Prioritizing Data to Support Students through Education and into Jobs

Federal leaders must invest in data to help individuals, providers, the public, and policymakers chart pathways through education and the workforce.

The Trump administration and 119th Congress face the challenge of addressing the lingering education and economic effects of multiyear disruptions to school and work that have transformed how we educate students, develop skills, and show up in the workplace. Many students remain below grade level in reading and math. College enrollment has not returned to prepandemic levels at all types of postsecondary institutions. And although employment has returned to prepandemic rates, labor market demand has shifted across geographies and industries.

Addressing these issues and helping individuals navigate education and workforce opportunities in the postpandemic world requires understanding, using, and making transparent data about what works for whom and under what circumstances to drive successful education and workforce outcomes.

States have been building cross-agency, longitudinal data systems and removing counterproductive policy barriers to do it—and they have been making notable progress. Educational institutions, providers, and intermediaries across the country have leveraged that data and other sources to develop innovative, evidence-based strategies that help learners and workers navigate their educational and career journeys and provide high-quality services from cradle to career. But the design of current state data systems and the policies that govern them are not oriented toward providing access to information that helps individuals, providers, the public, and policymakers take immediate action.

To make this change, states can and should develop robust statewide longitudinal data systems (SLDSs) that connect and protect data from early childhood through the workforce. The bones of the necessary infrastructure exist in every state data system at varying degrees of quality. The federal government has the ability to both ease and expedite state efforts to improve their SLDSs in ways that enable them to better support individuals, providers, policymakers, and the public in navigating education and workforce pathways, alongside broader efforts to support the data ecosystem. The Trump administration and Congress should prioritize supporting states in the following activities:

- **Strengthen statewide data infrastructure, governance, and quality.** Federal leaders need to partner with states to build a strong integrated data ecosystem within states that supports all stakeholders (policymakers, employers, community organizations, education and training providers, and learners). That work begins with encouraging and incentivizing the policy conditions necessary for a strong SLDS but must also include sufficient investment.

- **Protect individual data.** Federal and state agencies have a responsibility to keep individual data confidential and secure especially when employing new artificial intelligence (AI) technologies, including by adopting comprehensive privacy policies alongside robust technical, physical, and administrative safeguards.

- **Ensure transparency.** Federal and state leaders should incorporate transparency provisions into all data policies and practices so that individuals understand what data is collected about them and how their data is used.

- **Build capacity.** Federal and state agencies must invest in training for everyone who uses individual-level data. Federal support for training should focus on building literacy, including how to recognize and address algorithmic bias in the use of AI, and other privacy and ethical concerns.

Some components of each of these activities can be accomplished immediately while others are bigger and bolder and require more time to implement. This document lays out both types, beginning with **opportunities for the Trump administration and Congress to take bold action** followed by **areas in which they can and should prioritize work on day one.**

OPPORTUNITIES FOR BOLD ACTION

Over the next four years, leaders will continue to be called on to address complex education and workforce problems, and they will face an overwhelming number of priorities that require sophisticated responses. Addressing these challenges will demand different and additional policy and investment that must be guided by careful analysis. Getting useful information into the hands of those who must make these crucial decisions will depend in part on federal leadership and financial support for robust data systems and their effective use. The Trump administration and Congress 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:

1. Strengthen statewide data infrastructure, governance, and quality

- **Enable every state to have a fully connected and governed SLDS.** SLDSs that connect individual-level information from, at a minimum, early childhood through K–12 education, postsecondary education, and the workforce provide insights into patterns and emerging needs that state and federal leaders, as well as their local and nongovernmental partners, must address. They also provide the information individuals need to make informed decisions as they chart their paths through education and the workforce. The federal government's last substantial one-time investment in state efforts to modernize SLDSs was in 2009 with the American Recovery and Reinvestment Act. That massive injection of funding allowed states to build the bones of their current systems. A lot has changed economically, socially, and technologically since then, but no similar investment in data system technology has accompanied those changes. It is time for the federal government to once again make a big investment in supporting state efforts through increased resources, expanded grant program eligibility, enhanced guidance and technical assistance, and improved integration and accessibility of its own federal data assets. Developing and maintaining a comprehensive SLDS is a shared state and federal responsibility.

