

Making Decisions

Using Assessment Data in the Time of COVID-19 and Beyond

In the summer and fall months of a “typical” year, many education leaders would receive reports of student performance on annual summative state assessments administered each spring. Using these data, administrators begin a process of sense-making – identifying areas that need support and integrating new information offered by the data into their base of understanding about the performance of their students, school, district, county, and state. However, because the COVID-19 pandemic fundamentally changed teaching and learning over the past two school years, education leaders will need to bring a different mindset to reviewing assessment data from spring 2021. >>>

Authors: Jessica Arnold and Eric W. Crane



This shift in mindset includes recognizing that summative assessment data are most useful when placed in appropriate context. Understanding the impact of the COVID-19 crisis on student learning is fundamental for being able to develop responsive supports that address the needs of all students, particularly those most affected by the disruptions to learning in the 2019–20 and 2020–21 school years. Policymakers and education leaders can use valid, reliable data on student learning to identify inequities, support inquiry about systemic factors that contribute to inequity, and inform strategic allocation of resources, services, and staff to accelerate learning for those who need it most. Meaningful assessment data are essential for policymakers and stakeholders designating funding and determining eligibility requirements for programs that can impact student learning, such as state-supported professional learning resources and relief funding from sources such as the American Rescue Plan Act (ARP). And parents, educators, and the public need information about student learning in order to support their students’ academic progress.

In response to flexibility offered by the federal Department of Education, many states developed plans for assessment in the 2020–21 school year that decouple summative assessment data from federal accountability requirements and that offer alternatives in situations in which student participation in the state’s traditional summative assessment is not viable. For these plans to be effective, educators will need to pay attention to data, including assessment results, beyond just the state’s summative test. Furthermore, state and local education agencies will need to decide which data can provide meaningful information about student, school, and system performance. Accordingly, it is particularly important this year for states and districts to understand best practices for using and analyzing data to support student learning.

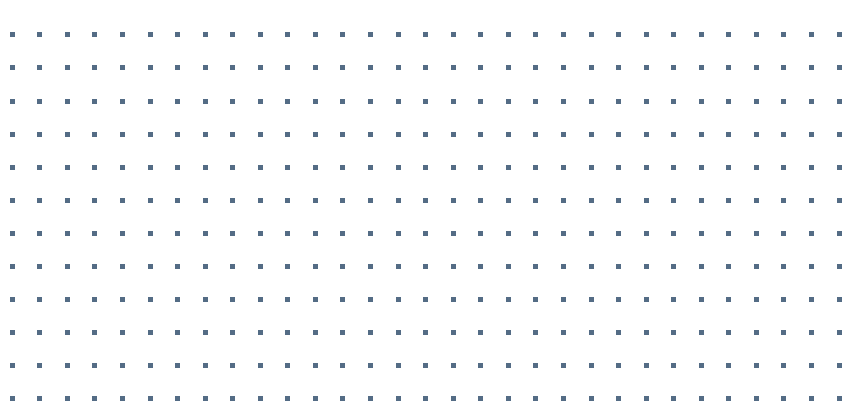
In this brief, we answer some timely questions about how to think about assessment information at this unique moment, and we offer several suggestions and considerations about how to use assessment data to inform decisions about teaching and learning.

Making Sense of Summative Assessment Data from Spring 2021

Given all the disruption to student learning, can assessments from 2021 be considered valid?

Validity is actually not a property of an assessment, but a property of the meaning given to, or the inferences made from, assessment scores.^{1,2} Because educators draw inferences from assessments to inform important student-, school-, and system-level decisions, they need to think through whether the conclusions they make and the actions they take in response to assessment results are justified by the properties of the test and consistent with what the test was designed to do. By themselves, teaching and learning disruptions do not invalidate assessment results. If well-designed assessments are administered under standardized conditions, then the results can increase our understanding of how effectively schools are preparing students to meet grade-level standards, even during the pandemic. For instance, assessment data can help show how well distance and hybrid learning strategies supported student learning during the pandemic. These data can reveal areas in which students need more support and inform discussions about practices that were introduced during the pandemic and may be worth continuing.

Important education decisions should, whenever possible, be supported by multiple sources of information to ensure that they are sound and based on the fullest understanding possible of student learning experiences and outcomes. While 2021 assessment data can still be a helpful barometer of how well educators and schools supported students’ grade-level learning, it is not appropriate to use these data alone to make inferences about student success or school quality, particularly if such inferences are attached to significant decisions or consequences. To avoid drawing incorrect conclusions from assessment data about student success or school quality, policymakers and education leaders should consider lowering or removing any high stakes attached to 2021 assessment results. They should also consider additional measures of student learning that will supplement summative assessment data to provide the richest picture of students’ academic progress.



