

# ILLINOIS EARLY CHILDHOOD DATA SYSTEMS IN 2024



Illinois Workforce and Education  
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Overview and Recommendations

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# Illinois Early Childhood Data Systems in 2024: Overview and Recommendations

## Introduction

As part of its evaluation of the Illinois State Board of Education’s Preschool Development Birth through Five Planning Grant (PDG B-5), IWERC completed an overview and evaluation of strengths and weaknesses in the current early childhood data systems. This review is meant to support the state of Illinois in two ways. First, this review might support state agencies in improving data quality, availability, connectivity, and utility for agency staff, key stakeholders, and the general public. Second, this review might support the transition of data to the new early childhood agency, the Illinois Department of Early Childhood (IDEC), as the Transition Advisory Committee considers data as a key issue (particularly the Data, Analytics, and Insights work group).

### Process for this Review

To complete this review, IWERC took several steps. First, IWERC examined the data available for programs housed at various state agencies, including the Illinois State Board of Education (ISBE), the Illinois Department of Human Services (IDHS), and the Illinois Department of Children and Family Services (DCFS). IWERC also explored the data housed or available through intermediaries, such as the Illinois Network of Child Care Resource and Referral Agencies (INCCRRA) and the Illinois Early Childhood Asset Map (IECAM), and through the Illinois Longitudinal Data System’s (ILDS) Early Childhood Participation Data Set.<sup>1</sup>

Second, IWERC systematically collected information from the activity leaders on the PDG B-5 grant on data quality, availability, and utility to inform this report. Because activity leaders conduct important early childhood work valued by ISBE, understanding their experiences accessing and using data seemed vital to informing data systems improvement. The activity leaders answered the following questions about data:

- What data do state entities currently collect, store, or share related to your activity? This can include data needed to complete, measure, or make use of the activity. Please list the nature of the data and the entity that collects it, to the best of your knowledge.
- What additional data or information is needed (or needs improvement) to conduct your activity?
- What additional data or information is needed (or needs improvement) to measure the outcomes of your activity?
- What other concerns or suggestions do you have about how state data related to your activity are collected, stored, or used by early childhood stakeholders?

IWERC also incorporated questions and comments about data asked by internal (e.g., state agency) and external (e.g., educators and advocates) stakeholders during its own execution of PDG B-5 grant activities. IWERC reviewed these observations and experiences holistically, using them to inform the syntheses and recommendations in this report. (Importantly, while informed deeply by stakeholders, these evaluations and recommendations are IWERC’s synthesis and thus may not necessarily reflect the opinions of specific/all stakeholders.)

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<sup>1</sup> Because of the nature of the PDG B-5, this report focused on early childhood education and care data, excluding health and social service (e.g., SNAP) data on infants and toddlers that may be housed in state agencies. However, integration of such data with education and care data could be quite valuable for understanding early childhood trajectories.

Next, IWERC discussed some of the issues raised throughout this process with staff from ISBE, IECAM, and ILDS to clarify specific questions and comments about data and to inform IWERC's consideration of wholistic issues. Finally, IWERC endeavored to summarize and objectively analyze what they had learned about early childhood data and data systems into a clear structure for a review and report (see next section).

Before moving on, it is important to acknowledge that the IWERC team itself has experience with the early childhood data sets and systems included in this review. This experience includes:

- Use of ISBE early childhood program and assessment data to create reports on the Kindergarten Individual Development Survey (KIDS) and its relationship to Pre-K and post-kindergarten experiences (Kiguel et al., 2024a, 2024b).
- Use of IDHS and ISBE early childhood program and participation data as evaluators of the emergent ILDS Early Childhood Participation Data Set, in work that was presented privately to agency staff.
- A data request to INCCRRA for use in a map of early childhood programs and services in Illinois, as well as use of Excelerate and Gateways data (housed at INCCRRA) as part of the previously mentioned kindergarten readiness reports.
- Use of public DCFS data (on children in foster care) and IECAM data as background to inform various early childhood reports (Wang, 2022; Wang & Bates, 2022).

As such, IWERC is one of only a few organizations (if any others) that has used all the relevant statewide data sets and systems related to early childhood. These experiences naturally informed our understanding of the data sets and systems reviewed in this report, as well as the comments and questions raised by various stakeholders. While we strove not to be overly influenced by these experiences (and certainly worked to ensure our recommendations were not rooted in self-interest regarding data access), it is important to acknowledge these experiences did shape our understanding and, ultimately, our evaluation.

### Structure of this Review

This review follows a simple structure. We organize the next four sections to discuss, in turn, the statewide data sets and systems related to four broad areas:

1. **Programs** in early childhood
2. **Program Quality**
3. **Teachers/Staff** in early childhood programs
4. **Student Experiences and Outcomes** in early childhood programs

Within each of these sections, we summarize the same five elements related to data sets and systems:

- **Data availability:** An overview of actual data available from each agency/organization.
- **Data quality:** A summary of issues related to data collection and quality.
- **Data connectivity:** A summary of the current methods to connect data across agencies/organizations to answer key questions.
- **Data utility:** A summary of common purposes for using these data and concerns related to utility.
- **Key considerations:** A synthesis of questions and issues about data going forward, with an eye towards the transition to IDEC.

