Critical Questions About Early Intervention and Early Childhood Special Education

Abby Winer, Kathy Hebbeler, Robin Nelson, Darla Gundler, Debbie Cate, Laura Hudson, Cornelia Taylor, & Mary Louise Peters

What is a high-quality statewide data system? One characteristic is that it provides the information needed to address important questions about early intervention and early childhood special education. But what are those questions? What questions should data users, such as program directors, advocates, and policymakers, be asking?

The Center for IDEA Early Childhood Data Systems (DaSy) compiled a set of **Critical Questions** that a quality state data system for early intervention (EI) or early childhood special education (ECSE) should provide the data to answer. The answers to these questions serve various functions, including supporting the state agency in effectively administering the program, meeting accountability requirements for EI and ECSE, and improving results for children and families through an examination of program features.

The questions are grouped into three sections, which align with the suggested data elements in the [DaSy Data System Framework System Design Subcomponent [see System Design and Development, Quality Indicator 4 (SD4)]:](#) child and family, practitioner, and local EI services program and local educational agency. Each section has a set of broad questions, with each broad question followed by more specific example questions. The broad questions represent critical global questions for state monitoring, evaluation, and program improvement efforts in EI/ECSE. The specific example questions illustrate more detailed approaches that will enable the state to address the issues raised by the overall broad questions.

The critical questions include both essential questions, denoted by the bread-and-butter symbol, and aspirational questions, denoted by the mountain climber symbol. Essential questions are those that a comprehensive, well-functioning state data system should provide the data to answer. Aspirational questions, although valuable to ask and answer, are more complex and require more information or more linkages to other data systems than would be expected even with a high-quality system. For both the essential and aspirational questions, there is no expectation that the data to answer them have to be in one system. The only expectation is that the state can access the data and link to data if necessary to answer the questions—wherever the data might reside.

A few of the example questions appear more than once. These questions were intentionally duplicated because they address more than one topic (e.g., questions that involve both child-level and practitioner-level data). Additionally, many if not all questions are relevant to ask at both the state and local levels.

Many state data systems do not currently have the data elements for answering all the essential questions. The purpose of this document is to help state staff think about some of the questions they would like to be able to answer with their data systems, take stock of where their data systems are relative to being able to provide the data to answer these important questions, and begin to plan for how to improve the power of their data systems.

How to use this document as a tool to plan enhancements to a data system:

1. Identify the questions in this document that are a priority for your state/locality.
2. Identify which of these questions can and cannot be answered with your current data system.
3. Prioritize the questions that currently cannot be answered.

4. Review your data system and data elements to identify what additional data or enhancements to the system would be needed to answer these questions. (The DaSy Data System Framework Self-Assessment is a helpful tool for reviewing your data system and data elements and capturing priorities for improvement.)
5. Develop a plan to begin to collect the necessary data elements or to make the necessary enhancements to your data system.

How to use this document to organize analyses for informing program operations, program improvement, and policy and accountability:

1. Identify the questions in this document that are a priority for your state/locality.
2. Identify which of these questions your state can answer with your data system and which questions currently cannot be answered.
3. Develop an analysis plan to answer the priority questions that can be answered with your current data system.
4. Analyze the data.
5. Apply the results of the analysis to answer your priority questions, with the goal of improving services for children and families.

DaSy technical assistance providers are available to assist state Part C and Part B 619 staff in identifying priority questions, necessary data elements, and developing analysis plans.

Next Steps for the Critical Questions

DaSy will be developing analysis templates for each of the critical questions. These templates will identify the data elements needed to address the question, provide suggested analyses, and give examples of tables or graphs for displaying the data. Stay tuned for additional resources on how to work with data to answer each of the critical questions, including data analysis plans and the data elements that would be necessary for each question in the Common Education Data Standards (CEDS) Connect Tool.

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About Us

The DaSy Center is a national technical assistance center funded by the U.S. Department of Education, Office of Special Education Programs. The DaSy Center works with states to support IDEA early intervention and early childhood special education state programs in the development or enhancement of coordinated early childhood longitudinal data systems.

To learn more about the DaSy Center, visit the DaSy Center website at http://www.dasycenter.org/.

Section 1: Child- and Family-Level Questions

1.A. Characteristics of Children and Families

1.A.1. What are the characteristics of children and families receiving early intervention or early childhood special education (EI/ECSE)?

1.A.1.a. How many children does the state serve in EI/ECSE (e.g., on a single day or in a given period of time such as a month or year)?

1.A.1.b. What are the characteristics of children and families currently enrolled in EI/ECSE (e.g., disability, demographics,[1] risk[2])?

1.A.1.c. How have the characteristics of children and families enrolled in EI/ECSE changed over time (e.g., disability, demographics,[1] risk[2])?

