The Education Trust–West

Policy Brief:

Equitable and Accessible Early Learning and Care in California Starts with an Early Childhood Integrated Data System (ECIDS)

In the first five years of life, 90% of a child's brain is developed, and their experiences during this time shape their ability to learn and to be successful throughout life.[1] The pandemic uniquely affected the early learning and care system. It brought into focus the essential role that system plays in California's economic infrastructure while widening the opportunity gap for our youngest learners of color, those living in low-income communities, and dual-language learners. Yet, because of a lack of coordinated, actionable data, we are unable to fully understand how California's early learning and care system responds to the experiences of young children, their families, and the workforce who cares for them — information all-the-more necessary as we work to recover from this unprecedented time.

In support of Governor Newsom's vision for the universal expansion of transitional kindergarten (TK), California outlined a plan of historic investments in the 2021-22 state budget to invest $600 million in TK in 2022-23, growing to $2.7 billion and full implementation of TK in 2025-26.[2] In the 2022-23 state budget, more than $900 million was invested to fund the continued expansion of TK and to reduce student-to-adult ratios, as the state continues on the path to universal access for all 4-year-olds by the 2025-26 school year. Additionally, state investments in child care for 2021-22 exceeded $612 million, whereas 2022-23 saw $161.5 million in investments.[3] Federal funding from the Child Care and Development Block Grant was also a significant funding source for stabilizing the child care sector during the pandemic.[4] These investments recognize the long-term social benefits of high-quality early learning and care. However, we must have complete, integrated, and publicly available data to inform how well we are doing in serving our youngest learners while also ensuring access and equity to those furthest from opportunity.

As California invests in early learning and care, the state is also moving forward with a long-overdue plan to build a statewide longitudinal data system (SLDS) — known as the Cradle-to-Career (C2C) Data System — which will eventually connect data over time and across sectors like education, health, human services, and the workforce.[5] This is a significant milestone that will allow California to identify inequities and roadblocks to success while also recognizing where things are going well, especially for children of color, those living in poverty, children with disabilities, and dual-language learners. However, California's early learning and care system has shortcomings in the way data is collected, managed, and used that present challenges in accessing and integrating data from the "Cradle" side of the C2C Data System.

With myriad state and federally-funded programs, there is a pressing need for a data-informed understanding of how families and communities use or benefit from early learning and care systems, including TK. Left unaddressed, the limitations in the current approach to early learning data could undermine the proposed full inclusion and linkage of early learning data to the C2C Data System, as well as our ability to monitor the implementation of expanded TK and the California Department of Education's (CDE) efforts toward P-3 alignment.

In this policy brief, we provide an overview of the current early learning and care data landscape in California, describe three key shortcomings of that landscape, and make recommendations for a coordinated, cross-agency effort to design a comprehensive Early Childhood Integrated Data System (ECIDS). A fully operational ECIDS will also provide the foundation necessary for stronger "Cradle" data that is an essential component of a robust C2C Data System.

ECIDS and How It Relates to California's C2C Data System

California's C2C Data System intends to link and make available data from early learning and care through K-12 and higher education and to create public-facing tools and resources, thus ensuring integrated and accessible early childhood data. With California's patchwork of programs, linking early learning and care data in a way that is accessible requires the intentional creation of an ECIDS, which would integrate data from the California Department of Social Services (CDSS) and CDE and possibly other agencies that serve children ages 0 to 5. An ECIDS "collects, integrates, maintains, stores, and reports information from early childhood programs across multiple agencies within a state."[6] Once complete, it would ideally link data across programs, like child care, Head Start, State Preschool, and public TK. It should include information about children, families, classrooms, programs, workforce, and other services related to the early learning and care sector. A primary benefit of a well-designed ECIDS is that it will enable policymakers, advocates, researchers, families, and others to answer questions about early learning policies and practices that cannot be explored by looking at data from just one agency. An ECIDS responds to the urgent need to advance racial equity in early learning and care programs through disaggregation of data and addressing disparities in policy.[7]

