ABSTRACT

Title of Document: STATE EFFORTS TO COLLECT CHILD
                            OUTCOMES DATA FOR THE PART B-619
                            AND PART C PROGRAMS UNDER THE
                            INDIVIDUALS WITH DISABILITIES
                            EDUCATION ACT

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The Part B-619 and Part C Programs under the *Individuals with Disabilities Education Act* (IDEA) provide preschool special education and early intervention services, respectively, to children with disabilities birth through age 5. Recent requirements in IDEA require states to monitor the implementation of these programs through a series of indicators, one of which focuses on the outcomes that infants, toddlers, and preschoolers make as a result of program participation. Known commonly as child outcomes, these data will be used to evaluate the effectiveness of the Part B-619 and Part C programs. The purpose of this investigation was to determine how Part B-619 and Part C programs are collecting high-quality child outcomes data, what barriers these programs are facing in this collection, and how programs are addressing these barriers.

Telephone interviews were used to gather descriptive information from a national sample of Part B-619 and Part C coordinators. The clarity and scope of the interview was improved through Dillman's (2000) pretest procedures. The final interview consisted of

open-ended questions and was standardized to elicit consistent information from each respondent (Patton, 1990).

The results of the study showed that state Part B-619 and Part C programs used similar methods to support the accurate and reliable collection of child outcomes data. Most frequently noted methods included training, a statewide measurement approach, and data review. Despite these methods, 18 types of barriers emerged from collection efforts. Barriers primarily pertained to data quality and the transmission of child outcomes data from local programs to the state. States chose to address barriers through the methods used to support high-quality collection efforts, most notably training and the use of communication and collaboration.

Findings suggest that states have established a structure to coordinate the collection of child outcomes data statewide. These efforts focused primarily on improving the quality of these data. Barriers related to the quality of the data emerged despite these efforts, which further indicate the need for ongoing support to sustain high-quality collection efforts. These findings emphasize the importance of training and continuous monitoring to ensure the quality of child outcomes data in statewide collection efforts.

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619 AND PART C PROGRAMS UNDER THE INDIVIDUALS WITH DISABILITIES
EDUCATION ACT

By

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2010

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Dedication

To my husband, Nitin, I am so grateful for your love and support.

Acknowledgements

First, I would like to thank Joan Lieber, my committee chair and advisor for her continued enthusiasm, encouragement, and mentorship both in this work and over the years. I would also like to thank Maggie McLaughlin, my committee "co-chair", for her guidance in developing this research project. To my committee members, Elisa Klein and Christy Tirrell-Corbin, thank you for reminding me about the reason I began this program. To Larry Wexler, my committee member and mentor, I thank you for challenging me to think about the big picture and for reminding me "these things take time".

I would also like to thank Lucky Mason, my colleague and friend, for lending an ear and supporting me through this process. To my colleague, Kelly Worthington, thank you for introducing me to the policy world.

Many thanks to those individuals who provided input in this research: To Kathy Hebbeler for her kindness in answering my many questions; to Jim Lesko for his direction, feedback, and support; and to the Part C and Part B-619 coordinators nationwide who shared their time and knowledge.

Finally, I would like to express my gratitude to my family: To my brother Ameet Sarpatwari, for taking time out of his dissertation research to encourage my success and review countless edits; to my brother, Ravi Sarpatwari, for encouraging me to celebrate each milestone along the way; and to Hobbes, for the quiet walks. To, my sister-in-law Nidhi Gupta, thank you for knowing what questions to ask. To my girls, your understanding and patience kept me sane. To my parents, Vilas and Arundhati Sarpatwari: Bab, I thank you for your continued confidence in me and for reminding me that finishing my Ph.D. was my first priority; Aai, your patience, gentle encouragement, and reminders to breathe ensured my daily success. To my husband, Nitin Gupta, your support, humor, and belief in me enabled me to realize this goal.

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B7 – Part B-Indicator 7
C1 – Coordinator 1
C3 – Part C-Indicator 3
CBA – Curriculum-based assessments
CEC – Council for Exceptional Children
COMS – child outcomes measurement system
COSF – Child Outcomes Summary Form
CSPD – Comprehensive Systems for Personnel Development
DD – developmental delay
DEC – Division for Early Childhood
EC – early childhood
EI – early intervention
ECO Center – Early Childhood Outcomes Center
ECSE – early childhood special education
FAPE – free and appropriate public education
GPRA – *Government Performance and Results Act*
IDEA – *Individuals with Disabilities Education Act*
IEP – individualized education plan
IFSP – individualized family service plan
IHE – institute of higher education
IRB – Institutional Review Board
LEA – local education agency
LRE – least restrictive environment
NAEYC – National Association for the Education of Young Children
NAECSE/SDE – National Association of Early Childhood Specialists in State
NECTAC – National Early Childhood Technical Assistance Center
NR1 – national researcher 1
NR2 – national researcher 2
NR 3 – national researcher 3
OMB – Office of Management and Budget
OSEP – Office of Special Education Programs
OT – occupational therapy
PART – Program Assessment Rating Tool
PD – professional development
PT – physical therapist
RRFC – Regional Resource Federal Center *(may remove!)*
SEA – state education agency
SLP – speech language pathologist
SPP – State Performance Plan

T & TA – Training and Technical Assistance

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CHAPTER I: OVERVIEW

The *Individuals with Disabilities Education Act* ensures children with disabilities access to a free and appropriate education (FAPE) (IDEA, 20 USC §1400(601)(a)(3)). This act serves the nation's youngest children with disabilities birth through age 5 through the *Part B-619* and *Part C* programs. *Preschool special education,* provided through *Part B-Section 619* of IDEA (2004), targets children ages 3 through 5. *Early intervention* (EI) is provided through IDEA's *Part C* program and supports the birth through two population and their families. The 2004 reauthorization of IDEA requires states to monitor the implementation of the preschool special education and EI programs through a series of indicators, one of which focuses exclusively on the progress that infants, toddlers, and young children with disabilities make during program participation. These progress data are intended to be used by states and the U.S. Department of Education to determine whether the IDEA Part B-619 and Part C program goals are being met, and to evaluate whether these programs benefit young children receiving EI, preschool special education, and related services (Hebbeler, Barton & Mallik, 2008). In this chapter, I review the impetus for the child outcomes requirement, discuss the subsequent changes, provide an overview of the child outcomes requirement, and finally, review the importance of this study.

Results-Based Accountability

The push for child outcomes data is part of the larger results-based accountability movement ushered in by the 1993 *Government Performance and Results Act* (GPRA).

Rather than looking at whether programs were carried out as planned, GPRA insisted

programs examine their impact by taking a look at their results through a series of

questions: Is the program effective in its aims? Is the program producing the results it

intends to produce? What differences does the program make in the lives of program

participants? Consequently, federal programs were held "accountable for achieving

program results" (GPRA 31 USC §1101(a)(1)). They needed to identify long-term and

annual goals that were aligned with the program's purpose (Hebbeler & Barton, 2007;

Hebbeler et al., 2008), and establish indicators, or measurable statements that describe the

observable characteristics, or changes, program participants should experience, to track

program success on these goals (United Way of America, 1996).

Impact of GPRA Requirements on the Part B-619 and Part C Programs

The emphasis on results prompted a radical shift in the EI and preschool special

education fields, which historically have evaluated children's success with respect to their

individualized goals. Establishing a set of common goals across the early childhood

period in which children are rapidly changing, as well as across children with varying

abilities, presented an immense challenge to the field and to the Office of Special

Education Programs (OSEP) in the U.S. Department of Education (Hebbeler & Barton,

2007). OSEP administers IDEA nationwide and is therefore responsible for collecting

data which is used to determine if GPRA goals are being met. OSEP must ensure that the

desired goals (or outcomes) assessed align with the overall aim of the Act and the Part B-

619 and Part C program purposes. IDEA is responsible for ensuring that all children with

disabilities and the families of these children have access to a free and appropriate

education (IDEA, 20 USC §1400(601)(a)(3)). In its effort to improve the educational

results of children with disabilities, IDEA provides states with monetary assistance 1) for

the education of all children with disabilities, 2) to enhance the development of infants

and toddlers with disabilities, and finally, 3) to support national activities that seek to

improve education for these children. Services provided under the Part B-619 program

are intended to help preschool-aged children with special needs meet challenging

standards and prepare them for "further education, employment and independent living"

(USC §1400 601(d)(1)(A)). Part C seeks to "enhance the development of infants and

toddlers with disabilities, to minimize their potential for developmental delay" (IDEA, 20

USC §1400 631(a)(1)).

Monitoring provisions in IDEA (2004) now require states to collect data on

specific indicators that demonstrate program implementation and program results.

Specifically, states are encouraged to collect progress data, or early childhood outcomes

data, on individual children upon entry into and exit out of the Part B-619 and Part C

programs, thereby providing a measure of progress to support program results (Early

Childhood Outcomes [ECO] Center, 2005). Aggregate data from states should provide a

broad view of progress made by all children receiving Part C and Part B-619 services,

with the exception of children who receive less than 6 months of services (ECO Center,

n.d.a). Additional IDEA accountability provisions detailed in Chapter 2 require states to

outline data collection efforts in a six-year State Performance Plan (SPP) and an Annual

Performance Report (APR) (IDEA 20 USC §1400, Section 616). These reports describe

efforts to implement and monitor outcomes activities. Child outcomes data submitted to

OSEP in 2010 will be used as baseline data to evaluate the impact of preschool special

education and EI (National Early Childhood Technical Assistance Center [NECTAC], 2007), and in justifying federal funding for the 619 and Part C programs, respectively.

Outcomes for EI and Preschool Special Education

The OSEP funded the Early Childhood Outcomes (ECO) Center to create a national data collection system to track the progress of children participating in the 619 and Part C programs. The Center's first charge was to assist in developing a set of desired goals, or outcomes, for all young children with special needs. Outcomes may be defined generally as the intended benefits of a program (Hebbeler & Barton, 2007). Individual outcomes reveal the changes participants experience, which may relate to "skills, attitudes, values, behavior, condition, or status" (United Way of America, p. xv). With respect to EI and preschool special education, the ECO Center defines an outcome as "a benefit experienced as a result of services and supports provided for a child or family" (ECO Center, n.d.-a, paragraph 1).

Identifying Outcomes

To begin the process of identifying outcomes, the ECO Center surveyed numerous stakeholder groups in the EI and preschool special education communities nationwide to a) determine a goal for both EI and preschool special education, and b) to garner input about a set of outcomes broad enough to apply to the range of abilities across young children with special needs. Stakeholders developed the following overall goal for EI and preschool special education: "To enable young children to be active and successful participants during the early childhood years and in the future in a variety of settings – in their homes with their families, in child care, in preschool or school programs, and in the community" (ECO Center, 2005, p. 2). Stakeholders felt that a

single set of outcomes that focused on the functional, or everyday, abilities of children from birth through age five (meaning children participating in both EI and preschool special education) were appropriate in demonstrating progress toward this overarching goal (ECO Center, 2005; Hebbeler & Barton, 2007). Stakeholders proposed and OSEP approved the following functional outcomes (ECO Center, 2005, p. 1):

1. Positive social-emotional skills (including social relationships),

2. Acquisition and use of knowledge and skills (including early language and communication and including early literary for preschoolers), and

3. Use of appropriate behaviors to meet individual needs (ECO Center, n.d.a, no page no.).

Each outcome, or indicator, describes a broad range of integrated behaviors children may use in their everyday lives to achieve everyday goals, rather than discrete behaviors or skills performed in a specific instance. So rather than determining that a child can point her finger (i.e. an isolated skill), stakeholders felt it was more important to determine whether the child can point her finger to identify the toy she wants to play with. The functional outcomes, then, denote the skills or behaviors meaningful to children in everyday contexts, rather than discrete skills traditionally categorized by developmental domain (e.g., finger pointing as a physical, fine motor skill). In general, outcome 1 looks at children's abilities to relate to adults and peers, and for older children, how they interact with others and follow the rules of a group. Outcome 2 encompasses thinking, reasoning, remembering, problem solving, the use of symbols and language, and the child's understanding of physical and social worlds. Finally, how children take care of their needs, move their bodies from one place to another, utilize tools (e.g.,

writing or eating utensils), and take steps to care for their health and safety in older

children are addressed in outcome 3 (ECO Center, 2008e). How the child responds to

hunger may provide information toward outcome 3, meeting individual needs in

appropriate ways. Does the child recognize his hunger? Can the child communicate his

hunger to his parents? Does the child use verbal language to communicate these needs?