We then offer a conclusion and recommendations to end.

## Section 1: Programs in Early Childhood

### Data Availability

Data about early childhood programs lies across several agencies/organizations, with some having a broader scope than others.

- **DCFS** maintains a list of 7,500+ licensed childcare providers (centers and homes) through its [Sunshine Illinois Accountability Project](#). This list does **not** include public Pre-K programs.
  - The name, address, phone number, facility type, license status, age range served, capacity, and languages offered/spoken are all publicly available.
  - The full data set can be exported as a CSV.
- **INCCRRA** maintains a broader list of childcare providers and Pre-K programs.
  - The name, address, phone number, schedule, ages served, license number, capacity, and Excelerate quality rating are available for each entity on the list.
  - This list is searchable via the [Illinois Cares for Kids website](#) (by zip code) but not viewable or downloadable as a whole. The list may be requested from INCCRRA through its [data request form](#) on its website.
- **ISBE** holds program information on specific initiatives.
  - These initiatives are:
    - **Early Childhood Special Education** (services for children ages 3-5 with disabilities),
    - **Prevention Initiative** (home visiting and center-based services for children ages 0-3 and their families, funded through the Early Childhood Block Grant),
    - **Preschool for All** (early childhood education for ages 3-5, for at least 2.5 hours per day, funded through the Early Childhood Block Grant),
    - **Preschool for All Expansion** (full-day early childhood education for ages 3-5, funded through the Early Childhood Block Grant), and
    - **Head Start** (ISBE maintains data on four Head Start programs that are coordinated by public school districts in Evanston/Skokie, Kankakee, Mt. Vernon, and Quincy).
  - The program data available are:
    - The specific program (e.g., Preschool for All, Prevention Initiative)
    - The service location (e.g., public school district, licensed childcare)
    - The service type (e.g., half day, full day) for all but Prevention Initiative
    - The program model (e.g., Nurse Family Partnership) for Prevention Initiative only
  - These data are available by request, although early childhood programs housed at districts can be found publicly in the Illinois Report Card data.
- **IDHS** holds program information on specific initiatives.
  - These initiatives are:
    - **Child Care Assistance Program** (financial support for childcare for families with lower income)
    - **Head Start**, Early Head Start, and Migrant & Seasonal Head Start
    - **Early Intervention** (services for children ages 0-3 with disabilities)
    - **Home Visiting** programs (coaching and support programs for families, such as Maternal, Infant, and Early Childhood Home Visiting, Healthy Families Illinois, and Parents Too Soon)

- The program data available are name, address, and type/setting.
- These data are available by request.
- **IECAM** provides a searchable database in which a user may find summary data on all the programs housed at DCFS, ISBE, and IDHS (listed above) in one place. For instance, a user interested in Pre-K programs could search for all Preschool for All, Preschool for All Expansion, and Head Start programs. The resulting data set could provide counts of each program across the state and within specific geographic regions selected by the user (e.g., county, school district, city). These data can be downloaded but do not provide details on provider names/addresses (although these details can be found case-by-case on IECAM's service maps).
- **ILDS** has a confidential data set, the Early Childhood Participation Data Set, that connects data from all the programs above in one cloud-based data system. ISBE, IDHS, and DCFS provide files with the relevant program data to the ILDS system, and the data can be connected using common identifiers for programs (as well as providers, children, and family members).

### Data Quality

There is one key issue with data quality for programs: the difficulty of understanding early childhood providers wholistically and consistently from the current data collection and data sets. This is because early childhood programs are defined less by the provider than by the funding stream. For example, the same childcare center might offer Head Start, Preschool for All, and Early Childhood Special Education services, and it might have children whose presence at the center is funded through the Child Care Assistance Program. The program code assigned to a child will be based on which funding stream (or streams) supports the child, and programs will share data on each child with state agencies based on funding stream. The data required for each funding stream may be slightly different, resulting in inconsistencies across different streams, even for the same child.

As such, it is difficult to create an overall picture of one provider's headcount, overall program structure, and so forth. In some ways, this is the inverse of K-12 or college data, where data give a familiar, consistent provider or "whole" (e.g., Quincy Public Schools, University of Illinois) and then allow investigation of the "parts" of that whole (e.g., grade levels, programs of study). In early childhood, the data provide the "parts," from which we must attempt to piece together the whole. And, because the "parts" are funding stream, we may be missing some programs at that provider that are not funded by one of the state streams, or we may be missing some children at the provider who pay tuition and are thus not in state data. Stakeholders are hungry for data that are collected from providers in a more wholistic way, with consistency in what is collected across funding streams and reduced burden on providers' data entry (i.e., having to submit data separately for each child by funding stream, with different requests and systems for each stream).