Using Integrated Data to Increase Equitable Acces to Early Childhood Programs

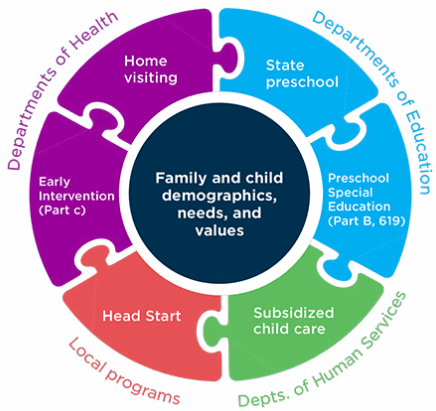
Integrated early childhood data can help state leaders combat inequities in families accessing and participating in early childhood programs that meet the needs of children, families and communities by answering key questions

Do children from birth to age 8 have equitable access to care that support their development and families needs?

- Is there enough supply in all communities?
- Is care conveniently located?
- Is care affordable?
- Is care developmentally appropriate?
- Is care culturally inclusive?

Right now, many states don't share or connect data about children's early childhood experiences across multiple agencies.

Integrated data can help state leaders determine child, staff, and program needs for both real-time and longer-term planning.



To guide data integration, policymakers and stakeholders should prioritize these equity-driven recommendations

- Design policy questions centered on equitable processes and outcomes.
- Establish a governance body in partnership with communities to protect privacy and guide data integration, access, and use.
- Create an identification system to connect information about children, families, programs, and staff for a more complete picture

Source: Child Trends

Although an ECIDS and an SLDS are distinct, they are complementary. In fact, many states have benefited from simultaneously designing an ECIDS and an SLDS, like California is attempting to do with the C2C Data System.[8] Doing so enables state leaders to define the distinct purpose of each system, design both for compatibility from the ground up, and ensure each system gathers and links information that will help answer critical questions posed by policymakers, the public, and other stakeholders.

Whereas an ECIDS horizontally connects early childhood information across different agencies, the C2C Data System, when complete, will link data vertically across many types of sectors (for example, early learning and care, health, social services, public K-12 education, public higher education, and private colleges). It is essential that California have a strong horizontal data system (ECIDS) and a strong vertical data system (SLDS, that is, C2C) to collect and analyze data on early learning and care services. A robust C2C Data System will provide information about children and students as they progress from their early learning and care experiences into the workforce.

Shortcomings of California's Early Learning and Care Data Landscape

Shortcoming 1: Current Data Systems Are Disjointed and Incomplete

In large part because of the combination of local, state, and federal funding, agencies administering various types of early learning and care programs, and agencies having different reporting requirements, information about young children's educational experiences is collected in ways that are disjointed and incomplete. As a result, critical data often lives within only one agency's various data systems, and, if the same datapoint is collected across agencies, it might be defined differently. Without clean data with uniform definitions, we are unable to match children across datasets or to look regionally at data, thereby making it nearly impossible to glean insights on how well specific communities are served by various kinds of early learning and care programs and to ensure equitable access to racial groups who lack access to high-quality early learning. This knowledge gap was evident when, during the first year of the pandemic, state and local leaders had no way of knowing which families were most affected by closing child care or preschool programs, where teachers were being laid off, and how to best direct relief funding.

Shortcoming 2: Current Data Is Not Ready for Integration

Currently, CDSS and CDE, the two primary state agencies responsible for early learning and care, do not use a unique child identifier for managing child-level data, which is a single, unduplicated identifier that is assigned to and remains with a child throughout their early learning and care experiences.[9] A unique child identifier is an essential data element to ensure a strong ECIDS because it facilitates linking data across agencies and, once created, will reduce duplication of information about children who use more than one type of early childhood service.[10] The issue of a unique identifier for children in early learning and care is complicated; however, it is one that needs to be solved if California is committed to monitoring child outcomes over time.

Without unique identifiers within and across early learning and care data systems, we lack the ability to accurately link the data and answer goal-related questions such as these:

- How do different early learning and care settings contribute to school readiness and educational outcomes for children?
- What intervention services or other supports are children utilizing?
- How do blending and braiding of public funding benefit children and their families?

