary of duration and growth.



Page Features – The page features orange coloring to represent higher percentages than expected. The second visualization uses colors to represent the difference in the selected growth metric for those test events that are beyond the cut points and therefore outside expectations. The color codes are displayed on the right side of the visualization.

Filters – The page contains filters to modify visualizations. The filters are displayed on the right side of the visualization. The top filter displays data about a specific testing condition (unusual increase in test duration, unusual decrease in test duration, short duration time 1, short duration time 2, low accuracy time 1, low accuracy time 2, long duration time 1, or long duration time 2). The second filter displays the data using a specified growth metric (observed raw growth, growth index, aggregate CGI, median student growth percentile, or percent meeting normative growth). Additional filters can be applied to filter the data within the table visualization and include school(s), subject(s), and grade(s).



Visualizations – The page contains three visualizations that show several impacts of testing conditions on various growth metrics. Selecting a row heading, column heading, or cell in the first visualization will display grade- and student-level data. The titles at the top of the visualizations will change depending on the selected testing condition and growth metric.

Prevalence of Selected Testing Condition displays school level data, grouped by grade, showing the percentage of the selected testing condition by grade. The visualization will change depending on the testing condition; the title of the visualization will change depending on the selected testing condition. Filters can be used to examine or focus on specific schools, subjects, and grades. Selecting a school or grade within a school will display the additional school- and student-specific visualizations.

Prevalence of Selected Testing Condition: Unusual Increase in Test Duration		
Aldburg School	6	9%
	7	11%
	8	49%
Almada School	1	18%
	2	2%
	3	0%
	4	2%
	5	6%
	K	2%
Bree School	6	3%
	7	7%
	8	9%
Budgeford School	1	2%
	2	0%
	3	8%

Impact of Selected Testing Conditions displays grade-level data for the school or grade selected in the previous visualization showing the specified testing conditions and growth metrics. The table visualization shows of the impact of the selected testing conditions by showing the aggregated selected metric for test events within the cut points (no is represented by blue), beyond the cut points (yes is represented by orange), and for all students regardless of the cut points (black). Hovering over or selecting a cell will display the number of students and selected growth metric value.

Impact of Unusual Increase in Test Duration on Median Student Growth Percentile			
Growth Metric for Students Flagged by the Selected Testing Condition (Yes vs. No)			
	No	Yes	Overall
6	49	80	51
7	61	93	65
8	62	88	77

Student-Level Information displays student-level data as selected by the first visualization (final enrolled grade, starting RIT score, term 1 duration, final RIT score, term 2 duration, and selected growth metric). Filters can be used to focus on specific subjects and grades.

Student Name	Final Enrolled Grade	Starting RIT	Term 1 Dur	Final RIT	Term 2 Dur	Selected Growth Metric
826	5	195	37.0	199	52.0	-4.0
1134	4	199	39.0	211	28.0	3.4
1135	4	206	36.0	226	37.0	10.7
1136	4	215	21.0	218	45.0	-6.4
1137	3	195	50.0	210	57.0	3.3
1138	1	172	20.0	193	21.0	6.7
1139	3	200	60.0	212	52.0	0.5
1140	5	230	67.0	240	66.0	2.0

User Scenarios

The user scenarios below offer a few options for looking at data within the Growth Report. Each scenario offers multiple possibilities. The reports were built with flexibility to allow for exploration of various scenarios. The examples below are a few ways to use the data to answer school and district questions.

User Scenario 1: Examining Growth across Grades or Schools using the [District Overview Visualization](#)

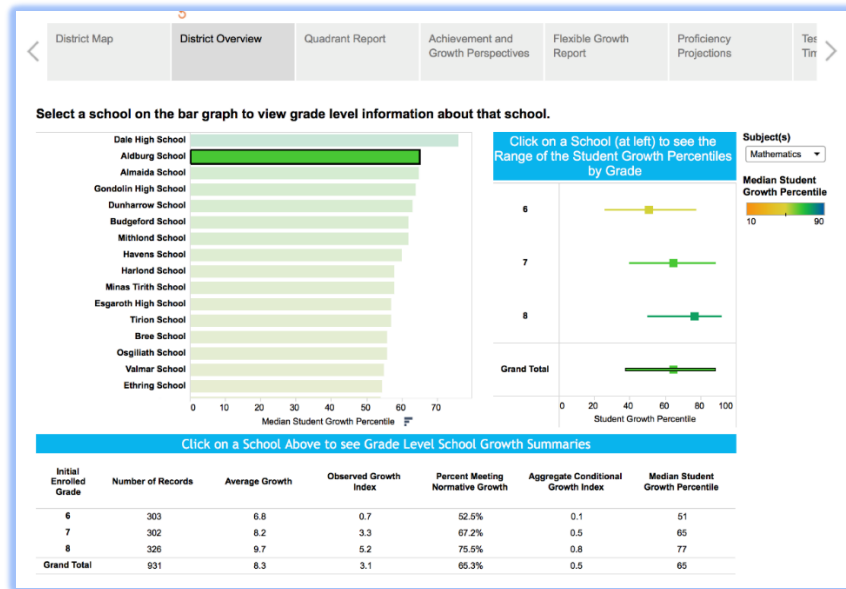
A School District has implemented a new math program for their students in Aldburg School. The program has not been implemented in Bree School and the district administrators would like to compare growth in general math achievement to determine if the new math program is better.