1.B. IDEA Services and Settings

1.B.1. What are the characteristics of the services and supports provided to children/families in early intervention/early childhood special education (EI/ECSE)?

1.B.1.a. What percentage of children in EI/ECSE were planned to have each type of service (e.g., occupational therapist, physical therapist) according to their Individual Family Service Plan (IFSP) or Individualized Education Plan (IEP) within a given time period (e.g., the past month or year)?

1.B.1.b. What percentage of children received each type of service within a given time period (e.g., the past month or year)?

1.B.1.c. What amount of each type of service (e.g., frequency, intensity, total hours) do children in EI/ECSE receive?

1.B.1.d. What is the relationship between the amount of services planned and the amount of services received?

1.B.1.e. What percentage of children received a particular practice (e.g., joint-attention activities, peer-mediated intervention) within a given time period (e.g., the past month, past year, or over their time in EI/ECSE)?

1.B.2. How do children enter and move through the early intervention/early childhood special education (EI/ECSE) system(s)?

1.B.2.a. What are the different sources of referral to EI/ECSE (e.g., parent, physician, social services)?

1.B.2.b. What percentage of referred children are eligible for services, and what percentage of eligible children are enrolled in services (e.g., have an IFSP/IEP)?

1.B.2.c. What percentage of children meet each program milestone (e.g., time between referral, evaluation, IFSP/IEP, first service, and transition) within timelines based on IDEA requirements or state standards?

1.B.2.d. How long do children participate in EI/ECSE (e.g., average length of time, percentage in program less than 6 months)?

1.B.2.e. What percentage of children who receive EI services continue on to ECSE? What percentage of children in ECSE received EI services?

1.B.2.f. What percentage of children leave EI/ECSE because they are no longer eligible (i.e., services are deemed no longer necessary)? What percentage of children leave EI/ECSE because the family withdrew from services? What percentage of children leave EI/ECSE for other reasons?

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[1] Demographics include characteristics such as race, ethnicity, gender, socioeconomic status (SES), and language.
[2] Risk includes characteristics that place children at risk for developmental delays or disabilities, such as prematurity and abuse or neglect.

1.B. IDEA Services and Settings (continued)

1.B.3. What factors help explain differences in the type and amount of services that children and families receive?

1.B.3.a. What child characteristics (e.g., disability, age at entry, socioeconomic status [SES]) are related to differences in services and length of time in the program?

1.B.3.b. How do the type and amount of services vary by local early intervention services program/school district?

1.B.3.c. What program characteristics (e.g., geography, size, service-delivery model, finance/reimbursement methods) are related to differences in services and length of time in program?

1.B.3.d. What service-provider characteristics (e.g., years of experience, type of professional) are related to differences in services and length of time in program?

1.B.4. What characteristics of services are related to better outcomes for children and families?

1.B.4.a. What is the relationship between child outcomes and length of time in service?

1.B.4.b. What is the relationship between type and quantity of services, service setting, and child outcomes?

1.B.4.c. What is the relationship between service-delivery model and child outcomes?

1.B.4.d. What is the relationship between quality of services and child outcomes?

1.B.4.e. What is the relationship between intervention practices (e.g., peer-mediated intervention, naturalistic time delay) that the child and/or family experience and child and family outcomes?

1.B.4.f. What types of practices and supports are most effective in helping families help their child develop and learn?

1.B.5. Are young children receiving IDEA services in settings that are for all children?

1.B.5.a. What percentage of children with IFSP/IEPs are receiving IDEA services in settings that are for all children (e.g., state-operated prekindergarten, Head Start)?

1.B.5.b. What are the characteristics of children with IFSP/IEPs receiving IDEA services in settings that are for all children (e.g., disability category, race/ethnicity, dual language learner [DLL], age, SES)?

1.B.5.c. What percentage of children with IFSP/IEPs are receiving IDEA services in specialized/special education settings?

1.B.5.d. What are the characteristics of children with IFSP/IEPs receiving IDEA services in specialized/special education settings (e.g., disability category, race/ethnicity, dual language learner [DLL], age, SES)?

1.B.5.e. What is the quality of the general early care and education settings in which young children with disabilities receive IDEA services?

1.B.6. What is the relationship between the IDEA service setting and child outcomes?

1.B.6.a. How do child outcomes for children who receive IDEA services in settings that are for all children compare with the child outcomes for those who receive IDEA services in other settings?

1.B.6.b. What is the relationship between the number of settings in which children receive IDEA services in a given time period (e.g., in a year) and child outcomes?

1.C. Non-IDEA Program and Services

1.C.1. To what extent are children with IFSP/IEPs attending general early care and education programs?

