



The Value of Having a Distinct Count

Knowing how many distinct children have been served by one or more early childhood programs and/or services is a foundational metric for a host of early childhood policy and programmatic analyses.

Many key early childhood policy questions require the state to calculate a distinct count of children, even though they do not explicitly mention a distinct count. For example, to answer the question, *“What is the relative kindergarten readiness of children who are served by the state-funded prekindergarten program versus children with similar demographics who were not served by any early childhood program or service?”* the state must be able to identify the distinct children served by just the state-funded prekindergarten program, as well as identify those who were not served by any early childhood program or service.

Being able to calculate a the distinct count allows a state to do the following:

Understand patterns of service.

- How many children are served simultaneously by more than one program and/or service?
- How do children move among programs and/or services? What are common patterns and sequences?
- How many eligible children are not participating in any program and/or service?

Inform resource allocation.

- How well are children’s needs met by the current provision of programs and/or services?
- Are there programs or services that are under-enrolled but have eligible children in the area?
- Where are there potentially redundant programs and/or services?
- Is there a need for more programs and/or services in areas with eligible children who are not participating in any programs and/or services?

Assess impact.

- Which programs and/or services have the most positive impact on different populations of children?
- Which combinations or sequences of programs and/or services have the most positive impact on different populations of children?
- What dosage of participation in programs and/or services is necessary to achieve the positive impact?

Define cost.

- What is the cost of raising a healthy child?

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Distinct Count Workgroup

For more information on the IES SLDS Grant Program or for support with system development, please visit <http://nces.ed.gov/programs/SLDS>.

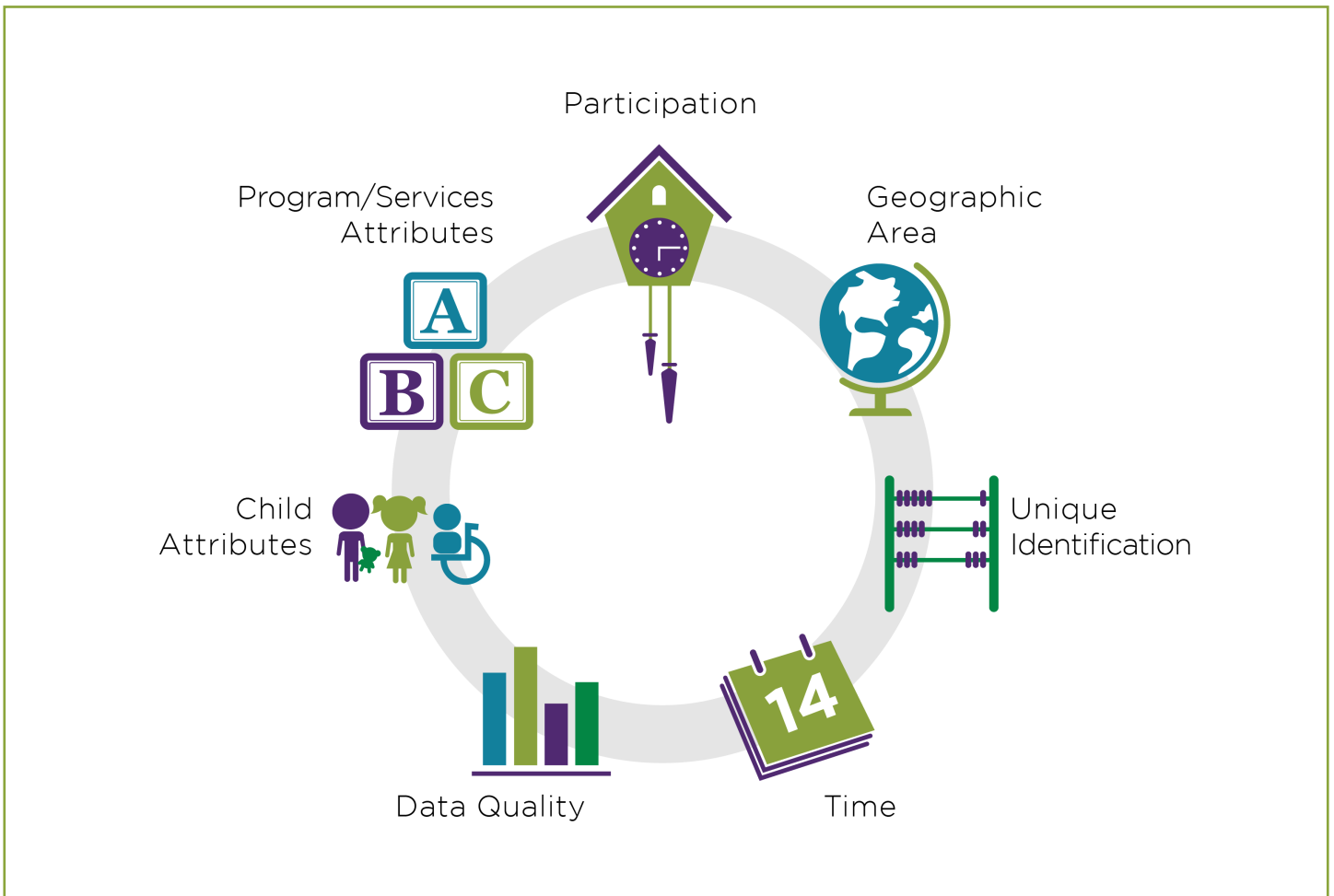


Figure 1. Factors contributing to a distinct count of children.