Questions such as these can be examined using the “District Overview” tab within the Growth Report, as shown below. In this visualization, one can look at the overall growth produced by each school (or by individual grades within the school), adjusting the selected school(s) and filter(s) to view only the comparisons of interest. In this case, the subject filter was set to “Mathematics” and Aldburg and Bree schools were selected to view the grade level growth summaries. Growth comparisons between grades and schools can be made on the basis of average growth, observed growth index, percent meeting normative growth, aggregate conditional growth index, and median student growth percentile, depending on the specific question or comparison being made. Additionally, a color key based on the median student growth percentile metric is offered.

In User Scenario 1, we are interested in knowing how the growth rates produced by two schools compare. The tables below show the overall growth metrics that can be compared between the two schools as well as grades between the two schools. The table shows that the median student at Aldburg School (the school with the new program) produced 65th percentile over the duration, compared to 56th percentile growth produced by the median student at Bree School (the school without the new program). One could conclude that the typical Aldburg student is producing higher growth scores than the typical Bree student, but one can also look at the variability of student growth within and across grades at each school for a more complete understanding. For example, growth at Aldburg was much stronger for eighth graders, whose growth percentiles ranged between 50th and 92nd percentiles, compared to sixth grade growth percentiles that ranged between 26th and 78th percentiles. While Aldburg produced higher growth overall, sixth grade growth showed very little difference between the two schools.

One would want to examine the growth patterns between Aldburg and Bree Schools in the year(s) prior to implementation of the program in order to determine whether the relative growth advantage seen for students in Aldburg School might be attributable to the new program, or part of a previously existing pattern.

