Pandemic Learning Loss: Using easyCBM to Guide Recovery

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Today's topics

- Impact of the COVID-19 pandemic on student learning.
- Using *easyCBM*© to aid learning recovery initiatives.

Learning loss

Initial studies published in California (Pier et al., 2021) and Texas (Dorn et al., 2000) document **substantially lower performance on both reading and mathematics assessments**, with **students in the most vulnerable populations** (those from low-income backgrounds, English language learners, and students of color) **experiencing significantly more loss than their peers**.

Although most students continued to make learning gains during this time period, their rate of growth failed to match patterns of growth from previous years (Kuhfeld et al., 2020; Renaissance Learning, 2020), suggesting that schools should prepare for intensifying instructional efforts to help students get back on track.

Learning loss

Of critical importance to educators and policy makers alike is that **a key group of students is missing from many of these initial studies: students with disabilities** (Betebenner & Wenning, 2021; Kuhfield et al., 2020, Renaissance Learning, 2020).

In their analysis of Oregon student data, Swartz and Benz (2021) found that **students with disabilities were more likely than their non-disabled peers to experience chronic absenteeism and report feeling disconnected to their peers, teachers, and schools during CDL**. Both chronic absenteeism and lack of engagement with schools carry with them potentially large negative consequences for students, particularly those from vulnerable groups.

Learning loss

Because communities have been differentially impacted by the pandemic, recovery may mean different things in different places, underscoring the importance of a concerted effort to identify the needs in a given area to ensure that appropriate steps are taken to support students. As the National Center for the Improvement of Educational Assessment suggested in their 2020 report, the process of pandemic recovery must include a plan to identify **who needs help**, **in what areas they need help**, and **how much help they need** (Kuhfeld et al., 2020).

To answer these basic questions, one must have access to data, both historical (to document past learning growth trends) and current (to document learning growth post-pandemic).

Learning loss – how to capture

For each of the last 1-3 pre-pandemic years for which you have data, organize students **by grade** and **key demographic groups** (may vary by district) and **compute average (mean) scores** on each of the fall, winter, and spring benchmark assessments for the grade level as a whole as well as for each of the selected demographic groups.

Graph each groups' fall / winter/ spring average scores (you can do this using Excel if you don't have access to a statistics program) on a line graph. Graphing multiple lines on the same graph (representing different years' data for the different grade levels) can help make it easier to identify historic learning patterns in your district.

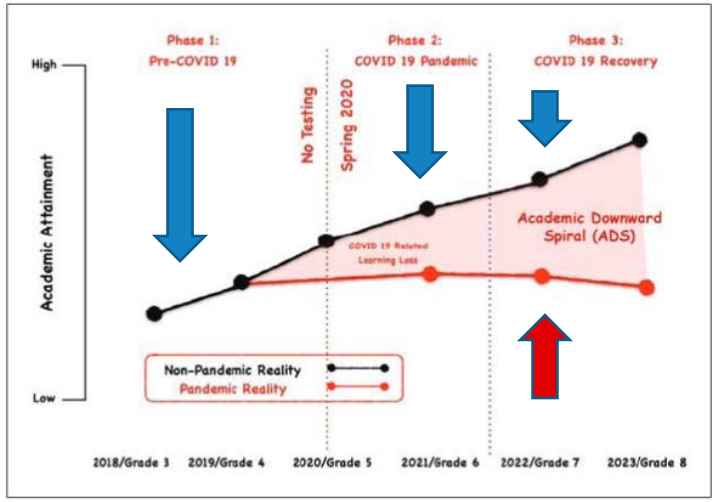
This process will result in at least one graph per grade level for the student body as a whole and possibly additional graphs per grade level for each of the selected demographic groups.

