The Early Childhood

DATA

Collaborative

10 Fundamentals of Coordinated State Early Care and Education Data Systems

Inaugural State Analysis

State policymakers are increasingly focused on closing the achievement gap and preparing all students to succeed in school and in life. However, college and career readiness begins long before students enter high school or even a classroom. Differences in children's abilities appear as early as the first year of life,[1] and research has shown that targeted interventions during the early childhood years can narrow the "school readiness gap."[2]

By ensuring that data are accessible and stakeholders have the capacity to use data appropriately, coordinated state early care and education (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.*

To measure states' progress toward building and using coordinated state ECE data systems, the Data Quality Campaign (DQC), in partnership with the Early Childhood Data Collaborative (ECDC), surveyed 48 states and the District of Columbia in fall 2010 to track state progress toward implementing the 10 Fundamentals of Coordinated State ECE Data Systems.

States Cannot 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?**

The ECDC's inaugural state analysis revealed that not only are states unable to answer critical policy questions about their public ECE systems, but policymakers also often struggle to obtain answers to basic questions about the number of children served in the state, the characteristics of existing programs and the qualifications of the adults working in ECE programs.

1 T. Halle, N. Forry, E. Hair, K. Perper, L. Wandner, J. Wessel and J. Vick, *Disparities in Early Learning and Development: Lessons from the Early Childhood Longitudinal Study — Birth Cohort (ECLS-B)*. Washington, DC: Child Trends, 2009.

2 J. Heckman and D. Masterov, *The Productivity Argument for Investing in Young Children* (Working Paper 5, Invest in Kids Working Group). Washington, DC: Committee for Economic Development, 2004.

The Time to Act Is Now:
Build and Use Coordinated State ECE Data Systems for Continuous Improvement

States are collecting data related to ECE programs, but the data are uncoordinated and often incomplete and therefore cannot be used effectively to support continuous improvement efforts. To leverage current investments and ensure effective use of data, the ECDC encourages state policymakers to:

■ **Articulate the critical policy questions that will drive the development and use of coordinated state ECE data systems.** Too often, federal reporting requirements shape state data collection efforts. For example, data on a child's developmental progress (Fundamental 3) are most likely to be collected in programs with federal mandates to report this information, namely Early Intervention and Early Childhood Special Education. Data will be used for continuous improvement only when they are collected to inform current policy discussions, rather than for compliance; therefore, states should first engage diverse stakeholders to determine the critical policy questions that will guide state ECE data systems' development and use.

■ **Evaluate current and future data collection and linkage needs based on the state's critical policy questions.** Once states have prioritized their critical policy questions, they can determine how to develop and enhance coordinated state ECE data systems to meet their unique needs. States can also use the 10 Fundamentals of Coordinated State Early Care and Education Data Systems as a guide to evaluate how well their current data systems address their key policy questions. In particular, the ECDC's state analysis revealed that states have more work to do to address gaps in data collection (Fundamentals 3, 6 and 8) and promote data linkages (Fundamentals 1, 4, 5 and 7), but each state should ensure its data collection and coordination efforts are driven by its priority policy questions.

