The Next Administration Must Invest in Data to Solve Our Nation's Biggest Challenges

Recommendations from the Data Quality Campaign

The Biden administration faces the daunting challenge of addressing the education, health, and economic crises gripping the country. Collectively, our country needs data to address the disproportionate impact the pandemic has had on the most vulnerable communities. **This document lays out both opportunities for the Biden administration to take bold action to solve some of our country's largest data challenges and areas where the administration can and should prioritize work on day one to make a difference immediately.**

OPPORTUNITIES FOR BOLD ACTION

Over the next four years, the problems that leaders will be called on to address will be complex, and leaders will face an overwhelming number of priorities. Addressing these challenges will require more than business as usual; this work will demand different and additional investment. Getting useful information into the hands of those who need it will depend on federal leadership and financial support. The Biden administration can pursue bold actions that can reinvigorate the nation's data infrastructure to meet current demands and better handle future challenges. The following actions will be most impactful:

- Integrating data systems. Integrated data systems linking data across sectors—including health, education, transportation, social services, and juvenile justice—provide insights into patterns and emerging needs that state and federal leaders must address. The federal government needs to more meaningfully integrate data sets across these sectors and support states and communities to do the same.
- Including data systems in infrastructure investments. As the federal government explores new rounds of emergency financial assistance and longer-term infrastructure

investments, new assistance should include funding for data systems at all levels. In our technology-rich world, infrastructure is no longer limited to physical structures like roads and buildings but extends to the systems (such as data systems and broadband) that enable information to be produced and consumed. A modern approach to infrastructure investment must include support for data systems that provide the information that individuals need.

Developing new, meaningful indicators of individual progress. For too long, the indicators we have used to understand whether public investments are producing their intended results have been defined based on the data we have rather than the data we need. State and federal leaders should work with stakeholders to identify the most important questions about individual success that they need to answer. The federal government should invest in research and pilot projects to develop meaningful indicators that will help leaders and community members have a true understanding of individual success factors and pathways that lead to better opportunities.



IMMEDIATE STEPS

Recovery will require long-term thinking and persistence. And while the administration should consider the innovations described in the previous section, important work needs to be done immediately. Leaders can move ahead with greater confidence if they prioritize the following five areas of work on day one:

- 1. Invest in modern P–20W data systems (systems that include four core systems: early childhood, K–12, postsecondary education, and the workforce) that produce information to help states address their policy priorities.
- 2. Ensure that communities have indicators and tools that create transparency about opportunity gaps in education.
- 3. Help states use evidence and build research partnerships to identify and expand on effective education policies.

- 4. Ensure that parents and educators have the tools and support to access and use individual student data.
- 5. Update laws and strengthen technical assistance to ensure that data is safeguarded.

At the center of every successful institution is effective use of data. While public institutions have frequently lagged behind other sectors in becoming evidence based, the public education sector has a history of innovations in funding, policies, and supports for data that have propelled the field forward. However, state and local needs have evolved beyond current data practices, and more remains to be done. It is time for the federal government to lead the way again and use the levers detailed in the following sections to help states emerge from the current crisis.

1. Invest in modern P–20W data systems that produce information to help states address their policy priorities.

Federal legislation, leadership, and support have expanded the availability and quality of early childhood, K–12, postsecondary, and workforce data over the past couple of decades. Investments through the 2009 stimulus (the American Recovery and Reinvestment Act) and State Longitudinal Data Systems (SLDS) grants enabled states to significantly enhance their longitudinal data systems. Updates to key laws (e.g., the Every Student Succeeds Act [ESSA] and the Strengthening Career and Technical Education for the 21st Century Act) pushed states to make use of more meaningful indicators of student learning and performance.

However, siloed federal investments further perpetuate compartmentalized state systems that make it harder for states leaders to nimbly address pressing priorities. Challenges created by the pandemic require state leaders to use data in new and different ways to answer their priority questions and find equitable solutions to entrenched problems. This work requires modernizing data systems, but cash-strapped states need substantial federal support in the following ways:

- Proactively affirm the importance of modernizing data systems. The Biden administration can do this by taking the following steps:
 - Establish a clear national vision and related goals for states and communities to develop and use integrated data systems to make better program and policy decisions. In the near term, state and local leaders should be able to leverage data to navigate pandemicrelated questions. In the longer term, leaders should be able to use their data systems to close opportunity gaps and support individual success.

- Lead by example by following through on the promises of the Evidence Act, and ensure that all federal agencies have the leadership and support to improve the integration and transparency of federal data.
- Prioritize open data so that the federal government is a model of accountability through transparency and communities have the information and tools to act on their priorities.
- Ask Congress to use callouts in legislation that enable or encourage improved quality of source systems and better integrated longitudinal systems.
- Increase funding targeted to helping states build modern, connected P-20W data systems. The Biden administration can accomplish this by taking the following steps:
 - Ask Congress to include emergency assistance for P–20W data systems in the next pandemic response bill.
 - Increase funding through the SLDS grant program and Workforce Data Quality Initiative, with sufficient flexibility for states to use the funds to meet their state-specific needs (e.g., linkages, better quality early childhood data, expansion of workforce indicators).
 - Provide flexibility, when appropriate, to use other funding streams to support modernizing state data systems.