2. Protect individual data

- **Provide states with a unified, cross-agency vision of what using data to support individuals' journeys while protecting privacy looks like.** The bedrock of federal student privacy infrastructure—the Family Educational Rights and Privacy Act (FERPA)—was enacted more than 50 years ago and last meaningfully regulated in 2011, almost 15 years ago. In the meantime, technology has changed radically as has policymakers' understanding of how technology and data can be used not just for research and insights but also to proactively support students. Because FERPA and other privacy protections (e.g., Protection of Pupil Rights Amendment, Children's Online Privacy Protection Act, Individuals with Disabilities Education Act provisions, Higher Education Act restrictions) have not kept pace with technology and educational practices, however, these laws now operate more often than not as a blunt instrument that may hinder, rather than protect, students. The federal government has an opportunity in the next four years to modernize FERPA to address the evolving technological landscape. This work can include updating other student data privacy provisions to ensure that they are aligned and relevant and can protect students' privacy while also allowing states to take educationally appropriate actions with the data (e.g., direct postsecondary admission, connecting students to public benefit programs) that lift students up and ease their educational journeys.

3. Ensure transparency

- **Ensure that each state identifies and measures whether students are graduating with the skills necessary to thrive.** For too long, the indicators of individual progress used to understand whether public investments in education and workforce training are producing their intended results have been defined based on the data that is available rather than the data that is necessary to make those determinations. Moreover, the indicators have often been based on outdated perceptions of what individuals need to succeed after high school. State and federal leaders should work together with community stakeholders (including school leaders, nongovernmental providers and intermediaries, businesses, and community colleges) to identify the most important traits and skills they need to elevate and the questions about individual success they need to answer. The federal government should support these efforts by investing in research, pilot projects, and technical assistance to help state, local, and community leaders define and measure what evidence suggests will lead to better opportunities for students after graduation.

4. Build capacity

- **Ensure that federal support systems align with the modern, integrated data needs of states and local communities.** SLDSs are no longer K–12–specific entities. The majority of state systems already connect at least two state agencies (usually K–12 and postsecondary), and most connect three or more or are in the process of establishing additional cross-agency linkages. As a result, states need clear guidance, technical assistance, and support on a wide range of data-sharing, access, and privacy issues that cross agency silos. The Trump administration should appoint a person to the Domestic Policy Council staff who is expert in education and workforce data and privacy. This person should be responsible for cross-agency governance and ensuring that federal leaders provide aligned support, technical assistance, and guidance to state and local data users. This person's charge should be to coordinate decisionmakers from relevant agencies to develop directives that can drive guidance, technical assistance, and support to state and local governments to implement and maintain SLDSs/P–20W data systems that enable appropriate access to and sharing, use, and protection of key education and workforce data to support policymakers as well as individuals navigating their journeys through education and the workforce. This person should also coordinate with the General Services Administration to identify the most effective way to implement support and technical assistance in an efficient, aligned manner.

- **Help states and school districts use data to address their capacity and equity needs as well as fill critical teacher shortages.** Across the country, school districts and states report difficulties filling their open teaching positions, including filling them with a diverse set of teachers. In part, this struggle exists because of a lack of data. School districts have the data to know where and what positions remain open. But institutions of higher education and state education agencies are the ones who know who is being prepared to teach and in what subjects—although this information often comes with a significant lag in when school districts receive the data. In most states, these two sets of data do not connect and inform one another sufficiently.[1] The Trump administration and Congress could help states overcome this data hurdle by establishing a pilot program overseen by the Department of Education (ED) focused on supporting a small number of states that are willing to track, align, and make transparent their disaggregated teacher supply and demand data to understand how to align preparation, support, and incentives to meet local district needs and increase the diversity of the teacher workforce.