### Data Connectivity

The issue raised above about data quality is intimately connected to data connectivity. Because the same provider may offer multiple programs and/or may have children's presence in the program funded via different funding streams, a complete picture of a provider cannot be painted without the ability to connect data across these funding streams/programs. Conversely, information about program co-enrollments is hard to acquire without connectivity; for instance, a count of 1 participant in the Child Care Assistance Program and 1 participant in Early Intervention could be two distinct children or one child enrolled in two programs. The early childhood community is full of stories about children who are enrolled at the same provider all day, but there as "Preschool for All" children in the morning and "Head Start" children in the afternoon. As such, it

is difficult to understand the key “units” of child or provider, when data are gathered from across so many discrete programs/funding streams.

The ILDS Early Childhood Participation Data Set was created in part to solve these issues, providing data about concurrent and longitudinal enrollments across programs and within and across providers. Currently, the Early Childhood Participation Data Set has built the infrastructure for connecting data across agencies and the architecture for sharing aggregate data in a dashboard. IWERC, Chapin Hall, and IECAM also completed preliminary evaluation research within this data set to help test and validate the system. However, the data set has not been used to produce public research products or data displays at this time, largely due to the difficulty of securing the cross-agency legal agreements necessary to allow data to be shared and used.

Public data are also disconnected to some extent. For example, DCFS’s Sunshine Illinois website includes a list of licensed childcare providers in one place and licensure compliance issues (a quality metric with which parents may be concerned; see next section) in another. DCFS contains no information on Preschool for All sites; Illinois Cares for Kids (from INCCRRA) contains Preschool for All and licensed childcare, but not some of the specific information on the DCFS site. A “one-stop shop” for parents, wherein all relevant information about programs is contained, could address these issues.

### **Data Utility**

There are two common uses for program data. The first is for families of young children to search for relevant programs and providers, as well as for information (such as capacity, ages served, licensure status) about those providers. As such, the ability to search for specific programs (e.g., home visiting, preschool) with specific characteristics (e.g., location) is a far more common use than examining the program set as a whole. The second use is for accountability. Providers enter information about their programs to comply with the rules and regulations of each agency and funding stream.

As currently organized, the data are not immediately useful for understanding the early childhood system as a whole. In other words, there is no comprehensive annual status report on the state of early childhood in Illinois, as there is with, for instance, the [Illinois Report Card](#) in K-12. IECAM comes closest, in that it curates the data from different agencies in one place, including counts and maps of programs across the state and by region, as well as key information about child and family characteristics. However, the kinds of “system status” inferences required to make decisions about investments—such as statewide supply and demand for childcare at each age (indifferent to specific program), unique and concurrent enrollments in programs, flows through programs from age 0 to 5 (allowing for positive “handoff” between early childhood sectors), and overall availability of different program types and features (e.g., multilingual programs, programs offering night care)—are not currently available. Historically, these inferences about system status have been created through unique projects, such as ISBE’s [preschool desert dashboard](#) or [Unduplicated Counts Project](#). To make consistent, timely inferences into such system status information (like the Illinois Report Card, but for early childhood), the state would need a single, connected data set of all program information (updated at least annually with new data) and a dashboard that shares key indicators for decision-making (perhaps built on IECAM’s existing architecture).

### **Key Considerations**

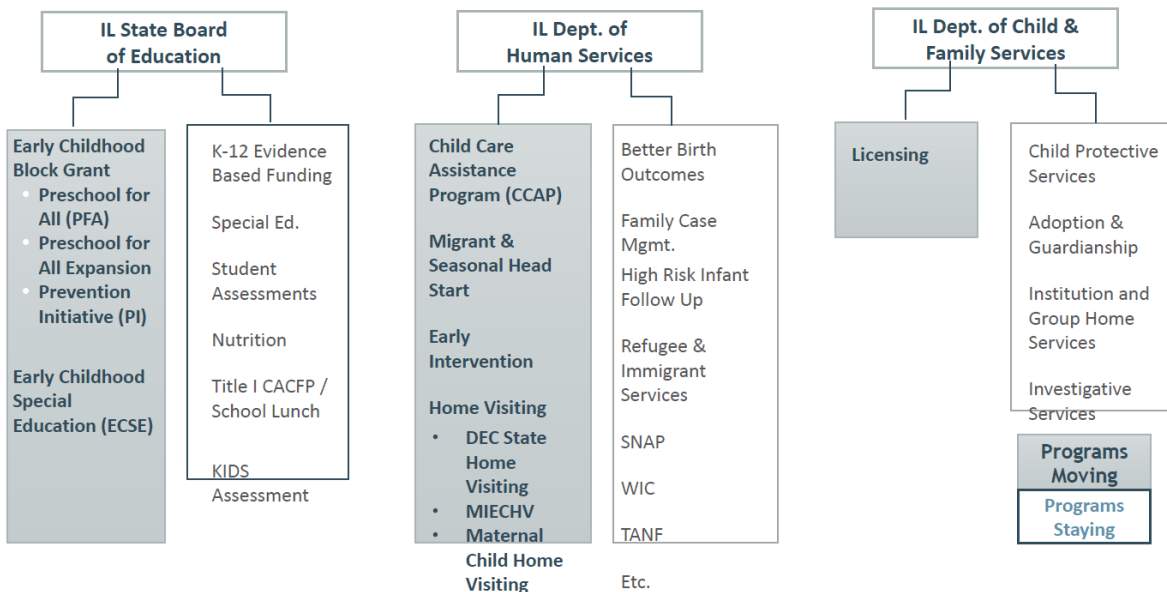
To summarize, this section raises several critical issues regarding program data in early childhood:

