

THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS

The Council of Chief State School Officers (CCSSO) is a nonpartisan, nationwide, non-profit organization of public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five U.S. extra-state jurisdictions. CCSSO provides leadership, advocacy, and technical assistance on major educational issues. The Council seeks member consensus on major educational issues and expresses their views to civic and professional organizations, federal agencies, Congress, and the public.

For several decades, the Council of Chief State School Officers has worked in partnership with the U.S. Department of Education to standardize data definitions and improve data use at the local, state and national levels. These efforts have been realized through various means, including the work of CCSSO's Education Information Management Advisory Consortium (EIMAC). The mission of EIMAC, as defined by the chiefs, is to represent and advise SEA chiefs and staff on national data issues, both current and future; collaborate in the planning of national data initiatives by building partnerships with national data collectors, including federal program offices; review and provide feedback on 1) national data collections and reports, 2) national assessments and related research studies; provide networking and professional development opportunities for SEA directors and managers of data and assessment; and provide resources and leadership to states in building student-level data systems.

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DATA QUALITY POLICY STATEMENT

A Policy Statement of the
Council of Chief State School Officers

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A Call to Action

With today's climate of increased accountability, the expectations for our nation's schools have risen, and thus, so have the demands on states to create programs and support interventions that improve student achievement. Educators and policymakers recognize that to provide these results, better information is needed—information derived from quality data rather than relying on anecdotes, feelings, or hunches about what students know or need. Quality data can be defined as data that are current, accurate, consistent across systems, and useful to educators and policymakers in answering critical questions about student performance or program effectiveness.

We, as state leaders, recognize the central role we play in this environment and believe we have a unique responsibility to build and improve both our organizational and technological infrastructure for data collection and analysis. These actions will help us reach beyond compliance monitoring to our goal of improving instruction and student achievement. We commit to reaching out to the public, local officials, and educators to emphasize the importance of education data from prekindergarten to postsecondary education. We believe each state has an inherent responsibility to make information available in a clear and accurate fashion so we can learn from our strengths and identify and correct our weaknesses.

While states play a central role in improving education data, we cannot improve education data in isolation. We support the development of an education data system in which local,

state, and federal data collection, analysis, and reporting efforts are aligned.

We applaud the initiatives already underway at the U.S. Department of Education (ED) and within state departments of education to improve the efficiency and effectiveness of data collection infrastructures, data availability, and data quality at the state and local levels, but there is more work to be done in this area. There must be a national call to action to arm educators, policymakers, parents, and the public with timely, accurate, and quality information to improve student achievement through an aligned and efficient system. As such, we call for a new level of collaboration and synergy among all levels to achieve this goal. Due to the importance of data in our education systems, in partnership with the federal government and our local education agencies, we commit to implementing longitudinal data systems to collect student level data within three years.

The Challenges

While we are committed to this goal, our success is not a foregone conclusion. Challenges lie in transforming not only states' technological infrastructures, but the way education organizations operate. Change is difficult and there are barriers at the local, state, and federal levels. Our challenges are focused in three broad areas:

1. a culture of data use
2. infrastructure and standards
3. resources and capacity

Challenge 1—A Culture of Data Use

There is need for a cultural shift among

educators, local officials, and some state officials to embrace the notion that good data make a difference and recognition that access to good data empowers them with the information they need to improve student outcomes. Data collection is sometimes seen as yet another intrusive government mandate, rather than an opportunity to provide differentiated and useful information to teachers, parents, administrators, and principals. This lack of understanding about the importance of quality data can create a scenario where unreliable, incomplete or incomparable data lead to an underutilization of information.

Data are not being used enough to inform curriculum and instruction in schools or empower parents to help their children at home. Ultimately, data systems must be learner-centered; they must deliver information about promising interventions in a useable format for educators. Solely relying on anecdotes or

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instincts to solve problems in education neglects the critical role data play in examining a broader range of measures and offering seemingly counterintuitive solutions. Our students deserve and need a more scientific, reliable approach with proven results. Such strategies are only possible when data are collected, reviewed, and accessible through a robust infrastructure.

Challenge 2—Infrastructure and Standards

Outdated data system, outdated data. A significant number of state data systems are

outdated by today's technology standards, either in terms of the technologies they utilize, the range of data they collect, or their design and data architecture. Powered by antiquated systems, the data reported can be months, if not years, out of date. Real-time information is simply not accessible to make dynamic decisions to impact student outcomes.

Lack of ability to track individual students.

Tracking individual students is needed to accurately calculate many indicators, such as graduation rates and student mobility. Without such capacity, states depend on aggregation, which conceals important information about specific student populations.

Data collection methods vary across all levels of the nation's educational system.