Shortcoming 3:
Current Data Is Not Made Available to the Public in a Comprehensive Way

Neither CDSS nor CDE currently has a comprehensive data system where information about early learning and care trends is available via public-facing resources or tools for the early learning community, families, or the general public. Policymakers are also unable to access necessary information to measure access, quality, or racial equity[9] for monitoring current investments while responding to conditions with new investments or supports. Although both agencies collect information about children accessing early learning and care services, that data is often available only in an internal data management system (see Table 1) and accessed primarily by agency staff for compliance monitoring purposes. And, when data is made publicly available, the information is outdated and difficult to decipher.

Table 1: Agencies and Data Systems

Agency	Program type	Data system
California Department of Education (State)	California State Preschool Program	Child Development Management Information System (CDMIS)
	Transitional kindergarten	CALPADS
California Department of Social Services (State)	Child care programs	Child Development Management Information System (CDMIS)
	CalWORKS Stage 1	Child Care Monthly Reports (CW115)
Office of Head Start (Federal)	Head Start	Program Information Reports (PIR)
U.S. Department of Education–SPED (Federal)	Special education	Federal Reports

California's Current Early Learning and Care Data Landscape

California's methods for collecting, tracking, and sharing data about the early learning and care system are as complex as the state's "mixed delivery" system itself. Often referred to as a patchwork of programs, an array of services is intended to meet the needs of California's children and their families, each with its own corresponding government agency, funding source, and data infrastructure.[11]

Different Programs, Different Data Systems

As one might expect, early learning and care programs have reporting requirements that vary based on the funding source; this translates to a corresponding patchwork of data available about California's early learning and care system. Unfortunately, this limits the ability of state and local leaders to truly understand how well the system is serving families and where gaps in access to quality programming exist. The CDS and the CDE are the primary agencies responsible for the administration of early learning and care programs. Table 2 depicts many of the early learning and care programs administered by each of the state's agencies and their associated data systems, although CDSS provides additional services through CalWORKs programming.

Table 2: Early Learning and Care Programs and Data Systems

Program type[12]	Voucher-based*	Direct Contracts Title 5**	Data system
CDSS			
CalWORKS Stage One Child Care	✓		Statewide Automated Welfare System (SAWS)
CalWORKS Stage Two Child Care (C2AP)	✓		CDMIS
CalWORKS Stage Three Child Care (C3AP)	✓		CDMIS
Alternative Payment Program (CAPP)	✓		CDMIS
Migrant Alternative Payment Program (CMAP)	✓		CDMIS
Emergency Child Care Bridge Program for Foster Children (Bridge Program)	✓		Not automated
General Child Care and Development (CCTR)		✓	CDMIS
Migrant Child Care and Development (CMIG)		✓	CDMIS
Children with Severe Disabilities (CHAN)		✓	CDMIS
Family Child Care Education Network (CFCC)		✓	CDMIS
CDE			
California State Preschool Program (CSPP)		✓	CDMIS
Transitional kindergarten		✓	CalPADS[13]

Federal Programs Add Another Layer of Data System Requirements

California's mixed delivery system also includes Head Start programs. Head Start programs are often blended with state-funded programs, like those described earlier, to strengthen state early learning and care systems to serve young children more efficiently and effectively.[14] California's Head Start is the largest in the nation. Head Start is a federally funded program administered by the Office of Head Start within the Administration on Children, Youth and Families, Administration for Children and Families, and Department of Health and Human Services. Head Start programs provide comprehensive developmental services for children from low-income households from birth to school entry. And, like the various programs listed previously, Head Start programs collect and report data to the federal government that is not shared directly with state agencies.