- **The current public availability of program data is limited and dispersed.** Basic information about programs lives across different websites, with each website attending to a different “universe” of programs and containing slightly different information about the programs on which they report. A comprehensive list of providers across the state, with critical information such as available programs and program features, is not readily available to the public.
- **Internally, program data are not easily or well connected, either across programs or within and across providers.** The data are currently collected by specific program or funding stream, rather than by provider, resulting in a need to connect data to understand providers or statewide service provision wholistically. Although significant efforts have been made in this regard, this connectivity remains an urgent need if decision-makers are to have the “system status” information they need.

The launch of the new early childhood agency provides a unique opportunity to solve these issues by design. According to the IDEC website (see the agency’s [FAQs](#) page and Figure 1 below), all of the programs discussed above will be moved under one roof. As such, information about providers (and the programs they house) could be provided in the “one-stop shop” proposed above. In addition, the data for each program and funding stream could be collected in the same system, both reducing provider burden and allowing connection across these data sets with common identifiers for providers, parents, and children. The issues raised in this report—as well as deep engagement with providers who submit data and organizations like IECAM and INCCRRA that aggregate and distribute data in various forms—could inform such a design.

Figure 1. The proposed movement of early childhood programs from current agencies to IDEC.

## Early education and care services will move, and broader family and school support will remain at home agencies





## Section 2: Program Quality

### Data Availability

- **DCFS** allows users to [search for license compliance issues](#) for licensed childcare providers (centers and homes) through its Sunshine Illinois Accountability Project. License compliance can be considered a measure of quality, in that it may signify the safety and credibility of the center to families.
  - Users may search for specific providers or addresses, or they may search more broadly by city or zip code.
  - The search produces a relevant list of providers, with a checkmark if they have *any* violations and a PDF that provides the date, code, and status of each violation. Within that PDF, violations are listed solely by code (with no description of the specific incident leading to the violation), and users are linked to another document to review the meaning of the code.
- **INCCRRA** provides Excelerate quality ratings for licensed childcare providers, Head Start, and Pre-K programs.
  - When users search for providers on the [Illinois Cares for Kids website](#), they are given each entity’s Excelerate rating. The definitions of the Excelerate ratings are found separately on [INCCRRA’s Excelerate website](#).
  - Note: Although the INCCRRA website describes a Quality Rating System for license-exempt childcare programs, data on those ratings do not appear to be publicly available.
- **IECAM’s** [searchable database](#), described more fully in the previous section, allows users to search for licensed childcare programs by Excelerate rating.

### Data Quality

There are two key issues with data quality in this area. The first is that the data are not transparent for citizens without background knowledge in early childhood. For instance, DCFS allows users to view a PDF of licensure violations by provider, but making sense of those violations is a heavy lift. The PDF lists codes for each violation, without any description of the incident compelling the application of the code, which the user must then take the further step of looking up in a DCFS codebook. The codes themselves are quite broad, technical, and detailed, but no information is given on the particular aspect of the code violated by the provider. It is also quite common for providers to have violations, as well as for those violations to have been corrected. As such, neither *having* a violation nor having a *specific* kind of violation is truly helpful information for comparing—or even understanding—the quality or safety of providers. In summary, while the DCFS tool is an important lever for transparency about licensed providers, it neither differentiates nor identifies providers that are or are not to be trusted in overall compliance or safety.

The Excelerate data are similarly opaque. The definitions of each level of quality live separately from the provider’s Excelerate rating information, requiring an extra level of interest by the user to seek out what a provider’s rating really means (by searching the internet). Even with the definitions in hand, there is no real way for the user to judge how rigorous or common a particular rating is, even the top rating of gold. No information is given on the percentage of programs rated as gold, silver, or bronze; the experience or expertise required to obtain a level; and so forth.

The second issue with data quality is that few providers have Excelerate ratings beyond the baseline “licensed,” making it even more difficult for discerning quality from a given rating. According to IECAM’s database, in 2023 there were only 454 licensed childcare centers (out of 2,070, or 22%) that had a rating of

gold, silver, or bronze (rather than “licensed”). For licensed family childcare, only 261 providers (out of 4,171, or 6%) had a gold, silver, or bronze rating. Indeed, a search of many zip codes in the Illinois Cares for Kids system will result in far more providers rated as “licensed” than as gold, silver, or bronze, which is likely confusing for parents seeking a quality measure.

This issue is perhaps an outgrowth of the ongoing debate in early childhood circles about what constitutes quality, as well as what level of professional development and structural requirements can rightfully be imposed on a field that pays so little and operates with such little financial margin. The state of Illinois should be commended for moving forward on a quality system as ambitious as Excelerate, no matter the caveats and concerns listed here. However, whatever the reason for the lack of true participation in Excelerate, the result is that it is hard for the average family—or perhaps even a seasoned early childhood professional—to make sense of what the Excelerate ratings really mean about the quality of a childcare provider. (This is not to mention that some state-supported programs, like home visiting, do not have a public quality indicator at all.)

