

# Supporting Students While Learning at Home

Individual Student Data and the COVID-19 Crisis



Recovering from the COVID-19 crisis will take coordinated action across multiple critical issue areas from policymakers, elected officials, researchers, advocates, and other education leaders. To support these efforts, the Data Quality Campaign (DQC) has compiled a series of resources on key issue areas states must address as they map their paths forward. Leaders can refer to these resources to learn why these issues matter to their education goals, how to prioritize actions now and down the line, and where to find additional guidance.



## Why Does Using Data to Support Individual Students Matter Right Now?

School closures resulting from the COVID-19 pandemic have left educators and families with the responsibility of rapidly learning how to support students while they are at home. This fundamental shift in the way most students receive instruction makes it critical for educators and families to be able to use data to meet students where they are and tailor instruction to their needs. While access to information on individual students is always important, teachers and parents who are supporting students at home need data to understand questions such as the following:

- Where is my student right now academically?
- What resources and materials does my student need to meet their learning needs?
- What has my student learned while at home?
- What is my student academically prepared for in the fall, whether schools re-open and students return in person or they begin the school year remotely?

As parents, teachers, and others involved in supporting students look to the next school year, they must have resources that enable them to tailor interventions to individual students, whether students are learning in the classroom, online, or some combination of both. State leaders can help by giving those closest to students the tools and training to understand how to best leverage their time and resources to give students exactly what they need.



## What Actions Do States Need to Take to Support Student Learning and Recovery Efforts?

Supporting individual student data use will require states and districts to enable access to the right information and the right tools—and to ensure that educators and parents have the skills to use them. In the short term, state leaders should support data literacy training and make timely and actionable data available to educators and parents. In the longer term, state leaders should address their state's data access needs, create professional development that supports ongoing data use, and take steps to build integrated data systems that link data across sectors.

## Near-Term Priorities

- **Prioritize access to student data.** Parents and teachers are taking on unprecedented responsibilities due to the transition to online learning. For this reason it is essential that they have access to easy-to-understand and actionable data to support student learning at home. Right now, states should use their resources and support districts to improve data access by taking the following steps:
  - Ensure that districts [turn on parent portals](#) in existing data systems to give families access to student data at home, and provide user guides for how to interpret the information.
  - Get timely data into existing tools for teachers and school leaders to access during online instruction.
- **Tailor professional development to data needs during online learning.** States should move quickly to deploy training for teachers on using data to support online instruction. In DQC's latest [teacher poll](#), 46 percent of teachers reported that they did not receive training on assessing student learning remotely either before or during school shutdowns.<sup>1</sup> More than three-quarters of those teachers said that they would have found such training helpful and would like to have it in the future. Providing data literacy training is crucial during online learning so teachers are confident about using data to tailor instruction for each of their students. Training should be designed to address teachers' current data needs, such as assessing student learning at home and tracking student progress toward academic standards.

## Long-Term Considerations

- **Address the unmet data access needs of parents and educators.** States and districts can take steps to improve or create secure data tools. These tools take time to develop, but they help connect schools to families and center conversations on individual student success. States should take steps now to identify needed improvements in data access so that people have the information they need to support students regardless of where students receive their instruction. This action may look different in each state and might include the following steps:
  - Review existing tools to ensure that the information included is helpful and understandable to parents and educators.
  - Support districts in building learner profiles to get timely and actionable data to educators, parents, and students.
  - Review existing data privacy and security practices to make sure that they are strong and transparent.

- **Embed data literacy into ongoing professional development.** Data literacy training is not just a short-term strategy to address immediate learning needs created by the pandemic; it should be a consistent aspect of professional development as educators continue to support student success, whether through online learning or in traditional school settings. States must ensure the following:
  - Teacher preparation programs fully integrate data literacy training into coursework so all teachers are ready on day one to support student learning with data.
  - Teacher training prepares educators to use data specifically for online learning.
- **Improve data access for everyone who plays a role in supporting individual students.** Students rely on academic and other supports from individuals beyond parents and teachers, such as afterschool providers, health care providers, and counselors. When all of these people have access to individual student data, students get the support that they need to succeed. States and districts should invest in tools that enable data to follow students (e.g., [student data backpacks](#)) so that it is readily accessible to everyone who plays a role in their education. States can support this work by [encouraging interoperability strategies](#) to support the flow of priority data within and among schools and platforms. This flow could include creating or adopting a common data language and creating processes for data collection and sharing that allow data to move quickly between platforms so it can be used in a timely manner to meet students' diverse needs.

<sup>1</sup> Online survey conducted within the United States by The Harris Poll on behalf of DQC: April 27–May 8, 2020, among 750 full-time teachers in the United States, all of whom were currently employed teaching grades K–12.



## Resources

States can refer to the resources below for clear, actionable information related to data use to support individual students.

**ROADMAP FOR EDUCATOR LICENSURE POLICY ADDRESSING DATA LITERACY**  
Key Focus Areas to Ensure Quality

**DATA ACTION**

**Where are we going?**  
Data use should be integrated into teachers' everyday practice as well as for supporting student achievement. To do this, teachers need to know how to use multiple types of data and how to translate that into action. To ensure that teachers are ready to use data effectively and ethically to improve student achievement, states can include data literacy skills requirements in their teacher licensure policies.