If so, how many words does the child use? Does the child need any support in meeting

his own needs, such as pictures of food?

Collectively, these outcomes provide a global view of the child's current level of

functioning across situations and settings and examine children's abilities to integrate

skills across developmental domains to participate in these situations and settings. One

may assume that with young children with disabilities, specifically, children may

demonstrate these outcomes in different ways, particularly across the 0 through 5 age

range, and that children may need support to achieve competence in these areas to reach

age-expectations (ECO Center, 2008e). The broad nature of these outcomes allows for

such variances and was therefore deemed appropriate for this population. (For a detailed

description of each outcome category and sample behaviors, see

http://www.fpg.unc.edu/~eco/assets/pdfs/ECO_Outcomes_4-13-05.pdf)

Measuring Outcomes

A measure of children's abilities at two points in time was needed to demonstrate

children's progress as a result of program participation, and program success by

extension, in each outcome category. The ECO Center developed five progress

categories, or measures, written in the form of evidence statements for each functional

outcome category (ECO Center, 2008c; ECO Center, n.d.a). Shown in Figure 1, these

measures specify the information needed from states to measure program success.

Figure 1

Measures Per Functional Outcome

Functional Outcome

| (a) Did not improve functioning | (b) Improved functioning but sufficient to move nearer to functioning comparable to same-aged peers | (c) Improved functioning to a level nearer to the same-aged peers but did not reach it | (d) Improved functioning to reach a level comparable to same-aged peers | (e) Maintained functioning at a level comparable to same-aged peers |

In general, states are required to report the percentage of children who demonstrate improvement, who do not demonstrate improvement, and finally, children who maintain their abilities across the outcome categories comparable to same aged-peers. The varying reporting categories described above and shown in Figure 1 take into account the range of progress young children with disabilities may make toward age-expected behaviors. Some children with milder disabilities may make progress in these categories and narrow or even close the gap between their functional abilities and age-expectations, whereas other children with severe disabilities may make slower progress or may not progress at all depending on the nature of their disability (ECO Center, 2008e).

Collectively, data collected across these reporting categories will describe the results children make as a result of EI and preschool services, results that may substantiate the success of the national IDEA 619 and Part C programs. These data may also be valuable at the state and local levels for several purposes: a) to demonstrate success to state and local entities in an effort to justify current and secure future funding for EI and preschool special education, b) to discern weaker programs from stronger ones, and c) to make system-wide decisions to better support programs to improve their ability to serve young children and families (ECO Center, 2008e)

State Efforts to Collect Child Outcomes Data

To efficiently collect, report, and analyze child outcomes data across a state, states are working to construct systems of outcomes measurement (Hebbeler et al., 2008), known more commonly as "child outcomes measurement systems" (COMS) (ECO Center, 2010). Systems should employ a statewide systematic approach to measurement that includes the use of one or more assessments that can capture accurately the progress

of young children with special needs (Hebbeler et al., 2008) and compare their progress

to typically developing children of the same age. How the system will collect and report

outcomes data is the responsibility of each state, as the IDEA requirements do not

mandate a measurement approach or the use of specific instruments (ECO Center, 2004).

Recent ECO Center data indicate that that all U.S. states and territories have selected an

overall measurement approach, specific measurement instruments, and have established

two points to collect child outcomes data (ECO Center, 2009a; 2009b).

National reports about the Part B-619 and the Part C programs also indicate that,

in 2008, 58 states and territories reported Part B-619 progress data in each area of the

three outcome categories and 56 states and territories provided progress data for children

exiting the Part C program (NECTAC, 2009b; 2009c). One may assume then, that at

least 58 Part B-619 programs and 56 Part C programs have established procedures for

child outcomes measurement. In addition, three states have published information about

their child outcomes measurement systems (Campbell & Anketell, 2007; Greenwood,

Walker, Hornbeck, Hebbeler, & Spiker, 2007; Rous, McCormick, Gooden, & Townley,

2007), detailing both the purpose and intentions of their systems and the rationale for

their measurement approaches. These states also articulated plans to use child outcomes

data for local accountability and program improvement purposes, though they are not

required by IDEA to do so, and detailed efforts to evaluate the validity of their

measurement approaches. These published efforts suggest that states have in place

systems that coordinate the collection, analysis, and reporting of data and that they may

be working to verify the accuracy and consistency of their measurement approaches,

which in turn ensure the accuracy and consistency of child outcomes data. Although all

states have collected some form of these data, we do not know how states are supporting this collection, and more specifically, how they are supporting the collection of accurate and reliable child outcomes data. Of utmost importance is determining on a state level whether data collection procedures validly and reliably capture children's progress prior to being used to evaluate the effectiveness of the Part B-619 and Part C programs.

Research Questions

The purpose of this investigation was to gather information about how states are supporting the collection of accurate and reliable child outcomes to meet federal requirements and to determine whether they have experienced any challenges in these efforts. The following questions guided this investigation:

1. What processes and methods are Part B-619 and Part C programs using to support the collection of accurate and reliable child outcomes data?

2. What barriers are these programs facing in the collection of accurate and reliable child outcomes data?

3. In what ways are Part B-619 and Part C programs addressing these barriers?

Importance of the Study

Findings from this investigation will describe methods that Part B-619 and Part C coordinators believe support high-quality collection efforts for the Part B-619 and Part C programs to meet federal accountability requirements. Findings will also reveal the barriers that state programs face in collecting child outcomes as well as the strategies state programs are using to address such barriers. These findings are important on several levels. First, findings will provide researchers, policy makers, and the EI and preschool special education fields at-large descriptive information about large-scale data

collection efforts and alert the field about the challenges involved in coordinating such a collection. Second, findings may contain implications for teacher preparation in special education and related fields, specifically with respect to preparing teachers and related service providers to participate in large-scale collection efforts. Findings may also influence state and local decisions to coordinate and support such a collection. Finally, findings reveal the complexities involved in evaluating a national program designed to improve the lives of children with disabilities and their families.

Definition of Terms

Child outcomes measurement system – A system that coordinates the regular collection, reporting, and analysis of child outcomes data.

Child outcomes requirement – An OSEP-issued requirement by which states must report child progress data on children participating in both the federal early intervention and preschool special education programs.

Data transmission – Describes the process of sharing and/or moving data and may include between adults; from one practitioner to another; from local practitioners to administrators of local programs; from local programs and/or districts to state administrators; and from local practitioners and/or districts into local, district, or state data systems.

Early intervention – Refers to the range of services provided to children ages 0 through 2 and their families under the IDEA Part C program.

Early childhood special education – A term used to describe preschool special education.

Functional outcomes – The everyday skills young children with special needs should acquire as a result of the early intervention and preschool special education programs. Also the three categories that describe desired goals for children participating in early intervention and preschool special education.

Indicators – Descriptive, measurable statements describing characteristics or changes that represent outcome achievement as a result of program participation. Also describes the desired functional outcomes for participation in EI and preschool special education

Measures – The progress categories shown in Figure 1 and used to measure indicators (ECO Center, 2008c)

Part B-619 – A federal program authorized under the IDEA that provides assistance to preschoolers (i.e. children ages 3 through 5) with disabilities. Part B-619 is also called preschool special education, 619, and Part B-preschool, and is sometimes referred to as early childhood special education.

Part C – A federal program amended to IDEA in 1986 and commonly known as early intervention. Early intervention seeks to enhance the development of infants and toddlers to prevent the risk of developmental delays.

Preschool special education – Refers to the services offered to children ages 3 through 5 under the IDEA Part B-619 program.

Outcomes – Benefits, or changes experienced as a result of program participation.

CHAPTER II: REVIEW OF LEGISLATION AND LITERATURE

The *Individuals with Disabilities Education Act* (2004) (20 USC §1400

(601)(a)(3)) requires states to monitor the implementation of the Part B and Part C

programs through a series of indicators, or descriptive, measurable statements (CFR §

300.157). One of these indicators is related to the outcomes young children make as a

result of program participation. States are building child outcomes measurement systems

(COMS) to coordinate the collection and reporting of these data as a result (Hebbeler et

al., 2008). This chapter opens with an overview of the Part B-619 and Part C programs,

specifically with respect to program efforts to demonstrate effectiveness. A summary of

accountability provisions in P.L. 108-446 is presented next, followed by the related child

outcomes requirement. Next, the literature pertaining to recommended and current state-

level child outcomes measurement activities is reviewed. This chapter concludes with a

discussion of the justification for this study.

Part B-Section 619 and Part C Programs

The Part B-Section 619 and Part C programs are national programs authorized

under IDEA. Section 619 was added to Part B in 1986 (P.L. 99-457) to ensure special

education and related services to preschool-aged children with disabilities. Part C was

also added (as Part H) and provided states the opportunity to create state systems to

support infants and toddlers, or children birth to 3 (Bruder, 2010).

The Part B Program provides monetary assistance to states for the education of all

children and youth with disabilities. As a formula grant program, Part B funds are

allocated to each state based on its population of children ages 3-21 (IDEA 20 USC

§1400, Section 618). Section 619 of Part B of IDEA is known formally as the *Preschool*

Grants Program and assists states with providing high quality special education and related services to children ages three through five, inclusive, though states may choose to include services to 2-year-old children who will turn 3 during the school year (IDEA 20 USC §1400 619(a)(2)). Services are not limited to the delivery of a particular service such as occupational therapy, and may be defined as a set of supports or an environment that addresses a child's needs and assists development (Division for Early Childhood [DEC], 2007). Preschool services, generally referred to as early childhood special education (ECSE), are intended to assist children in meeting challenging expectations (Bruder, 2010).

The Part C Program is referred to as the early intervention program and assists states in creating a "statewide, comprehensive, coordinated, multidisciplinary, interagency system" of services for infants and toddlers with disabilities and their families (IDEA USC §1400 631(b)(1)). This program was developed with an understanding of the significant brain development that occurs in the first three years of life and it aims, therefore, to "enhance the development of infants and toddlers with disabilities, to minimize their potential for developmental delay" (IDEA USC §1400 631(a)(1)). Similar to the Part B Program, Part C is administered through a formula grant, which is based on a state's general population of children ages 0 through 2. Participation in the program is voluntary, although all 50 states, the District of Columbia, eligible territories, and the Bureau of Indian Education currently receive Part C funding (Office of Special Education Programs [OSEP], 2009b).

By law, children must demonstrate a need for EI and ECSE services, meaning they must demonstrate that they are eligible for services. States may categorize children

with respect to a number of disabilities (e.g., mental retardation, hearing impairments, speech or language impairments, visual impairments, emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments or specific learning disabilities), however many states opt to use the broad terminology of developmental delay (DD), which denotes a delay in one of five developmental domains: physical, cognitive, social or emotional, communication, or adaptive (IDEA USC §1400 602(3)). States vary with respect to eligibility determination for the Part B program (i.e., the extent and type of delay), but essentially if a young child exhibits a significant delay, he or she is entitled to a FAPE. Preschool-aged children who qualify for the Part B-619 program are entitled to a FAPE in the least restrictive environment (LRE), meaning the environment in which the child may typically be enrolled with typically developing peers. Eligible preschoolers may receive special education and related services in settings such as Head Start classrooms, child care settings, state- or local-funded pre-kindergarten classrooms, and in their homes. Generally, once children begin kindergarten, they transition into the school-age Part B program, which provides students with a FAPE through the age of 21 or until graduation.