Aldburg School Mathematics



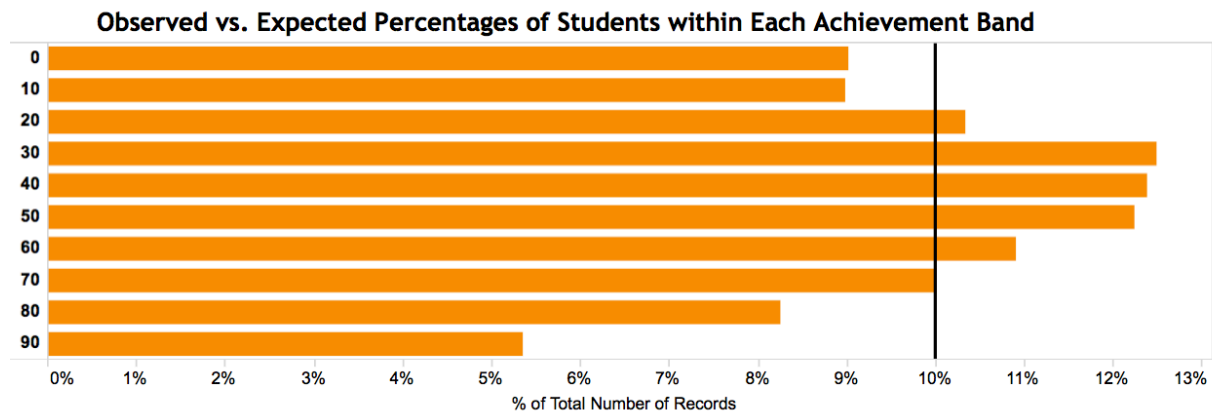
Bree School Mathematics



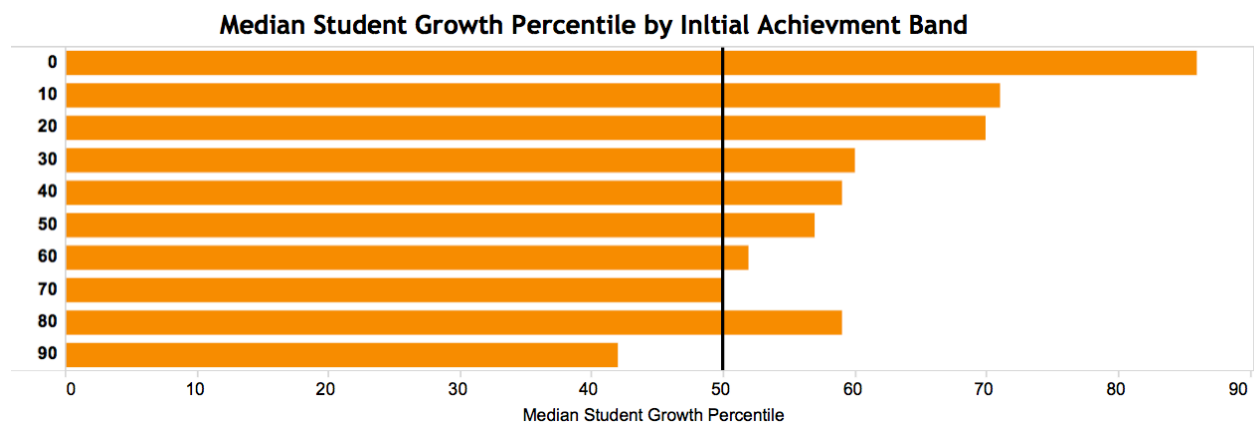
User Scenario 2: Examining Growth across Students Grouped by Achievement Level using the [Achievement and Growth Perspectives](#) visualization

A district administrator wants to know whether the high and low performing eighth grade students within the district are showing comparable growth in math achievement over time.

This question can be examined using the Achievement and Growth Perspectives visualization, which aggregates student growth based on subgroup designations provided by the district and specified by the user. In User Scenario 2, the question examines eighth grade growth, so the visualization below has been filtered to show only eighth graders in the entire district for the subject of mathematics. Additional filters would allow one to examine subgroupings based on district or school assignment, race/ethnicity, or gender.



The first visualization shows observed vs. expected percentages of eighth grade students within each achievement band in mathematics. If the group looked like the U.S. population as a whole, you would expect about 10% of the population within each achievement band, represented by the black vertical bar. As a group, there are more eighth grade students performing in the middle bands than in the upper and lower bands, in comparison to the U.S. population as a whole.

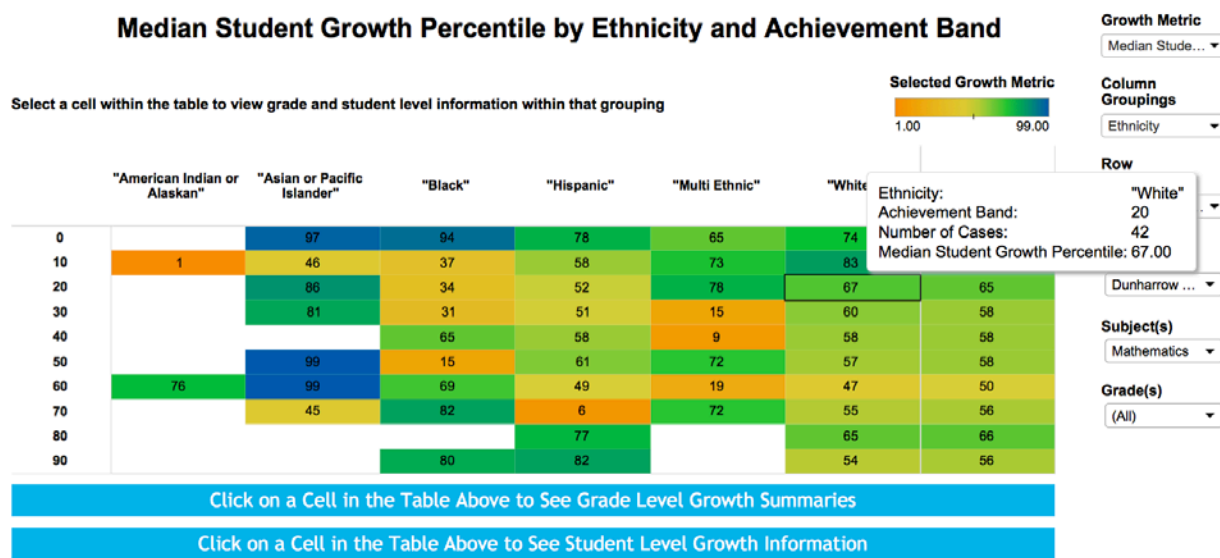


The second visualization shows the median student growth percentile by initial achievement band for eighth grade students in mathematics. This visualization shows that eighth grade students are making meaningfully higher growth for almost all of the achievement bands in comparison to average growth of the U.S. population.