**How do we get there?**  
The ability to effectively use data includes a set of skills that teachers (and administrators) need to use data with confidence and independently to inform instruction. The roadmap focuses on the key data literacy skills that can be embedded in a licensure policy, such as a requirement to use data effectively and ethically. These skills include: access and gather relevant data from available sources; analyze and synthesize data; use data to inform practice; and use data to improve practice.

**Where are we coming from?**  
DQCC's Data Literacy 101 survey is the national benchmark for data literacy skills. A review of 19 states' licensure policies revealed that 7 states have policies that include data literacy skills. The survey also found that 19 states have policies that include data literacy skills. The survey also found that 19 states have policies that include data literacy skills.

**Roadmap for Educator Licensure Policy Addressing Data Literacy** is a resource from DQC that lays out 10 key data literacy skills, including the ability to use data to tailor instruction to individual students, that states can prioritize in teacher education programs.

**EDUCATION LEADERS REPORT**  
Volume 4, No. 2 February 2018

**Advancing Personalized Learning through Effective Use and Protection of Student Data**  
BY WILLIAM TUCKER AND DON LONG

**NASBE** National Association of State Boards of Education

**Advancing Personalized Learning through Effective Use and Protection of Student Data**, by the National Association of State Boards of Education, details how state and local education leaders can safely engage with various tools and digital platforms to use data to meet parents and students where they are.

**DQC** DATA QUALITY CAMPAIGN

Why Education Data? Action Items Resources What We Know Blog

**Data Literacy 101**  
PUBLISHED SEPTEMBER 02, 2015

When educators have access to meaningful data, and the time and skills to analyze that data, they can make more informed decisions about their students and their schools. This page discusses resources that teachers at every level can use to build their understanding of data literacy and how they can use that knowledge to meet the needs of individual students and their schools.

**What does it mean to be a data-literate educator?**  
Data literate educators continuously, effectively, and ethically access, interpret, and use data to inform their practice. They use data to understand their students, their classrooms, and their schools to improve outcomes for students in ways that are appropriate to their students' individual needs and abilities.

**Teacher Data Literacy**  
What does it mean to be a data-literate teacher?

Ms. Rubin's Data Literacy 101 Survey one teacher throughout the school year as she puts her data literacy skills to work to tailor instruction, engage families, and improve her practice.

**“Data Literacy 101,”** from DQC, includes roadmaps, infographics, and examples of what it looks like when teachers and administrators have the tools and skills they need to access and use student data safely and effectively to determine how to best support students.

**OFFICE OF EDUCATIONAL TECHNOLOGY**

Home About Priorities Tech Resources Publications Stories Blog

**Assessment**

**Section 4: Measuring for Learning**

**Goal:** At all levels, our education system will leverage the power of technology to measure what matters and use assessment data to improve learning.

Measuring learning is a necessary part of every teacher's work. Teachers need to check for student understanding, and parents, students, and leaders need to know how students are doing overall in order to help them successfully prepare for college and work. In addition to supporting learning across content areas, technology-enabled assessments can help reduce the time, resources, and disruptions to learning required for the administration of paper assessments. Assessments delivered using technology also can provide more complete and nuanced pictures of student needs, interests, and abilities than can traditional assessments, allowing educators to personalize learning.

Through embedded assessments, educators can see evidence of student thinking during the learning process, and provide near real-time feedback through learning dashboards so they can take action in the moment. Families can be more informed about what and how their children are learning during the school day. In the long term, educators, parents, districts, states, and the nation can use the information to support continuous improvement and innovation in learning.

Technology-enabled tools also can support teacher evaluation and coaching. These tools capture videos and other evidence of quality of teaching such as teamwork and collaboration. They provide new avenues for self-reflection, peer reflection and feedback, and supervisor evaluation.

Educators and institutions should be mindful of what they are measuring, what is easy to measure or what is most valuable to measure. Traditional assessments in schools and post-secondary institutions, which rely largely on multiple-choice questions and fill-in-the-blank answers. Many assessments also happen after learning has occurred and with results delivered months later, usually after the course has ended. Assessments are more meaningful only when they are timely feedback.

Continued advances in technology will expand the use of engaging, formative, and embedded assessments that are less disruptive and more useful for improving learning. These advances also ensure that all students have the best opportunity to demonstrate their knowledge and skills on standards assessments that measure high-level skills and complex demonstrations of understanding. Standards assessment—coupled with meaningful accountability—is an essential part of ensuring students have equitable access to high-quality educational experience. At the same time, it is crucial to focus time and effort on the most important areas that affect the best of educational experiences: quality, equity, and cost.

**“Measuring for Learning,”** a resource from the US Department of Education’s Office of Education Technology, details the numerous ways technology can transform assessments, as well as how teachers can use this data to improve their instruction.

**BEYOND ONE CLASSROOM: PARENTAL SUPPORT FOR TECHNOLOGY AND DATA USE IN SCHOOLS**

**FUTURE OF PRIVACY FORUM**

**Beyond One Classroom: Parental Support for Technology and Data Use in Schools**, from the Future of Privacy Forum, details how school leaders can create trusting environments and engage with parents as partners in data use.



The Data Quality Campaign is a nonprofit policy and advocacy organization leading the effort to bring every part of the education community together to empower educators, families, and policymakers with quality information to make decisions that ensure that students excel. For more information, go to [www.dataqualitycampaign.org](http://www.dataqualitycampaign.org) and follow us on [Facebook](#) and [Twitter](#) (@EdDataCampaign).