---

1 National Council on Teacher Quality, *State Reporting of Teacher Supply and Demand Data* (2021), *Teacher Supply and Demand State Data Guide* (2022).

OPPORTUNITIES FOR WORK ON DAY ONE

Achieving the longer-term innovations described in the previous section begins with important work that needs to be done within the first 100 days. State and local leaders can move ahead with greater confidence if the Trump administration and Congress prioritize the following areas of work on day one:

1. Strengthen statewide data infrastructure, governance, and quality

Federal legislation, leadership, and support have expanded the availability and quality of early childhood, K–12, postsecondary, and workforce data over the past two decades. Investments through the 2009 stimulus (the American Recovery and Reinvestment Act), the SLDS grant program, pandemic-related assistance (the American Rescue Plan Act and the Coronavirus Aid, Relief, and Economic Security Act), and infrastructure investments (the CHIPS and Science Act) enabled states to significantly enhance their longitudinal data systems. Updates to key laws (e.g., the Every Student Succeeds Act [ESSA], the Strengthening Career and Technical Education for the 21st Century Act, and the Workforce Innovation and Opportunity Act [WIOA]) pushed states to make use of more meaningful indicators of learning, outcomes, and performance.

However, siloed federal investments further perpetuate compartmentalized state systems that make nimbly addressing pressing priorities harder for state leaders. Challenges created by the pandemic and its immediate recovery require state leaders to use data in new and different ways to find equitable solutions to entrenched economic and social mobility problems. This work requires modernizing state data systems, but states need the following types of federal support:

- **Proactively affirm the importance of modernizing data systems with a focus on access and use.** For example:
  - Prioritize open-source, structured data formats, such as those licensed through Creative Commons. Open-source data is generally higher quality and more transparent than data in other formats, mitigating some bias and accessibility concerns. Federal leaders should require recipients of federal funds to make data available in structured, open, and interoperable formats.
  - Use callouts in legislation that enable or encourage improved quality of source systems and better SLDSs, including secure, privacy-protected accessibility and use.

- **Clarify and increase the funding available for SLDS modernization and capacity building.** State and local leaders across P–20W sectors, not just those in the state education agency, need additional federal funds to support data modernization efforts and clarity on how those funds may be used. The president's first budget request and other policies, including congressional action, should:
  - Maintain or increase the appropriations levels for the current SLDS and Workforce Data Quality Initiative (WDQI) grant programs and expand eligible state-level grantees and uses of funds to incentivize states to undertake much-needed improvements in their data systems, making data more accessible and useful to individuals, providers, the public, and policymakers.
  - Fully fund the National Secure Data Service while also finding ways to replicate and expand such an infrastructure, especially in the education and workforce data space. Efforts such as the Internal Revenue Service's Secure Query Service pilot and the Coleridge Initiative's Administrative Data Research Facility platform should be explored for ways they can facilitate sharing the data across the education and workforce spectrum now while more complex infrastructure continues to be built out.
  - Provide clear agency guidance and technical assistance that aligns with the Office of Management and Budget's 2024 revision to the Uniform Grant Guidance on how existing funds may be used, braided, and blended to support SLDS modernization. This support would enable states to tap into current resources as well as new ones to assist their modernization efforts.
  - Explore other funding sources such as a state data block grant, as recommended by the Advisory Committee on Data for Evidence Building, or a cross-agency data pilot similar to the Temporary Assistance for Needy Families (TANF) Data Innovation Pilot. Additional sources could provide sustainable federal funding to match state investments in modernizing their 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 SLDS when faced with competing priorities. For example:

  - Align reporting requirements when updating federal legislation by requiring indicators and outcomes measures that cut across sectors (e.g., kindergarten readiness, student pathways after high school, job earnings/quality after leaving postsecondary education).