User Scenario 3: Examining Growth across Population Subgroups using the [Flexible Growth Report](#) visualization

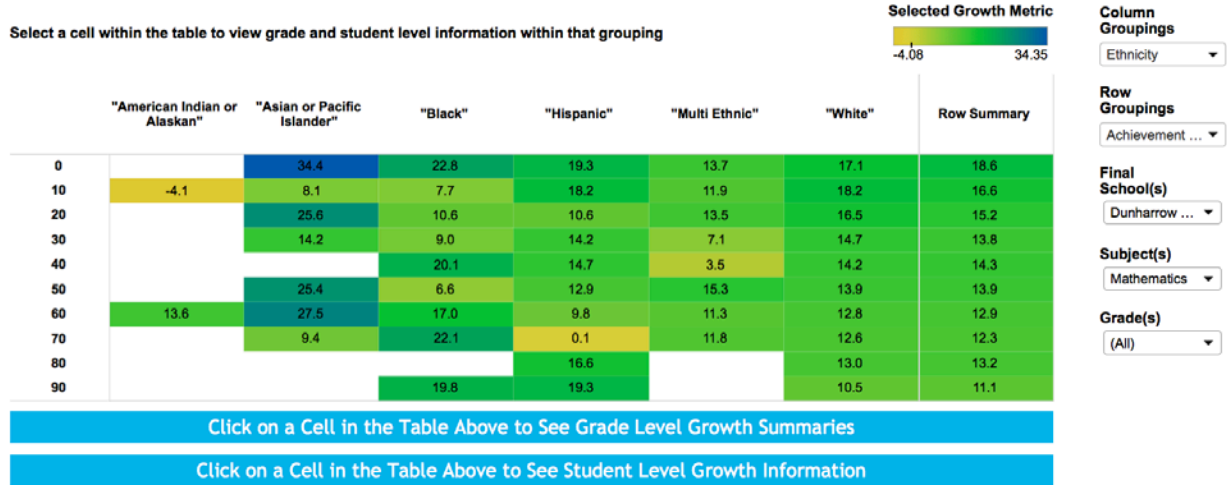
Dunharrow School is implementing changes to narrow the achievement gaps between students who are White and students who are Hispanic in mathematics. How can administrators at Dunharrow School evaluate whether the gaps are closing?

This question can be examined using the Flexible Growth Report visualization, which can aggregate student growth within student race/ethnic designations by the district and based on various growth metrics. The filter on the right has been set to show the median student growth percentile by achievement by and ethnicity for all students at Dunharrow School in mathematics.



Under the current set of filter selections, if one were to hover over individual cells, one could see the number of students within each achievement band, with 17 Hispanic students and 18 White students in the lowest performing decile (0-9), 8 Hispanic students and 35 White students in the second decile, 11 Hispanic and 42 White students in the third decile, and so forth (only the third decile for White students is shown in the figure above). Average median student growth percentile varies across groupings and ethnicities (Hispanic and White) from a low of 6 (Hispanic, 8th decile) to a high of 83 (White, 2nd decile) in the various cells shown in figure above; however, growth across achievement bands is fairly consistent between both Hispanic and White students. Other growth metrics show similar growth between the high and low performing White and Hispanic students in math (shown in the figure below). Additionally, a color key based on the growth metric is offered.

