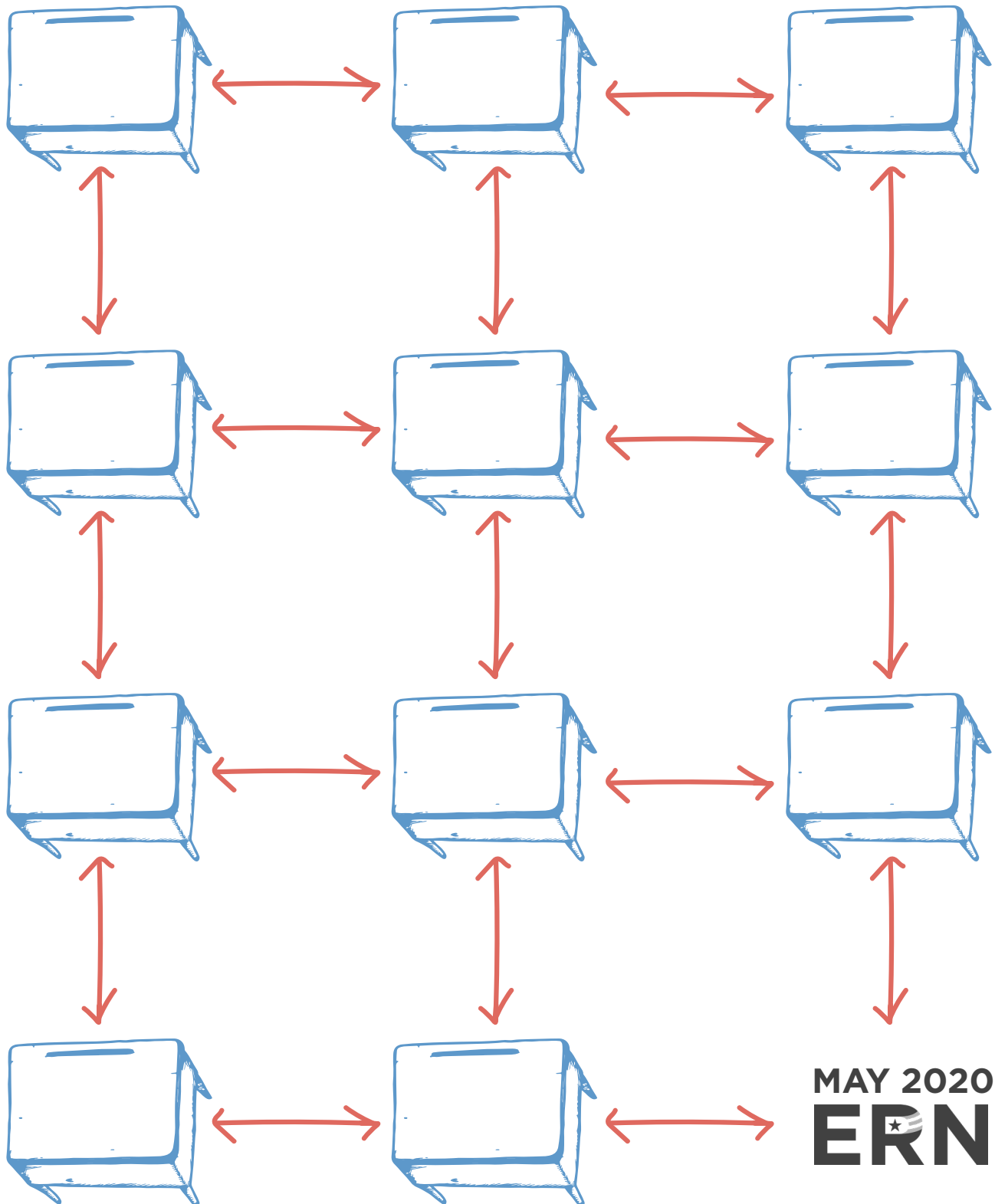


COVID-19 RESPONSE: DIAGNOSTIC ASSESSMENT

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DIAGNOSTIC ASSESSMENTS ARE ESSENTIAL FOR A SUCCESSFUL RETURN-TO-SCHOOL

Now that schools have settled into the reality that they will not re-open until the 2020-21 school year, state and district leaders are grappling with how to safely and effectively move learning back into the classroom. Regardless of whether the return to school in 2020-21 is full or partial—and in addition to ensuring the wellbeing of students, teachers and staff, and the community—determining student academic achievement levels will be essential to a successful transition. We know that students lost considerable time in the second semester of the 2019-2020 school year to gain new knowledge and skills. Moreover, [research indicates](#) that students may retain as little of half the learning gains they made prior to school closures. **Starting the year with diagnostic assessments is a straightforward way to gain critical data after unprecedented disruptions to instruction**, a solution recently endorsed by the Florida Association of District School Superintendents in a new set of re-opening [recommendations](#), as well as by the [Maryland State Superintendent](#) and the [Louisiana Department of Education](#).