■ **Strategically govern data collection and use, including ensuring the privacy, security and confidentiality of ECE data.** Once states have identified their informational needs, policymakers must establish a governance structure to plan and oversee data collection, coordination, reporting and use (Fundamental 9). However, currently multiple state agencies govern ECE data collection and use in nearly every state. While states address data gaps and enhance linkages, they must also ensure the privacy, security and confidentiality of individually identifiable data and ensure transparency about why data are collected, how they are being used and who has access to them. Almost every state has privacy policies that govern the collection of ECE data, but just half of them make the policies available to the public on the state's website, making it difficult to assess the adequacy of these policies (Fundamental 10).
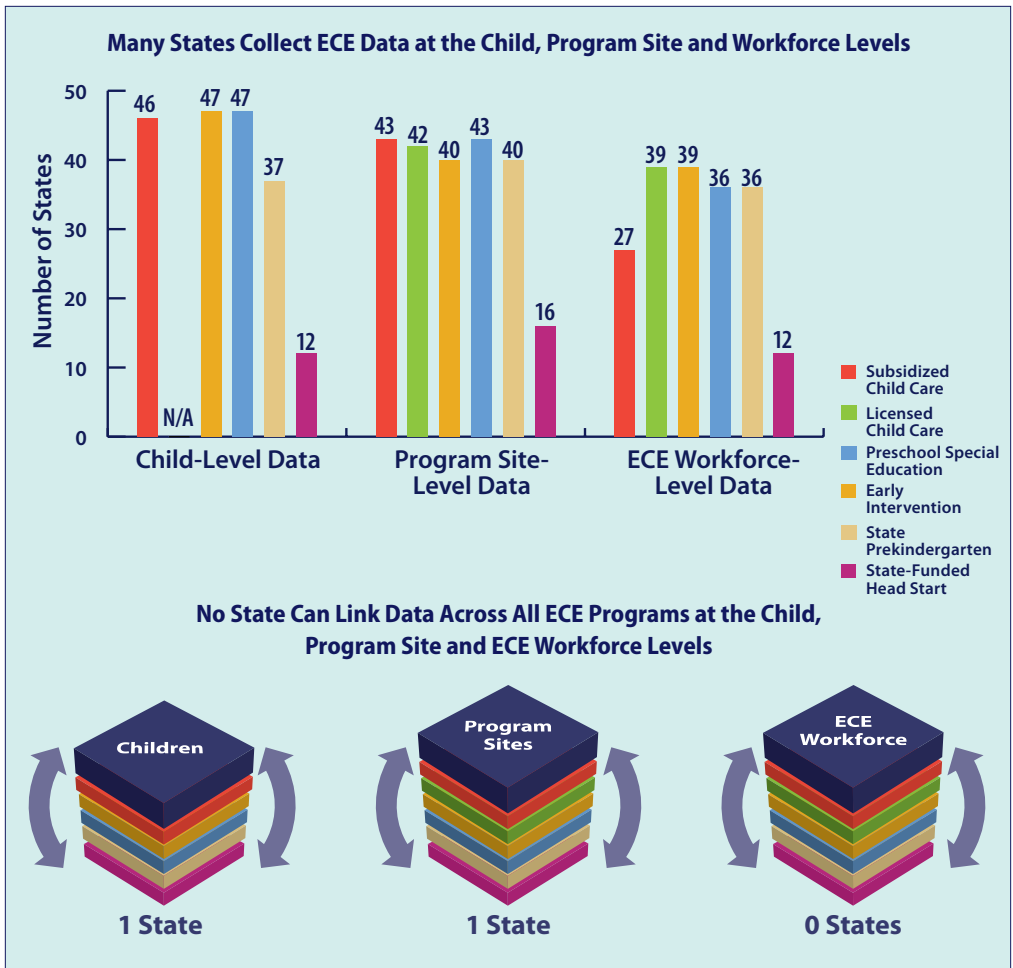
By taking these steps, states will ensure that stakeholders, from policymakers to parents, have access to the types of information that will allow them to make informed decisions.

States Collect ECE Data But Cannot Transform the Data into Actionable Information

The ECDC's inaugural state analysis reveals that states collect a significant amount of data on individual children, ECE program sites and individual members of the ECE workforce. However, the data are largely siloed by funding stream and incomplete and therefore are unable to help policymakers answer basic policy questions about their state's ECE systems, support continuous improvement, and determine whether their investments put children on track to succeed in kindergarten and beyond.

- **Every state collects ECE data** on individual children, program sites and/or members of the ECE workforce for at least some of the state's ECE programs.

- **Data gaps remain** as far fewer states maintain individual ECE workforce-level data systems than child- and program site-level data systems, and no state collects child-level development data for all of the state's ECE programs.

- **Data are uncoordinated** as only one state (Pennsylvania) can link data across all ECE programs at the child and program site levels, and no state can link data across all ECE programs at the ECE workforce level.

- **Governance matters** because data linkages between ECE and K–12 and other key state systems serving children are most likely to occur between data systems located within the same state agency.

Many States Collect ECE Data at the Child, Program Site and Workforce Levels

Legend:
- Subsidized Child Care
- Licensed Child Care
- Preschool Special Education
- Early Intervention
- State Prekindergarten
- State-Funded Head Start

No State Can Link Data Across All ECE Programs at the Child, Program Site and ECE Workforce Levels

Children — 1 State

Program Sites — 1 State

ECE Workforce — 0 States

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.

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, socio-economic 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.