Observed Raw Growth by Ethnicity and Achievement Band



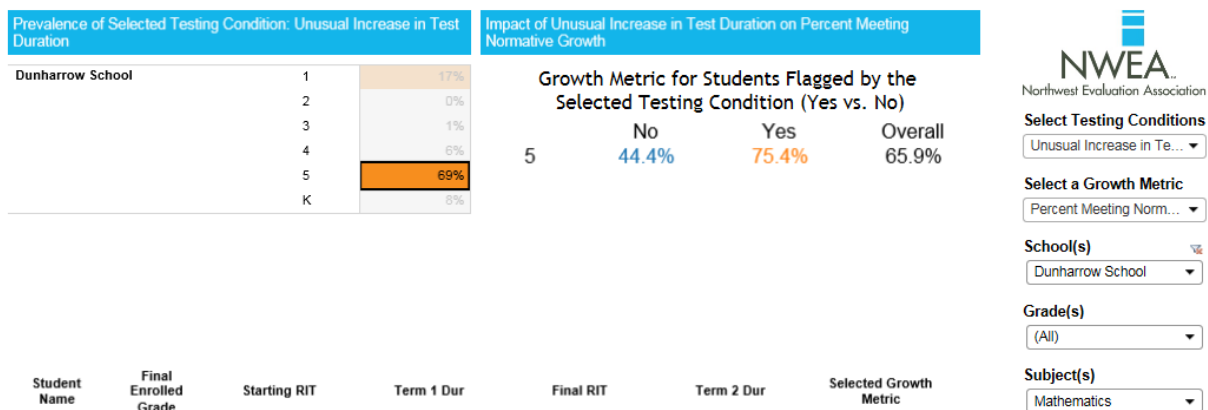
Overall, the takeaway interpretation would be that there is not a very large difference between White and Hispanic student performance across the achievement bands. This suggests that the district has moderate supports for both White and Hispanic students across all achievement bands except the 70th percentile achievement band for Hispanic students.

User Scenario 4: Examining Whether Specific Testing Conditions Impacted Observed Growth

Grade 5 at Dunharrow School showed unusually low growth this year. The principal thinks it may have been the result of unusual testing conditions. How would she investigate that? Are there differences in testing time each term?

This question can be examined using the Impact of Testing Conditions on Observed Growth visualization, which aggregates student growth based on testing condition and growth metric. In addition to student growth, the Growth Reports also provide summaries of several statistics related to the testing events, including the percentages of students whose completed test events were considered “low accuracy”, short or long in duration, or in which there were unusual decreases or increases in test event duration between the pre- and post-test assessments. These statistics are shown in the filters within the testing conditions visualizations. Additional filters on the right side of the visualization can also be adjusted to include only specific school(s), grade(s), and subject(s). In a typical school, about 10% of cases will be flagged for low test duration or unusual changes in test event duration.

The image below shows that at Dunharrow School, nearly 70% of students took a considerably longer time to complete the MAP Growth assessment at Time 2 than at Time 1. In other words, more time was spent on the second test than the first test. One can select a number of growth metrics to examine the potential impact that “taking more time on Test 2” exerted on student growth. In this example, Dunharrow School had 88 students in grade 5 tested for growth in mathematics. Of students who did not show an unusual increase in test duration, 44% met normative growth, whereas 75.4% of students who did show an unusual increase in test duration met normative growth.



The large number of students who showed an unusual increase in test duration might call into question the reliability of the growth metrics produced by the school/district overall. If students rushed through the test at Time 1, but were more methodical during the test at Time

2, the change in score might simply reflect more effortful behavior and not real learning. In general, one can have more confidence that changes in scores represent learning when the testing conditions are as consistent as possible between Times 1 and 2.

Missing Student Report

Introduction

The intent of this report is to provide districts with an overall summary of all students who are tested using the MAP Growth assessment during the growth period in question but who might not have been included in the Growth Report for various reasons. These reasons might include only having one test event (and consequently, no growth information), taking the MAP Growth survey test, or not testing within the designated testing window. The NWEA Missing Student Report provides a series of visualizations providing information at the district and school levels as well as individual student lists.

Missing Student Report Classifications

The Missing Student Report provides summaries of the number of students within a series of classifications, as follows:

Grade Mismatch – Grade does not match or is not consecutive between test time 1 and test time 2. The student may not have been rostered correctly, meaning that the appropriate status and growth norms cannot be applied to her or his scores.

Has Invalid Test – The test was considered invalid for one of several reasons including a RIT score that was outside the range of acceptable values, a standard error outside the range of acceptable values, or other potential reasons.

Missing Term – A student was tested on one but not both of the testing seasons within the specified growth period.