Schools and districts all collect and warehouse data in a variety of different ways and categorize them under varying definitions. As a result, systems across states and districts are not able to "talk" to one another. Without a flow of streamlined information, tracking trends in student performance becomes nearly impossible. Developing systems with a level of agility to communicate and translate information across schools, districts, and states requires new technologies.

Data definitions vary among the states, and among the federal program offices that collect data from states. Without consistent data definitions, comparability of the data collected is undermined.

Challenge 3—Resources and Capacity

Costs of creating data infrastructures.

Building robust data systems requires significant

investments in both the technology and training necessary to change organizational processes. The costs include technology, staff, professional development, and outreach at both the state and local levels.

Duplicative and disjointed data requests. All states struggle to respond to the disjointed and repetitive data requests from state offices, federal agencies, the research community, and the private sector that occur at various times throughout the year. These duplicative and uncoordinated requests place significant time and resource burdens on state staff.

State capacity is limited. Many state staff lack the time, expertise, or resources to design, develop, and deploy updated and integrated systems. Coupled with a technological infrastructure of legacy systems, producing accurate information requires concerted investments and a tremendous amount of time and effort.

Addressing the Challenges

Every state shares the common goal of creating a robust longitudinal data system. Charged with such a costly and critical goal, it is of the utmost importance that states learn from others' experience to adopt successful practices and minimize repeated mistakes. Each state has a set of existing systems, legislative mandates, and other conditions that create unique contextual foundations for the development of a longitudinal data system. While there is no one linear pathway for states to follow, there are certain necessary steps that can be taken to improve systems at all levels.

Challenge 1—A Culture of Data Use

Develop public understanding about the need for good data. States should report education data to the public in a highly transparent manner. Education leaders should explain the differences in methodologies used to report data in terms the public can clearly understand. Policymakers need to understand the importance of quality data and support only collecting information that is relevant and useful.

Transform data into information useful for teachers, school administrators, and parents. States should work with local education agencies (LEAs) to create school environments that encourage data-based decision making and see data as reliable measures of student ability. Education data must be placed in an easy-to-use format for teachers, school administrators, and parents so they can translate data into information on which to base specific action steps to improve student outcomes. Professional development of teachers and school administrators and an

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emphasis on the importance of data in teacher education programs will be required to help teachers and school administrators use data in a meaningful way.

Facilitate the movement of accurate data from LEAs. State leaders should ensure that systems across the state and within districts are fully compatible with one another and create

uniform standards to guide data collection, entry, analysis, and reporting. States should establish a process for auditing state, district, and school records to ensure accuracy and consistency. Furthermore, states should regularly evaluate the data collections to determine the relevance of the data collected and effectiveness in analyzing performance; they should provide a reason for every item that is being collected from the districts. Education leaders must develop, promulgate, and provide training on policies and practices that promote the accuracy and quality of education data to the state. They must also develop acceptable statewide data sharing policies to ensure that privacy requirements are met. Establishing in each state a system to keep LEAs accountable for data is a fundamental first step. It is critical that LEAs are

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held to the same high degree of quality data standards that the state and policymakers expect from other sources.

Collaborate with leaders from local communities and schools, higher education institutions, and the business community.

State leaders should ensure that local leaders are engaged in the process of adopting and implementing the new or improved data systems. Local education leaders can provide additional resources, lend their own political will to accomplish effective implementation, identify and train key staff, and provide another level of oversight and accountability. Local leaders in some districts may also be able to share knowledge that they have acquired in

developing their own data systems, some of which are more sophisticated than those at the state level. State leaders should also engage higher education leaders who can help link P–12 and higher education data systems with one another. Business leaders can also add their expertise on data systems and data-based decision making and lend support for building public and political will. Additionally, leaders of local community and civil rights organizations can build local support and political will and communicate important messages about the need for better data.

Challenge 2—Infrastructure and Standards

Update and integrate data collection

systems. Data collection systems may be outdated, with some work still being done using pencil and paper instead of computerized systems. States must take steps to implement computerized data collection systems and provide LEAs with the training and resources to use them. Buy-in and support within states is critical to addressing this challenge. CCSSO encourages states to actively engage schools and districts in the redesign and innovation of state systems, and to work toward integration of all data—facility, staff, finance, course/program—with systems at all levels.

Develop longitudinal data systems that track

individual students. States should develop student-unit-record data systems with unique student identifiers that have the capacity to track students through the state's education system from prekindergarten through postsecondary education. Determining a student's progress over time will significantly narrow the chances of any student "falling through the cracks." Further,

with a student ID system, promising practices can then be identified and shared with other schools. States should adopt criteria—such as accountability, accuracy, interoperability, transparency, and uniformity—for developing quality systems that meet state needs and take extra precautions to ensure that privacy concerns are sufficiently addressed. States might also consider student identifiers and data systems that would allow them to track students across state lines.

Policymakers need comparable information to make good decisions about the success and efficiency of education programs.