1.C.1.a. What percentage of children enrolled in EI/ECSE are served in general early care and education programs[3] (e.g., Early Head Start, Head Start, home visiting, child care, state pre-K)? How does this compare with the overall population of children birth to age 5 in the state?

1.C.1.b. What are the characteristics of children with IFSP/IEPs who are spending time in general early care and education settings[3] (e.g., disability category, race/ethnicity, LEP, age, SES)?

1.C.1.c. What percentage of children with IFSP/IEPs are spending time in high-quality early care and education settings?

1.C.2. To what extent are children with IFSP/IEPs participating in other programs for children and families?

1.C.2.a. What percentage of children in EI/ECSE are enrolled in public insurance, such as Medicaid and/or the Children's Health Insurance Program (CHIP)?

1.C.2.b. What percentage of children or families in EI/ECSE are receiving other public services (e.g., The Special Supplemental Nutrition Program for Women, Infants, and Children [WIC]; foster care; children with special health care needs [CSHCN]; child protective services [CPS]; supplemental security income [SSI])?

1.D. Child and Family Outcomes

1.D.1. What are the outcomes for children and families participating in early intervention/early childhood special education (EI/ECSE)?

1.D.1.a. How many children exiting EI/ECSE showed greater than expected growth (summary statement 1) and exited within age expectations (summary statement 2)? How do the patterns compare across child outcomes?

1.D.1.b. What percentage of children who receive EI services continue on to ECSE? (i.e., What percentage of children in ECSE received EI services?)

1.D.1.c. What outcomes do families achieve during their time in EI/ESCE (e.g., helping their child develop and learn, being able to advocate for their rights)?

1.D.1.d. How have child and family outcomes changed over time, and how do the trends compare across outcomes (for the state and local programs)?

1.D.2. What factors are related to better outcomes for children and families participating in early intervention or early childhood special education (EI/ECSE)?

1.D.2.a. How do child and family outcomes differ by child and family characteristics (e.g., disability, demographics,[4] and risk[5])?

1.D.2.b. What is the relationship between family outcomes and child outcomes?

1.D.2.c. How do outcomes for children and families differ by characteristics of IDEA services received (e.g., length of time in service, type and quantity of service, service setting, service-delivery model, and quality of services)?

1.D.2.d. How do outcomes for children and families differ by characteristics of the workforce (e.g., years of experience, level of education, and participation in professional development)?

1.D.2.e. What is the relationship between child outcomes and characteristics of the general early care and education settings in which children with IFSP/IEPs spend time (e.g., child to caregiver ratio, type/variety of settings, curricula, staff experience, and quality)?

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[3] General early care and education program/setting refers to programs that are not designed specifically for children with disabilities.
[4] Demographics include characteristics such as race, ethnicity, gender, SES, and language.
[5] Risk includes characteristics that place children at risk for developmental delays or disabilities, such as prematurity and abuse or neglect.

1.D. Child and Family Outcomes (continued)

1.D.2. What factors are related to better outcomes for children and families participating in early intervention or early childhood special education (EI/ECSE)? (continued)

1.D.2.f. What factors (e.g., amount and type of service, level and type of personnel) contribute to better outcomes without increased cost?

1.D.3. What are the long-term outcomes of children who participate in early intervention/early childhood special education (EI/ECSE)?

1.D.3.a. What percentage of children who exit EI/ECSE at age expectations do not have an IEP in K-12 (e.g., in kindergarten, in third grade, in grade 12, at graduation, ever)?

1.D.3.b. What are the characteristics of children who exit EI/ECSE at age expectations and without an IEP but who subsequently receive an IEP later in K-12? How do they differ from EI/ECSE recipients who do not receive special education services later in K-12?

1.D.3.c. What percentage of children who have received EI/ECSE are achieving at grade level later in K-12 (e.g., at grade 3, grade 6)? What percentage of children who exit EI/ECSE at age expectations achieve at grade level later in K-12? How do these percentages compare with the percentage of their classmates achieving at grade level?

Section 2: Practioner-Level Questions

2.A. Practitioner Characteristics

2.A.1. What are the characteristics of practitioners working in early intervention/early childhood special education (EI/ECSE)?

2.A.1.a. What are the demographic characteristics of EI/ECSE practitioners (e.g., age, gender, ethnicity/race, language[s] spoken)?

2.A.1.b. What are the levels of education and years of experience of EI/ECSE practitioners?

2.A.1.c. How many EI/ECSE practitioners have specific types of credentials/licenses (e.g., EIS, preschool, special education, licensed therapist)?

2.A.1.d. What is the turnover rate among EI/ECSE practitioners (by year, state, or local program)?