Publicly Reported, External Data Adds Another Consideration

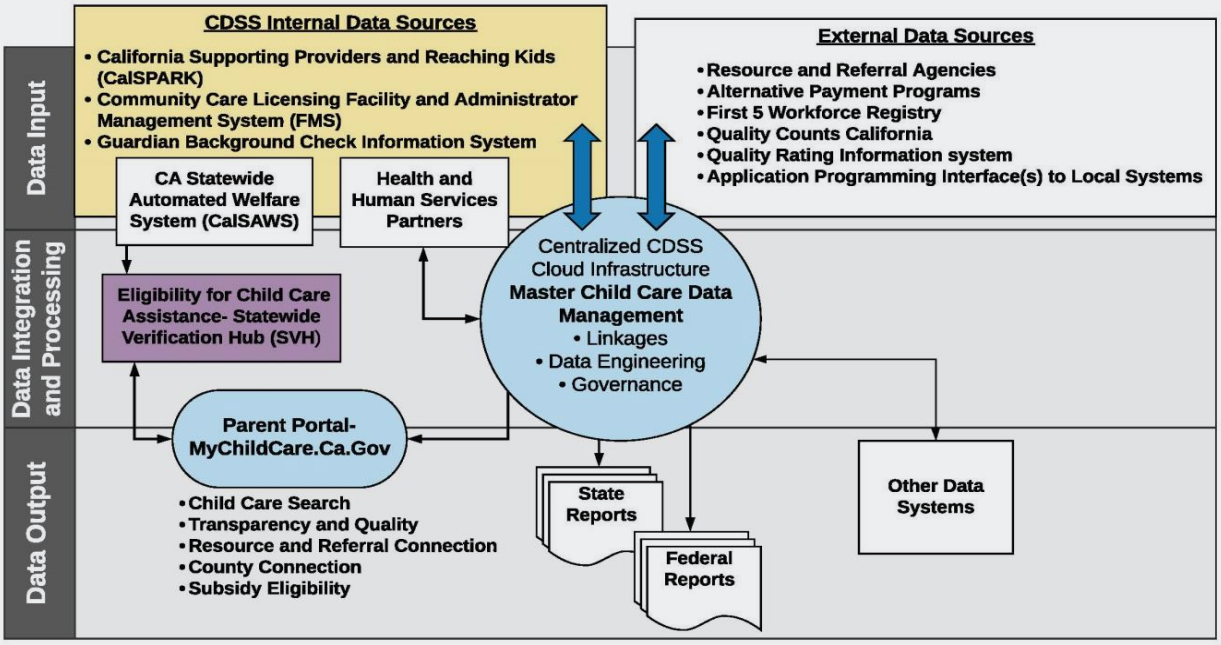
Another aspect of the mixed delivery system is that continuous quality improvement data is collected from programs that focus on early learning professional development, workforce development, and advocacy efforts. This data is reported through external, public data sources. The external data collected by these programs, which can be referred to as early learning and care infrastructure programs, helps improve policies and practices for children who have historically lacked access to quality early learning and care, while also addressing wage discrimination or poor workforce conditions experienced by the early learning and care workforce. For more information about these programs, visit Quality Improvement Initiatives (ca.gov), California Early Care & Education Workforce Registry (caregistry.org), and Quality Counts California – Home (qualitycountsca.net).

Promising Developments

In 2021, CDSS released a new vision for modernizing California's outdated early childhood data systems, California's Brilliant Beginnings Data Landscape.[15] This "data landscape vision" presents a path forward for making data on child care programs "streamlined, coordinated, and more effective" by redesigning antiquated data systems that remained at the CDE when state child care programs were transferred from CDE to the CDSS on July 1, 2021. Reforms include a modernized data infrastructure, CalSPARK, and a refreshed public-facing website, mychildcareplan.org, for families searching for child care providers that also provides consumer education. A third component, still in its initial planning phase, is the ECIDS, which will integrate select data for children ages 0 to 5 and eventually connect to the C2C.