### **Data Connectivity**

Program quality data are plagued by the same concerns about connectivity as program data, but perhaps to a heightened extent. The available data on quality (licensure violation, Excelerate) and program data are not connected in internal systems nor publicly. Families must look in two separate places for the existing measures of quality on the same program, and there is no confidential data set where licensure violations and Excelerate ratings are available in the same place for the same program (to our knowledge). Additionally, while state agencies have admirably made efforts to evaluate the results of specific programs, these results have not been synthesized across programs to provide a picture of the overall quality of, say, licensed childcare or home visiting in the state (see Wang & Bates, 2022, for one such attempt to curate studies of program effectiveness in one place). If the state is interested in the kind of “system status” information described in the previous section, a common goal for quality across programs—and data collection and connection to measure it—would make sense. This work might build on previous attempts to measure system quality and state progress towards goals, such as IECAM’s [Early Childhood Dashboard](#).

### **Data Utility**

The primary use of program quality data is for families to make judgments about the quality of their childcare and other early childhood program options. A secondary use is for the state to evaluate the overall and specific quality and outcomes of the programs they support, as well as to hold programs accountable. The limitations of these data for families and state agencies have been discussed above and thus will not be repeated here. The fact that Illinois has established quality metrics, in the face of many headwinds, is to be applauded. The next step is to make these quality metrics more universal, understandable for families, and helpful for measuring program and statewide progress towards providing a high-quality early childhood experience for Illinois citizens.

### **Key Considerations**

This section has described three key issues with program quality data:

- **Communication to families:** While program quality data is available to families, the meaning of the data (e.g., licensure violations and Excelerate ratings) is opaque and requires substantial digging to understand. Making the definitions, as well as what can reasonably be inferred from the ratings/violations, clear to families is a worthy goal.

- **Universal application:** Programs do not participate fully in the quality ratings that are available. Many childcare programs do not have an Excelsior rating beyond “licensed.” And there are no metrics for quality available for some state-supported programs and services. Broadening the application of quality measures to state-supported programs might be a useful goal for the state.
- **Broader understanding of quality:** While the state has quality data on many programs, as well as commissioned reports on specific program features and outcomes, these efforts have not been synthesized into a broader understanding of overall quality of the early childhood system (or even some of its larger components, such as childcare, PreK, and home visiting). A “system status” report—again, like the K-12 Illinois Report Card but for early childhood—could include statewide metrics of quality.

As IDEC develops, a shared vision of quality for the system and its programs could help address some of these problems. With a shared vision, the state could develop data collection to support understanding of program quality, overall system quality, and progress towards quality goals (e.g., providing families in all regions access not only to programs, but to highly-rated programs). Quality measures could be part of a “system status” report as described in the previous section.

## Section 3: Teachers/Staff in Early Childhood Programs

### Data Availability

- **INCCRRA** operates the Gateways registry, where early childhood staff can track the certifications and professional development they have received. The registry includes training earned through Gateways to Opportunity, which offers credentials (such as the ECE credential, an ESL/Bilingual credential, the Illinois Director Credential, and so forth) and professional development for early childhood providers and staff. However, the registry also includes general education information, coursework relevant to early childhood, ISBE licensure (see next paragraph), conference attendance credits, and so forth. This information is private to the person in the registry (although available as part of a confidential data set for research and other purposes).
- **ISBE** provides data on staff for many programs it oversees (Preschool for All, Preschool for All Expansion, Prevention Initiative) across three systems.
  - Within the **Student Information System (SIS)**, there is information on the identification number of the staff member providing services to a child, their role type (e.g., teacher, home visitor), their educator identification number (if they are a licensed Pre-K teacher), their Gateways registry number, and whether they have a Gateways Credential. It also provides their start date, end date, and reason for leaving (if applicable). This information is available upon request as part of a confidential data set.
  - Within the **Educator Licensure Information System (ELIS)**, there is more specific information on the professional educator license for teachers in Pre-K settings. Information includes the date the license was issued, the date it is slated to expire (or has expired), the relevant endorsements on the license, and the regional office of education at which it is registered. The public can view this information by searching for a specific educator; a full list of educators and their licenses is available as a confidential data request.
  - Within the **Employment Information System (EIS)**, there is information on where teachers are employed, their salaries, and their benefits. This information is available for all teachers in the state on a public website.
- In addition to holding these teacher-level data, INCCRRA and ISBE both do routine surveys on staffing levels and needs in educational settings. INCCRRA conducts a salary and staffing survey of licensed childcare centers every two years to understand vacancies and wages across the state, while ISBE collects data on unfilled positions in Illinois public school districts (including early childhood) annually.