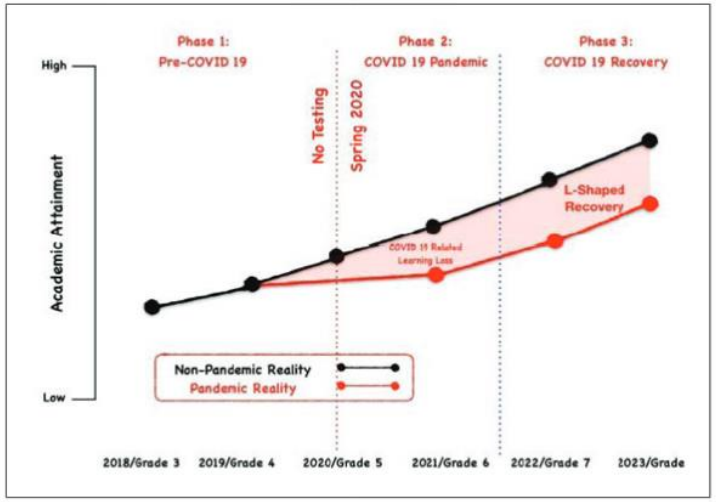
Learning loss

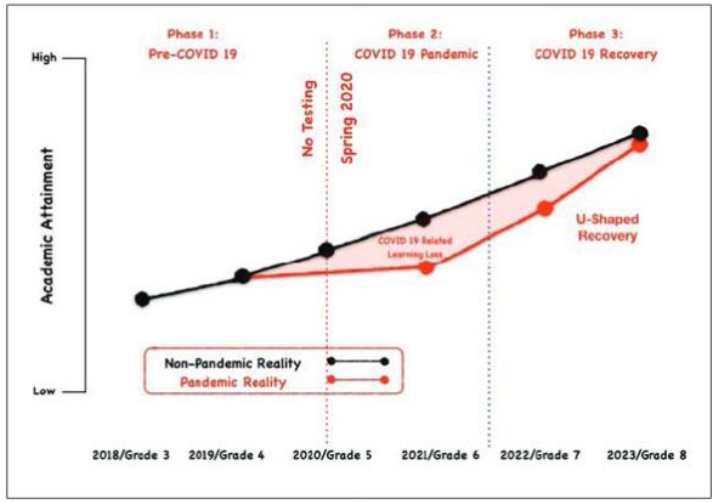
This year, gather fall, winter, and spring easyCBM benchmark assessment data. Using the same approach, calculate the average performance for students in each grade (both for the entire grade-level group and for the specific sub-groups you've decided to analyze as well).

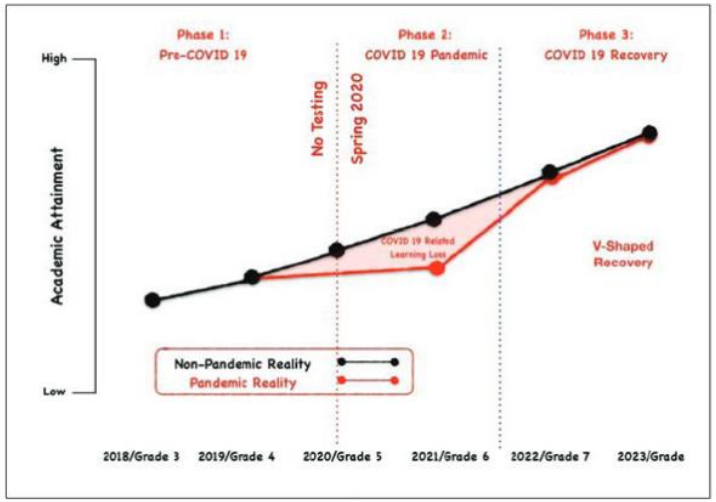
Plot the average scores on a line graph. Initially, you can compare the level (average raw score performance) as you gather each benchmark score. Once you have added winter scores, you can begin to project growth trends (learning recovery).

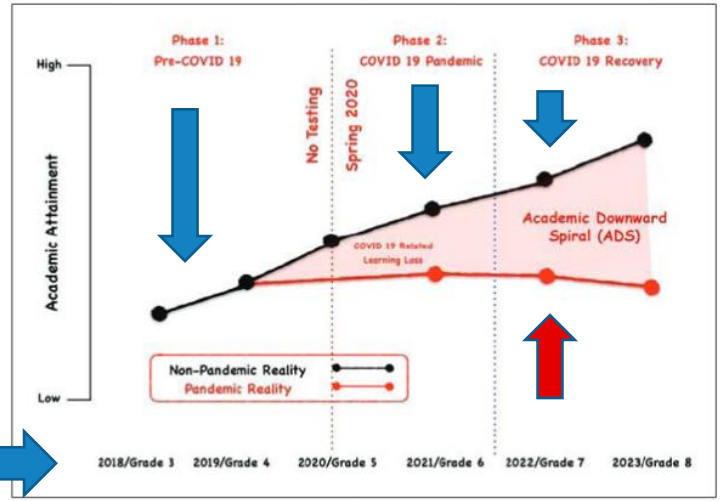
The **black dots** in Phase 1 depict pre-pandemic baseline student data, and the black dots in Phase 2 and 3 depict extrapolated “expected” learning trends had the pandemic not occurred.

