**Core Question:** How can I use my growth monitoring assessment to understand and articulate student progress at my school?

**Overview:**

This tool offers one way to effectively use data from NWEA Map, Renaissance STAR, and iReady and find your best data story for renewal. First, it lays out common terms and important background information for these assessments. Then, it provides a [suggested approach to analyzing these data](#_Finding_your_best) followed by examples focused on one key growth metric for each assessment: [Conditional Growth Index for NWEA](#_EXAMPLE_1:_NWEA), [Student Growth Percentile for Renaissance STAR](#_EXAMPLE_2:_RENAISSANCE), and [Typical Growth/Stretch Growth for iReady](#_EXAMPLE_3:_IREADY).

**What is a growth monitoring assessment?**

“Growth monitoring assessment” refers to an assessment that:

1. Schools give multiple times per year. Ideally, they are given fall, winter, and spring at a minimum.
2. Reports student growth compared to a reference group (see below for definition).
3. Is designed to give information on student growth on a continuum of skills and knowledge, even if the student starts the school year very behind.

**Other key definitions:**

* Reference group—For the assessments discussed in this tool, this refers to a national group of peers who took the same test and scored at the same starting level.
* Typical growth—This term is used throughout the document to name the amount of growth made on average by students in the reference group.
* Accelerated growth—This term is used throughout the document to name when a student makes more than typical growth.[[1]](#footnote-1)

**Why are growth monitoring assessments important?**

Given the ever-changing systems of testing and accountability schools face, CCSA encourages schools to consistently implement a growth monitoring assessment like NWEA MAP, Renaissance STAR, or iReady. These assessments are valuable in articulating a story of student growth because they set growth targets based on the average performance of a national peer group.

**How can these assessments help me articulate student progress?**

These assessments[[2]](#footnote-2) are designed to provide information about how a student is performing compared to other students in the reference group. These assessments can answer key data questions like:

* Compared to other students in the reference group, what percent of my students are making equal or more progress in a testing window?
* Compared to other students in the reference group, what percent of students receiving a particular program or intervention are making more progress than the reference group?

In order to effectively articulate your student growth story, you should be clear on what these assessments tell you.

**These assessments are good for…**

* Articulating the diagnostic level of students at a moment in time.
* Giving an indication of whether students are making appropriate progress from where they started.
* Determining whether your school or a program you offer is helping students grow on pace with or faster than students in the reference group.

**These assessments are not as good for…**

* Articulating if students are meeting claims and targets on CAASPP or are proficient on Common Core Standards.[[3]](#footnote-3)
* Understanding how your students grow compared to a demographically similar peer group (the reference groups from these are national samples that do not account for demographics).[[4]](#footnote-4)

# Finding your best data story

*STEP 1- Choose one student growth measure and understand what it tells you*

Each growth monitoring assessment offers multiple ways to look at growth. To help you articulate your data story, it may be helpful to zoom in on one measure at a time and to understand what it does and doesn’t tell you.

*STEP 2- Use student, class, and/or grade-level data to ask and answer specific questions about progress*

When analyzing data, it is helpful to ask and answer specific data questions. General questions like “how are my students progressing?” are difficult to answer. But answering specific questions like “what percent of students at my school made typical growth?” gives you clarity that you can articulate to your authorizer.

It may be helpful to develop questions in a few categories. Knowing your school, you should develop questions that help you analyze your growth story in a way that reflects your school goals, programs, and unique assets. This is a list of suggestions or options to help you plan the questions for your school.

|  |  |  |
| --- | --- | --- |
| Type | Detail | Examples |
| Overall performance | Always ask questions about the whole student population. | What percent of students made accelerated growth in 2018-19? |
| Common disaggregation | It is likely that your authorizer is going to be interested in the academic growth of common subgroups like English learners or students with socioeconomic need, so analyzing the data for those groups would be wise | What percent of African American students made typical growth? Accelerated growth? |
| School-specific disaggregation | It may also be helpful to consider disaggregating by school-specific need or program. For example, you could disaggregate students participating in a specific intervention program or students receiving mental health services. This will be especially compelling if these disaggregated data tell the story of a program aligned with the unique need of your students. | What percent of students participating in after school tutoring made accelerated growth?  What percent of students with a modified school day made typical growth? Accelerated growth? |
| Year over year | You can ask the same types of questions above for multiple years. This may be helpful in articulating the success of a turn-around effort or a new school-wide teaching approach. | What percent of students made accelerated growth in 2017-18 vs 2018-19? |

To answer these questions, some leaders download excel files of scores and use conditional formatting in excel. Others hand count the students meeting the chosen target. Both can be easy to do when you have clarity on what question you are trying to answer.