Can assessments from 2021 be considered reliable?

Reliability refers to the consistency of measurement from an assessment. In other words, would the same results be obtained if the assessment were given and scored again? As with assessment validity, if a well-designed assessment is given under standardized conditions, it can be expected to be reliable, even during a year of pandemic-related disruptions to learning.

What if the assessment conditions aren't standardized, or if test security cannot be assured?

In many communities, the pandemic has posed challenges to administering a standardized, secure assessment. Even in communities in which schools reopened for in-person schooling in some capacity for the 2021-22 school year, families were given the option to remain in remote learning programs through the rest of the year. Consequently, some students will only have participated in testing remotely, which can pose challenges in terms of students' equitable access to technology, bandwidth, and appropriate levels of support.

If testing administration conditions reflect this sort of variation in access and, thus, are not standardized, educators and policymakers cannot be sure that assessments are measuring the same things for all students. If these challenges cannot be overcome, then it is likely that the assessment results will not be reliable.

If different students had widely different access to learning the standards, shouldn't we throw out the assessment results?

Opportunity to Learn (OTL) refers to the system inputs experienced by students in their learning, such as access to fully qualified teachers or quality learning materials. As in any year, when students' learning experiences have varied widely, assessment data may actually be measuring OTL much more than student knowledge, skills, and abilities. Because factors such as access to home broadband and computer hardware were gatekeepers to participation in distance learning for many students, it is essential to consider OTL data when making sense of and responding to inequities that emerge from the 2021 outcome data on student learning.

So, while assessment results should not be disregarded, educators and others should collect and use OTL data in conjunction with summative assessment data and other data sources to inform inferences and action steps. Such data can be collected via surveys of parents or teachers, examination of teacher assignments, and reviews of resource allocation, among other approaches. Analyzing OTL data alongside assessment data will help ensure that the focus is on the systemic factors that result in unequal assessment outcomes.

Given that many educators have concerns about the validity and reliability of assessment data from 2021, why should we bother with summative assessment this year?

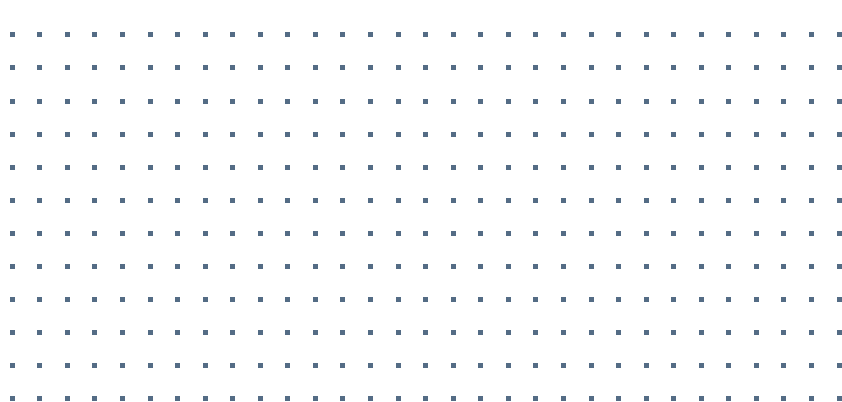
When used in conjunction with accurate OTL data, high-quality summative assessments are still an important source of information about student learning. This full set of data can be disaggregated and examined as part of a broader root-cause analysis to understand inequities in inputs that produce inequitable student outcomes and inform improvement efforts that support higher achievement for all students.

What Can Be Done If We Have Concerns About the Accuracy and Usefulness of 2021 Assessment Data?

Lower the Stakes

In spring 2021, the United States Department of Education (ED) issued guidance that affirmed the importance of summative assessment but recognized the need to lower the stakes associated with summative assessment results.³ Specifically, ED permitted states to exclude certain assessment results from federal accountability for the 2020-21 school year. Many states have taken advantage of this flexibility. Decoupling summative assessment data from federal accountability requirements signals that the primary purpose of state assessment data is to measure learning, so state and local systems can use those assessment data to inform decisions about teaching and learning.

Given that there are concerns about variation in assessment conditions and cautions about not using 2021 assessment data to draw inferences



about school quality and student performance, states and districts should follow ED’s lead and refrain from making high-stakes decisions based solely on assessment data.

Use Multiple Measures to Understand Student Learning

As policymakers wrestle with thorny decisions such as how ARP relief funds should be spent, they need a variety of information sources to shed light on resource needs and other investments that can support student learning. Summative data should never be the sole measure of student learning used to make decisions, particularly not in a year with major disruptions to teaching and learning. Using multiple measures can provide a more nuanced picture of the current status of learning. These measures can include OTL data; local assessment data; and qualitative data from students, teachers, and families about student experiences and learning.