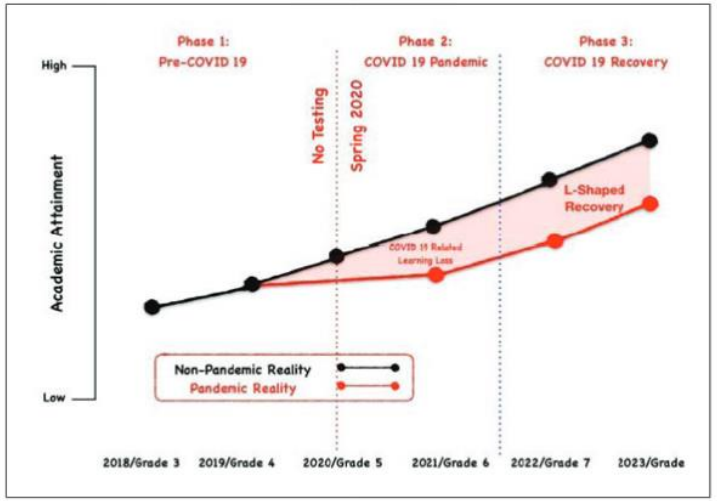


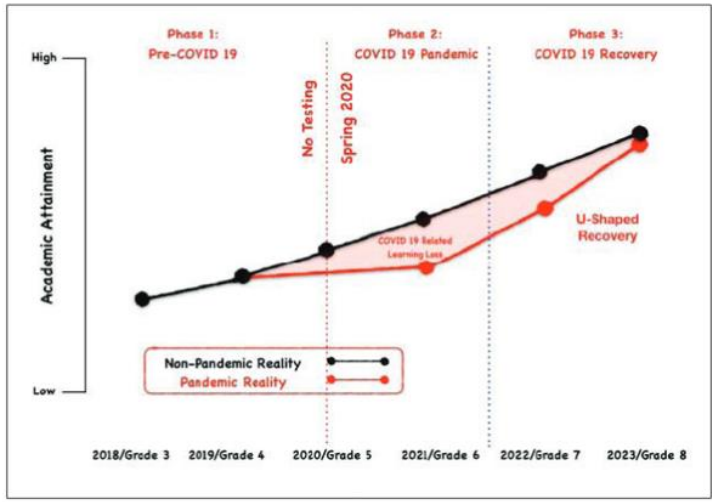


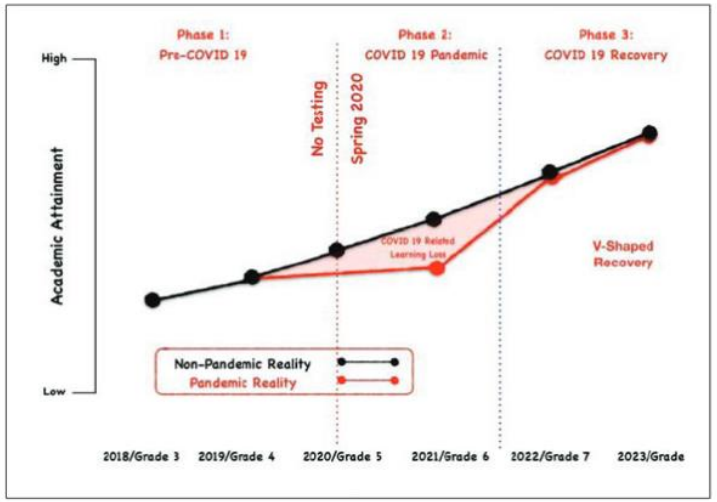




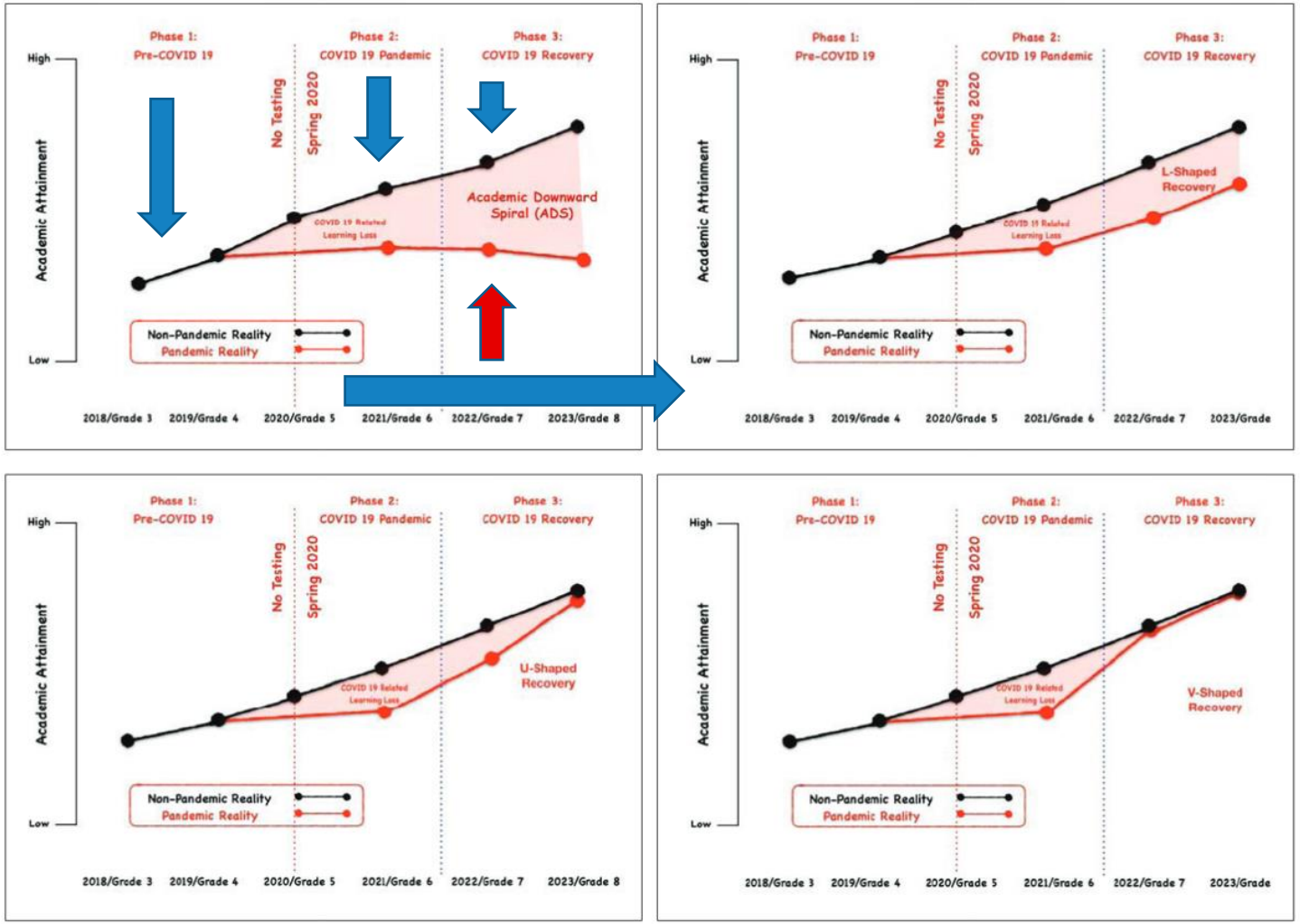








The red dots depict student learning data under four possible scenarios. Clockwise from the upper left quadrant: **continued learning loss as student performance continues