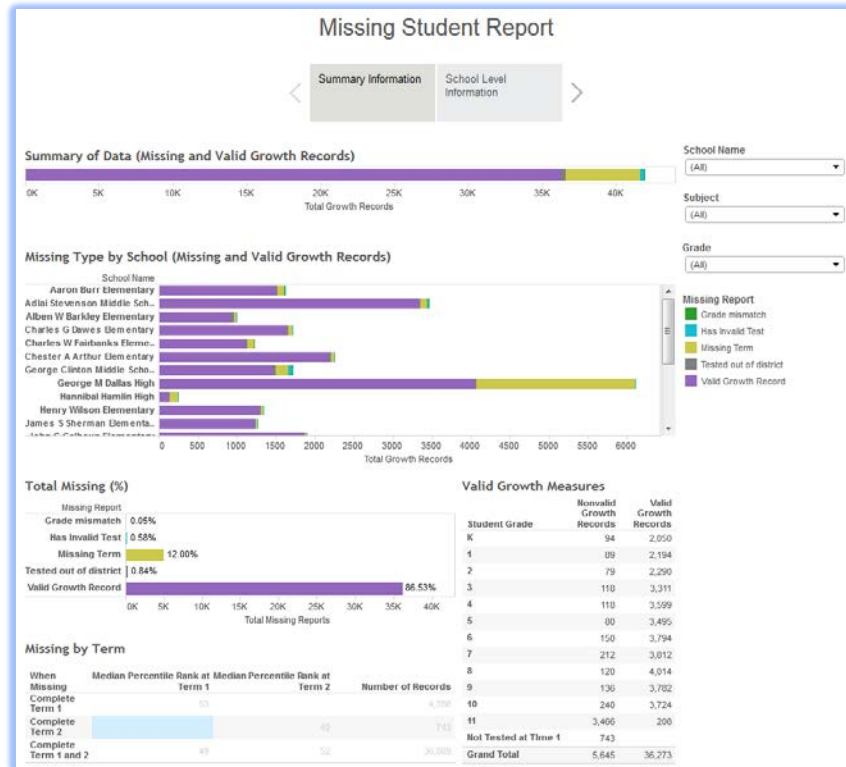
Tested out of District – A student is missing a test at time 1 due to enrollment in an outside district at time 1.

Non-valid Growth Record – A students' record has any of the above non-valid growth records (grade mismatch, invalid test, missing term, or tested out of district).

Valid Growth Record – A students' record does not contain any of the above non-valid growth records.

Summary Information

The worksheet contains five visualizations that show missing reports at the school level. The information provides a summary of percentage of valid growth records and missing growth records within the entire district or school.



Page Features – The page features colors to represent number counts based on report type. The color codes are displayed on the right side of the visualization.

Filters – The page contains filters to generate visualizations. The filters are displayed on the right side of the visualization. The filters include school(s), subject(s), and grade(s).

School Name
(All)

Subject
(All)

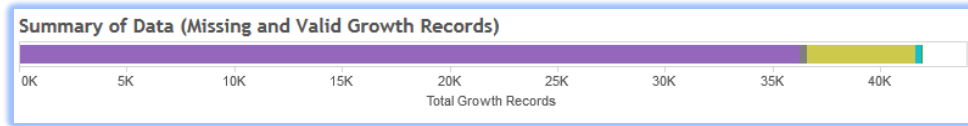
Grade
(All)

Missing Report

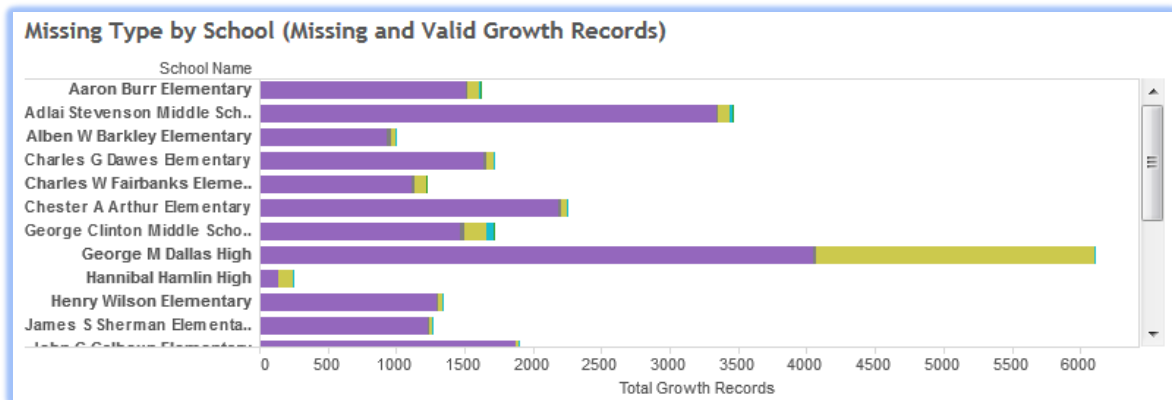
- Grade mismatch
- Has Invalid Test
- Missing Term
- Tested out of district
- Valid Growth Record

Visualizations – The page contains five visualizations that outline missing reports at the school level.

