The Early Childhood DATA Collaborative

Getting Started

10 Fundamentals of Coordinated State Early Care and Education Data Systems



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Can Your State Answer These Questions …

- **Are children, birth to age 5, on track to succeed when they enter school and beyond?**
- **Which children have access to high-quality early care and education programs?**
- **Is the quality of programs improving?**
- **What are the characteristics of effective programs?**
- **How prepared is the early care and education workforce to provide effective education and care for all children?**
- **What policies and investments lead to a skilled and stable early care and education workforce?**

Policymakers often struggle to obtain answers to basic questions about their states' public early care and education (ECE) systems. Answering these critical policy questions requires data to be collected over time at the individual child level and to be linked to data on ECE programs and the ECE workforce. These systems also require structures and policies that can ensure appropriate access to and use of data, along with security and privacy protection. By ensuring that data are accessible and stakeholders have the capacity to use data appropriately, coordinated state ECE data systems will promote data-driven decisionmaking to ***improve the quality of ECE programs and the workforce, increase access to high-quality ECE programs, and ultimately improve child outcomes***.

The Time To Act Is Now

Effective use of data systems will help policymakers improve:

- **Program quality.** State and local program managers will receive timely, accurate and ongoing feedback on the performance of programs — and will be able to identify and adapt strategies and practices from the highest-performing providers to improve all programs across the state.
- **ECE workforce quality.** Higher education institutions, state legislators and other leaders will have information on the supply and demand for ECE staff members; the professional development opportunities and resources available to them; and an understanding of how well these supports attract, retain and develop an ECE workforce that prepares every young child for success in school and in life.
- **Access to high-quality programs.** Policymakers and advocates will have a detailed picture of the distribution of the quality of services across neighborhoods, communities and regions of their state and accessible data systems to answer critical policy questions.
- **Child outcomes.** ECE educators will draw on rich, cumulative information on children's strengths and progress in all areas of their development and use this information to plan and adjust curricula, learning experiences and family engagement efforts.

States can begin now to build and use coordinated ECE data systems by identifying the state's key policy questions, assessing the status of current data efforts in relation to the Early Childhood Data Collaborative's (ECDC) 10 ECE Fundamentals and developing an action plan for improvement. The ECDC will continue to build new partnerships, conduct a 50-state survey, and develop tools and resources to support policy change that advances the development and use of coordinated state ECE data systems. For more information, please visit www.DataQualityCampaign.org.

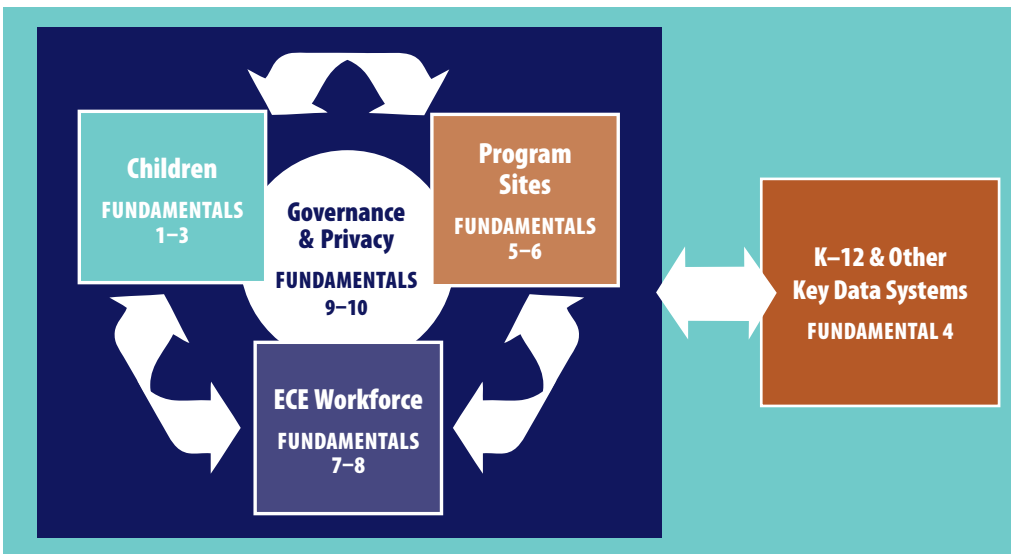


Laying the Foundation for the Strategic Development of Coordinated State ECE Data Systems

Accurate, timely and quality ECE data can inform policy decisions; guide the daily work of ECE professionals; and support coordination among ECE programs, the K–12 system, and other systems that serve young children and their families. Building coordinated state ECE data systems requires a threefold transformation:

- **From compliance-driven data efforts to *improvement-driven data systems.*** Current ECE data systems were created to satisfy reporting requirements from a variety of state and federal agencies. Improvement-driven data systems are designed to answer the critical policy questions (see Can Your State Answer These Questions ...) states seek to answer regarding young children, ECE programs and the ECE workforce.
- **From fragmented and incomplete data efforts to *coordinated data systems.*** Coordinated state ECE data systems, driven by critical policy questions, strategically link select data collected on young children, program sites and ECE practitioners. They align data across funding streams and agencies to provide state policymakers with a unified picture of their states' young children, programs and ECE workforce.
- **From "snapshot" data to *longitudinal data systems.*** ECE data systems have historically collected point-in-time data, or "snapshots," of children, programs and the ECE workforce. Longitudinal data — data that follow individuals over time and across programs — allow policymakers to track progress to uncover trends and act on the information.