to drop even after a return to school**; maintenance of learning loss post-pandemic (no recovery shown), quick recovery to pre-pandemic learning levels, and finally gradual recovery to near pre-pandemic learning outcomes over the course of three years.



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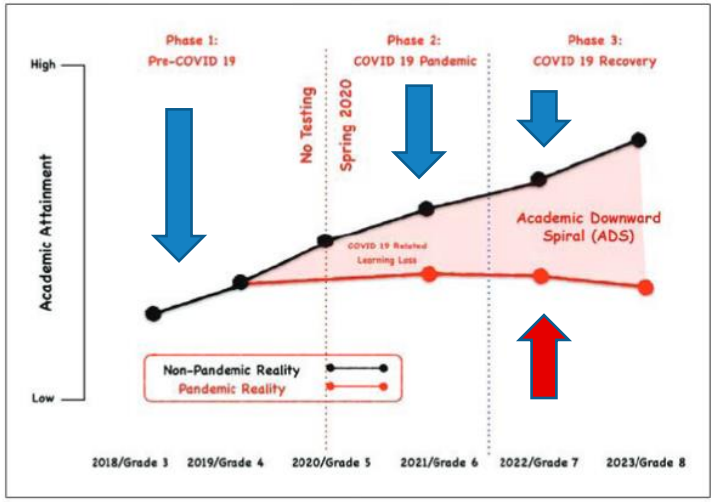