Eligibility for Part C also varies from state to state. Per statute, children are eligible if they demonstrate a delay in one of five developmental domains (physical, cognitive, communication, adaptive, and social or emotional) (IDEA USC §1400 632(1)(C)) or if they are "diagnosed with a physical or mental condition that has a high probability of resulting in a developmental delay" (IDEA USC §1400 632(1)(5)(A)(ii)). The term developmental delay is used to categorize these children and states must develop a rigorous definition of this label to appropriately identify infants and toddlers in

need of services (IDEA USC §1400 635 (a)(1)). Children under 3 are also eligible for

Part C services in some states if categorized as "at-risk", defined as an infant or toddler

who may be at risk of experiencing a substantial developmental delay if early

intervention services were not provided to the individual (IDEA USC §1400 632(1)).

According to a 2006 NECTAC report, eight states and territories serve infants and

toddlers at-risk (Shackelford, 2006). Some states' provisions also enable young children

to remain in early intervention beyond the age of 3 (IDEA USC §1400 632(5)(B)(ii)).

Whomever the program serves, states that participate in the Part C program must ensure

that early intervention services are made available to every eligible child and his family

(IDEA USC §1400 634(1)). Moreover, the system of services provided to infants and

toddlers and their families must fulfill minimum criteria by law (See IDEA USC §1400,

Section 635).

The ways in which services are delivered in the Part C program vary markedly

from the preschool special education program. Early intervention invites family

participation in an effort to enhance a family's ability to meet its child's needs (National

Early Childhood Technical Assistance Center [NECTAC], 2009). Thus, practitioners

work both with the child and the child's primary caregivers, at no cost to the family

(IDEA USC §1400 632(B)), to learn best how to support the child in everyday situations.

Skills are not taught in isolation, rather they are taught in a way that enables the child to

become more independent in his or her everyday environment, which may be the home,

day-care, or a grandparent's home.

Program Effectiveness

As stated in Chapter 1, the 1993 *Government Performance and Results Act* (GPRA) initiated a wave of nationwide reform that focused on program effectiveness, or accountability. As a result of this Act, federal programs were expected to demonstrate program results toward program goals. Appendix A summarizes the impact of GPRA on program goals for the general education and early childhood education arenas. Meanwhile in the special education field, subsequent IDEA amendments in 1997 required states to establish performance goals and indicators for federal programs serving children with disabilities (P.L. 105-17). Goals were needed to promote the purpose of the act and indicators provided a means to measure progress toward goal achievement. Part B goals focused on providing a FAPE to all eligible children, while Part C goals focused on developing a statewide system of services for eligible infants and toddlers and families. Indicators to show performance goals were met included state reporting of the number of children being served under the each program, the age of the children being served, and the settings in which children receive services (see Section 618). This information was used to demonstrate that programs were carrying out the aims of IDEA and providing young children with disabilities access to services. What these data did not show, however, was whether these programs were effective (Hebbeler & Barton, 2007).

The Office of Management and Budget (OMB) initiated a review procedure to evaluate program performance and effectiveness based on GPRA requirements. The Program Assessment Rating Tool (PART) was designed to evaluate programs specifically on their "purpose, design, planning, management, results, and accountability" (ExpectMore.gov, n.d.-b). PART rating scores translate into overall effective or ineffective ratings (ExpectMore.gov, n.d.-b), which are then used to make budgetary

decisions (Hebbeler et al., 2008). Failure to demonstrate program effectiveness places a program's funding at risk.

The Part B-Section 619 and Part C programs were reviewed individually in the 2002 PART assessment and were given a "Results Not Demonstrated" rating (ExpectMore.gov, 2002-a, ExpectMore.gov, 2002-b). Although OSEP could provide evidence of program compliance in each state, they did "not have agreed upon performance measures or lack[ed] baseline data and performance data" (See ExpectMore.gov) that indicated these programs were successful in meeting their intended results. These results directly prompted a shift in IDEA's emphasis from one of access to one of results in the form of student performance (Apling & Jones, 2005). Monitoring provisions added to the 2004 amendments reflect this shift and prompted changes that required states to assess the progress of children participating in IDEA programs.

Accountability Provisions in P.L. 108-446

IDEA, 2004 (P.L. 108-446) amendments emphasized the need to improve results and functional outcomes for children with disabilities (IDEA USC §1400 616(a)(2)). Monitoring provisions in the law require states to document this improvement using quantifiable, qualitative indicators (IDEA USC §1400 616(a)(3)). Additional monitoring requirements include state development of "a performance plan that evaluates the State's efforts to implement the requirements and purposes of [IDEA] and describes how the state will improve such implementation" (IDEA USC §1400 616(b)(1)(A)). It is in this State Performance Plan (SPP) that states outline six-year plans to measure relevant indicators to substantiate active efforts to monitor, enforce, and evaluate IDEA Part B and Part C programs with respect to established priority areas and respective performance

indicators. Annual reports of performance must also be submitted via Annual

Performance Reports (APRs) by state Part B and Part C programs, by law. OSEP

reviews both SPPs and APRs to determine non-compliance with the law and to assist in

the development of a plan for technical assistance to states (IDEA USC §1400 616(i)(2)).

Determinations are made based on these data, and if they do not reflect results, states run

the risk of losing funding for both programs (Apling, & Jones, 2005; IDEA USC §1400,

Section 616).

Program Indicators and Child Outcomes Requirements

To demonstrate that programs are effective in improving results for children with

disabilities, states must collect data on 20 indicators that align with the Part B program

and 14 that align with Part C (34 CFR §300.600; Regional Resource Federal Center

[RRFC], n.d). Indicators for Part B include graduation rates, suspension and expulsion

rates, and parental involvement, for example (see

http://www.nichcy.org/InformationResources/Pages/PartBIndicators.aspx for all Part B

indicators. Examples of Part C indicators include early intervention services in a timely

manner, settings, child find, transition, and accurate and timely data (see

http://www.nectac.org/partc/partc.asp for all Part C indicators).

The PART ratings of "Results Not Demonstrated" for both the Part B-619 and

Part C programs underscored the need for child progress data to demonstrate children's

positive gains as a result of early intervention and preschool special education programs.

PART evaluators' specific reference to the lack of child outcomes data prompted OSEP

to specifically designate one Part B indicator and one Part C indicator to the gains or

program outcomes. Specifically Part B-Indicator 7 (B7) and Part C-Indicator 3 (C3) address the three child outcomes discussed in Chapter 1.

Outcomes in general have been used in programs "with an overall focus on specialized populations" such as children with special needs, children at risk, or children from lower economic backgrounds (Harbin, Rous, & McLean, 2004, p. 9) to assess "the result or the effect of services, instruction, and programs on the attainment of skills or other characteristics" (Harbin et al., 2005, p. 143). Outcomes data that reflects improvement, then, can corroborate program success. Listed below, the outcome indicators are virtually the same across the Part B-619 and Part C programs, except that Part B's indicator includes a focus on early literacy skills. Specifically, states must report the percent of children receiving Part B-619 or Part C services in each state who demonstrate improved performance in:

1. Positive social-emotional skills, including social relationships,

2. Acquisition and use of knowledge and skills, including early language, communication (and early literacy for Part B-619 only)

3. Use of appropriate behaviors to meet individual needs.

The outcome indicators provide information about children's performance, yet they are only one of several types of data states must report to OSEP. With assistance from the ECO Center, states were able to move forward in reporting child progress data relative to these outcome categories.

Monitoring and Reporting Child Outcomes

The sense of urgency generated by the "Results Not Demonstrated" ratings led the ECO Center to devise a schedule to move states forward in data collection and reporting

efforts (NECTAC, 2008). What states must report in their SPPs and APRs with respect

to the child outcomes requirement has varied since this requirement was established and

has led states to report baseline data in 2010, data which will be used to establish

measurable and rigorous targets (or expectations for improved results) for children's

progress in coming years.

Reporting Timeline

Final details about child outcomes regulations were released to states in August

2005 (ECO Center, n.d.a). Earlier versions of the NECTAC timeline (2008) indicated

state SPPs were due to OSEP in December 2005 and needed to include plans for

collecting and reporting child outcomes data. States were exempt from submitting

updates on child outcomes indicators in the 2006 APR, but were required to update

information in the 2007 APR in SPP format, as the child outcomes requirement was still

new. OSEP anticipated that states would not have progress data on children by 2007

given the short time frame since the release, therefore they required states to submit entry

data on children entering 619 and Part C services during 2005-2006 fiscal year. States

were only required to report status data on the first two measures for each outcome

indicator (see Figure 1), meaning for outcomes 1, 2, and 3.

Full progress data were required in the 2008 APR (NECTAC, 2008). States

needed to provide data on all five measures for each outcome area, again using the SPP

format. The 2009 APR also required the same information, and constituted the second

set of progress data (ECO Center, 2008d). In 2010, states were required to report data on

all five measures for each outcome area once again, and in addition, were asked to

calculate two summary statements – defined as "a statement based on one or more of the

OSEP progress categories that will be used to describe child progress and for which targets will be set" (Hebbeler & Kahn, 2008, p. 3) – using these data. Data submitted in the 2010 APR constitute the third set of data and will serve as baseline data to begin evaluating the effectiveness of 619 and Part C (ECO Center, 2008d). Data reported in summary statements will also be used to establish numerical, yearly targets for improvement, which in turn will enable OSEP to provide the PART review with evidence of program effectiveness (Hebbeler & Kahn, 2008).

What states have been responsible for collecting has differed within each APR. And although states embarked on a number of activities in 2006 to begin system development, Hebbeler and Barton (2007) assert that a great deal more is needed to assure the "seamless and effective" collection of high-quality child outcomes data (p. 13). State systems of accountability can provide for the systematic collection of high-quality data, when constructed well. Several technical assistance centers have provided states with guidance on how to understand, collect, and report child outcomes data to OSEP. Their recommendations are presented here.

Outcomes Measurement

The collection of child outcomes data, or child outcomes measurement, requires a tremendous amount of planning, time, resources, and capacity. To this end, the Early Childhood Outcomes (ECO) Center and the National Early Childhood Technical Assistance Center (NECTAC) recommended the construction of accountability systems to coordinate the collection and reporting of child outcomes data statewide. First, I present first the NECTAC-developed framework used to guide system development, then, I summarize primary considerations related to initial system design.

A Framework to Develop A High-Quality EI/ECSE Outcomes Measurement System

According to Hebbeler and Barton (2007), the development of an outcomes

measurement system "is a massive undertaking requiring multiple decisions and

investments of time and resources at all levels" (p. 13). States were encouraged to

assemble first a statewide stakeholder group to assume responsibility for system

development and implementation system. Once convened, the group could proceed with

the following activity framework (NECTAC, 2006):

1. Developing a purpose.

2. Determining a measurement approach.

3. Planning a field test.

4. Conducting a field test.

5. Revising the state data and monitoring system.

6. Developing capacity to provide training, professional development and

   technical assistance.

7. Implementing the training and technical assistance plan.

8. Conducting quality assurance activities.

To initiate this series of activities, stakeholders developed a system purpose.