Coordinated state early care and education data systems



10 FUNDAMENTALS
of Coordinated State ECE Data Systems

Transforming data systems so that they are improvement driven, coordinated and longitudinal lays the groundwork for coordinated state ECE data systems. The 10 ECE Fundamentals outlined here provide the foundation for answering the critical questions that policymakers seek to answer. Of the four domains of services and supports that are fundamental to early child growth and development[1] — health, early intervention programs, family supports and services, and ECE — this framework focuses on the ECE domain.

1 Unique statewide child identifier

A single, nonduplicated number that remains with a child throughout participation in ECE programs and services. The child identifier remains consistent even if the child moves or enrolls in different services within a state. States policies need to ensure the unique identifiers are secure and protected.

2 Child-level demographic and program participation information

Information such as age, ethnicity, socioeconomic status and program participation, including early intervention services for children with special needs.

3 Child-level data on development

Developmental data collected from multiple sources (e.g., child observations, parent questionnaires) and the assessment of multiple skills, including social-emotional, physical, cognitive and linguistic development, and approaches to learning. Data collection methods must be appropriate, valid and reliable, using scientifically sound instruments.

4 Ability to link child-level data with K–12 and other key data systems

Linkages that allow policymakers to track the progress of children over time, as well as better understand relationships among ECE programs and other programs that influence child development.

5 Unique program site identifier with the ability to link with children and the ECE workforce

A single, nonduplicated number assigned to a school, center or home-based ECE provider. States also may assign unique classroom identifiers to identify individual classrooms within a site.

[1] www.finebynine.org/uploaded/file/SECPTAN_Build_PROOF.pdf

6 Program site data on structure, quality and work environment

- **Structural data** such as location; length and duration of the program(s) offered; and funding sources.
- **Program quality data** such as national accreditation information, child-adult classroom ratios, curriculum and staff-child interaction measures.
- **Work environment data** such as the availability of professional development opportunities for staff, wages and benefits, and turnover.

7 Unique ECE workforce identifier with ability to link with program sites and children

A single, nonduplicated number assigned to individual members of the ECE workforce, including teachers, assistant teachers, aides, master teachers, educational coordinators and directors, and other individuals who care for and educate young children.

8 Individual ECE workforce demographics, including education, and professional development information

- **Demographic data** such as race/ethnicity, gender, age, educational attainment, experience in the field, retention and compensation.
- **Professional development** and training program data, such as the focus of the program content and delivery, funding sources, financial aid, and monetary rewards for educational attainment.

9 State governance body to manage data collection and use

Body that establishes the vision, goals and strategic plan for building, linking and using data and sets policies to guide the collection of, access to and use of the data. This includes setting policies to ensure common data definitions and standards and data audits to ensure the validity of the data.

10 Transparent privacy protection and security practices and policies

Transparent, publicly available policies and statements that articulate how states ensure the security of the data and the privacy and confidentiality of personally identifiable information. These policies and statements should address important issues including who has access to what data, especially identifiable data; how the information is used and linked; the justification for the collection of specific data elements; and how long states retain the information.

Ensuring Appropriate Access and Building Capacity To Use Data for Continuous Improvement

To fully realize the potential of coordinated state ECE data systems, state policymakers need to establish policies, practices and structures that ensure appropriate access and help stakeholders use data effectively to guide decisionmaking.

Ensure Timely, User-Friendly and Appropriate Role-Based Access to Data

Ensuring timely, user-friendly access to data for appropriate stakeholders is critical to supporting data-driven decisionmaking. State data systems need to serve a variety of stakeholders, so engaging stakeholders at all levels in designing reporting systems helps states ensure they analyze and present data in ways that meet each stakeholder's informational needs and also ensure the security and privacy of personally identifiable information. States can also enhance access to data by minimizing delays between collecting data and making them available.

Build the Capacity of Appropriate Stakeholders To Use Data for Continuous Improvement

States will realize the potential of coordinated state ECE systems if they invest in training, professional development and other efforts that build the capacity of appropriate stakeholders to use the information for continuous improvement. The state's higher education and research communities can enhance the research capacity of states and provide guidance on correct interpretations of data as well as serve as valuable partners in providing education and training to use data to inform decisionmaking.



The Early Childhood DATA Collaborative

A PARTNERSHIP OF

The Center for the Study of Child Care Employment at UC Berkeley

Council of Chief State School Officers

Data Quality Campaign

National Center for Children in Poverty at Columbia University's Mailman School of Public Health

National Conference of State Legislatures

National Governors Association Center for Best Practices

Pre-K Now, a campaign of the Pew Center on the States

The Early Childhood Data Collaborative (ECDC) supports state policymakers' development and use of coordinated state early care and education (ECE) data systems to improve the quality of ECE programs and the workforce, increase access to high-quality ECE programs, and ultimately improve child outcomes. The ECDC will provide tools and resources to encourage state policy change and provide a national forum to support the development and use of coordinated state ECE data systems.

The ECDC is supported through funding from the Birth to Five Policy Alliance, The Pew Charitable Trusts, and The David and Lucile Packard Foundation.

For more information, please visit www.DataQualityCampaign.org.