  - Direct ED to commit to implementing ESSA's accountability and reporting provisions with fidelity through new regulations and guidance and increased state oversight, including ensuring that school report cards are easy to access, contain all of the elements required by ESSA, and supply meaningful data about student transitions into college or the workforce.

  - Improve postsecondary education data, particularly information on 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 iteration of the Higher Education Act requires institutions to publish actionable information about the costs, quality, outcomes, and value of their postsecondary programs.

> **For more information on strengthening statewide data infrastructure, governance, and quality, see:**
>
> - *The Art of the Possible: Data Governance Lessons Learned from Kentucky, Maryland, and Washington*
> - "Grace's Path to Success"
> - *Investing in California's Data Future: How California's P–20W Cradle-to-Career Data System Could Take the State from Last to First*
> - *Roadmap for Cross-Agency Data Governance*
> - *What Now? A Vision to Transform State Data Systems to Inform People's Pathways through Education and the Workforce*

2. Protect individual data

Strong policies and practices to protect individual data are critical for enabling data use strategies like those described in the previous sections and for setting a solid foundation for the use of AI in conjunction with SLDSs.[2] Prioritizing the safeguarding of data helps leaders maintain families' and community members' trust in the information provided to them and its usefulness. But privacy requirements can be overwhelming and confusing, and state and local leaders need help to understand and implement them. Further, privacy and security practices must be up to date so that they keep information secure while enabling state and local leaders to use the data in new and innovative ways, including with AI. The Trump administration and Congress can support these efforts in the following ways:

- **Enhance privacy technical assistance and support.** States consistently cite the confusing patchwork of privacy laws and policies as a barrier to making progress in linking data across sectors to support access goals. Evolving state and local privacy needs overwhelm current federal technical assistance capacity, so states struggle to find sufficient support and technical assistance to address their privacy concerns. The federal government should, as an

initial matter, revise FERPA so that it meets current data privacy needs (see discussion on page 2). For example, since the Data Quality Campaign started tracking this information in 2013, every state legislature has considered a privacy bill, and 48 have passed new privacy laws. In total, more than 150 privacy-related laws have been enacted by states in the same time period. FERPA, however, has remained unchanged. The effort to revise it may take some time, but immediate steps the Trump administration and Congress can take include:

- Issuing joint guidance from ED and the Department of Labor (DOL) on the privacy implications and permissibility of integrating education and workforce data, among other types of data, across agencies.

- Providing clear, unambiguous guidance about when and how uses of individual data within AI tools can be compliant with FERPA and other federal privacy laws. This new guidance should clarify:

  » FERPA's application to different types and uses of data, including linked P–20W data, synthetic data, and vendor uses of data; and

2   This paper uses the term *AI* to encompass both artificial intelligence and other emerging technologies that may raise similar data use and ethical considerations.

» How, if, and when FERPA's consent provisions should extend to the use of personally identifiable information (PII) in AI tools, including by disseminating best practices and templates to help state leaders design consent policies for AI use.

○ Clarifying privacy requirements or protections across core federal early childhood funding streams, including Head Start, the Child Care and Development Fund, and the Maternal Infant and Early Childhood Home Visiting program.

● **Establish guardrails and disseminate best practices related to AI use and contracting.** The Trump administration and Congress should set forth clear guardrails to govern state use of AI or other emerging technologies within data systems, including prohibiting state actors from uploading PII into open, generative AI tools. The administration also should disseminate best practices related to AI vendor contracting policies, including:

○ Templates and model language that state and local leaders can use for procurement processes, such as memoranda of understanding that satisfy federal privacy requirements; and

○ Recommended language for state actors to govern the ownership and control of data or intellectual property when using AI or other emerging technologies with third-party vendors, especially as the use of data affects individuals' education and employment opportunities.