Developing a purpose. Just as child outcomes articulate the desired results for

Part C and Part-619 participation, the system purpose and principles function as the

desired results for a state's outcomes measurement system. First and foremost, the

system should be designed to collect and report child outcomes data to OSEP per GPRA

and PART requirements. Beyond the federal requirement states may choose additional

aims for the system (Hebbeler & Barton, 2007). Child outcomes data may prove valuable

for states interested in assessing program effectiveness, improving existing programs, and substantiating local funding for EI/ECSE (Hebbeler et al., 2008). In comparing the gains of young children receiving 619 or Part C services, states may discriminate stronger programs from weaker ones. Outcomes data may also allow states to identify programs where outcomes are not as strong, and subsequently provide additional training or support to staff working with young children with special needs (Hebbeler et al., 2008). Whatever the goals or intentions, they will drive state decisions around the type of information needed to judge program effectiveness, improve programs, and/or provide accountability data to local entities. Questions about the data (i.e., Are some early intervention programs stronger than others?) should also be recorded in purpose statements to describe system intentions.

Along with system intentions, system principles further guides system development, implementation and evaluation. The ECO Center (2004) suggested state-level decisions pertaining to outcomes measurement depend on the following principles:

• The outcomes system will provide information to improve programs for young children with disabilities and their families.

• The outcomes system will do no harm to young children with disabilities, their families, and the programs that serve them.

• What is measured by the outcomes system will be aligned with the goals for Part C and 619.

• The outcomes system must reflect a state-federal partnership that meets the needs of both partners insofar as possible.

• Universal design principles will be followed to the maximum extent possible in the design of the outcomes system.

• Measurement techniques employed to collect outcomes data will reflect high standards for validity and reliability.

• Major decisions about the outcomes system will reflect (1) best practice as determined by research and (2) input from key stakeholders.

• To the maximum extent possible, the outcomes system will not add undue burden to families, providers, or local or state administrators (p. 6).

These values, along with the system aims, drive system development and serve as a reference point in measurement activities. Once completed, stakeholders must be notified about the purpose of the outcomes system.

Determining a measurement approach. McLean (2004) noted that "the purpose of any assessment endeavor must be clear to all involved because it will determine the questions that are asked and instruments and procedures that are used" (p. 13). Considering the evidence needed to support the purpose of outcomes measurement is the first step in determining how best to measure child outcomes. Follow-up considerations include specific assessment instruments or an overall assessment approach to yield percentage data toward the outcome indicators, specific assessment instruments or assessment approaches best suited for young children with disabilities, and instruments that provide an accurate view of the abilities of young children with special needs (RRFC, n.d.).

These considerations require a basic understanding of the term assessment. In general, assessment refers to gathering information for decision-making purposes

(McLean, 2004). Assessment as a process and assessment as an instrument or a tool requires further differentiation (Hebbeler et al. 2008). The process of assessment involves collecting information about a child in multiple ways (Hebbeler et al., 2008). Both the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood (DEC) recommend using an authentic assessment approach, or the "*systematic collection of information about the naturally occurring behaviors*" of young children with special needs "*in their daily routines*" (italics in original, Neisworth & Bagnato, 2004, p. 204). The specific use of "an effective assessment system [that] emphasizes repeated, systematic observation, documentation, and other forms of criterion- or performance-oriented assessment using broad, varied and complimentary methods …" (DEC, 2007, p. 11) is recommended. Further, tools used should be appropriate, individualized, and collectively capture and confirm children's abilities. There is an even stronger rationale for this approach for children with disabilities who need more and perhaps different opportunities to respond. When used properly, the authentic assessment approach compiles information from multiple sources and people to generate a comprehensive profile of a child's everyday abilities (DEC, 2007; Hebbeler et al., 2008; National Association for the Education of Young Children [NAEYC], 2003; Neisworth & Bagnato, 2004). Results, then, will reveal the smaller and sometimes unique variations in a child's development or learning not detectable by many formal assessments instruments, rendering it more desirable for use with young children with special needs.

An assessment instrument, by contrast, refers to a single tool designed with a specific purpose (NAEYC, 2003). Some instruments, for instance, are designed to assess

specific developmental skills, such as a young child's gross and fine motor skills. Other

tools seek to compare a child's abilities to a typically developing group of children of the

same age. Still others evaluate a child's overall development across a number of

domains. Whatever the intention of the instrument, it is critical that the instrument be

used in just that way (Hebbeler, et al. 2008; NAEYC, 2003).

Recommended assessment practices in EI/ECSE advocate the use of criterion-

and performance-based assessment tools as they garner information about children's

natural abilities in flexible ways and in their everyday environments (DEC, 2007).

Although there are a number of criterion- and performance-based assessment

instruments, the vast majority of these instruments are not designed to assess program

accountability. Hebbeler and colleagues (2008) maintain that few instruments overall in

EI and ECSE have been designed to assess program effectiveness. The lack of these

instruments is somewhat problematic, as the only way to collect child outcomes data is to

assess children individually. The systematic collection of child outcomes data is needed,

then, to assure the consistency, accuracy, and appropriateness of approaches and tools

used to measure children's progress (Hebbeler & Barton, 2007).

In response to state requests for a tool that employs an authentic assessment

approach and aligns with recommended assessment practices, the ECO Center

specifically created the *Child Outcomes Summary Form* (COSF) a mechanism to gather

results from a range of data sources and assessments. The COSF guides teams to

summarize these results into a single rating from 1-7 (where 1 equals *Not Yet*, 3 equals

Nearly, 5 equals *Somewhat*, and 7 equals *Completely*) to describe children's performance

relative to their same-aged peers children (see

http://www.fpg.unc.edu/~eco/assets/pdfs/Definitions_Outcome_Ratings.pdf for ratings;

see http://www.fpg.unc.edu/~eco/assets/pdfs/COSF_overview.pdf for information on the

COSF). Individuals, including parents, are gathered together to discuss a child's

performance on several assessment instruments (e.g., parent interviews, curriculum-based

measures) and as a team they select a rating score that best reflects the child's abilities.

Recent ECO Center data indicates that 43 Part C programs and 39 Part B-619 programs

used the COSF as their statewide measurement approach in 2008 (ECO Center, 2009a,

2009b).

OSEP has given states the freedom to determine their own child outcomes

measurement approach, recognizing that states may vary in their current delivery of

services, choice of assessment strategies, and outcomes system purposes (Hebbeler &

Barton, 2007). Data from the ECO Center indicate that measurement approaches differ

not only across states, but also across the Part C and Part B-619 programs within states

(2009a; 2009b). However states choose to approach measurement, they must develop a

consistent process for collecting child outcomes data and select appropriate assessment

tools that are capable of detecting the varied abilities of young children with special

needs. States should assemble this information in a plan that includes when and how data

collection will take place, and by whom (NECTAC, 2006).

Planning a field test. Determining how best to carry out the measurement plan is

the focus of this activity. To do this, states should consider the logistical details needed

to shift from ongoing assessment practices in the state to new ones created specifically to

measure child outcomes. Some states may need to overhaul current assessment

procedures. Others may need to extend procedures to continually measure child

outcomes. The choice to implement one assessment statewide, for instance, may require practitioner training to ensure understanding and administration of the assessment tool. Hebbeler and colleagues (2008) suggest states consider: 1) the type of tool being used; 2) who will be administering that tool; 3) how many tools should be used; 4) who to include in the overall assessment, meaning are all participating children assessed, or only children receiving special education services, or just a sample of children; and 5) who will have access to the data and at what level of detail. These questions assist stakeholders in devising a plan for implementation given desired measurement approaches and instruments, and current practices within the state. With this information, states may then begin anticipating potential challenges, questions, or issues that a pilot test may address.

Conducting a field test. This stage of the process offered states a critical first opportunity to evaluate and improve the designed system. Perceived challenges noted in the previous activity may be addressed through a pilot of the state's proposed data collection and reporting procedures. Regular communication between field-testers and stakeholders at this stage allows for the discussion of factors that facilitate or impede implementation. Do field testers have all of the materials they need to carry out data collection, for example? The NECTAC and the ECO Center suggested that states document each activity in the field test to provide evidence for or against the proposed measurement procedures. Data collected may be compared with a system's purposes to determine their congruence and may lead the state to determine whether the proposed measures are successful in retrieving an accurate measure of child progress, for example. Data may also reveal whether instruments were administered with accuracy and

consistency and whether field testers felt the measures were appropriate and sensitive to the population of children being addressed.

Revising the state data and monitoring system. Prior to instituting any pilot-based changes, the state should reassemble stakeholders to review the purpose of the outcomes measurement system (NECTAC, 2006). Findings from field tests should inform any revisions, as should recommendations drafted after preliminary analyses of data. Changes to the measurement approach, instruments used, or changes may be amended to monitoring protocols. Additionally, if state systems posed questions about child outcomes data (e.g., Which early intervention programs are more effective in producing functional outcomes?), these should be answered in this phase. Consistently, stakeholders should be disseminating new information about the measurement system to the field as it arises (NECTAC, 2006).

Developing capacity. Once states solidified their measurement approach, they should have determined training and support needs around data collection, reporting, and data use (NECTAC, 2006). Needs assessments conducted with the professionals involved in measurement activities may provide information toward this purpose and assist in creating a Training and Technical Assistance (T & TA) Plan that both outlines a training schedule, identifies trainers, TA providers, and TA opportunities, and, identifies relevant materials, resources, and evaluation materials.

Implementing the training and technical assistance plan. Once developed, the plan should have been implemented in an effort to evaluate its usefulness. Similar to the system revision activity, this phase encourages states to refine and improve the training events and opportunities for those individuals administering the measurement approach.

Conducting quality assurance activities. Finally, findings that emerge from the T & TA implementation may be applied to the state data and monitoring plan. The goal of quality assurance activities is to review outcomes data to determine procedural and program quality assurance, which means evaluate the system's overall measurement capability. Additional considerations, summarized in the following section, further refine the system's measurement capability.

Initial Considerations Related to Developing an Outcomes Measurement System

To carry out the steps discussed above, states must understand conceptually what the purpose of an outcomes system is (ECO Center, 2004). Specifically, an outcomes system refers to the process identified to regularly collect, analyze, and use indicator data (ECO Center, 2004, p. 3). Second, states must adopt a measurement approach to collect outcomes data. Outcomes data provides information about the progress of individual children, however, it is the combined success of children that determines the benefit of any program (United Way of America, 1996). An added provision within IDEA prohibits states from disclosing any identifiable information about children receiving services (IDEA, 616(b)(2)(C)(iii)). For this reason, and to comply with IDEA regulations, states are required to report the aggregate numbers of children who make progress with respect to the outcomes indicators seen in Figure, which leads to the third requirement: states must determine how data collected will be analyzed, aggregated, and interpreted. Lastly, the logistical and infrastructure considerations (i.e., the tasks summarized in the activity framework) provide guidance in achieving this task.

Summary

NECTAC's activity framework summarizes the design and implementation process for outcomes measurement systems. A key feature of this framework is the routine assessment of measurement procedures. Each activity invites stakeholders to use the purpose and values of the outcome system as a point of continual reference to refine, revise, and verify the measurement procedures (i.e., Activity 5, 8) used to collect and report child outcomes data. Ensuring the effectiveness of this system in its aims not only reflects GPRA's emphasis on accountability, but it also provides a systematic way for states to confirm the intent and the quality of child outcomes activities. In the next section, I describe states' efforts to develop outcomes measurement systems.