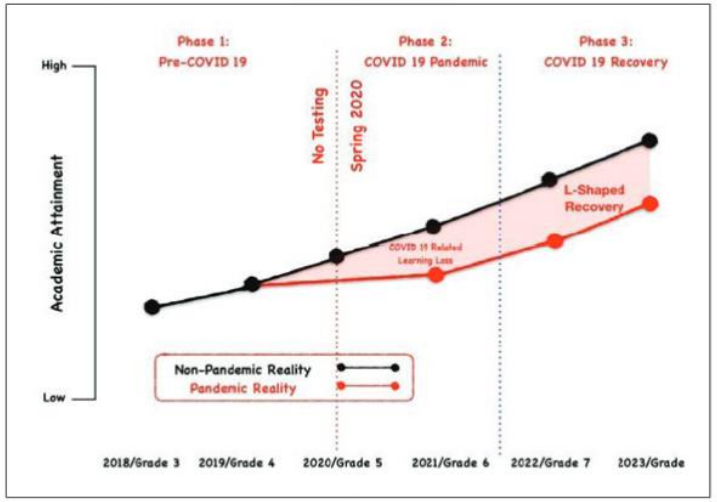

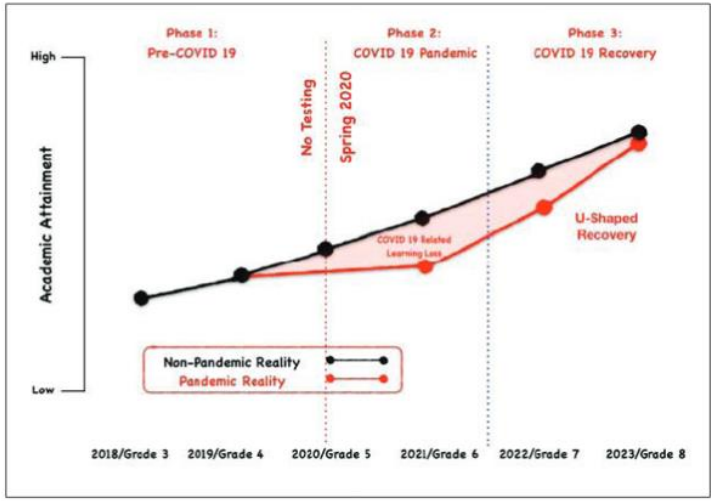

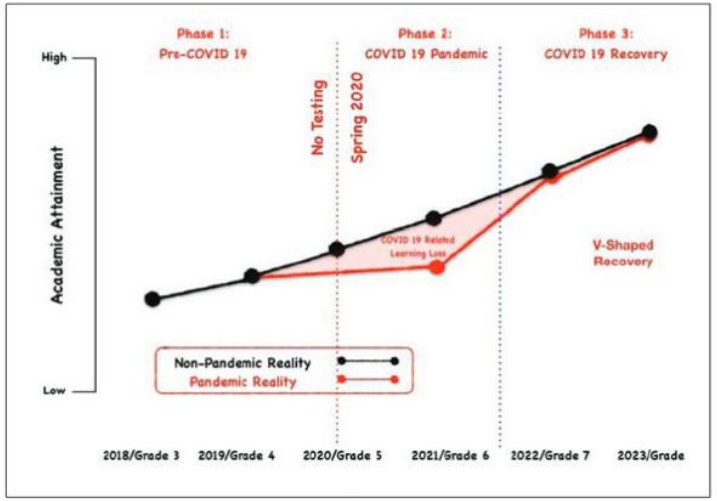

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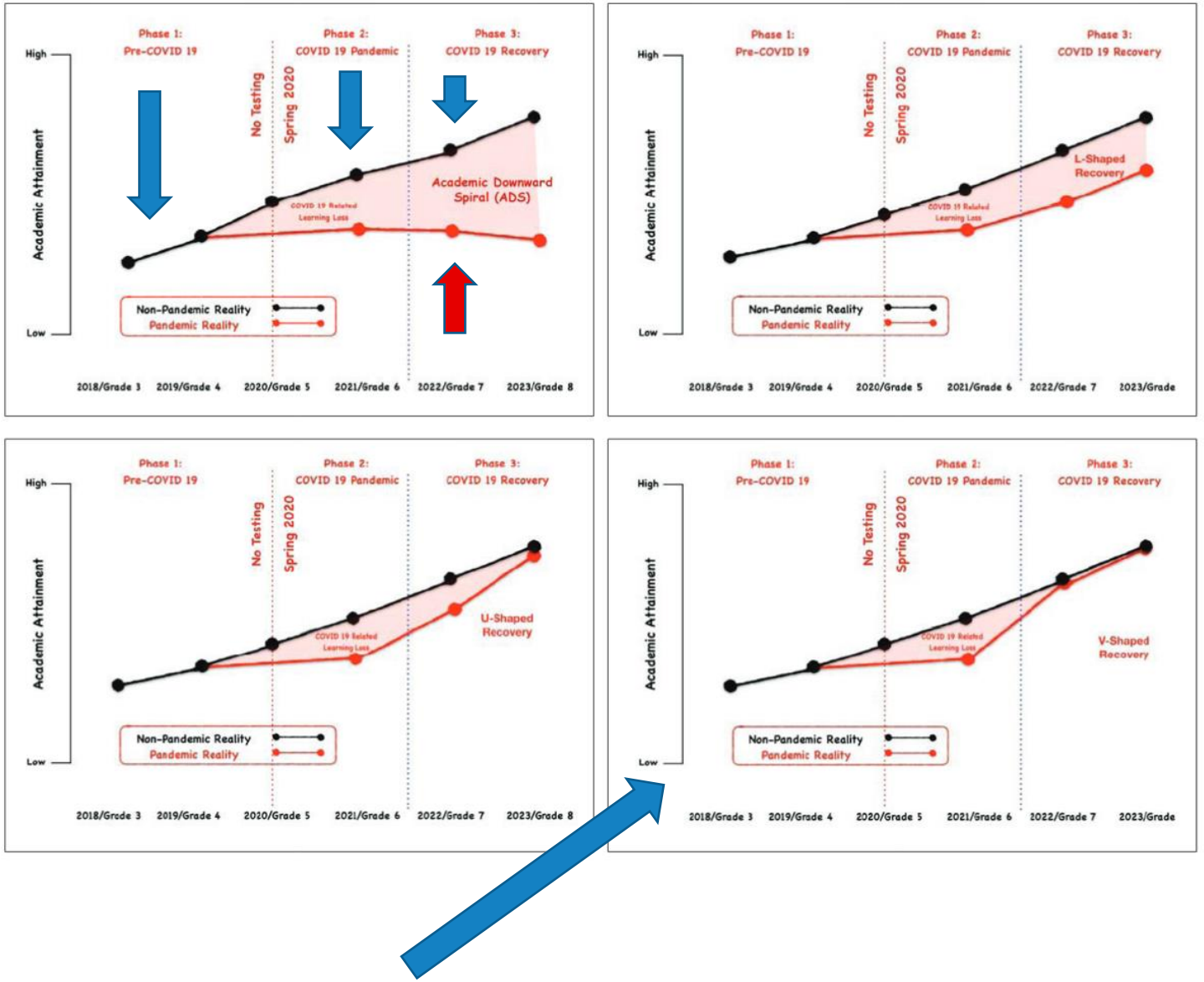

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Learning recovery

Document learning recovery by analyzing changes in learning trajectories (level and slope) as district initiatives related to pandemic recovery are implemented.

Analyze the impact of district initiatives by comparing the learning trajectories of students whose teachers participate in District initiatives to the learning trajectories of students whose teachers have not participated in district initiatives.

These learning trajectories will include both empirically derived slopes of actual student learning (based on average performance on the given assessments) and estimated “extrapolated learning trajectories” derived by extending the empirically-based learning trajectories out in a linear fashion. **The difference between the expected learning trajectories** (those which we extrapolate by extending the empirical trajectories out over time) **and the actual data points showing student learning outcomes measured post-pandemic reflect “learning loss” that can be attributed to the disruption in learning that took place from spring of 2020 through spring of 2021 (or perhaps later, if schools return to CDL in the current school year) as a result of the COVID-19 pandemic**.

Benchmark Grade Level Score Report

Use the “Compare” feature on the Benchmark Report page to help you identify exemplary growth across the year / find students who need more support.

Students Create Groups | **Compare WRF** | Compare PRF | Compare MCRC | Export CSV

	Student Name	Fall	Winter	Spring	Growth	Suggested Progress Monitoring
1	Ball, Adalberto	36	40		+4	
2	Bernier, Alaina	20	16		-4	
3	Bohman, Janett	8	16		+8	
4	Cupp, Mary	6	18		+12	
5	Dimauro, Bobbie	72	84		+12	
6	Engstrom, Darline	44	54		+10	
7	Fairfax, Marcene	22	28		+6	
8	Leiser, Perry	60	86		+26	