Collect and Use OTL Data

In any year, OTL data provide important contextual information about the conditions in which students learn and the factors that contribute to student learning outcomes. For the 2020–21 school year, OTL data can include information about student access to the internet and computer hardware, access to appropriate books and learning materials, and hours of available instruction with qualified teachers. These data should be collected and viewed in tandem with assessment data to inform any inferences made about student learning. Analysis of OTL data alongside outcome data can also help identify inequitable inputs that may be reflected in summative results and inform decisions about providing appropriate resources to support accelerated learning.

In most contexts, OTL is not static. Over the course of the 2020–21 school year, for instance, many student learning experiences changed — often dramatically. Therefore, OTL data should be collected at key intervals to ensure the data reflect the lived learning experience of students.

Leverage Interim Assessment Results

In using multiple measures of student learning, interim assessment data can provide valuable additional information. In most years, interim data can be used in concert with summative assessment results. However,

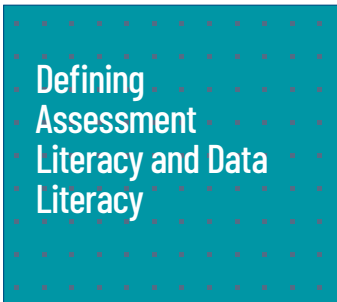
in 2021, some districts will opt to use local interim or benchmark assessments in place of summative assessment if they deem that administering state assessments is not viable. In either context, some of the considerations or limits on the inferences that can be made from summative assessment data this year also apply to data from interim assessments, given similar concerns about variation in assessment administration conditions.

Additionally, when making inferences based on interim assessment data, it is important to consider the attributes of the specific interim measure selected: How well does it align to the standards? What content is underrepresented or omitted? For example, an interim assessment that focuses on reading comprehension cannot provide meaningful information about the status of broader literacy skills such as writing, speaking, and listening. It is also important to consider the appropriateness of the interim assessment for students with disabilities and the availability of necessary accommodations and supports available to all students who take the assessment.

Collect and Use Qualitative Data from Students, Families, and Teachers

Authentic engagement of students, families, and teachers is essential for establishing a more complete picture of student learning from which to make decisions, which is particularly important during the COVID-19 pandemic. These sources can provide essential qualitative data about how students experienced learning in remote contexts, which can, in turn, be used to contextualize other measures and inform appropriate support.

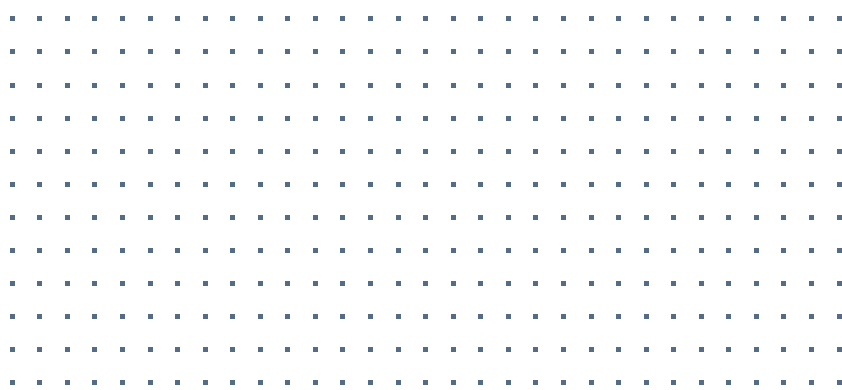
Valuing the data that students, families, and teachers provide about learning



Defining Assessment Literacy and Data Literacy

“Assessment literacy is defined as the knowledge about how to assess what students know and can do, interpret the results of these assessments, and apply these results to improve student learning and program effectiveness.”⁴

“Data-literate educators continuously, effectively, and ethically access, interpret, act on, and communicate multiple types of data from state, local, classroom, and other sources to improve outcomes for students in a manner appropriate to educators’ professional roles and responsibilities.”⁵



not only improves understanding of students’ academic successes, challenges, and needs, but it can also support rebuilding school-home relationships and community engagement as students return to school.

Pay Attention to Who Is Not in the Data Set

Although flexibility from ED will remove the traditional penalty to schools or districts that do not achieve 95 percent participation in this year’s assessments, the requirement to administer the standardized assessments was still in place for spring 2021. As a result, schools should have made efforts to administer the required assessments.

Despite those efforts, it is reasonable to expect that many, if not all, schools will have less than full participation. Local educators may be able to glean insights by identifying which students are missing from the spring 2021 assessment data set. For instance, identifying who is missing from the assessment data set may uncover inequities or point to actions needed to serve all students: *Do untested students tend to share common features, such as race/ethnicity? Does the composition of untested students differ from the school as a whole, in terms of grade level, race/ethnicity, and past academic performance?* A “yes” answer to either of these questions may be a flag that some groups of students face higher barriers to participating and engaging in school activities such as testing, and/or that more outreach or different communication is needed.