State-Level Child Outcomes Measurement Activities

According to the ECO Center, states have determined methods to measure child outcomes (2009a, 2009b). Specifically, they have selected statewide measurement approaches (such as the COSF) to gather assessment data statewide, identified data sources (e.g., parents, observations, formal assessment instruments) to assess young children, and established points of entry into the program and exit out of the program at which assessments should be conducted (2009a; 2009b). These measurement activities not only differ across states, but also across the Part B-619 and Part C program in many states. Despite state selection of measurement approaches and despite efforts to collect and report child outcomes data to OSEP (NECTAC 2009a; NECTAC 2009b), only three states have published information pertaining to their child outcomes measurement activities. In this review, I present these three state's efforts to construct, implement, and empirically evaluate the effectiveness of measurement approaches chosen to collect and report child outcomes data.

Overview

Pennsylvania, Kansas, and Kentucky have developed and implemented statewide systems for outcomes measurement. Campbell and Anketell (2007) detailed Pennsylvania's efforts to establish and implement a statewide measurement approach to collect child outcomes data. The process included a review of literature pertaining to recommended assessment practices, as well as a survey of local-practitioner perspectives on accountability-related issues. Greenwood and colleagues (2007) not only shared Kansas' development and implementation of a statewide outcomes system, but also they provided preliminary findings from their statewide assessment and reporting procedures to validate the use of a specific measurement approach. Finally, Rous and colleagues (2007) revealed the series of events leading to the development of Kentucky's early childhood continuous assessment and accountability system. Aligning assessment items with child outcomes data was a major part of the development process, and one that was tackled in a series of validation activities described in their paper. Although not empirically based, this study provides vital information about a state's efforts to validate its outcomes measurement system. Table 1 summarizes these studies with respect to their purpose, their methodology, and their sample (when applicable). Table 1 also summarizes the features found to strengthen or diminish study findings (see Table 1: Strengths and Limitations). The methodological rigor with which these researchers collected and analyzed these data differentiate them from one another, but also highlight participant samples for future research. Leading the review is a description of each state's outcomes measurement system, a critical detail that distinguishes each system and clarifies state intentions and plans for outcomes measurement.

Table 1

Articles Describing State Child Outcomes Measurement Activities

Article	Purpose	Methodology	Sample	Strength/Limitation
Campbell & Anketell, 2007	To describe the broad approach to gather information and apply it in the design of a statewide system for measuring child outcomes in PA.	Multi-method: written surveys and focus groups	Convenience sample: preschool supervisors, IT program directors, preschool evaluators, IT evaluators Survey response: n=131, IT-55%, PS=42% Focus group: n=374 organized into 28 groups held in three regions	Strengths: Social validation, multi-method approach Limitations: Statewide v. nationwide sample, convenience sample, biased note-takers
Greenwood, Walker, Hornbeck, Hebbeler, & Spiker, 2007	To describe the KS experience in developing and implementing a statewide accountability system to evaluate EI and ECSE outcomes. To report preliminary findings for entry-level COSF data.	Descriptive, quantitative	Sample: KS children with disabilities, KS individuals and teams working with children with disabilities Entry data: N=2,388; n=1,108 Part C; n=1,280 Part B; included team members	Strengths: First study to report on COSF; acknowledge limitations of analyses, results, and findings; offer future directions for research for KS and other states

				Limitations: Data from one state
Rous, McCormick, Gooden, & Townley, 2007	To describe the development and implementation of comprehensive initiatives that increased the quality of all opportunities for all young children and the development of an accountability system based on improved assessment and curriculum practices that resulted in improved outcomes for all young children.	Descriptive	KY's EC continuous assessment and accountability system	Strengths: Highly descriptive, plans to validate data based on strategies being used in the field, future directions for research seek to establish validity and reliability of current procedures. Limitations: Not empirical

State System: Intentions and Measurement Approach.

All three states developed their child outcomes measurement systems with specific properties or principles and components in mind. Pennsylvania endeavored to create an assessment system which was 1) capable of measuring the progress of all young children, regardless of the early learning program children participated in, 2) developmentally appropriate for children birth through age five, 3) linked to eligibility determinations, and 4) utilized local-level practitioners as data collectors (Campbell & Anketell, 2007). Furthermore, policy makers aspired to use one assessment instrument across this system to allow for data comparisons across all children enrolled in statewide early learning programs. The selected instrument "needed to be viewed as appropriate and meaningful by local-level practitioners, provide authentic information about child performance, and align with recommended practices" (p. 35), therefore achieving consensus among local practitioners constituted a major portion of the design phase.

Principles of authentic and continuous assessment served as the foundation for Kansas' system, as the state established a commitment to collect authentic information about student performance across time (Greenwood et al., 2007). Curriculum-based measures provide authentic information from multiple sources about a child's abilities; therefore the state approved a list of curriculum-based assessments (CBAs) suitable for use with young children with disabilities. Approved measures were cross-walked, or cross-referenced, with the functional outcomes to ensure that specific items and scales provided information about child progress in the three outcome categories. ECSE practitioners were encouraged to gather information about the child's gains from multiple sources (e.g., parents, assessment instruments, observations) and synthesize them on the

COSF tool designed by the ECO Center to produce a single rating score per child. Over time, rating scores would reveal progress, thereby enabling the state to determine the effectiveness of ECSE services.

An interesting feature in the Kansas system was the extension of the measurement system both across early childhood (EC) and K-12 and across general and special education. For example, the COSF was not only used to assess the progress of children in early intervention and preschool education, but also it was used to assess children's abilities in general EC programs (e.g., Head Start, state-funded pre-kindergarten, child care). As in Kansas, CBAs were used in Kentucky to assess the K-12 population. Assessment results of all Kansas children were stored in an online comprehensive student information system, allowing practitioners to access child outcomes data now or in the future to determine links between child outcomes and K-12 outcomes.

Kentucky also expressed a commitment to continuous assessment and accountability, but with the explicit goal of improving the quality of all early childhood experiences (Rous et al., 2007). Its system, similar to Kansas' system, extends across all programs serving young children. The state linked the programs with an overarching set of state indicators, standards for early care and personnel, environmental and program standards, and expectations for child learning. This tiered design was a critical feature of its system and one the state will utilize to examine relationships between what children are being taught, how they are being encouraged to learn, and the outcomes they are making as a result of the programs they are participating in. In an effort to evaluate the success of both federal and state programs, the system aggregates child outcomes data at

the local and state levels. This system, then, encompasses "all content areas, all children, and all programs" (p. 20).

As in Kansas, EC and ECSE practitioners in Kentucky can choose from a list of approved curriculum-based measures available in the state's *Continuous Assessment Guide*. This guide also provides an assessment model to practitioners to ensure recommended practices are being used effectively to assess child progress and that assessment results inform instruction and intervention. As stated by Rous and colleagues (2007):

> The design of the system reduces the need for programs to alter their assessment tools and procedures in response to the ever-evolving and increasing requirements for state and national accountability and outcome data across agencies and programs. (p. 26)

State system descriptions highlight state intentions to utilize recommended assessment practices in ECSE, a guiding principle for high-quality child outcomes measurement systems. All three systems seek to employ authentic assessment procedures to capture accurately a child's abilities. Moreover, states' explicit integration of the outcomes system into the larger statewide system of preschool accountability suggests that states are alleviating the burden on practitioners by providing and prioritizing consistent measurement strategies across EC and ECSE.

State system descriptions highlight the intention of each state's child outcomes measurement system. These intentions, in turn, drove each state to evaluate the feasibility of its measurement approach.

Evaluating the State Measurement Approach.

Each state sought to verify the selection of their child outcomes measurement approach. Depending on where states were in the design and development of their system dictated the series of activities chosen.

Pennsylvania contemplated the use of a single assessment instrument statewide (Campbell & Anketell, 2007). To evaluate the feasibility of such an approach, the state launched a review of a) current practices within the state and b) practitioner perspectives of evaluation and assessment. Early intervention and preschool special education practitioners were surveyed about initial assessment processes (meaning how practitioners measured infant, toddler, and preschooler learning and development), assessment purposes (i.e., whether assessments were used to determine eligibility, inform IFSP/IEP development, etc.), and primary instruments, in an effort to determine the alignment between current and recommended assessment practices statewide. Focus groups elicited practitioner beliefs about child measurement in moderated, but open forums. Participants were asked to provide input on the advantages and disadvantages of uniform assessments with children with and without special needs, factors the state should consider in selecting a statewide instrument, ways to ensure successful statewide implementation of the assessment system, and finally, which instrument would be most appropriate for the state to adopt as a uniform assessment for all of its young children. In sum, Pennsylvania amassed practitioner input to socially validate the proposed statewide assessment procedures. These activities led the state to make a determination about a statewide assessment instrument.

Greenwood and his team (2007) strove to validate the usefulness of Kansas' selected statewide measurement approach: the COSF. To verify the utility of the COSF,

Kansas examined entry level data on child progress to determine a) the process

description, meaning who was included in measuring the child's gains, b) the sources of

evidence, or the assessment instruments used to make COSF ratings, and c) COSF

psychometrics, which are helpful in determining how accurately ratings reflect children's

abilities (Greenwood et al., 2007). Descriptive analyses allowed the authors to compare

practitioners' use of the COSF (i.e., the number of practitioners that met to discuss a

child's performance, the individuals involved in rating the child, instruments used to

measure child performance, etc.), whereas a series of quantitative analyses enabled the

authors to examine COSF characteristics. Kansas' major challenge was the consideration

of multiple sources of evidence to determine "the outcome status of any one child at a

point in time" (p. 3). These activities collectively enabled the authors to determine how

well the COSF accurately and consistently detected variations in the development of

children with special needs.

Rous and team's (2007) approach stands apart from the prior two investigations in

that they did not present empirical support of their validation efforts. Instead, Rous and

colleagues chronicled the events leading to system development. They, then, outlined

efforts to validate the link between assessment items and child outcomes data, so that

practitioners could assess children minimally to provide child data both to Kentucky

toward the state's standards and to OSEP. The first activity sought to cross-walk test

items from the state's recommended CBAs with the Kentucky standards for early

learning. This allowed the state to determine the link between assessment items and

Kentucky standards. Kentucky standards were then aligned with the three functional

outcome categories.

Statistical analyses constituted the state's second validation activity, to establish a relationship between approved assessment items and the state's early learning standards. Essentially, the state wanted to ensure that child progress data collected by way of assessment instruments linked to the state early learning standards, and subsequently, the OSEP's outcome categories. Determining consistent and useful ways to assess children's progress for local, state and federal purposes was a goal for data analysis.

The third validation activity sought practitioner input to confirm that children's progress toward the outcomes accurately reflected their perceived progress by teachers toward the state's early learning standards. Because the system linked assessment items to Kentucky benchmarks before the OSEP outcomes, it was important that the state ensured "congruence" between "teacher perception and assessment tool measurement of child status and progress" (Rous et al., 2007, p. 28).

Lastly, Kentucky sought to explore the concurrent validity of the approved tools in the state. A series of pilot studies allowed the state to determine the extent to which all children in the state met both standards and OSEP outcomes. These activities informed the state about how local districts were measuring child and program outcomes, as well as the type of assistance programs may need in the assessment process. While waiting for pilot results, the state worked to design a universal data platform that collects demographic data on children, stores assessment results, and stores progress results for all young children in the state.

Each state evaluated their measurement approaches in specific ways, to verify the acceptability and quality of its chosen approach. Findings from these activities

influenced state plans to maintain, enhance, or revise the system's activities to produce child outcomes data.

Findings and Their Implications for the State.