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To maximize the effectiveness of instructional time in the upcoming school year, educators and school leaders need a solid understanding of how large of a “COVID slide” student experienced as a result of being home from school combined with the usual summer slide. Diagnostic assessments, administered statewide, are well-suited to this task because they can:

- Provide actionable data on a very short timeline; most tests can generate performance reports immediately after students complete assessments;
- Inform individual remediation;
- Define small groups for building missing skills and knowledge;
- Provide an overall picture of a class or school’s achievement levels so educators can determine if they are able to start with grade level content or need to incorporate missed content from the previous year; and,
- Empower teachers to use the limited time—due to potentially reduced school hours—in a more targeted way to meet student’s individualized needs.

In addition to providing educators with critical information for restarting instruction, the data from statewide diagnostic assessments could help determine the impact of various types of distance learning on student achievement: Did districts that acted swiftly see fewer learning declines than districts that were slower to respond? Did providing internet connectivity and/or devices make a difference? Are some types of distance learning and homeschooling more effective than others? If states and districts publicly report their diagnostic assessment data, education researchers can work to answer these important questions. Given the possibility of similar learning disruptions in the future, understanding the effectiveness of distance learning practices is an integral part of developing preparedness strategies.

Furthermore, opting for common statewide diagnostic assessments will allow comparability across districts that would be impossible if each district in a state chooses its own tests. However, these data shouldn't be used for anything that could be characterized as "high-stakes," such as accountability or teacher evaluations. Doing so will likely undermine efforts to ensure teachers and school leaders use data to address student learning loss.

DEFINING DIAGNOSTIC ASSESSMENTS

Determining the distinctions between diagnostic, formative, and, summative assessments can often be fraught by overlapping definitions, and in some cases diagnostic and formative are used interchangeably. In this piece, consistent with most taxonomies, we define **diagnostic assessments** as those that occur prior to or at the beginning of the learning process to gauge what students know and are able in order to help educators guide and plan instruction. **Formative assessments**, by contrast, are those that happen throughout the school year to gauge student progress after a period of instruction and inform next steps in a recurring feedback and response loop. **Summative assessments** are those administered at the end of instructional unit or school year to assess content mastery. While all three types of assessments are key to informing instruction, we're particularly focused on diagnostic assessments as a critical piece of resuming education after extended closures due to COVID-19.

One potential roadblock to administering diagnostic assessments is looming budget cuts as a result of the economic fallout of COVID-19. Current [estimates](#) project that state budgets alone will see a combined \$460 billion shortfall by the end of next year. As a result, Maryland Governor Larry Hogan [vetoed a sweeping plan](#) to overhaul K-12 and higher education, and Hawaii's Governor has proposed [slashing teacher salaries](#) by as much as 20 percent.

A tempting option to reduce the blow of spending cuts would be to absorb the savings from not administering state testing this spring, something [Colorado](#) announced it would do as part of its \$2.8 billion education budget cuts. However, these savings could be redirected to help pay for diagnostic assessments, which typically cost around \$6 per student in each subject. States may also want to consider using federal CARES Act funds if redirecting savings isn't possible.

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Another barrier to implementation is vetting the myriad options available. States should first leverage existing relationships with testing vendors and consider working with them to implement testing in the fall, as students and teachers will be familiar with these formats. States may also want to explore new diagnostic testing options for grades K-12 across a range of subjects that provide criterion- and norm-referenced scores in user-friendly reports for educators. We've compiled a list of 10 of the most well-established and widely-used assessments from eight vendors (see table below).