Seize the Opportunity to Build Stronger Data Practices

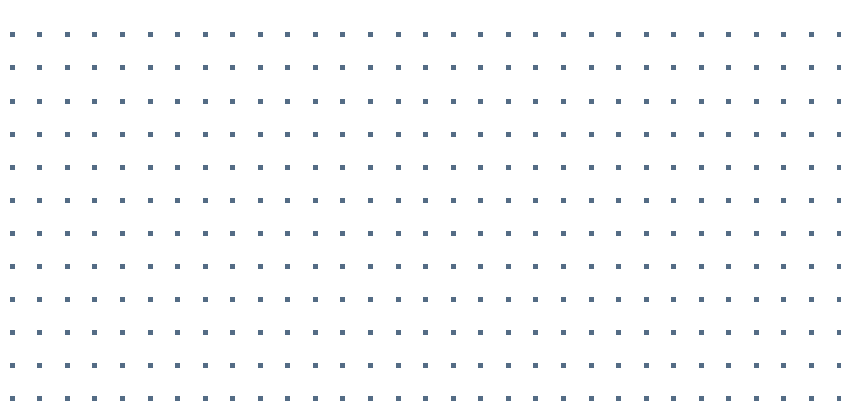
Instead of reacting to concerns about the quality of assessment data during the COVID-19 pandemic with quick fixes, state and local systems can use this opportunity to establish sustainable data practices that can support improvement in teaching and learning and promote equitable outcomes for all students well beyond the pandemic. To do this, state and local leaders will need to articulate a clear vision for the local system of assessment and how it aligns to and supports goals for learning shared by the community, local educators, and state policymakers.

Leaders must also engage teachers, principals, and local administrators in building and sustaining balanced and systemic assessment and data practices. The following investments can support the development of a strong culture of assessment literacy and data literacy (see sidebar) in which assessment data are used to highlight and address inequities and improve teaching and learning:

- » Build a common base of assessment literacy, including an understanding of the distinctions between different types of assessment, the purposes of these assessments, and the appropriate use of the data they yield.
- » Foster an expectation that analyzing data requires interrogating biases and committing to a shift from a deficit mindset to an improvement mindset.
- » Commit to developing culturally responsive data literacy, which places an “explicit focus on both centering culture and equity, emphasizing specific data skills and dispositions that are needed to implement an inclusive and asset-based approach to data interpretation and use.”⁶
- » Develop data use norms and practices that ensure all data-based decision-making includes meaningful consideration of multiple measures, including OTL data and qualitative data gathered through authentic stakeholder engagement.
- » Support teachers and administrators to apply learning about assessment practice and data use to their own context by allocating sufficient time and resources for collaboration and inquiry around assessment literacy and data literacy.

Conclusion

Although the administration of summative assessments in spring 2021 looks different than most years, educators should resist the temptation to conclude that the 2021 standardized assessments will not provide any useful information. Rather, asking how the data and evidence collected can be used appropriately may point schools and districts to new solutions to address inequitable system inputs, uneven opportunities to



learn, inefficient allocation of program dollars or eligibility, and ineffective outreach to students and families.

The pandemic provides an opportunity to revisit the stakes and consequences associated with different assessments, as well as a chance to consider multiple measures to ensure a fuller picture of the performance of students, classrooms, schools, districts, and states. Such a broader understanding will be essential to informing the efficient investment of ARP funds, and resource allocation more broadly. Our hope is that educators will be able to use this period as an opportunity to re-evaluate their assessment practices and make important shifts toward strengthening assessment data-use practices, making indelible improvements to decision-making, equity, teaching, and – ultimately – student learning and success.

Endnotes

- 1 Messick, S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educational Researcher*, 23 (2), 13–23.
- 2 Cronbach, L. J. (1971). Test validation. In R. L. Thorndike (Ed.), *Educational measurement* (2nd ed., pp. 443–507). Washington, DC: American Council on Education.
- 3 Ian Rosenblum to Chief State School Officers, February 22, 2021, <https://www2.ed.gov/policy/elsec/guid/stateletters/dcl-assessments-and-acct-022221.pdf>
- 4 Webb, N. L. (2002, April). *Assessment literacy in a standards-based urban education setting*. Paper presented at the American Educational Research Association Annual Meeting in New Orleans.
- 5 Data Quality Campaign. (2014, February). *Teacher data literacy: It's about time – A brief for state policy makers*. Washington, DC: Author.
- 6 Warner, S. J. (2021). *Culturally responsive data literacy*. National Center for Systemic Improvement at WestEd.



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