Findings from these studies influenced outcomes measurement activities in each state. In Pennsylvania, several state-level decisions were made prior to the research, such as the properties the system must address, and the decision to use a single assessment instrument statewide (Campbell & Anketell, 2007). Practitioner input unearthed critical considerations in the construction of a "cross-system" of accountability measurement (p. 46). Selecting one instrument to assess all young children, though cost-effective, was determined not to be the most detailed, appropriate, consistent, and accurate way to measure progress in all young children. Focus group discussions led the state to abandon its initial one-test approach to measuring child outcomes, as many of the groups were unable to decisively select one instrument that met recommended practices, fulfilled assessment purposes such as eligibility determination, and were sensitive enough to capture smaller incremental gains characteristic of young children with disabilities. Discrepancies in practitioner practice and recommended practice further suggested that Pennsylvania look closely at whether their professionals were aware of appropriate assessment strategies in the field, and their perceived benefits to children and families. And by extension, if the system desired to collect and report meaningful data about children's gains, practitioners needed to understand the importance of administering assessment procedures accurately and consistently. Lastly, the state realized that in order for the system to be implemented and function successfully with respect to its intentions, it needed to achieve buy-in from local professionals to support the policies being enacted

at the state level. Pennsylvania allowed districts to continue their use of prior

assessments, but instituted a transition period in which districts had three years to select

assessment instruments from an approved list of curriculum-based measures. Overall the

findings, primarily in the form of practitioner input, altered plans for child outcomes

measurement.

The implications of Kansas' investigation also enhanced internal decisions about

statewide measurement (Greenwood et al., 2007). In particular, findings from the Kansas

investigation verified that key aspects of the state's accountability system, such as the

collaborative team rating process and the use of at least one CBA instrument to measure

child outcomes, were in place. These findings also led the state to determine that the

assessment process successfully and validly detected children's individual differences, as

assessment results on the curriculum-based measures both correlated with the COSF

ratings and represented the range of developmental skills for young children. Stated

simply, COSF ratings for young children with special needs in KS reflected the

assessment scores these children received on the approved curriculum-based assessment

instruments, thereby justifying the use of the COSF to compile multiple sources of

evidence to present a well-rounded picture of the child's true performance. Findings

from Kansas' investigation interestingly responded to similar concerns that practitioners

in Pennsylvania had about using a statewide uniform assessment method: could one

measurement approach successfully detect variations in children's behaviors?

In Kentucky, system validation activities were underway (Rous et al., 2007).

Preliminary results from the four validation activities were being reviewed and

collectively indicated the state's desire to demonstrate the system's ability to provide

good data to both the state and the federal government. Although this article was not

empirical in nature, it did provide a unique descriptive look at how the state established

the system, as well as plans to evaluate its validity. Results from these activities may

prompt a state to revise its own measurement activities and/or introduce future directions

for evaluation efforts.

Findings and Their Implications for Other State Activities

Findings from each state may provide guidance to other states seeking to verify

their own measurement approaches. Findings from Pennsylvania's focus group resulted

in the elimination of the option of a single statewide assessment instrument. This

research suggests that gaining local acceptance from local practitioners is one way to

support statewide decisions related to appropriate assessment practices. In addition to

seeking local support, it seems important from the Pennsylvania experience to

conceptualize first the measurement of child progress. Thinking in advance about

preferred instruments, the data collection process, who will collect this data and how it

will be summarized and reported are critical considerations the state of Pennsylvania

recommends states address initially before trying to implement a statewide accountability

and assessment system.

Greenwood et al.'s (2007) findings revealed that in Kansas the COSF was a

methodologically sound way to collect, synthesize, and rate child outcomes. In light of

these findings, Kansas raised several questions. For instance, have COSF validation

activities in other states revealed similar findings? Were the similarities in child

performance across the COSF and CBAs specific only to Kansas? Kansas' validation

activities reflect some of the first in the field to establish the COSF as a tool to bring

authentic assessment information together. Moreover, the state suggests that state-to-state comparisons may be helpful in solidifying the validity of the COSF in measuring child outcomes.

Kentucky's detailed description of state activities may provide guidance to states conducting initial and routine evaluations of their COMS, particularly those who have designed comprehensive, overarching early childhood accountability and improvement systems. Although data from Kentucky's efforts will be important, the processes they describe may be just as important for states interested in learning how to evaluate system intentions and activities on a large-scale. In an era where programs are expected to show efforts toward their gains, it may be critical for states to generate a detailed strategy to a) verify state programs are accomplishing their aims and b) to provide accountability data to relevant entities, be they local, state, or federal.

As noted above, building an outcomes measurement system takes time and resources. States have moved through these initial stages of system development and are now working to improve the quality of child outcomes data they collect (J. Lesko, personal communication, September 21, 2009; Rooney, 2010). Although there is little literature that reflects this movement, the recent ECO Center focus on data quality supports this movement.

Justification for the Study and Research Questions

Local districts, states, OSEP, and the federal government are all seeking evidence of program effectiveness. This review of published efforts shows that three states have approached the task of collecting child outcomes data in deliberate, albeit different ways. These published efforts also suggest outcomes measurement systems are a statewide

effort spanning EI and ECSE, though it may not be in some states, particularly if Part C and 619 programs are using separate measurement strategies, as indicated by the ECO Center (ECO, 2009a; 2009b).

Although programs have identified outcome measurement strategies and therefore have in place systems to coordinate this collection, it remains unclear what steps programs are taking to ensure the quality of data being collected. This information seems particularly important, given OSEP's requirement for baseline data for the 2010 APR and the ECO Center's 2009 emphasis on data quality.

To understand data quality efforts, it is important to understand first how state programs are supporting the collection of accurate and reliable child outcomes data. It is also important to understand any barriers that may impede the collection of these data. Researchers at the ECO Center and NECTAC may be aware of such barriers from a technical assistance standpoint; however, this information has not yet been formally collected or summarized. Additional descriptive information about state efforts to support such a collection, as well as system-specific barriers related to this collection, may provide greater insight into how state programs are working to improve the quality of their child outcomes measurement systems and subsequently the quality of early childhood outcomes data. Given the timeliness of this topic, the information obtained through this investigation may be valuable to ECO and NECTAC as they tailor technical assistance next steps. This information would be particularly useful given the ECO Center's current plans to support communities of practice related to professional development, data quality, and data analysis (Rooney, 2010). The following research questions guided this study and were designed to obtain information on state efforts to

ensure the quality of their child outcomes data, and thereby the quality of their measurement systems.

1. What processes and methods are Part B-619 and Part C programs using to support the collection of accurate and reliable child outcomes data?

2. What barriers are these programs facing in the collection of accurate and reliable data?

3. In what ways are Part B-619 and Part C programs addressing these barriers?

Chapter Summary

The information presented in this chapter described the purpose and performance of the IDEA Part C and Part B-619 programs, federal requirements to evaluate program effectiveness, and the subsequent IDEA and OSEP requirements to evaluate these programs by way of child outcomes. Recommendations to build systems to evaluate programs on a state level led state Part C and 619 programs to identify statewide measurement approaches, sources of data to assess children's outcomes, and points at which to measure children's progress. Several states moved beyond requirements to establish the validity of their measurement efforts. Limited information about data quality efforts led to the research questions in this investigation, which in turn led to the design of this descriptive study. In the following chapter, I describe the methods used to answer my research questions.

CHAPTER III: METHODOLOGY

This study was designed to collect information to address the following research questions:

1. What processes and methods are Part B-619 and Part C programs using to support the collection of accurate and reliable child outcomes data?

2. What barriers are these programs facing in the collection of accurate and reliable child outcomes data?

3. In what ways are Part C and Part B-619 programs addressing these barriers?

In this chapter I describe study design first, then the methodology, and finally, data analysis strategies.

Study Overview and Design

This investigation was descriptive, therefore its purpose was to gather information about an issue or a topic (Gay & Airasian, 2003; Gillham, 2003), rather than to investigate hypotheses, generate predictions, or explain relationships. I used a telephone survey to collect descriptive information about states' child outcomes activities. This survey, referred to as an interview from here on, allowed me to gain insight into state-specific activities that ensured the collection of accurate and reliable child outcomes data as well as barriers related to the collection of these data (Gay & Airasian; Merriam, 1998). I invited 619 and Part C coordinators from all U.S. states and territories, described as states, to participate in the interview.

Method

I used a telephone interview to answer my research questions. Specifically, I designed an open-ended telephone interview (see Appendix C: Final Interview) (Frey,

1989; Gay & Airasian, 2003) to garner descriptive information from 619 and Part C coordinators about their perception of program efforts to support high-quality child outcomes data collection. Interviews enable researchers to access and understand an individual's perspective, as they seek to find out about events not observed (Patton, 1990), such as statewide data collection efforts. Additionally, interviews ensure less work for respondents; may encourage in-depth responses, as well as more accurate and honest responses; may allow for probing and follow-up into responses; enable the researcher to collect data relatively quickly; allow for flexibility in use; and may be recorded and transcribed for later analyses (Gay & Airasian, 2003). Finally, telephone interviews are cost effective (Frey, 1989; Patton, 1990), a particularly appropriate strategy given that this investigation sought information from a nationwide sample of Part C and Part B-619 coordinators.

The interview was designed in a standardized, open-ended format for several reasons (Patton, 1990). First, this standardized interview – consisting of "a set of questions carefully worded and arranged with the intention of taking each respondent through the same sequence and using the same wording" (Patton, 1990, p. 281) – reduced the possibility for extraneous or tangential information beyond the scope of this study (Patton, 1990) and allowed me to obtain a similar set of data from each respondent (Gay & Airasian, 2003). Second, open-ended questions elicited specified responses and description, rather than yes/no, ranked, or scaled responses, and were therefore desirable in seeking detailed information about data collection efforts (Gay & Airasian, 2003; Gillham, 2000).   In this section, I describe interview procedures, efforts to protect

respondent confidentiality, and data storage.

Procedures

Interview procedures consisted of a) the selection of participants, b) an interview pretest to ensure the clarity of the interview, c) efforts to increase the response rate, and finally d) the interview.

Participant selection. I invited Part C and 619 coordinators to participate in this study given their primary responsibility for overseeing implementation of the EI and/or preschool special education programs in their respective states. According to NECTAC's Part C and Part B-619 coordinator contacts lists as of October 2, 2009, 66 individuals from 61 Part B-619 programs and 62 individuals from 58 Part C programs were eligible to participate in this study. The number of 619 and Part C programs differs as some territories that have Part B-619 programs do not have Part C programs. I list the 619 and Part C programs from which individuals were eligible in Appendix B. Generally, one coordinator was listed per program, however several states listed two or more coordinators per program, which led to a higher number of coordinators than programs listed. I invited all eligible individuals to participate in the interview.

Pretest. Of the 128 eligible individuals listed on the NECTAC lists, five individuals were from four states that have published information about their state child outcomes measurement systems and/or have presented information about their state's system in national forums. I invited these five individuals via email to participate in the pretest (see Appendix D: Recruitment Email for Pilot Study). Of these five individuals, only one agreed to participate. I also invited and successfully recruited three national researchers who led child outcomes efforts to provide expert advice on the quality of the

interview draft.

I used Dillman's pretest process (referred to as the pilot in all consent forms) to refine the interview guide. Through the following four consecutive and unique phases, I determined how well respondents understood what was being asked and what type of information respondents might provide (Gillham, 2000):

1. Seeking expert advice,

2. Cognitive interviewing,

3. Piloting the interview,

4. A final check of the instrument (Dillman, 2000).

Once a participant agreed to participate, I sought informed consent from him or her for one of these specific phases. Informed consent forms, as well as the recruitment email, were approved by the University of Maryland Institutional Review Board (IRB) prior to the pretest. I asked the three national researchers to participate in the first phase. I asked the one coordinator to participate in the cognitive interview. Due to non-response, I did not implement the third phase. However, feedback from the first two phases led me to me to improve the quality of the interview guide significantly and modify my research questions. I discuss each of the pretest phases and their purposes first, then I describe revisions to the interview guide.