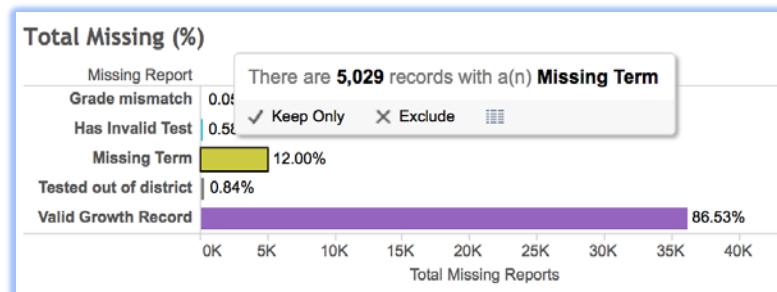
Summary of Data displays all data selected (based on filters) grouped by missing report type. Clicking on a color will display specific values for the missing report. Filters can be used to examine or focus on specific schools, subjects, and grades.



Missing Type by School displays school-level data selected (based on filters) grouped by missing report type. Clicking on a color will display specific values for the missing report. Filters can be used to examine or focus on specific schools, subjects, and grades.



Total Missing (%) displays percentages of missing report (based on filters selected). Clicking on a color will display specific values for the missing report. Filters can be used to examine or focus on specific schools, subjects, and grades.



Missing by Term displays median percentile rank at term 1 and term 2 for complete measures at term 1 and/or term 2 (based on filters selected). Clicking on a value will display the information associated with the value. Filters can be used to examine or focus on specific schools, subjects, and grades.

When Missing	Median Percentile Rank at Term 1	Median Percentile Rank at Term 2	Number of Records
Complete Term 1	When Complete Term 1 and 2, Median Percentile Rank at Term 1 is 49		
Complete Term 2	<input checked="" type="checkbox"/> Keep Only <input type="checkbox"/> Exclude <input type="button" value="⋮"/>		
Complete Term 1 and 2	49	52	36,889

Valid Growth Measures displays grade level non-valid and valid growth measures (based on filters selected). Clicking on a value will display the information associated with the value. Filters can be used to examine or focus on specific schools, subjects, and grades.

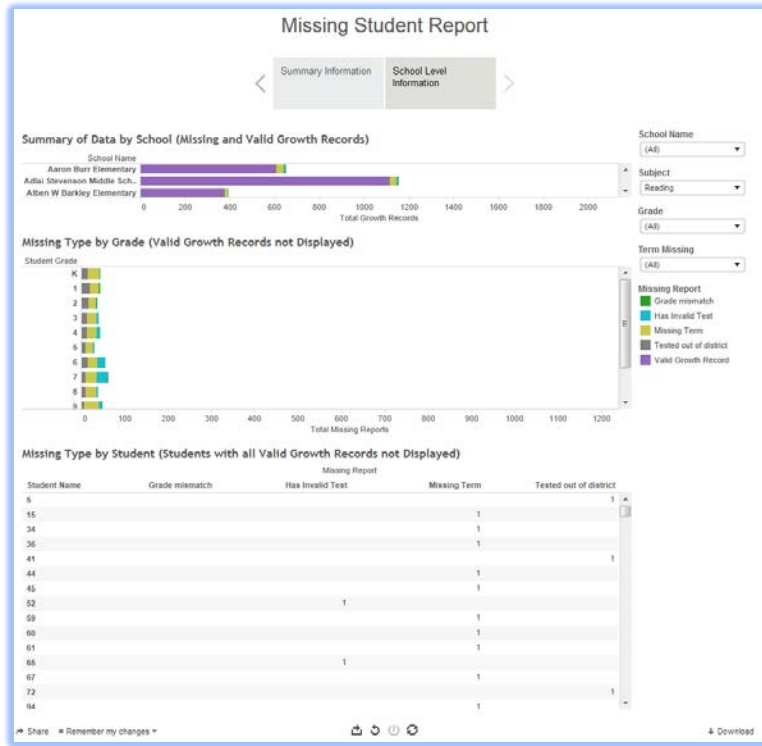
Student Grade	Nonvalid Growth Records	Valid Growth Records
K	94	2,050
1	89	2,194
2	79	2,290
3	118	3,311
4		
5		
6		
7	212	3,812
8	120	4,014
9	136	3,782
10	240	3,724
11	3,466	208
Not Tested at Time 1	743	
Grand Total	5,645	36,273

The number of **Nonvalid Growth Records** in grade **7** is **212**

Keep Only
 Exclude

School-Level Information

This worksheet contains three visualizations that show missing reports at the school- and student-level. The information provides a summary of percentage of valid growth records and missing growth records across school(s), grade(s), and student(s).