- Refresh federal requirements, including updating relevant laws, regulations, and guidance, to give states the support and encouragement needed to continue to prioritize improvements to their data systems when faced with other competing priorities. The Biden administration can achieve this by taking the following steps:
 - Ask Congress to align reporting requirements when updating federal legislation by requiring indicators that cut across sectors (e.g., kindergarten readiness, student pathways after high school, job earnings after leaving postsecondary education).
 - Direct the US Department of Education (USED) to commit to implementing ESSA's accountability and reporting provisions with fidelity through new

regulations and guidance, including requiring report cards to supply meaningful data about student transitions into college or the workforce.

 Call on Congress to improve postsecondary education data, particularly information on postsecondary outcomes. This effort should include passing the College Transparency Act, which would facilitate the creation of a student unit record system and support students and families in making more informed decisions regarding postsecondary education. Congress should also ensure that the next version of the Higher Education Act requires institutions to publish actionable information about their postsecondary programs.

For more information on P-20W data systems, please see

- ⊘ Roadmap for Cross-Agency Data Governance;
- The Art of the Possible: Data Governance Lessons Learned from Kentucky, Maryland, and Washington; and
- Searly Childhood Data Systems: Responding to COVID-19 and Building for the Future.

For a vision of what is possible with investments in P-20W data systems, please see

- Grace's Path to Success; and
- ⊘ Data Linkages Enable Individual Support and Shared Success.

2. Ensure that communities have indicators and tools that create transparency about opportunity gaps in education.

The pandemic has been an unambiguous reminder of the nation's stark opportunity gaps, especially in access to education. Leaders must focus on ensuring that individuals have information that helps them understand how well different groups are being served by schools and other institutions in their communities. This type of information empowers decisionmaking at every level and holds leaders accountable for effectively using education investments. The Biden administration has an opportunity to update and modernize transparency and reporting requirements and to be more intentional about how data is used to improve outcomes for all learners. The administration can begin by taking the following steps:

Protect, through laws, regulations, and guidance, requirements for annually assessing students. Summative assessments are not perfect and have often been used for purposes for which they were not designed, but they are still the best performance metric to identify gaps in how well schools are serving students. The federal government has a responsibility to help people understand what these assessments mean and why they matter. The Biden administration can also commit to improving them in the following ways:

- Establish a commission to explore innovations in testing that reduce bias, to consider new delivery options, and to make recommendations to improve test efficacy for measuring and supporting learning for all students.
- Increase the emphasis on using assessment data to calculate academic growth, one of the most equitable measures of student outcomes.
- Provide guidance to states on plain language they can use to help communities understand how assessment data is and is not used.
- Ensure that existing tools provide information that is meaningful for all students and families. These existing tools are often the best and most prominent vehicles for getting data in the hands of the public. However, the Biden administration can do the following to make them as useful as possible:
 - Push states to improve transparency through the report cards required by ESSA so that the report cards continue to be powerful tools for communicating how well schools are serving different groups of students. Critically important elements for understanding

differences across schools include student academic outcomes, school spending, and access to learning opportunities. Information should be available for each group of students served by the school.

 Promote better transparency in postsecondary education by ensuring that the College Scorecard and institutions' own websites include data that represents all students and their pathways. For too long, individuals have had to make decisions about postsecondary education based on limited information that reflects only a subsection of the individuals attending an institution. The College Scorecard and individual institution websites should provide information that all students can use to understand the value they will get from their postsecondary education.

 Take steps to make the Civil Rights Data Collection (CRDC) more useful. The CRDC is the best federal source of information on inequities in education. However, by the time it is publicly available the data is often outdated. To ensure the timeliness of the data, the federal government can provide more resources to USED for the CRDC's implementation and require states to take a greater role in collecting and submitting the data. Since states are now including CRDC data on report cards, they can reduce the burden on districts by partnering with districts to submit it to USED or by submitting it on their behalf.

For more information on the role data plays in addressing inequities in education, please see

- Shining a Light on Equity: Opportunities to Use Data to Serve All Students;
- Show Me the Data;
- Growth Data: It Matters, and It's Complicated; and
- *O* Disaggregated Data: Not Just a Box Checking Exercise.

3. Help states use evidence and build research partnerships to identify and expand on effective education policies.

In the coming years, states will need help as they make difficult decisions about where to invest limited resources. Partnering with researchers to create research agendas can help states frame useful questions, test ideas, and capture information about what was successful. When implemented well, research partnerships add important capacity to states and help them identify innovative, evidence-based solutions. As states look for new ways to educate students and build robust economies, researchers will be critical partners in identifying and scaling policies and strategies that result in improved education and workforce outcomes. While these types of cross-sector collaborations often start at the state or local level, the following federal investments and actions are critical to sharing and scaling what works across the country:

- Provide direct federal support through technical assistance and guidance. The Biden administration can support this in the following ways:
 - Help states find and make better use of evidence by establishing a framework for evidence-based best practices. States have struggled to implement the requirements for tiers of evidence in ESSA. The new administration can model this work by using an evidence framework to guide future investments through federal discretionary grantmaking to better focus on promising local efforts that can be brought to scale.