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 pro-gram 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.
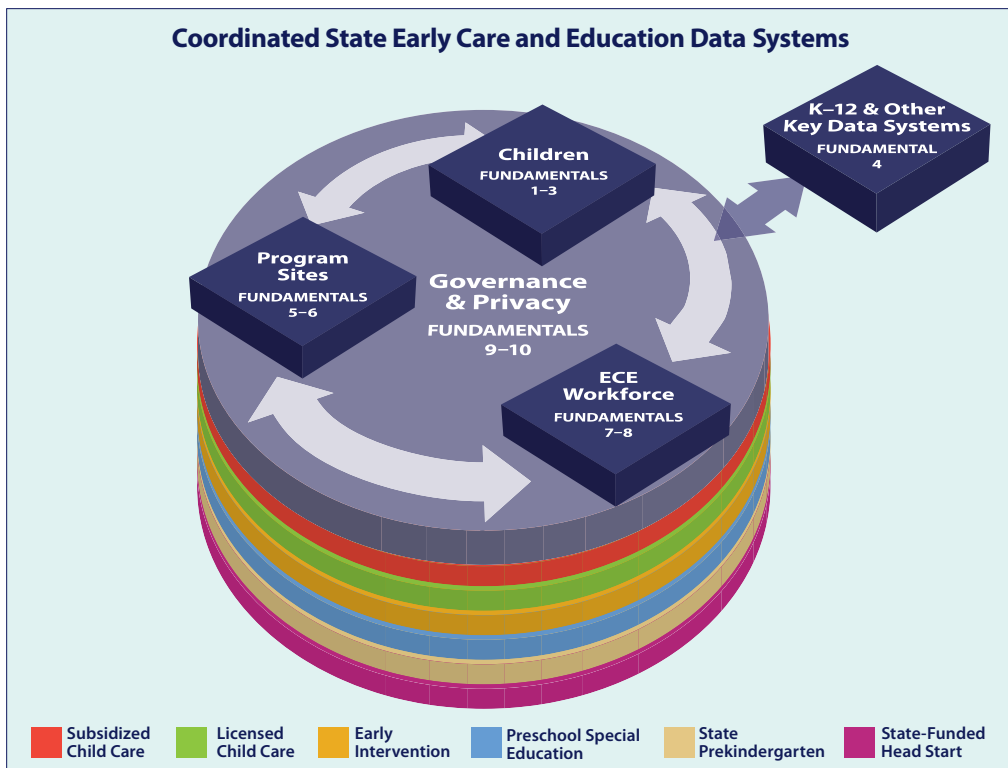
10 Transparent privacy protection and security practices and policies

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.

Developing Coordinated State ECE Data Systems to Promote Continuous Improvement

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.*
- **From fragmented and incomplete data efforts to** *coordinated data systems.*
- **From "snapshot" data to** *longitudinal data systems.*

Coordinated State Early Care and Education Data Systems

K–12 & Other Key Data Systems — FUNDAMENTAL 4

Children — FUNDAMENTALS 1–3

Program Sites — FUNDAMENTALS 5–6

Governance & Privacy — FUNDAMENTALS 9–10

ECE Workforce — FUNDAMENTALS 7–8

Subsidized Child Care | Licensed Child Care | Early Intervention | Preschool Special Education | State Prekindergarten | State-Funded Head Start

Early Care and Education Defined

Of the four domains of services and supports that are fundamental to early child growth and development — health, early intervention programs, family supports and services — this framework focuses on the ECE domain and the following programs:

- **Child Care (birth–age 13)** — Provides non-parental care for children in either centers or home-based settings.

- **Early Childhood Special Education (ages 3–5) and Early Intervention Programs (birth–age 3)** — Provide special services to children diagnosed with developmental delays and disabilities who are eligible under the Individual with Disabilities Education Act.

- **Early Head Start (birth–age 3) and Head Start (ages 3–5)*** — Provide comprehensive services to children and their families, including access to health services and parenting information, as well as high-quality care and education.

- **Prekindergarten (ages 3–5)** — Offers early education programs for children one or two years before kindergarten entry.

For this inaugural state analysis, the ECDC analyzed only state-funded Head Start/Early Head Start (HS/EHS). The extent to which states can collect data about local federally funded HS/EHS programs is unclear because local programs receive funding directly from the federal government with little to no state involvement. In future years, the ECDC will include federally funded HS/EHS programs in its state analysis.

The Early Childhood DATA Collaborative

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.

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