*STEP 3- Use your findings*

Ideally, you are completing these analyses yearly and therefore can make some targeted changes in the coming school year, then repeat them to include in your petition. If you are writing your renewal petition now, use these analyses to find your best data story and to be aware of your areas of struggle. Often, schools that clearly articulate their own areas of growth (rather than waiting for the authorizer to point them out) are in a stronger position in their process.

# EXAMPLE 1: NWEA CONDITIONAL GROWTH INDEX (CGI)

**What does this measure tell you?** This index incorporates conditions that affect growth, including weeks of instruction before testing and students’ starting RIT scores. It tells you to what extent, given those factors, a student met its projected growth.

**What is RIT?** RIT is an abbreviation for “Rausch Unit” and is a measurement of where students are ready to be instructed today based on a continuum of skills, not standards.

**How do I know if my students made typical growth?** A CGI of 0 corresponds to mean growth, indicating student growth matched projection.

**How do I know if a student made accelerated growth?** NWEA recommends 0.5 CGI as a reasonable target for “accelerated growth.” If a student’s growth is 0.5 or higher, this student grew substantively more than “typical.”

**Where do I find this measure?** The [Growth Summary Report](https://teach.mapnwea.org/impl/maphelp/Content/Data/SampleReports/StudentGrowthSummaryReport.htm) is the easiest place to find this measure. There are class and school-wide Growth Summary Reports. NWEA has several resources on their various reports [here](https://padlet.com/nweapl/MG_AR).

**Sample data questions to ask and answer using CGI:**

* What percent of students (or classes) at our school made expected growth?
* What percent of the students (or classes) at our school made accelerated growth?
* What percent of students in X intervention (be specific) made accelerated growth?
* What percent of students enrolled at our school performing more than 1 year behind based on grade level equivalency? Of those students, what percent of them made expected growth? Accelerated growth?

**Here are two samples that show how CGI data could be used in a second look process:**

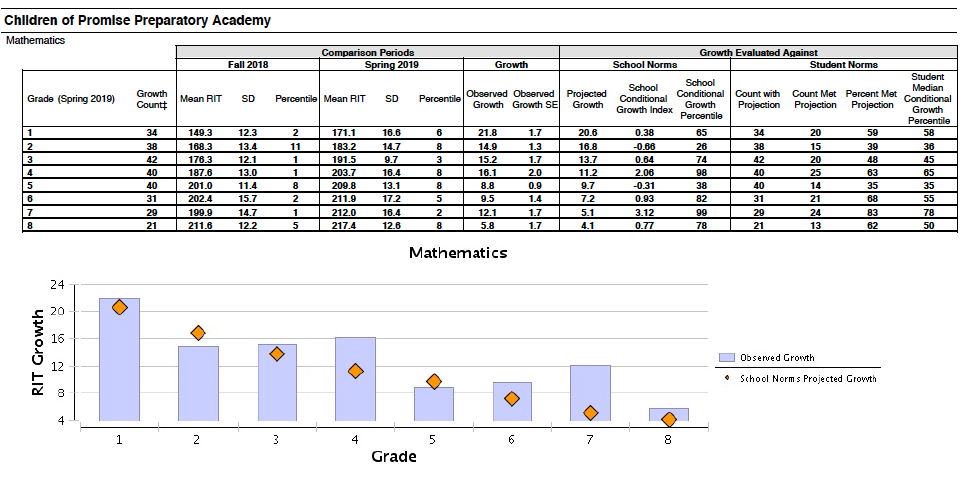
***Sample chart with school narrative 1***:

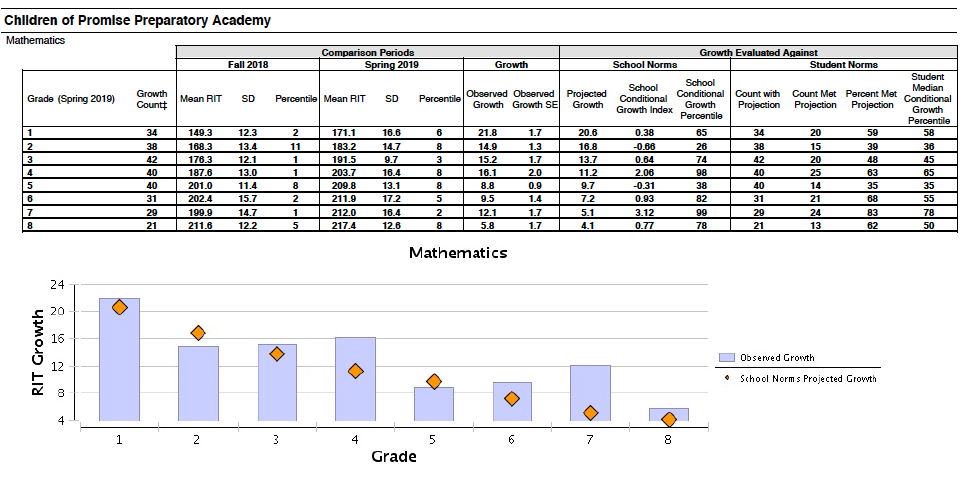
CGI Before and After Starting Systematic Phonics in 2017

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | 3rd Gr |  | 4th Gr |  | 5th Gr |  |
| 2016 | -.2 | Less than expected | -.12 | Less than expected | -.6 | Less than expected |
| 2017 | .25 | Expected | .6 | More than expected | 0 | Expected |
| 2018 | .8 | More than expected | .92 | More than expected | .73 | More than expected |

*Prior to implementing systematic phonics, students in 3rd-5th grew less than expected. In the first year of implementation, this outcome improved. The second year of implementation, all three grades grew more than expected on average.*

***Sample chart with school narrative 2:***





*5/8 grade levels made accelerated growth from fall to spring (CGI over 0.5)*

*6/8 grade levels made more than expected growth from fall to spring (CGI greater than 0)*

# EXAMPLE 2: RENAISSANCE STAR STUDENT GROWTH PERCENTILE (SGP)

**What does this measure tell you?** SGP is a percentile rank of growth. It compares a student’s growth to that of his or her peers nationwide in the same grade with similar achievement history on STAR Assessments. SGP is reported on a 1–99 scale, with lower numbers indicating lower relative growth and higher numbers indicating higher relative growth. For example, an SGP score of 90 means the student has shown more growth than 90 percent of his/her academic peers. See more information [here](http://doc.renlearn.com/KMNet/R00571375CF86BBF.pdf).

**How do I know if my students made typical growth?** SGP 50 is considered “typical” growth, but most states use a less precise range and consider anything between 35 and 65 as “typical.”

**How do I know if a student made accelerated growth?** A student with an SGP above 65 has made more growth than is considered typical.

**Where do I find this measure?** STAR Growth Report shows both status and growth. Find info about all STAR reports [here](https://www.renaissance.com/resources/star-360-reports/).

**Sample data questions to ask and answer using SGP:**

* What percent of students (or classes) at our school made typical growth (between 35-65 SGP)?
* What percent of the students (or classes) made accelerated growth (above 65 SGP)?
* What percent of students in XYZ intervention (be specific) made accelerated growth(above 65 SGP)?
* What percent of students enrolled at our school performing more than 1 year behind based on grade level equivalency? Of those students, what percent of them made typical growth? Accelerated growth?

**Here are two samples that show how SGP data could be used in a second look process:**

***Sample chart with school narrative 1:***

17-18 & 18-19 STAR Reading SGP by Grade

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2017-18** | | **2018-19** | |
| **Grade** | **Mean SGP** | **# of Students** | **Mean SGP** | **# of Students** |
| 2 | 40 | 28 | 52 | 38 |
| 3 | 40 | 19 | 60 | 21 |
| 4 | N/A | N/A | 46 | 58 |

*All tested grades in 2017-18 and 2018-19 made at least typical growth.*

***Sample chart with school narrative 2:***

*We recognize that compared to the state average, our English Learners scored further away from the met standard than on CAASPP in the last three years. However, instructional changes made in 2017-18 have begun to show results. English Learners in all three grades have shown typical or accelerated growth on Renaissance Star for the last two school years..*

# EXAMPLE 3: IREADY “TYPICAL GROWTH” AND “STRETCH GROWTH”

**What should I know about iReady?** iReady is designed slightly differently than Map and STAR. It places students in bands of performance based on a set of skills and standards for their grade level, rather than just reporting performance compared to a reference group of peers.However,iReady gives students two growth targets, “Typical Growth” and “Stretch Growth,” which are based on how test takers nationwide score when in the same grade and at the same level of performance at the beginning of the year.