Risk Analysis Grade Table

Benchmark Scores | Risk Analysis

Reading | Math | Spanish

Grade 2

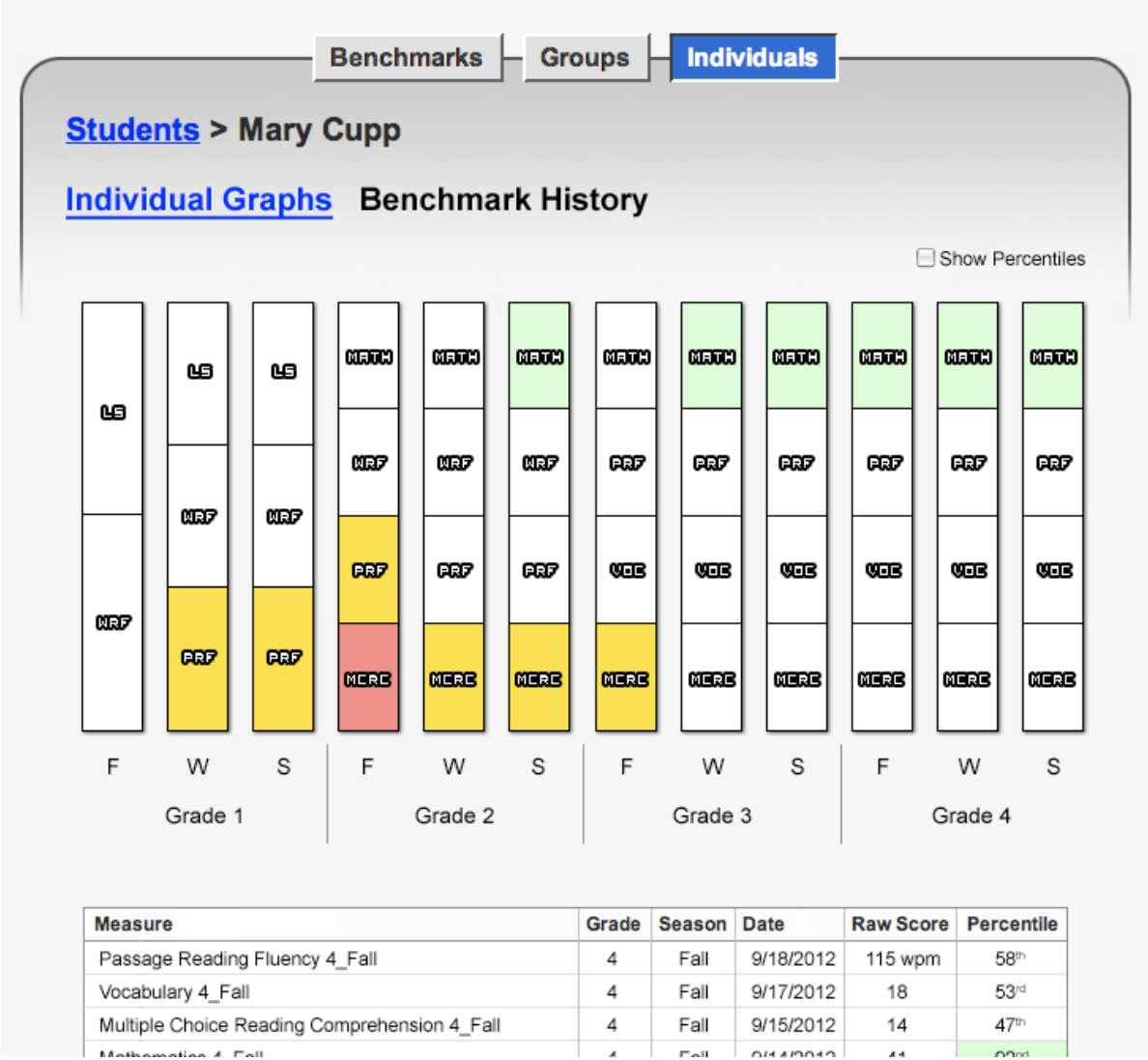
Use the Risk Analysis report to quickly identify interventions / teachers who are having an exceptionally positive impact on their students' learning.

Grade 2 Reading Risk Analysis

	Student Name	Fall	Winter	Change	Winter	Spring	Change	Fall	Spring	Change
1	Ball, Adalberto	Low	Some	1↑	Some	-	-	Low	-	-
2	Bernier, Alaina	Some	High	1↑	High	-	-	Some	-	-
3	Bohman, Janett	High	High	-	High	-	-	High	-	-
4	Cupp, Mary	High	High	-	High	-	-	High	-	-
5	Dimauro, Bobbie	Low	Low	-	Low	-	-	Low	-	-
6	Engstrom, Darline	Low	Low	-	Low	-	-	Low	-	-
7	Fairfax, Marcene	Some	Low	1↓	Low	-	-	Some	-	-
8	Leiser, Perry	Low	Low	-	Low	-	-	Low	-	-
9	Macy, Rusty	Low	Low	-	Low	-	-	Low	-	-
10	Nelson, Reatha	Low	Low	-	Low	-	-	Low	-	-