California Brilliant Beginnings Data Landscape, California Department of Social Services (2021)

A smart approash to state child care data that will result in better beginnings and outcomes for ALL children



Source: California Department of Social Services

Questions Remain on How the Brilliant Beginnings Approach Will Connect with Other Systems

Less clear is how or whether CDSS' Brilliant Beginnings Data Landscape will incorporate or connect to relevant data systems housed outside by other agencies, like the CDE. CDE's data systems include Child Development Management System (CDMIS) and the CA Longitudinal Pupil Achievement Data System (CALPADS). The CDMIS houses child-level data for both CDE-contracting California State Preschool Programs (CSPP) and CDSS-contracting direct-service and alternative payment child care programs. In addition to the child-level data for CSPP and CDSS programs, the CDMIS collects the Subsidized Provider Report, pursuant to SB 75 (Statutes of 2019), which contains information regarding license-exempt and family child care home providers, and submits this to the California Child Care Providers Union each month. The CALPADS contains all TK-12 student-level data.[16] Recently developed data systems by CDE include the Preschool Language Information System (PLIS), as a result of Assembly Bill (AB) 1363 (2021, Assemblymember Luz Rivas) to collect data on dual-language learners. The data collected by these various entities and programs is crucial information; as such, any effort at having a cohesive and coordinated early learning and care data system in California must at a minimum connect to these other systems.

Addressing the Need to Understand Young Learners' Progress Over Time

Neither the CDMIS nor the PLIS data can be directly linked to the CALPADS, mainly because the data does not have unique identifiers for children, teachers, families, classrooms, sites, and agencies, which have been established in the CALPADS. Therefore, CDE is not easily able to track students longitudinally from early education to K-12 programs. The California State Preschool Data Collection System (CAPSDAC) Project is being proposed in response to AB 22 (Rivas), which requires the CDE to collect pupil data for each child enrolled in a CSPP operated by a local education agency (LEA) and would include all data elements that are collected for children in transitional kindergarten by July 1, 2024. The CAPSDAC Project's objective is to identify a solution that will enable the CDE to collect, organize, track, monitor, analyze, and aggregate CSPP data and to apply unique identifiers that will allow the CDE to link preschool data with CALPADS. The CDE is also in the early planning phases, which includes identifying adequate funding to create a new modernized early education data system, the California Preschool Achievement System, that will allow the CDE to track students' learning progress over time using unique identifiers; streamline business automation for timely technical assistance and continuous improvement; improve data reporting for agencies, community, and the public; and align early education data to the C2C Data System.

Although CDSS and CDE are both taking steps to modernize their data systems in preparation for C2C linkage, it remains unclear how the two agencies will work together to address data coordination and if funding exists to do so. This is especially important to better understand how children are served across programs and over the birth-to-5 spectrum of California's early learning and care system.

California's Current Plan for an ECIDS & Recommendations for Improvement

Although the Brilliant Beginnings design includes an ECIDS, it remains unclear how other administering agencies of early learning and care, like those listed in Table 2, intend to share data from their antiquated systems, if a unique child identifier will be incorporated within the design, and how equity will be measured. The approach of the ECIDS by CDSS seems to be linking data within the department, rather than sharing across other state agencies that also administer early learning and care programs, like CDE, which is fundamental to a comprehensive ECIDS. If this is true, we will not be able to answer any of these questions or others, such as the following:

- How many children participate in California's early learning and care services across various settings?
- What other services do children and their families use, and what programs support learning and development? In what locations are early learning and care programs, including TK, provided, and who are the children enrolled in these programs?

Furthermore, it is unclear how the state's current ECIDS plan will connect with and vertically integrate with C2C to analyze trends over time for specific subgroups and across different geographical areas and to identify where progress is being made or when desired outcomes are going in the opposite direction.

A strong, comprehensive ECIDS is good for California, and it will address the specific data challenges identified in this brief. It is good for children, their families, and the workforce who cares for them. It is the necessary step to deliver on the promise for "The Master Plan for Early Learning and Care: California for All Kids," and it is imperative to ensure the C2C Data System is ready to fully link early learning and care data.