**Are “Typical Growth” and “Stretch Growth” the same as “Growth Monitoring”?** Not exactly. Standard administration of this assessment is three times per year, however there is a Growth Monitoring option where students take the assessment in shorter cycles. If you have a large population of students who are substantially behind, using Growth Monitoring may be valuable. For more info go [here](http://i-readycentral.com/articles/growth-monitoring/) and [here](http://i-readycentral.com/download/?res=19910&view_pdf=1).

**What does “Typical Growth” and “Stretch Growth” tell me?** Using student grade level and starting score, iReady gives students a Typical Growth target and a Stretch Growth target based on how test takers nationwide score when in the same grade, at the same starting level of performance.

* Typical Growth is the average growth of students at the same grade and placement level.
* Stretch Growth is more than typical growth for the same grade and placement level, designed to help students catch up if they are behind over 1+ years depending on their starting level. This target was derived by breaking down the growth of students in iReady’s national sample that started behind but achieved proficiency on iReady over time.

**Where do I find these measures?** The Diagnostic Growth for a Student report clearly shows students’ Typical and Stretch targets and student progress toward those. You can see samples [here](https://4.files.edl.io/cf97/08/09/18/180052-8928a370-85d0-491d-b0c5-5284c8108535.pdf).

**Sample data questions to ask and answer using SGP:**

* What percent of students (or classes) at our school made their Typical Growth targets?
* What percent of students (or classes) at our school made their Stretch Growth targets?
* What percent of students in XYZ intervention (be specific) made Stretch Growth?
* What percent of students enrolled at our school performing 1 year+ below grade level?
* How many percentage points was the proportion of students below grade level reduced from the beginning to end of year?
* How many percentage points was the proportion of students on level (or above) increased from the beginning to the end of year?

**Here are two samples that show how iReady data could be used in a second look process:**

***Sample chart with school narrative 1:***

|  |  |  |  |
| --- | --- | --- | --- |
| ***Students making Typical or Stretch Growth goals, 18-19*** | | | |
|  | Typical Growth | Stretch Growth | Typical or Stretch growth |
| 6th | 49% | 22% | 71% |
| 7th | 50% | 7% | 57% |
| 8th | 48% | 21% | 69% |

*Based on iReady diagnostic, students start our middle school 2 or More Levels behind. Despite that, the majority of our students consistently make their Target Growth or Stretch Growth goals*.

***Sample chart with school narrative 2:*** iReady Math Results Fall 2018 to Spring 2019

*One of our biggest celebrations is that students who were two or more levels below grade level had the greatest amount of growth. From Fall 2018 to Spring 2019, the percentage of tested students that were 2 or more levels below grade-level decreased from 25% (49 students) to 11% (21 students). During this same time, the percentage of students on-level increased from 4% (7 students) to 19% (38 students).*

1. Note that iReady creates “Typical Growth” and “Stretch Growth” targets for every student, which align with the definitions of typical and accelerated growth here. Map and STAR report different measures through which typical and accelerated growth can be understood. See assessment specific sections below for more information. [↑](#footnote-ref-1)
2. iReady’s assessment is slightly different than Map and STAR. It is designed to assess students’ knowledge and skills against a set cut point for their grade level. However, the growth targets they use are based on a national peer reference group. [↑](#footnote-ref-2)
3. While these assessments have [linking studies](https://www.nwea.org/resource/type/linking-studies/) that show they are correlated with CAASPP, each of these assessments is testing students against its own continuum of skills and knowledge that are different than the standards themselves. [↑](#footnote-ref-3)
4. NWEA offers a Similar Students Report. If you give NWEA, you may want to reach out to your account manager to find out more information. [↑](#footnote-ref-4)