- Strengthen investments in the Regional Educational Laboratory and Comprehensive Center networks. These networks are a valuable resource, but states often find that limitations on their scopes of work do not allow them to provide the support that states and communities need the most. The new administration should ensure that the networks have the flexibility and funding to be the partners that states need to address their biggest challenges.
- Create the conditions for states and communities to identify and scale best practices. The Biden administration can support this in the following ways:
 - Support peer learning networks. Often the best ideas come from local innovations, but it can be challenging for states and other communities to learn about those practices or adapt them to work in context. The new administration can facilitate the establishment of peer learning networks that include communities, school districts, and states to share best practices, evidence, and research to better support all students. This process should include identifying and scaling local efforts to develop new indicators that provide a better understanding of student success factors and education pathways that lead to better opportunities.

• Enable research capacity within states. Some of the most effective partnerships come from institutions, foundations, or research offices that exist within a state. Since these entities already understand the state context, they are well positioned to address relevant problems of practice and turn research into actionable

findings. The new administration should support these practices by elevating states that are implementing effective partnership models, helping states think through considerations for setting up partnerships, and providing financial support to nurture them.

For more information on how to build capacity to support evidence use in education, please see

- Improving Education Outcomes by Building Data-Driven Relationships; and
- Ø Roadmap for Effective Data Use and Research Partnerships between State Education Agencies and Education Researchers.

For a vision of what is possible when researchers have access to data, please see

When Researchers Have Access to Data, Students Succeed.

4. Ensure that parents and educators have the tools and support to access and use individual student data.

As our country begins to see how the pandemic will affect education trajectories in the short and long terms, those closest to students need information to answer questions about individual students. Over the past year, access to individual student data has become even more important, as the pandemic has required teachers to rapidly adapt to remote instruction and parents to take on a much larger role in their child's day-to-day education. Access to individual student data allows teachers to meet students where they are and tailor instruction to students' needs, and it allows parents to keep track of how well their child is progressing. The Biden administration can take the following steps to help ensure that those closest to students can get to the information they need and support to use it:

- Ensure that parents and teachers can access data. This goal can be accomplished by taking the following actions:
 - Encourage states and school districts to establish comprehensive data portals for parents and provide financial assistance to develop and secure the portals. In many cases, parent data portals already exist, and

districts just need to turn them on. States can make the information more robust by contributing longitudinal data, such as student outcomes, and making adjustments based on parent and community feedback.

- Require states to provide teachers access to timely data about students to inform instruction and ensure that students have the comprehensive support required to prepare for success after graduation.
- Provide educators with the support they need to use data. This goal can be accomplished by taking the following actions:
 - Invest in preparation and professional development for teachers and leaders aimed at boosting their data literacy. This includes encouraging states and districts to use existing resources, available through ESSA and other federal programs, for this purpose.
 - Encourage states to ensure that teachers and leaders have the time and support required to analyze and use data to make effective decisions, particularly by supporting peer learning networks.

For more information on data access and use, please see

- Supporting Students While Learning at Home: Individual Student Data and the COVID-19 Crisis;
- Seducation Leaders Must Not Be Data Gatekeepers; and
- ✓ Teacher Data Literacy: It's About Time.

For a vision of what is possible when parents and teachers can access and use data, please see

- How Data Empowers Parents; and
- Ø Ms. Bullen's Data Rich Year.

5. Update laws and strengthen technical assistance to ensure that data is safeguarded.

Strong policies and practices to protect student data are critical for enabling data use strategies like those described in the previous sections. When leaders do not prioritize safeguarding data, families and community members lose trust in the information provided to them and will not use it. However, privacy requirements can be overwhelming and confusing, and state leaders need help to understand and implement these requirements. Further, privacy and security practices must be up to date so that they keep information secure while enabling state leaders to use data in new and innovative ways. The Biden administration can support this in the following ways:

Work closely with Congress to modernize the Family Educational Rights and Privacy Act so that the law's requirements are aligned to new developments in technology and so that the regulatory language that describes how data can be used is updated and integrated into legislative language.

- Provide support to states so they can address privacy and security needs. This goal can be accomplished by taking the following actions:
 - Strengthen the investment in USED's Privacy and Technical Assistance Center to better support states, school districts, and other education stakeholders so they understand their responsibilities regarding the use of student data and how best to safeguard it.
 - Provide cybersecurity funding to states and school districts dedicated to helping leaders protect student and teacher data from the rising number of ransomware and other attacks on their networks.

For more on privacy, please see

- Ø Maintaining Trust as Data Use Changes: Student Data Privacy and the COVID-19 Crisis; and
- ⊘ Roadmap to Safeguarding Student Data.

Data Quality Campaign staff welcome the opportunity to further discuss these recommendations. We are confident that the Biden administration will take the necessary steps to ensure that states and communities have the information they need to rebuild.



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 and follow us on Facebook and Twitter (@EdDataCampaign).