Page Features – The page features colors to represent higher the type of missing report. The color codes are displayed on the right side of the visualization.

Filters – The page contains filters to generate visualizations. The filters are displayed on the right side of the visualization. The filters include subject(s), grade(s), and term missing.

School Name
(All)

Subject
Reading

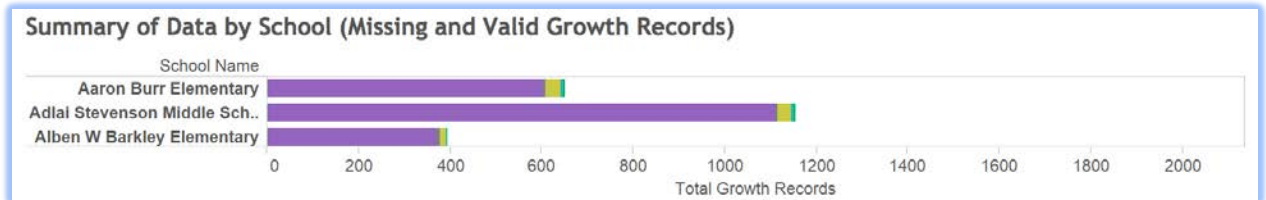
Grade
(All)

Term Missing
(All)

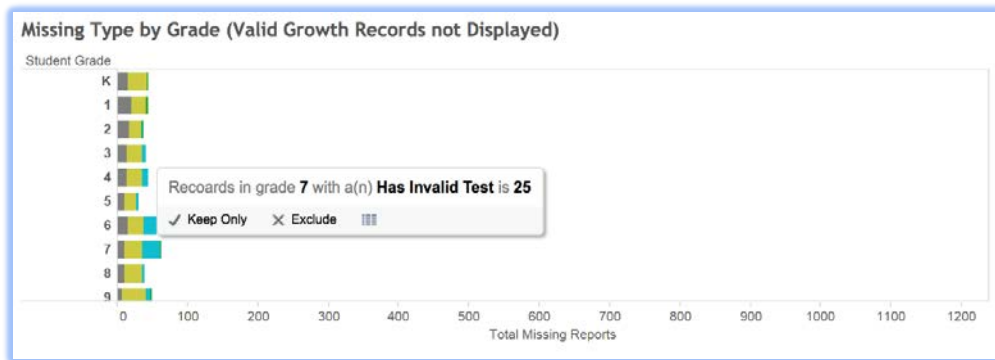
Missing Report
Grade mismatch
Has Invalid Test
Missing Term
Tested out of district
Valid Growth Record

Visualizations – The page contains three visualizations that outline missing reports at the school- and student-level.

Summary of Data by school displays school-level data (based on filters) grouped by missing report type. Clicking on a color will display specific values for the missing report. Filters can be used to examine or focus on specific subjects, grades, and term missing.



Missing Type by Grade displays grade-level data for selected schools grouped by missing report type (based on filters). Clicking on a color will display specific values for the missing report. Filters can be used to examine or focus on specific subjects, grades, and term missing.



Missing Type by Student displays student-level values of missing report (based on filters selected). Clicking on a number will display specific values for the missing report. Filters can be used to examine or focus on specific subjects, grades, and term missing.

Missing Type by Student (Students with all Valid Growth Records not Displayed)				
Student Name	Missing Report			
	Grade mismatch	Has Invalld Test	Missing Term	Tested out of district
5				1
15			1	
34			1	
36			1	
41				1
44			1	
45			1	
52		1		
59			1	
60			1	
61			1	
65		1		
67			1	
72				1
94			1	

Frequently Asked Questions about Growth Reports

Can you evaluate student growth on Special Education and/or English Language Learner status?

Students' ELL or Special Education status is not regularly tracked or recorded within NWEA's Growth Research Database, so we cannot evaluate growth on those variables.

Why are classroom reports not included?

Classroom reports are not currently included in Growth Reports because they are available within the standard suite of reports provided to all NWEA users. However, we are continually examining ways to improve the value and utility of these reports, so it is possible that classroom reports may be included in a future release.

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