Identify and collect the data needed to answer key policy questions. States should work toward implementing the 10 essential elements of quality data systems laid out by the Data Quality Campaign and the National Center for Educational Accountability (NCEA):

- ◆ a unique statewide student identifier
- ◆ a teacher identifier system
- ◆ student-level enrollment, demographic, and program participation information
- ◆ student-level test information, or information on student performance on state standards
- ◆ information on every student in a tested course or grade who did not take the state test, or whose performance on state standards was not reported

- ◆ student-level transcript (course completion and grade) information
- ◆ student-level SAT, ACT, AP, and IB exam results
- ◆ student-level graduation and dropout data
- ◆ the ability to match student records between P–12 and higher education systems (Where this is not possible, established statistical methods of finding overlap between data sets may be an option.)
- ◆ a state data audit system assessing data quality, accuracy, and reliability

Promote interoperability among district and state systems.

Implementing open standards will enable systems at various levels to easily transfer data. CCSSO supports the efforts of the Schools Interoperability Framework Association, which works with educators and vendors to ensure that software products will work across systems. It should be noted that consistent protocols are needed for managing data at the district level before open standards can be implemented effectively.

Identify and use common indicator

definitions. Education indicators are plagued by differences within and across states. Thus key indicators such as graduation rates, student enrollment, and instructional expenditures cannot be compared. Common definitions of education indicators, as well as basic data elements, facilitate a rigorous examination of both input and output data. Policymakers need comparable information to make good decisions about the success and efficiency of education programs.

Challenge 3—Resources and Capacity

Educate policymakers and public on the need for improved data systems. There must be an increased understanding among policymakers and business, civic, and education leaders about the power of longitudinal and financial data systems that are built on common definitions. These education stakeholders then will be able to *understand and act on* the need for financial and political support for building longitudinal data systems in each state within three years and commit to using data systems as part of the efforts to improve student outcomes. Communication materials highlighting the benefits to education stakeholders of investments in data systems may be useful in gaining policymaker support.

Coordinate national data submission procedures. CCSSO supports ED's efforts to minimize the burden on states for federal data collections through the Education Data Exchange Network (EDEN). Their efforts to condense data collections into one congruent system will allow states to provide information once, decrease the time burden on state staff, and provide a single source of federal program data for education stakeholders. A recent report of the Government Accountability Office recognized the potential EDEN holds for improving education data, but it also acknowledged that the success of the initiative is reliant upon states submitting data to the system. As ED works to achieve this goal, states must do their part to make sure all data are submitted in a timely manner to the federal government. Other national data collectors should be encouraged to work with ED to use available data rather than imposing redundant data collections upon states.

Train and increase the number of SEA staff.

With the move toward quantitative data collection, state staff have had to utilize or develop a different skill set in order to complete their work. Some state departments of education do not have staff with the technical knowledge to perform data collection efficiently. Stagnant or shrinking state budgets also make it difficult to hire additional SEA staff to meet states' growing information system needs. Therefore, state staff need professional development to work with quantitative data collection and understand data quality. Investing in quality information will arm educators and schools to perform their jobs more effectively.

Promote active participation in the Education Information Management

Advisory Consortium (EIMAC). EIMAC offers a forum for state leaders to build collaborative solutions and identify promising practices in education data systems. States are able to share lessons learned and mistakes made in collecting and reporting data and building or improving data systems. The practical advice and opportunities to collaboratively problem solve are critical to minimizing the costs of creating longitudinal data systems.

Advocate for focused federal funds to support the development of state longitudinal data systems. As the federal government is a key driver and recipient of state data, we believe that targeted investments in state data systems by the federal government will be critical to the rapid and successful implementation of such systems. We encourage Congress and the federal agencies to which states report data to work with states to develop funding models that accelerate state implementation.

The Commitment

States alone cannot address all of the challenges in transforming the quality and use of education data. We believe that the development of a consistent nationwide education data system, wherein local, state, and federal data collection, analysis, and reporting efforts are aligned, is required. By working in partnership with federal, state, and local organizations in the public and private sector, we can achieve the goal of creating an educational data system where decisions are made based on the most relevant and accurate information available so every child has the opportunity to succeed.

We applaud the states and organizations that have already taken steps in this direction.

Over the past three years, the number of

statewide student ID systems has increased significantly; transparency in data reporting has become a common expectation; and policymakers, state leaders, and associations are collaborating to effectively use data when making policy decisions. These efforts must be sustained and strengthened through this collaboration.

We commit to reaching out to the public, local officials, and educators to emphasize the importance of data collection. We commit to making our data transparent, reliable, and accurate so it can be used to improve teaching and learning. Due to the importance of data in our education systems, in partnership with the federal government and our local education agencies, we commit to implementing longitudinal data systems within three years.