TABLE 1: DIAGNOSTIC ASSESSMENTS

Assessment	Company	Subject	Grades	Length	Turn-around time	Cost per student	Aligned to CCSS/ Next Gen Science	Criterion Scores	Normed Scores	# of Districts/ Schools already using product
i-Ready Diagnostic Assessment	Curriculum Associates	Math, Reading	K-12	45-90 minutes per subject	Immediately	\$6.00*	Yes	Yes	Yes	19,700 schools
FastBridge	Illuminate Education	Math	K-8	15-30 minutes	Immediately	\$7.50**	Yes	Yes	Yes	5,200 districts
FastBridge	Illuminate Education	Reading	K-12	15-30 minutes	Immediately	\$7.50**	Yes	Yes	Yes	5,200 districts
Adaptive, Diagnostic Assessment of Mathematics (ADAM)	Let's Go Learn	Math	K-9	60 minutes	Immediately	\$7.00	Yes	Yes	No	1,500 districts
Diagnostic Online Reading Assessment (DORA)	Let's Go Learn	Reading	K-12	20-60 minutes	Immediately	\$7.00	Yes	Yes	No	1,500 districts
MAP Reading Fluency	NWEA	Reading	PK-3	20 minutes	Immediately	\$5.00	Yes	No	Yes	Not Available
MAP Growth	NWEA	Math, Reading and ELA	K-12	45 minutes	Immediately	\$13.50*	Yes	No	Yes	40,000 schools
MAP Growth	NWEA	Science	3-12	45 minutes	Immediately	\$2.50***	Yes	No	Yes	40,000 schools
aimsweb-Plus Complete	Pearson	Math, Reading	K-8	20-40 minutes	Immediately	\$6.50+	Yes	Yes	Yes	3,000 schools
Star Reading	Renaissance Learning	Reading	K-12	15-30 minutes	Immediately	Not available	Yes	Yes	Yes	30,000 schools
Star Math	Renaissance Learning	Math	1-12	20-40 minutes	Immediately	Not available	Yes	Yes	Yes	30,000 schools
Performance Series	Scantron Corporation	Math	K-10	30-45 minutes	Immediately	\$3.25-4.50++	Yes	Yes	Yes	750 districts
Performance Series	Scantron Corporation	Reading	K-12	30-45 minutes	Immediately	\$3.25-4.50++	Yes	Yes	Yes	750 districts
Performance Series	Scantron Corporation	Language Arts	2-8	30-45 minutes	Immediately	\$3.25+++	Yes	Yes	Yes	750 districts
Performance Series	Scantron Corporation	Science	3-8	30-45 minutes	Immediately	\$3.25+++	Yes	Yes	Yes	750 districts

*Volume discount may lower cost per student.

**Comes bundled with math, reading, and social-emotional assessments. Cannot be purchased separately.

***Can be added on to the math/reading/ELA bundle.

+Can also be purchased as single subjects, but still costs \$6.50 per student.

++\$3.25 when bundled with Language Arts and Science as part of 4 subject bundle, \$4.50 when purchased as a single subject. Volume discounts are available.

+++Comes bundled with math and reading

The lion's share of diagnostic assessments cover reading and math for grades K-8, while about half extend into high school and only three cover science. FastBridge also includes assessments to monitor social-emotional domains, something many states may want to consider after the potential of trauma exposure related to COVID-19. All assessments are aligned with the Common Core State Standards or Next Gen Science Standards; MAP Growth, Performance Series, and Star are also aligned to all individual state standards.

Results of these assessments are all reported to teachers immediately. The reports produced are often interactive and present information in a way that is easy for educators to understand and provide actionable data.

Most of the assessments take less than an hour per subject, so they can typically be completed in a single class period. One exception is i-Ready, which can take up to 90 minutes per subject. Scantron's Performance Series also allows for additional flexibility: teachers can pause student assessments so they can be finished another time, if needed. Similarly, Let's Go Learn's assessments can be broken up into smaller sub-tests by skill.

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- MAP Growth uses test results to predict college and career readiness through an estimated future ACT score and allows educators to set student goals.
- Curriculum Associates' i-Ready and Let's Go Learn's DORA/ADAM reports state, in clear language, what students can do and provide next steps for instruction and related curriculum resources.
- FastBridge identifies at-risk students and makes recommendations for instructional plans and teacher interventions.
- Renaissance's Star identifies key areas of growth and provides instructional resources that can be assigned directly to students.
- Scantron allows users to easily create custom learning plans for students and is currently at work on adjusting its reports to reflect changes related to COVID-19.

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There are also a number of options for those looking to extend partnerships with testing vendors throughout the year. All of the assessments included in the table above can be taken multiple times to monitor student growth. And many vendors will also provide more expansive instructional resources—at an additional cost, of course. Let's Go Learn and Curriculum Associates have their own personalized learning programs; and MAP Accelerator, created in partnership with Khan Academy, uses MAP Growth data to create personalized learning pathways in mathematics. These resources can allow teachers to

address skill gaps; however these products are not integrated with the core curriculum and may be too much of an expense for districts facing heavy budget cuts.

While all testing vendors provided internal studies showing strong test reliability and validity, [The National Center on Intensive Intervention](#), part of the American Institutes for Research, has examined three of the assessments in the above table for quality. All three—MAP Growth, Star, and i-Ready—received top marks for accurate skill coverage, reliability, and validity.

Given widespread opposition to standardized testing, it may be tempting to rely on locally developed formative assessments to determine the needs of students as they return to school for the first time since March. However, doing so has the potential to overwhelm educators who will be addressing a host of new challenges and procedures related to reopening schools. And it will create a missed opportunity to collect actionable policy data on the COVID slide. Providing teachers with professionally developed diagnostic assessments can allow them to focus on instruction to accelerate learning as well as students' social-emotional needs.