### Data Quality

Information collected from stakeholders as part of this project revealed several questions about data quality for early childhood teachers/staff. First, many stakeholders had questions about how complete our understanding of early childhood position vacancies is, especially at the Pre-K level. ISBE collects data on unfilled positions each year and, according to [recent documentation](#), expects Preschool for All and Preschool for All expansion programs to participate (regardless of whether they are operated by a public school district). However, very few community-based childcare programs can be found in recent unfilled position data sets. ISBE staff noted that they are working on increasing participation rates by community-based organizations. Future collections could indicate how many community-based programs were expected to participate, as well as how many did.

Second, there are questions in the field about how “prior learning” information is incorporated into early childhood credentialing systems, including both higher education systems and the Gateways Registry. Third, there are requests for clarity on where Gateways credential information is and is not required. For instance, there is needed clarity on whether Gateways is required for Prevention Initiative or optional.

Finally, the field is hungry for more comprehensive information on staff supply and demand in licensed childcare settings. INCCRRA provides data on vacancies, turnover, wages, and benefits every two years from a survey of license childcare providers (both centers and home-based). This survey provides valuable information on the needs of the field. However, the response rate is low (around 20%) and thus does not provide the kind of just-in-time information on supply and demand that might allow a coordinated state strategy around staffing.

### **Data Connectivity**

As illustrated above, data on early childhood staff is collected differently based on whether staff are working in licensed childcare (and thus in the Gateways registry) or Pre-K (and thus in ELIS/EIS). Information on vacancies and salaries is also collected differently. For Pre-K, it is part of mandated reporting for the unfilled positions and EIS reports. For licensed childcare, it is part of a voluntary survey. Because of these different requirements and data collection streams, there is no collective portrait of staffing needs across the state or across roles (such as home visitor, licensed childcare teacher or assistant teacher, licensed Pre-K teacher).

To its credit, ISBE has worked on getting non-licensed early childhood teachers and home visitors who work in the ISBE-supported programs (such as Preschool for All) into ELIS. Gateways information is also available for these teachers in SIS. A commensurate effort in the other direction, wherein licensed childcare data incorporates ELIS data and includes mandatory statewide collections of teacher vacancies and wages, would help create a more wholistic picture of the early childhood workforce.

### **Data Utility**

The primary use of early childhood staffing data is programmatic. Staff themselves use the data to build credentials and find employment. Programs use the data to hire qualified staff, which they then report to state agencies for accountability. The public may inquire about specific staff members’ qualifications in ELIS or the salaries of their publicly employed early childhood teachers in EIS.

The use of data to understand the qualifications, wages, and supply and demand of the Illinois early childhood workforce as a whole is more limited. Strong efforts are in place, such as the ISBE unfilled positions report and the INCCRRA salary and staffing survey. However, more participation by providers in these reports, as well as connection across ISBE and non-ISBE programs, is essential to complete this portrait of the workforce. In other words, current efforts to understand this workforce are fragmented and not easily repeated; ideally, staff data could be connected and pulled annually as part of a “system status” report on early childhood, much as teacher data are included annually in the K-12 Illinois Report Card.

### **Key Considerations**

Two key issues are raised by this review. The first is how to increase participation in data collection that would allow a wholistic picture of early childhood staff supply and demand, qualifications, and salary/benefits. The second is what kind of statewide early childhood workforce portrait is needed for policy decisions about resource allocation, support for staff development, and so forth. Once that vision is in place,

there is work to be done on collecting the right data from all programs and connecting that data across programs.

The launch of IDEC offers an opportunity to set that vision, but also creates a key challenge: While Preschool for All, Preschool for All Expansion, and Prevention Initiative data currently housed at ISBE will move to IDEC, the ELIS system will remain at ISBE. The ELIS system contains robust information on early childhood teacher qualifications, and, as noted previously, ISBE has made an immense effort to include Gateways credentials in their systems as necessary. Building on these past efforts and connecting to ELIS will be essential for workforce data at IDEC.

## Section 4: Student Experiences and Outcomes

### Data Availability

- **ISBE** maintains information on children’s experiences in the early childhood programs that fall under ISBE’s umbrella (detailed in Section 1). These data include child-level data on enrollment in specific programs, as well as demographic data (e.g., gender, race/ethnicity, age (via birthdate information), native language) and data related to specialized service enrollment (e.g., English learner, free/reduced lunch enrollment (a proxy for income), homelessness indicator, disability program enrollment). There are also child and caregiver/parent data collected that are unique to the early childhood program in which the child is enrolled. ISBE also holds data on various assessments or what might be considered “outcomes” in the early years: (1) the Kindergarten Individual Development Survey (KIDS), a measure of kindergarten readiness given in the first 40 days of kindergarten, (2) data on the early years of PK-12 schooling, such as attendance and scores on the state standardized assessment, (3) data on English proficiency screening and outcomes, and (4) outcome data specific to the early learning program.
- **IDHS** holds information on children’s enrollment in the programs they oversee (detailed in Section 1). These data include similar demographic and specialized information to what ISBE collects, such as gender, race, age, homelessness status, income status, English Learner status, family size, and family income.
- **DCFS** collects and publishes some data about children that may be of interest to early childhood stakeholders. This primarily includes children who are in foster care at various ages (including 0-5) and their demographic and geographic information. DCFS also holds information on child abuse and neglect, as well as child injury or fatality within childcare settings.
- **IECAM** has searchable, aggregate information on the characteristics of children ages 0-5 and their families. For instance, these data include important health indicators, birth rates, demographics, family work and living arrangements, and so forth.
- **ILDS** connects child-level data across state early childhood programs to create a fuller picture of children’s early childhood participation. Once accessible to users, this data set will allow agency staff and researchers the opportunity to examine children’s current enrollments and longitudinal trajectories through programs.