● **Promote the ethical use of AI tools and require transparency.** Federal agencies should provide guidance and best practices that address the ethical and safe use of AI. The Trump administration and Congress should also ensure that federal laws and grant programs require and prioritize transparency around AI's use.

Necessary **guidance** includes:

○ Identifying and addressing algorithmic bias, including the disproportionate impact of bias on historically vulnerable students (such guidance should, at a minimum, align with existing civil rights laws and regulations);

○ Ensuring appropriate human oversight when using AI or other emerging technologies in conjunction with individuals' education and workforce data, particularly when connected to an SLDS;

○ Determining whether the use of AI or another emerging technology is appropriate for the situation, including guidance on how to conduct audits for when and whether data should be used with an AI tool;

○ Continuously monitoring the functionality, efficacy, and impartiality of AI models and whether they remain suitable tools for use;

○ Communicating about the equity and bias implications of AI with individuals in an ongoing and responsive manner; and

○ Building AI governance and decisionmaking into existing SLDS governance functions.

In terms of **transparency,** the Trump administration and Congress should ensure that:

○ Grant programs require state leaders to publicly disclose the use of AI, including what data was involved and how AI or another emerging technology was used, on relevant websites, reports, and tools designed for the public.

○ Grant programs require state and local leaders to publicly disclose when AI or another emerging technology is used for *decisionmaking* that affects individuals' education and employment opportunities, particularly for vulnerable populations.

○ Open-source, Creative Commons-licensed structured data formats are prioritized. As discussed in the previous section, open-source data is generally higher quality and more transparent than data in other formats, mitigating some bias and accessibility concerns. Federal leaders should require recipients of federal funds to make data available in structured, open, and interoperable formats.

For more information on privacy and AI, see:

● *DQC FERPA Recommendations*
● *Federal Laws Are Not a Barrier to Connecting Data within a Statewide Longitudinal Data System*
● *The Federal Role in Safeguarding Student Data*
● *Recommended Federal Actions to Govern AI Use in State Data Systems*

3. Ensure transparency

The pandemic and subsequent recovery efforts have been unambiguous reminders of the nation's stark opportunity and equity gaps, especially in access to education and workforce pathways. Leaders must focus on ensuring that individuals have information that helps them understand how well different groups are being served by schools, colleges, workforce training providers, and other institutions in their communities. This type of information empowers decisionmaking at every level and holds leaders accountable for effectively using federal investments. The Trump administration and Congress have 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 and workers. For example:

- **Protect, through laws, regulations, and guidance, requirements for annually assessing students to determine grade-level proficiency and growth.** Summative assessments are not perfect and have often been used for purposes for which they were not designed, but they are still the only comparable tool for identifying gaps in how well schools are serving students. ED has taken strides to increase the number of states exploring innovative ways to conduct annual assessments; however, the requirement that states administer and publish annual state assessment data must remain intact and not be waived.

- **Make federal data more accessible and provide guidance on and support for linking and accessing data.** States struggle to provide clear information to individuals, communities, and even local leaders about the quality, effectiveness, and value of education-to-workforce pathways because doing so requires using federal data to which they do not have access or connecting data across agencies and sectors, which they believe is prohibited by federal law or regulations. Federal law rarely prohibits states from integrating data across education and workforce sectors, and often, the use of federal data for this effort is allowable. These misconceptions could easily be cleared up through administrative actions that provide states clarity or direct approval, including:

- ○ Support state data systems in obtaining access to federal data that is relevant to education and the workforce, encouraging transparency and continuous program improvement. Relevant data includes:
  - » Wage and employment records (e.g., unemployment insurance, census records, National Directory of New Hires, other applicable sources);
  - » Postsecondary enrollment data from across state lines;
  - » Military enlistment information;
  - » Free Application for Federal Student Aid (FAFSA) data, including the accompanying federal tax information (FTI); and
  - » Other state administrative data, including public benefits data.