But, California must first address the overarching lack of coordination and establish a coherent, comprehensive plan for improving early learning and care data. We recommend the following actions for policymakers:

- **The governor and the legislature** should approve a multiyear investment of $10 million for the funding of an ECIDS that captures data across all early learning and care programs administered by CDE and CDSS and can link to C2C.
- **The governor and the legislature** should approve funding for adding one new full-time equivalent state agency staff position within the C2C Data System office, designated as the ECIDS Interagency Data Governance Coordinator and assigned to work with CDE and CDSS, to develop a publicly available, comprehensive plan for integrating early learning and care program data, disaggregated into a California ECIDS.
- **The governor and the legislature** should approve legislation that establishes a California ECIDS for all early learning and care programs. The legislation should require CDE and CDSS to work collaboratively and in coordination with the support and technical assistance of an ECIDS Interagency Data Governance Coordinator (as recommended) in an extensive planning process (using various workgroups, like the process used by the C2C system in 2020-21) that results in a comprehensive plan for developing an ECIDS capable of disaggregating data and linking to C2C.

Conclusion

For generations, advocates have been pleading for reforms in California's early learning and care system. Even amid a surplus of more than $90 billion in California's 2022-23 budget, these efforts continue. However, year after year, policymakers fall short in developing solutions or making adequate investments to create an equitable and accessible early learning and care system for California's youngest learners, especially for those furthest from opportunity and for the workforce of providers and educators, predominantly women of color, who continue to struggle to make livable wages. These issues, just like the shortcomings related to early learning and care data, are not new. What is new are the post-COVID conditions facing California families with young children of color, and this no longer allows for status quo decision-making. Data coordination within the early learning and care community must no longer be managed within silos of administrating agencies, such as CDE and CDSS. California must implement a comprehensive ECIDS, across all early learning and care programs, because the C2C Data System will not wait for early learning and care data coordination and management to catch up.

How Can You Engage?

In Your Local Community

Share this policy brief widely and get input. Parents, families, and other advocates in your local community should know the state has committed to the creation of a new C2C data system, which includes early learning and care, and what it means for future decision-making about early education and care programs and for workforce support for providers and educators. Share this brief along with other materials and updates at early learning and care parent advisory meetings, at community input sessions on early education-related issues, and on social media using the hashtag #DataForThePeople. Advocates can collect input from these discussions to share with the C2C Governing Board, related state workgroups, and advisory groups directly.

With Statewide Leaders

Share your input and perspective by contacting the state and/or volunteering for advisory group membership. The C2C team continues to progress in their efforts to establish the country's most comprehensive SLDS and seeks community members' involvement and awareness in the process. Community members can engage through interactive webinars, known as Community Conversations; inform development, interpretation, and awareness of the data system; and foster an environment and culture of collaboration. Visit Get Involved – C2C (ca.gov) for more information.

Volunteer for Advisory Group Membership

Ed Trust–West will share names of individuals and organizations interested in serving on workgroups and advisory groups related to ECIDS development. If you would like Ed Trust–West to share your information, contact Natalie Wheatfall-Lum, director of P-16 Education Policy, at nwheatfall@edtrustwest.org.

Take Action

Join our Data for the People Coalition by contacting Raquel Morales, Policy and Government Relations associate, at rmorales@edtrustwest.org.

Stay in Touch

Join Ed Trust–West's email list to receive updates and resources and to learn more about early learning and care advocacy and other equity issues. Visit www.edtrustwest.org/join and/or email us at information@edtrustwest.org to share your concerns and insight.

Connect with Us on Social Media

Follow Ed Trust–West and the hashtag #DataForThePeople on social media for more updates and resources on the C2C and early learning and care and opportunities for you to get involved. twitter.com/EdTrustWest instagram.com/edtrustwest

Endnotes

1 Timothy T. Brown and Terry L. Jernigan, "Brain Development During the Preschool Years," Neuropsychology Review 22, no. 4 (2012): 313–33, https://doi.org/10.1007/s11065-012-9214-1.

2 "Master Plan for Early Learning and Care," California Health and Human Services Agency, 2021, https://www.chhs.ca.gov/home/master-plan-for-early-learning-and-care/.

3 "California State Budget Summary, 2021-22 and 2022-23," California Department of Finance.

4 Patti Banghart, Carlise King, and Sarah Daily, "Guidance for States on Measuring Equitable Allocation of COVID Relief Funds and Progress Toward Child Care Stabilization," Child Trends, https://www.childtrends.org/publications/state-guidebook-measuring-progress-toward-equitably-supporting-child-care-stabilization.