Seeking expert advice. The purpose of this phase was to seek feedback on the clarity and scope of the interview guide from professional colleagues and analysts familiar with the topic (Dillman, 2000). Three participants provided feedback about the likelihood of questions being answered. Once these participants indicated agreement, I sent each participant a packet containing a letter of introduction and instruction, the draft

interview guide, two letters of informed consent (one to retain for personal records, the other to sign and return to me), and a self-addressed stamped envelope (Gay & Airasian, 2003) (see Appendix E: Pilot Phase 1 Letter and Introduction and Appendix F: Interview Draft – Phase One; see Appendix G: Consent Form for Pilot – Phase 1). Specifically, I asked participants to comment on the quality and structure of the interview, including the format, question wording, vocabulary, probes, the length and time of the interview, and recording procedures, as well as the overall introduction for the project. I sent electronic versions of the instructions and interview guide to participants when requested. Phase 1 comments clarified the child outcomes requirement and led me to eliminate questions and narrow the scope of the interview (see *Revisions to the Interview*). With a revised interview guide, I proceeded to the next step: the cognitive interview.

Cognitive interviewing. I tackled respondent comprehension in the second phase, inviting the one coordinator to think aloud responses to determine the clarity of questions I refined in phase 1 (see Appendix H: Interview Draft – Phase 2). Known formally as cognitive interviewing (Willis, 2005), this method examines the "manner in which targeted audiences understand, mentally process, and respond to the materials we present—with a special emphasis on potential breakdowns in this process", and may be applied to both oral and written materials to improve them (p. 3). Once I received agreement from the coordinator, I scheduled a time to conduct the cognitive interview. We agreed to meet in person given our geographic proximity.

Given that this step was conducted in person, I sought informed consent at the interview and provided the coordinator with a copy of the consent form first (see Appendix I: Consent Form for Pilot – Phase 2). I then explained the purpose of the

cognitive interview and requested the coordinator talk through responses to determine their clarity (Dillman, 2000; Willis, 2005). Feedback indicated that modifications to the interview guide were necessary to ensure better understanding of the questions (see *Revisions to the Interview*). This coordinator's input proved invaluable in improving interview procedures, format, language, and in clarifying the scope of the interview to the coordinator community (Gay & Airasian, 2003). I used suggestions from the second phase to revise the interview guide once again.

   Piloting the interview. In the third phase, I attempted to pilot the revised interview guide (see Appendix J: Interview Draft – Phase 3; see Appendix K: Consent Form for Pilot – Phase 3). I attempted to recruit the four respondents who did not respond to my initial invitations, but no more than five times (Dillman, 2000). Unfortunately, two declined and two did not respond. I proceeded therefore to the fourth and final phase.

   Final check. The fourth and final phase consisted of a final check of the interview guide (see Appendix J). Per Dillman (2000), I sought assistance from an individual outside of this research project to review the guide for grammatical errors. Overall, the pretest was helpful in improving the interview guide.

   Revisions to the interview. Feedback from the first, second, and third pretest phases led me to revise the interview guide. First, phase 1 participants felt that the initial interview questions were too broad and could be answered through independent searches of SPPs/APRs or ECO Center and NECTAC reports. National Researcher 1 (NR1), for example, focused on reformatting the interview to lead with a broad question and then probes for elaboration. Following Question 3 (*Tell me about your involvement in the*

collection and reporting of child outcomes data) with specific probes (*Are you primarily responsible for outcomes work in your state?* and *Who are the other staff involved in your outcomes work and what is their role?*) may elicit detailed information about capacity surrounding child outcomes work. NR1 felt probes might also be helpful in retrieving detailed information. In question 4, for example, (*What procedures is your state using to collect child outcomes data?*), suggested probes included: "1) *Elaborate on the procedures* 2) *What instruments is your state using?* 3) *Who conducts assessments? How (and how often) are they trained?* 4) *How are data transmitted from local programs to the State?* 5) *How do you ensure that data are valid and reliable?* 6) *What quality checks are you using?*; and 7) *How were your procedures rolled out across your state?*" NR1 also commented that most questions in the *Child Outcomes Measurement Procedures Section* could be answered through state SPPs/APRs reviews. Upon further review of SPP/APR procedures, I found that NR1's specific probes served as an outline for state APR/SPP reporting for the child outcomes indicators, B7 and C3 (see Chapter 2). Finally, NR1 clarified IDEA reporting requirements. The IDEA 2004 reauthorization did not require states to collect child outcomes data per se, though it "does support such a collection", according to NR1. NR1 further explained that the impetus for child outcomes collections stemmed directly from the 2002 federal PART rating of "Results Not Demonstrated" of the Part C and Part B-619 programs.

National Researcher 2 (NR2) held a prior post as a coordinator for a state that presents information pertaining to state child outcomes efforts in national forums. NR2 noted that Questions 4 and 5 were broad and may best be separated into two given potential responses. The term *procedures*, for instance, may include instruments,

sampling, specific instruments, or the use of the COSF tool. This participant also

commented that much of the information I was seeking could be found on the ECO

website and publicly posted state APRs. NR2 also felt that *factors or processes* in

question 6 was not clear: "Is this the type of guidance they provided for collection of data

to locals – or the type of support they received in designing their system?" The purpose

of Question 9 also did not seem clear to NR2: "Does this mean how will the state use the

data to support policy and practice?"

The final set of feedback from National Researcher 3 (NR3) offered similar

comments with respect to publicly available information, specifically to questions 1a, 1b

and 4. NR3 also focused on question wording and wondered if the intent of question 5

was "how or why" *did states decided to use these procedures and instruments*, noting

that "Some states had quite an elaborate stakeholder process which would answer the

how questions but I'm not sure that is really what are you are asking". Additionally,

asking respondents to *Tell me about any barriers your state has faced in the collection of*

child outcomes data may have elicited a very long list of barriers. Rephrasing the

question to: "What do you consider the major barriers instead of 'any'" may better guide

respondents to list specific, yet major challenges impacting their efforts. NR3 also felt

the intent of a question 7 probe was not clear (*How is your state planning to analyze child*

outcomes data?), foreseeing potential responses to include technical aspects of analysis

such as in statistical programs or the specific types of analyses states may be planning to

do. Similarly NR3 felt the question 7 probe (*Is your state planning to use child outcomes*

data beyond the mandatory federal reporting requirements for local determinations? And

if so how?) would likely elicit a general response: "for program improvement". NR3

suggested "one way to get states to be a little more specific might be to ask what kind of questions they want to address with the data and then what they will do with the answers".

Feedback from phase 1 participants indicated the need to revise interview questions as much of the information sought could be found in public data sources. NR3 also suggested I refine my focus: "take a piece of what you are doing and make that the focus (e.g., the barriers and how state overcome them – or not) so you will understand something in depth".   I revised and restructured the draft for phase 2 to determine further if phase 1 participants' suggestions were valid from the coordinator perspective.

Phase 2 proved immensely useful in further narrowing the scope of interview questions and in a manner that would benefit the EI/ECSE coordinator. Beginning with the initial question (*What is your position in the state?*), Coordinator 1 (C1) suggested "pointedly" asking "What is your responsibility relative to IDEA and young children", as someone's "title doesn't always tell you what they do". In combining the think-aloud process and general conversation, C1 and I recognized my interest in finding out about the primary role of respondents related to outcomes work. I therefore revised question 3 to "What is your primary responsibility with respect to child outcomes data collection?" per C1's specific wording. To make better use of respondents' time, I decided it best to eliminate question 4 and collect this information through public data sources ahead of the interview. I also refined question 5 to determine the straightforward data transmission procedure, meaning how the child outcomes data is transmitted from local practitioners and programs to the state, as *procedures* could entail lengthy and technical descriptions of many aspects of collecting these data. A specific probe (*How do you ensure that data*

are valid and reliable?) emerged as the focus of the interview. Although data may be transmitted from local programs to the state, the quality of the data may be in question, particularly with factors such as high staff turnover (i.e., which might lead to a lack of training on assessing children). Zeroing in on the major barriers states are facing and how they are addressing those barriers may draw more useful information for the national child outcomes effort. As a result of phase 2, then, I improved and revised the wording in questions 1-3, eliminated questions 4 and 5, and condensed the probes under questions 5 and 6.

I did not gather feedback in phase 3 due to non-response, so I proceeded to the fourth phase, a final check of the interview. An individual outside of the study whose undergraduate degree is in communications reviewed the document for grammatical and punctuation errors. No errors were found, but the individual remarked that question 4's intent seemed unclear. I removed question 4 from the instrument, as it functioned only as a reminder to me to collect this data prior to the interview.

Conducting the interview. Prior to administering the interview, I finalized the respondent pool and took steps to ensure a higher response rate.

Interview participants. Given that only 1 of 128 coordinators responded to my pretest request, I determined it was best to send interview requests to all 128 eligible coordinators. I invited coordinators via email to participate in this study (See Appendix K: Recruitment Email). In the event eligible individuals were not able to participate, I asked these individuals to suggest a designee that was a) a previous or current state-level administrator of early intervention or preschool special education, b) knowledgeable about the child outcomes requirement, and c) was currently involved in efforts to collect

child outcomes data. I asked eligible individuals to send me designees' email addresses so that I could invite and recruit them in the same manner as coordinators.

Once respondents agreed, I sent them each an informed consent form and the final interview guide (see Appendix M: Consent Form; Appendix C). Per the University of Maryland IRB, an affirmative response to the email and agreement to schedule an interview functioned as informed consent, therefore respondents were not required to sign and return consent forms. The informed consent form included an overview of the research project, the role of participants, general procedures, issues of confidentiality, and the potential risks and benefits of participation. Consent forms also requested audio-record permission and informed participants of their right to withdraw from the research project at anytime. As in the pretest, I obtained IRB approval for the recruitment and informed consent forms prior to interview recruitment.

Improving respondent participation. I took five steps to improve the communication process with respondents to ensure their participation (Dillman, 2000). First, I designed the interview in a respondent-friendly manner. Second, I made no more than five contacts with respondents and I personalized all correspondence. Third, I maintained flexibility in scheduling interviews. When respondents forgot their interview date and time or desired rescheduling, I suggested finding a new date and time convenient to them. I also offered respondents the option of an in-person interview since the final interview coincided with the OSEP National Early Childhood Outcomes Conference in Arlington, VA in December 2009. Several respondents also expressed an interest in providing written responses given their demanding schedules – I accommodated those requests. I also accommodated requests to conduct joint interviews

with individuals from the same state. Finally, I provided each participant with a financial

incentive – a $5 Starbucks gift card – for participation, unless declined.

 Interview. I conducted interviews with respondents at a pre-scheduled date and

time. Individual interviews typically ranged from 20-30 minutes, while many joint

interviews exceeded this time frame. No interviews lasted over one hour.

 I provided respondents with an introduction to the project and its aims prior to the

interview. I reminded all respondents that they were voluntary participants and could

withdraw at any time during the project. I also reminded them of the efforts I was taking

to protect their confidentiality. Lastly, I sought audio-record consent prior to initiating

the interview, a strategy that proved helpful in capturing responses verbatim (Gillham,

2000) and in strengthening the quality and content of data collected.

 Conducting an interview involved more than asking questions, it involved being

an active listener and learner to seek information from an expert (Patton, 1990).