### Data Quality

A key issue for these student data is how to collect data on indicators of children’s success in early childhood. The issue of whether and how to measure the outcomes of early childhood programs for children is an area of much debate. Current efforts have mostly focused on program quality indicators (like Excelerate) and staff credentialing as reflective of the quality of experience children may be receiving. However, these data do not necessarily describe the true experience on the ground or hold programs accountable for children’s success in the program or afterwards.

The state’s kindergarten readiness assessment, KIDS, is a common measure implemented in the first 40 days of kindergarten that could potentially shed light on the relationship of participation in early childhood programs and school readiness. However, the assessment has been implemented in a formative fashion (see Kiguel et al., 2024b), not summative. Many scholars also believe kindergarten readiness should not be viewed as the outcome of interest for early childhood, given that even a strong relationship between early childhood programs and readiness tends to fade by later grades (academically).

Intermediate data like attendance (both in early childhood programs and K-12) could be useful for examining student and family relationships with early childhood programs. However, stakeholders are concerned that attendance data are not consistently collected or available across programs. Other potential measures like observations of staff-child interactions have yet to be implemented in Illinois at scale.

### **Data Connectivity**

The ILDS represents the state’s strongest effort to connect child data across programs and agencies. As noted in Section 1, the Early Childhood Participation Data Set solves many of the issues around viewing *programs* collectively, and it does similar work for examining a *child’s* experience holistically—i.e., across programs and time/age. Children’s data across programs is connected using a tool called the CDDA-ID, which is also used in other cross-agency data projects.

One connectivity issue raised by stakeholders is whether data collected in early childhood is firmly and consistently available at the K-12 level. For instance, some children are evaluated for English Learner status in Pre-K settings. There is a question whether K-12 stakeholders know where and how to access that information on English Learner status when the child enters kindergarten. Additionally, many children attend early childhood programs but do not have data collected about them at the state level. Investigating how information from early childhood programs is “handed off” to K-12 (and how that handoff might be improved) is an important area for future policy and practice work.

### **Data Utility**

Child-level data is primarily used in the administration of programs and required reporting about those programs. Furthermore, child-level data currently allows a window into performance of specific programs: there are numerous reports by program on number of children served, by child characteristics and geography. As with the other types of data, however, there is no current way to examine “system status” across all programs. IECAM’s statewide counts by program are perhaps the closest to that high-level view. More expansive and accessible child-level data would be essential to any research endeavors on early childhood trajectories and outcomes. Notably, the ILDS team is working towards a tool that would allow both administrative “system status” updates at consistent intervals as well as more ambitious research projects on what works for children, where, and how.

### **Key Considerations**

As IDEC takes form, there are critical questions to be answered about what the agency needs to know about children’s experiences and outcomes in Illinois early childhood programs. There is currently no agreed-upon measure of “success” in early childhood for children, nor a way to examine that success across specific programs. There is also inconsistency in our understanding of children’s early childhood experiences. We do not have common attendance collections or reporting across programs, nor can we easily examine children’s experiences concurrently or longitudinally across early childhood programs. Developing a vision for what the state wishes to know about the “child,” their “experiences” in early childhood, and their “outcomes” from early childhood could support decision-making for policy and practice.



## Conclusion and Recommendations

This report has provided a review of available early childhood data at the state level across dispersed systems. Within each type of data, this report has characterized current issues with the data and potential recommendations, as informed by a review of the data and stakeholder concerns. Now, we summarize these issues at a high level and suggest a possible way forward.

### Overarching Issues

While there are nuances to the issues with each type of data, there is clearly one pervasive root cause for all: **the lack of a unified plan for early childhood data collection and use across agencies and programs.** Currently, data are collected based on specific program needs, largely for administrative purposes, and not for statewide or public needs. This purpose makes sense in the short-term, but not in the long-term. It allows programs to be implemented in silos, but not systematic decision-making across programs in an early childhood system.