Distinct Count: Definition

Each state must craft its own specific definition(s) of “distinct count” based on (1) the question being asked, (2) whom the answer is meant to inform, and (3) its context and data capacity. However, the following is a generic definition of “distinct count” that can be tailored to any state:

The number of distinct children being served by a program or set of early childhood programs and/or services within a specified geographic area over a given time period.

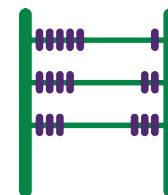
For example:

On October 25, 2014 [time], state subsidized early childhood programs [programs/service attributes] within the state of Utah [geographic area] served 23,976 distinct children [unique identification].

Key Factors to Consider When Defining a Distinct Count of Children

The following factors should be considered and clearly defined as part of creating a distinct count of children

served. The purpose for which a distinct count is being created should influence how each factor is defined.



Unique Identification

- How many unique children were served? It must be possible to distinctly count each child once, even if he or she is served by more than one program or has multiple enrollments in the same program over the specified time period.
- How will children be uniquely identified? For example, will there be a universal unique ID across all early childhood programs, or will records be matched across programs using an algorithm?



Time

- At what point in time or over what time frame do you need to capture the number of children served? Time frames might cover a month, a school year, a fiscal year, or specific dates.



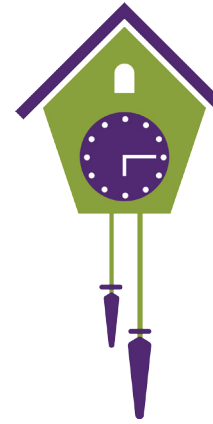
Geographic Area

- Within what geographic area do you need to capture the number of children served? The geographic area might cover a city, a school district, a county, a legislative district, or an entire state.
- Is the geographic area defined by the child's residence or by the location of the program?
- What geographic information is available for each program and/or service to ensure that its data are included accurately depending on the geographic area selected?



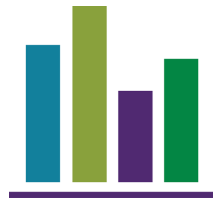
Program/Service Attributes

- Which early childhood programs and/or services will be included in a distinct count?
- How will programs and/or services be uniquely identified? Descriptive information about the distinct count report should specify which programs and/or services are represented. For example, the report might cover Head Start, state-funded prekindergarten, or all early childhood programs that receive federal or state funding.
- By what program and/or service attributes will you need to aggregate the distinct count? For example, the count might be aggregated by service type, quality rating, or staff credential.



Participation

- Will there be a threshold of participation for a child to be included in the count? For example, will a child who only received services for one week be included in the count, or will he or she be factored in differently from children who participated in programs and/or services for more time?
- Consider that the threshold established for including children in the distinct count will likely vary by the question being asked. For example, to answer a research question regarding the long-term impact of early childhood programs and/or services, a higher threshold for participation would likely be set than for a question of how many children are being served by a given set of programs and/or services.
- Consider dimensions such as:
 - » Duration: How long the service was given at any one time (for example, three hours a day). Note: *Duration* is not the same as the enrollment period.
 - » Frequency: How often the child received the service (for example, three days per week). This refers to actual participation, not recommended participation.
 - » Dosage (also referred to as *intensity*): How long the child was served by the program and/or service (enrollment). For example, the child might participate for three months, three days per week for six hours each day. Dosage encompasses *duration* and *frequency*.



Data Quality

- How will you ensure that the data are of sufficient quality to serve the purpose identified?
- Are additional data sources—such as birth records—available that could help improve the quality of the unique identification of children?
- Consider making a consistent assessment of the data quality of each source system, by year, to inform whether a source should be included in a particular analysis.
- Do you have the data for all programs and/or services that should be included in the count for the time period specified and by the geographic area identified? If not, how will you modify the definition and/or work toward collecting or improving the quality of the data needed in the future?

- How will you reconcile differences in definitions of common data elements? For data elements that are common across multiple source systems (for example, child demographics), which system will be the system of record?



Child Attributes or Demographics

- By what child attributes or demographics will you need to aggregate the distinct count? For example, the count might be aggregated by gender, race/ethnicity, socioeconomic status, or home language.

Additional Resources

Answering Key Questions with an Early Childhood Data System: SLDS Issue Brief
<https://slds.grads360.org/#communities/pdc/documents/4798>

Data Quality: Striking a Balance: SLDS Issue Brief
<https://slds.grads360.org/#communities/pdc/documents/5202>

Unique Identifiers: Beyond K12: SLDS Issue Brief
<https://slds.grads360.org/#communities/pdc/documents/4564>

What is an Early Childhood Integrated Data System?
<https://slds.grads360.org/#communities/pdc/documents/4441>