- ○ Provide guidance on how state agencies, institutions of higher education, and their nongovernmental partners can use FTI from the simplified FAFSA for research, analysis, planning, evaluation, and projections to administer financial aid programs more effectively and to assist students in persisting in and completing postsecondary education.[3] Guidance should specify how FTI data collected on the simplified FAFSA can be used and shared by state agencies and institutions.[4]

- ○ Promote state- and local-level sharing of Head Start data and create a standardized agreement template to facilitate that sharing.

- **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 Trump administration and Congress can take the following actions to make them as useful as possible:

- ○ Enforce ESSA's state report card requirements so that the report cards continue to be powerful tools for communicating how well schools are serving different groups of students. One option is to establish a pilot program of states willing to innovate by creating a neutral agency that reports assessment scores and accountability data. After 20 years of states still dragging their feet on reporting critical information for understanding differences across

---

3   Sean Baser, *Data Use Implications of the FAFSA Simplification Act and FUTURE Act* (State Higher Education Executive Officers Association, 2024).
4   *Ibid.*

schools, like student academic outcomes, chronic absenteeism, school spending, and access to learning opportunities, it's time to try something new. Information should be available for each group of students served by a school and should be easy for parents to find, read, understand, and use.

○ Promote better transparency in workforce training by instituting initial improvements to WIOA data reporting regarding eligible training providers, including publicly reporting on longer-term (fourth-quarter) earnings data and demographic data that is already collected, as well as revisiting suppression practices to increase the proportion of programs with available data (e.g., rolling up over multiple years) on TrainingProviderResults.gov.

4. Build capacity

States rely on the federal government to step in to address priorities or challenges that states cannot or do not have the capacity to tackle on their own. This support includes promoting best practices, addressing systemic barriers, providing states with cover to take action, and breaking down silos. Existing federal efforts can be expanded and enhanced through the following actions:

● **Support cross-state and multistate collaborative efforts.** Removing state border silos, both in data systems with state-driven governance and in the cross-agency/cross-state data analytics community, is critical for capacity building. Federal agencies should increase support for and encourage participation in cross-state data linkages, shared problem solving, and collaborative efforts to develop common solutions, building on progress funded by the SLDS grant program, WDQI, and the Multi-State Data Collaborative. Federal agencies should also provide line-item funding for training for the public-sector analytics field, similar to the DOL Employment and Training Administration-sponsored Applied Data Analytics training for state agencies.

● **Partner with state and other federal agencies and stakeholders to ease the burden of accessing federal labor market outcomes data.** Using secure, privacy-protected linkages; an exchange; or a clearinghouse that minimizes sharing of PII could support the creation of state-level employment scorecards that can more easily report outcomes for participants in WIOA-supported programs across a longer range of time.[5] These approaches could also capture outcomes for participants who may have moved out of state and whose outcomes are not included in state

unemployment insurance systems. While the State Wage Interchange System enables states to share labor market participant data for the purpose of reporting, in practice using those systems for anything beyond basic reporting can be challenging.

● **Reimagine the role of Regional Education Labs and Comprehensive Centers.** These networks are a valuable resource, but states often find that limitations on their scope of work do not allow them to provide the support that states and communities need most. The Trump administration and Congress should ensure that the networks have the flexibility and funding to provide direct service to states driven primarily by needs that states identify; establish research-practice partnerships; and build capacity for data use by making existing research more actionable, translating it, and helping local users learn how to use it. A standalone network of data support centers that can provide targeted technical assistance on state and local integrated data needs and expand state capacity to analyze and use data to improve opportunities and outcomes also might also be more effective.

---

5   Two possible structures for this clearinghouse approach are described in more detail here and here.

Data Quality Campaign staff welcome the opportunity to further discuss these recommendations. We are confident that the Trump administration and Congress will take the necessary steps to ensure that states, local governments, and communities have the information they need to help their residents chart their paths to success.

DQC Data Quality Campaign