2.A.1.e. What percentage of those working with children with IFSP/IEPs and their families entered the field with the academic preparation and/or experience for working with young children and families?

2.A.2. What are the characteristics of the practitioners working with children with IFSP/IEPs in general early care and education?

2.A.2.a. What are the demographic characteristics of practitioners working with children with IFSP/IEPs in general early care and education (e.g., age, gender, ethnicity/race, language[s] spoken)?

2.A.2.b. What are the levels of education and years of experience of the general early care and education practitioners working with children with IFSP/IEPs?

2.A.2.c. How many general early care and education practitioners working with children with IFSP/IEPs have specific types of credentials/licenses (e.g., early childhood, preschool, Child Development Associate [CDA], special education, licensed therapist)?

2.A.3. What ongoing professional development do early intervention/early childhood special education (EI/ECSE) practitioners receive?

2.A.3.a. What professional development activities do EI/ECSE service providers/teachers participate in during employment?

2.A.3.b. How much professional development (e.g., hours, continuing education units [CEUs]) did EI/ECSE practitioners receive over a given time period (e.g., in a year, over a 5-year period) by role and profession?

2.A.3.c. How much professional development specific to EI/ECSE did EI/ECSE practitioners receive over a given time period (e.g., in a year, over a 5-year period) by role and profession?

Section 3: Local Early Intervention Services (EIS) Program- and Local Educational Agency (LEA)-Level Questions

3.A. EIS Program/LEA Characteristics

3.A.1. What are the characteristics of local early intervention services programs and local educational agencies?

3.A.1.a. Where are EIS programs/LEAs located in the state (e.g., by geographic region, urban/suburban/rural/frontier)?

3.A.1.b. What are the characteristics of EIS programs/LEAs in the state (e.g., number of children served, number of providers in program, average funding per child)?

3.A.1.c. What curricula are used in the early care and education programs serving young children with disabilities?

3.A.1.d. What is the EI/ECSE practitioner to child ratio for each EIS program/LEA overall? By type of profession/role?

3.B. EIS Program/LEA Performance

3.B.1. How well are local early intervention services programs and local educational agencies supporting children and families?

3.B.1.a. How do child and family outcomes compare across EIS programs/LEAs? Are some EIS programs/LEAs meaningfully (e.g., statistically) different from the state?

3.B.1.b. What are the local determinations for each EIS program/LEA?

3.B.1.c. What percentage of EIS programs/LEAs provide IDEA services in general early care and education settings? What percentage of their children receive IDEA services in these settings?

3.B.1.d. Within each EIS program/LEA, what percentage of early care and education programs attended by children with IFSP/IEPs are participating in a Quality Rating and Improvement System [QRIS]? What are the ratings of those early care and education programs,?

3.C. Funding and Expenditures

3.C.1. What is the cost of providing early intervention/early childhood special education (EI/ECSE) services to children and families?

3.C.1.a. What major funding streams and allocations support children participating in EI/ECSE (e.g., federal, state, local)?

3.C.1.b. What is the total amount of funding from all sources that is supporting the operation of the EI/ECSE program (including direct services, administration, general supervision, training, technical assistance, etc.)?

3.C.1.c. What is the cost to each local EIS program/LEA to provide EI/ECSE services?

3.C.1.d. What is the average cost per child for EI/ECSE services statewide? For each EIS program/LEA?

3.C.1.e. What are some of the factors (e.g., demographics of population, geography) that are related to differences across EIS programs/LEAs in the average cost per child?

3.C.2. Does the state have sufficient revenue to provide quality IDEA services?

3.C.2.a. What is the comparison between projected revenues/budget and estimated need at the state level (i.e., revenue gap)?

3.C.2.b. What is the comparison between projected revenues/budget and estimated need for each local EIS program/LEA?

3.C.2.c. What would it cost to provide IDEA services for young children with disabilities consistent with recommended practices and quality standards (i.e., estimated need)?

3.C.2.d. What is the relationship between the extent of the revenue gap and child outcomes (e.g., the percentage of children who make greater than expected growth) for each EIS program/LEA?

3.C. Funding and Expenditures (continued)	
3.C.3. How can the state maximize efficiency in the operation of the early intervention/early childhood special education (EI/ECSE) program (e.g., by changing practices and reallocating resources) and maintain or improve outcomes?	
3.C.3.a. What are the high-cost drivers within the state program configurations (e.g., personnel, evaluation, delivery of service, program models, administration)?	
3.C.3.b. What are the characteristics of programs with relatively lower than average cost per child and relatively higher child outcomes (e.g., higher percentages of children experiencing better than expected growth)?	
3.C.3.c. What are alternative configurations of IDEA service provision (e.g., amount and type of service, level and type of personnel) that contribute to same or better outcomes without increased cost?	