A vacuum in shared purpose creates several discrete problems (detailed above, but summarized here):

1. **There are no shared key indicators or goals for the early childhood system as whole.** Because there is no shared vision for what data should be collected and how it should be used, there is no shared definition for what constitutes “program quality,” “staff quality,” “adequate staff supply,” or “early childhood outcomes for students.” Data on these indicators is either not collected at all for some programs or collected idiosyncratically by program. As such the state cannot build clear goals or measures of progress around these critical indicators.
2. **The “units” of primary public interest—children, staff, providers—are buried beneath administrative units like funding stream, creating a variety of downstream headaches.** Due to regulatory requirements and administration of similar programs in different agencies, the “units” of data collection are primarily the program/funding stream, rather than the child, staff member, and provider. This leads to several sub-issues:
  - a. **Providers carry a data entry burden.** They must enter data about children differently, often in different systems, across funding streams.
  - b. **Full information about children, staff, and providers is difficult to create.** Understanding of children’s experiences, staff members’ work, and providers’ offerings must often be built from parts (reporting for a child in a specific funding stream/program) rather than a whole.
  - c. **Definitions for key variables vary by program/funding stream.** Variable definitions depend on the regulatory definitions for the funding stream.
  - d. **Important information is collected for some programs and not others.** The data collected is based on what each funding stream requires, not what is needed to understand key “units.”
3. **There is no strong, agreed-upon system for connecting data across programs.** Data lives by program/funding stream, across agencies that administer these programs, and is only connected for special projects. As such, answering a question as simple as “How many unique children are being served by state early childhood funds?” is not answerable without an idiosyncratic project. As stated previously, the whole must be constructed from the parts in early childhood data, but the parts are currently barred from connecting to each other. There are several sub-issues associated with this, such as the costs associated with developing a common identifier across data sets for children, families, staff, and providers, as well as the lack of a consistent system for early childhood data

access by researchers that would allow important questions about “what works, for whom, and where” to be answered.

4. **Because of the three previous issues, there is no regular “system status” report on the overall Illinois early childhood system, as in the Illinois Report Card for K-12.** The lack of shared goals, units, and connection across data makes regular reporting across early childhood programs and services impossible. The only status reports that are completed are those mandated by law.
5. **There is no “one-stop shop” for the public to access and understand important data,** especially families of young children.

In the next section, we describe what a statewide plan designed to solve these issues might include.

### **Recommendations for Moving Forward**

As IDEC begins its work as a new agency, developing a data plan would provide a strong path forward. The following factors could be considered in developing such a plan.

1. **Develop “use cases” for each audience within the early childhood system.** Different people have different purposes for accessing data; as described above, the system is now best designed for administrative use, with public use quite secondary. Use cases should include internal agency use, provider use (especially the experience of sharing data for children across funding streams/programs), parent/family use, legislative/policy use, and research use.
2. **Determine what the key “units” are in the system, and design data collection around getting the most complete and consistent portrait of these units.** This review has suggested that children, early childhood staff, and providers are the key units, and that data collection for each of these units is currently fragmented. The state may have different units in mind, but the goal is to define data collection around the units.
3. **Determine the information that is needed about each “unit,” and create variables to collect accordingly.** Ideally, require providers to share these defined statewide variables. For specific funding streams, allow these statewide variables to fulfill reporting obligations where possible, or collect idiosyncratic additional information only as needed for specific funding streams. This would involve unifying variable definitions, as recommended in a previous PDG grant (see D’Souza et al., 2022).
4. **Identify the statewide indicators that are necessary for the best decision-making in early childhood policy and practice, and design data collection and linking systems to measure these indicators on at least an annual basis.** This review has suggested that some regular indicators might be overall supply and demand for early childhood slots in specific types of services (such as “childcare age 3”), supply and demand for early childhood workforce members, program quality overall and in specific geographies, cost for families in different geographies, workforce compensation in different geographies, children’s flow through early childhood programs and into K-12, and children’s experiences and outcomes from early childhood participation. Again, the state may have different indicators in mind, but the data collection and connection system should be built around the ends the state desires.
5. **Consider how the data within the new agency will connect to important data staying at previous agencies.** For instance, KIDS assessment data and teacher licensure will remain at ISBE. How will this information be incorporated into IDEC’s data system?
6. **After considering all this, return to the use cases, and develop interfaces for collecting, viewing, and using the data accordingly. These could include a “one-stop shop” for the public, a streamlined reporting system for providers, and an annual “system status report” (like the**

**Illinois Report Card) for key early childhood indicators.** Based on the use cases, the state can develop wireframes for how different stakeholders will interact with data. These wireframes can be piloted with each stakeholder group. Key questions to ask during design would be:

- a. What will public reporting look like? What information will parents be able to search and see, how can it be provided as a “one-stop shop,” and how can it be best explained to them as they use it?
- b. How will providers share data—can the system be unified to reduce burden?
- c. What routine reports will agency staff need to administer programs, and how can we provide those reports on the same dashboard?
- d. How can researchers access data for specific questions in a way that is repeatable and reduces time, legal, and technical burden?

Finally, and most importantly, data must be deemed central for any system to work. Unfortunately, a good data system is often viewed as a luxury rather than a necessity, particularly if there is a cost—either financially or in terms of temporary burden to providers or agency staff—to building it. But a data system that works should be built into the DNA of agencies and providers, and it should (after short-term challenges) lead to long-term easing of burden and time. Developing idiosyncratic projects to answer key questions, along with the legal and technical challenges that come with that approach, costs more time, money, and capital than getting a single, connected system in place from the start. The current moment provides a once-in-a-lifetime opportunity to build data systems the right way with the launch of the new agency.

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