5 "Cradle-to-Career Data System First Legislative Report," WestEd, December 2020, https://cadatasystem.wested.org/wp-content/uploads/2023/03/Cradle-to-Career-Data-System-December-2020-Legislative-Report-FINAL.pdf.

6 Missy Coffey et al., "An early childhood integrated data system: What is an ECIDS?," Institute of Education Sciences (IES) Statewide Longitudinal Data Systems (SLDS) Grant Program, U.S. Department of Education, (Washington, DC: National Center for Education Statistics, 2017), https://slds.ed.gov/services/PDCService.svc/GetPDCDocumentFile?fileId=33126.

7 Carlise King, "Integrated Early Childhood Data Is an Essential Tool for Advancing Racial and Ethnic Equity," Child Trends, 2022, https://www.childtrends.org/publications/integrated-early-childhood-data-is-an-essential-tool-for-advancing-racial-and-ethnic-equity.

8 Missy Coffey, Carolina Zamora, and Jenna Nguyen, "Using Data to Support a Comprehensive System of Early Learning and Care in California," 2020, https://www.sri.com/wp-content/uploads/2021/12/SRI_CA_ECIDS_PublicBrief.pdf.

9 Hannah Melnick et al., "Understanding California's Early Care and Education System," Learning Policy Institute, June 1, 2017, https://learningpolicyinstitute.org/product/understanding-californias-early-care-education-system-report.

10 "Unique Identifiers: Beyond K-12," Institute of Education Sciences (IES) Statewide Longitudinal Data Systems (SLDS) Grant Program, SLDS Issue Brief, March 2014, https://nces.ed.gov/programs/slds/pdf/uid_brief.pdf.

11 Kelly Maxwell et al., "The Connection Between Head Start and State or Territory Early Care and Education Systems: A Scan of Existing Data", OPRE Report # 2019. (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, August 2019), https://www.acf.hhs.gov/sites/default/files/documents/opre/cceepra_head_start_and_ece_connections_aug_2019.pdf.

12 *Programs defined as "voucher-based" allow families to select and obtain care in licensed child care centers, licensed family child care homes, or license-exempt care settings with their subsidy voucher.

**Center-based, direct-contract child care and development programs are administered by CDSS and the California Department of Education (CDE). CDE administers the California State Preschool Program, whereas CDSS administers the General Child Care Program (CCTR), the Severely Handicapped Program (CHAN), and the Family Child Care Education Home Networks (CFCC) Program. To operate these programs, the state contracts directly with child care centers and Family Child Care Home Education Networks for a fixed number of child care slots. Title 5 contracted programs must meet Title 5 and Title 22 regulations. However, Title 5 regulations require more stringent child-to-adult ratios and staff qualifications than do Title 22 programs.[4]

13 TK data is reported in conjunction with Kindergarten enrollment data. Per the CDE, "there is no separate grade-level for TK. Rather, eligible students are enrolled in Kindergarten and local educational agencies (LEAs) are required to submit TK program participation data to CALPADS at the end of the academic year. Program start and end dates are used to determine which kindergarten students enrolled on Census Day are participating in the TK program." (Source: TK Report Glossary, CDE, https://dq.cde.ca.gov/dataquest/tkreports/TkGlossary.aspx)

14 "Child Care and Development Programs," California Department of Social Services, https://www.cdss.ca.gov/inforesources/calworks-child-care/subsidized-programs#:~:text=Center-based%20direct-contract%20child%20care%20and%20development%20programs%20are,CDSS%20and%20the%20California%20Department%20of%20Education%20%28CDE%29.

15 "California Brilliant Beginnings Data Landscape," May 20, 2021, https://cappa.memberclicks.net/assets/PublicPolicy/2021/California%20Brilliant%20Beginnings%20Data%20Investment_5.18.21.pdf.

16 "20th Anniversary Speaker Series: Data and Why It Matters for Early Learning & Care," The Education Trust–West, 2021, https://vimeo.com/726126758.

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