Multi-Year Benchmark History Report for Individual Students

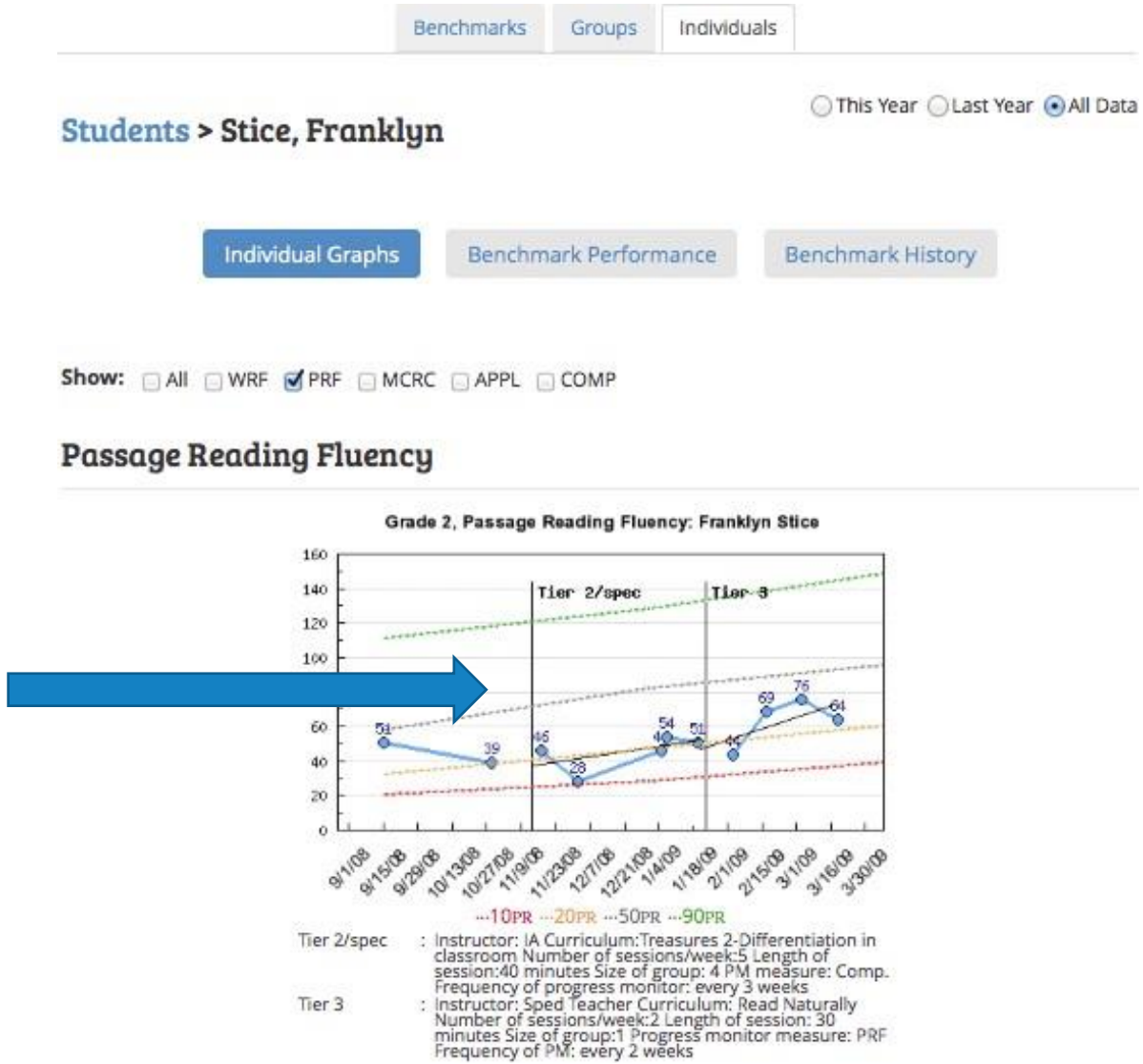
Check to see if individual students' performance has dropped substantially.



Measure	Grade	Season	Date	Raw Score	Percentile
Passage Reading Fluency 4_Fall	4	Fall	9/18/2012	115 wpm	58th
Vocabulary 4_Fall	4	Fall	9/17/2012	18	53rd
Multiple Choice Reading Comprehension 4_Fall	4	Fall	9/15/2012	14	47th

Individual Student Reports

Emphasize the importance of logging interventions with your staff.



Quick Recap

Districts with access to historical learning data, such as that available through easyCBM, have a serious advantage when it comes to identifying needs within their district, individual schools, and particular classrooms.

They also have a way to determine if particular sub-groups of students are especially at risk as we return to school, and—perhaps most importantly — have a way to track the impact of district initiatives to support student learning.

Thank you for the heart you bring to your work; we all owe you an immense debt of gratitude for your service to society.

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