Providing wait time after questions and allowing time in between questions often

encouraged participants to elaborate. To encourage descriptive responses in a

straightforward, non-judgmental manner, I probed and asked follow-up questions (Patton,

1990). For example, if a respondent simply identified that he or she "owned" the effort

of child outcomes data, I probed with: *Can you describe your specific responsibilities,*

such as coordinating the collection of these data or training practitioners to collect these

data? When I needed further clarification, I asked respondents to *Tell me more*. When

participants provided lengthy responses, I sought confirmation by restating responses in

bulleted points. I intentionally used these strategies to demonstrate my genuine interest

in hearing respondent stories, an approach that both strengthened my overall rapport with

respondents and encouraged them to share detailed information (Gay & Airasian, 2003;

Patton, 1990). At the conclusion of each interview I thanked respondents for their time,

their participation, and their efforts to improve the lives of young children with special

needs. Several participants noted their appreciation to share their experiences. Two

respondents also noted how well the interview instrument guided our discussion, a detail

they recognized both prior to and after the interview. Finally, one respondent felt the

interview allowed her to step back and see the larger picture of these efforts; she

subsequently encouraged other coordinators to participate in what she felt was a

worthwhile experience.

Confidentiality

I took steps to protect the confidentiality of all pretest participants and interview

respondents. All letters of informed consent described my efforts to ensure participant

confidentiality. I also reminded all participants of these efforts prior to the pretest phase

and/or the interview. I assured participants their names and states' names would be

masked with a pseudonym both in data storage and in the write-up of this research and

that I would use general terms to describe identifiable groups or systems. I further

explained that if I described their roles, I would they describe them simply as

administrators involved in coordinating programs and services for young children with

special needs in the write up of this investigation, rather than linking them to a formal

title. These same procedures (see *Data Management*) were used to protect the

confidentiality of designees (i.e., those individuals were selected to participate on behalf

of respondents), who too, would be described in general terms, such as a *key individual*

knowledgeable about and/or involved in the collection of child outcomes data. Interview

respondents may be identified in the following way: *619 respondent, Part C participant*, or *an individual representing the Part C and 619 programs*.

Data Storage

I also masked participant confidentiality in the storage of data (Miles & Huberman, 1994). Specifically, I assigned each state with a color pseudonym (e.g., Beige, Coral) and each respondent with a letter (e.g., Respondent A, Respondent B). I used these labels in all forms of data: electronic interview files, transcriptions, print outs, on summary sheets, and in analyses. For example an audio-recording of an interview was titled *Auburn State-Respondent A*. I, alone, am in possession of a master list of state names and their respective pseudonyms, participant names and assigned letters, and personal contact information for participants. This master list will be destroyed immediately following this research. Formal consent forms and IRB approval forms are also stored in this cabinet in a separate file from the data. All audio-recorded files (electronic and hard copy form) are organized and stored according to pseudonyms and without identifiable information. Electronic file folders are saved and stored in encrypted format on my password-protected laptop. All data will be destroyed five years after the completion of this project.

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Analysis

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The descriptive nature of this study warranted an analysis approach that consistently sought the same type of information across interviews (Carney, 1972). For this reason, I used content analysis to organize and present descriptive data in a straightforward and simple format (Gillham, 2000). This approach is commonly used to code open-ended survey questions (Weber, 1990).

I began by transcribing all interviews. Next, I analyzed all interview transcriptions by hand with the assistance of a second coder. Lastly, I analyzed independently respondents' responses to specific questions, again by hand. I discuss interview analyses and response analyses here.

Interview Analyses

Interview analyses consisted of two steps: a) organizing the data, and b) developing a coding scheme. Given the length of interview transcriptions, I felt it was necessary to summarize interview content. I developed contact summary sheets to highlight and organize interview content according to each interview question (see Appendix N: Contact Summary Sheet). In questions 1 through 3, I sought information about respondent position responsibilities, years in the position, and responsibilities specific to child outcomes measurement, respectively. In question 4, I asked respondents to identify their state's collection strategy (e.g. collecting child outcomes data on each child or using a sampling plan). I asked respondents to identify processes that ensure the collection of high-quality child outcomes data, the barriers their states are facing in these efforts and efforts to address these barriers in questions 5-8, respectively. In Questions 8-10, respectively, I sought information about the processes for transmitting child outcomes data from the local to state level and any barriers that have arisen in this transmission. And lastly, in question 11, I invited respondents to share "concerns" about the coordination and collection of child outcomes efforts state- or nationwide. I created 8 headings that corresponded to interview questions 3-11. I completed one summary sheet for each interview transcription by hand and attached it to the interview transcription. These summary sheets assisted me in organizing the data to determine later the

development of a detailed coding scheme (Miles & Huberman, 1994).

      Interview coding scheme. After completing and transcribing all interviews, I developed a detailed scheme to code transcripts by hand. The coding scheme was based on the questions themselves (Gillham, 2000; Weber, 1990) (See Appendix O: Coding Scheme). I created a coding scheme summary to illustrate the relationship between the interview questions, and the subsequent codes I assigned to each question. Question 1 focused on respondents' primary responsibility relative to IDEA and young children with disabilities, therefore I chose the code PR-IDEA to identify these responses. I created the code PR-Y for question 2 in which asked respondents to state the number of years they worked in their stated position. Respondent's primary responsibility with respect to the child outcomes data (question 3) was assigned the code PR-CO, while the sampling question (question 4) was assigned an S code. Questions 5, 6, and 7 all pertained to high-quality child outcomes data (processes to ensure, barriers in collecting high-quality data, and strategies to address barriers, respectively) therefore I used similar codes to identify these responses: HQ, HQ-B, and HQ-B-A. Questions 8, 9, and 10 concerned transmission of the data and were also coded similarly: DT, DT-B, DT-B-A. Finally, the code CO-C was used to identify respondent concerns about the child outcomes data (question 11). I created definitions for each code next, after which I created a template excel spreadsheet consisting of three columns to record the page number, the code, and the corresponding excerpt from the interview transcription. I printed out multiple templates in preparation of coding transcripts by hand. Then, I recruited a second coder both to ensure the reliability of the coding scheme and to assist me in coding transcripts.

      Interrater reliability. I served as coder 1. Coder 2 was a graduate student in

early childhood and severe disabilities. The student was enrolled in two assessment

classes at the time of recruitment and was familiar with the importance of validity and

reliability in the assessment of children. I provided the coder 2 with an overview of the

project and the interview instrument, and I encouraged her to review transcripts to

familiarize herself with the question and response format. We then reviewed the coding

scheme (i.e., interview questions, corresponding codes and code definitions) together.

I adapted Weber's (1990) steps to ensure reliability and validity of the coding

scheme:

- Defined "recording units";

- Defined categories;

- Tested coding scheme on a sample of interview transcriptions;

- Assessed coding accuracy and reliability;

- Revised coding rules;

- Retested the coding scheme;

- Coded a larger sample of transcriptions;

- Determined interrater reliability of coders once more; and finally

- Coded all interview transcriptions. (p. 21)

Generally, respondent responses to interview questions were identified as the

recording units in interviews. However, given the range in response lengths, we

narrowed recording units down to phrase descriptions, or several words that provided

information about the question. For example respondent responses to question 3 (i.e.,

describe roles and responsibilities with respect to child outcomes) ranged from one-word

tasks to lists of tasks (e.g., training, monitoring the collection) to paragraph summaries of

responsibilities. We further reduced recording units to one-word answers or phrases, such as "writes the SPP/APR" or "oversees primary lead who coordinates child outcomes work" that related to specific responsibilities. We included examples in the coding scheme to further *define the categories*.

Next, we *tested the coding scheme* and *assessed our coding accuracy and reliability*. Of 39 interviews, 4 were selected randomly to test the coding scheme (10.3%). We coded the first transcript together, discussed each code, and reached 100% agreement. We coded the next three transcripts independently and noted several disagreements pertaining to time, which led us to *revise our coding rules*. First, we noted several respondents shared activities they hoped to carry out in the future to ensure accurate and reliable collection of child outcomes data, rather than current activities or implementation plans in the near future. We decided not to code respondent "desires" as we called them, only past, current, and upcoming activities. Similarly, we found that respondents noted barriers to high-quality data collection both in the past and present. To get a broader view of challenges, we decided to keep past barriers and current barriers and to note how they were addressed.

Remaining disagreements pertained to the primary responsibilities of respondents (PR-IDEA and PR-CO), double coding responses, and looking for questions to determine codes. In these instances we decided to list each respondent responsibility separately, allow for double coding (e.g., if respondent stated responsibilities related to child outcomes data that were also her responsibilities relative to IDEA and young children with disabilities in the state), and to use interview questions as a guide to locate responses, respectively. Some respondents shared concerns throughout the interview,

thus we chose to use interview questions to guide the codes. This meant that when respondents noted concerns after high-quality questions they were coded as such. When respondents noted national concerns after the concern-specific question, they were coded as CO-C. Interrater reliability was calculated according to Miles and Huberman (1994) as (% agreement/(total # agreement + disagreements)). We achieved an 82% interrater reliability rate on those transcripts.

We then decided to *retest the coding scheme* on a *larger sample* of transcriptions. We selected randomly eleven additional transcripts (28.2%) to code independently. We decided to note any questions or comments to clarify coding definitions on the coding sheet. Overall, we agreed on 260 codes and disagreed on 51, which resulted in a 83.6% agreement rate. Though slightly higher, we felt we needed to revise and strengthen coding definitions. I present these revisions by code.

Code: PR-IDEA. In the PR-IDEA code, we noted that some respondents listed their position title and described tasks of this position. Coder 1 had noted these separately, while coder 2 had noted them collectively as one entry. Through discussion we decide to note the title as one entry and code the tasks separately. The exception to this rule occurred when respondent stated "oversight of" and provided examples – this was coded as one entry as the activities fell under the oversight responsibility. For example, one Part C participant noted her specific job title and described her responsibility relative to IDEA as "general supervision activities" which included writing the SPP/APR and motoring local staff. Two separate entries were noted in this instance, one for the position, and another for "general supervision activities – SPP/APR, monitoring of local staff".

Code: PR-Y. In coding years in the position (PR-Y), coders 1 and 2 were consistent with one exception. One Part C respondent reported 2 years experience in the current title, but mentioned having conducted the same work under another title for 7 years prior to that. Coder 1 had coded this response as 2 years, while coder 2 coded 9 years. In this one instance we agreed to add together the respondent's years experience.

Code: PR-CO. Coder 1 felt it was important to list each task/responsibility separately to understand the multi-faceted role of respondents. Coding rules for PR-CO were revised to instruct coders to list training and technical assistance, as well as specific instances of these tasks, as separate codes. For example, one 619 participant conducted outcomes measurement training as well as training related to the proper use of assessment tools.

Code: S. No changes were made to the sampling (S) code.

Codes: HQ and DT. The greatest number of disagreements occurred in the high-quality (HQ) and data transmission (DT) categories for several reasons. First, many HQs and DTs could be applied to both categories interchangeably. Some respondents cited the use of the COSF as a means to improve high-quality data collection, while others cited it as a data transmission method. The use of one statewide assessment instrument was also described in this manner. We felt this information, whenever noted, was relevant to high-quality data collection and recorded this rule. Additionally, we made the decision to code the use of state-approved assessment tools and/or the use of anchor-tools if mentioned at any point in the interview.

Second, both coders noted that several types of training were noted as high-quality and data-specific improvement strategies. Rather than grouping all trainings

together, we decided to list each one, such as "vendor-conducted training to administration and front-line staff" and "trainings on the systems and on computer aspects of the system" to better understand the specific ways in which the state supported staff collection of accurate and reliable child outcomes data. We also debated on training's relevance to ensuring high-quality efforts and transmit data. We considered collapsing the high-quality and data transmission codes into one category, but decided to maintain separate codes to indicate strategies specific to coordinate efforts related to people and the data entry-specific strategies. If respondents noted "training" as a general strategy to ensure high-quality data, we coded it as a single strategy. When respondents elaborated on training-specific content, such as training focused on authentic assessment and training focused on the state data system, these two methods were coded separately.

Codes: HQ-B and DT-B. Major barriers in the collection of high-quality data included barriers in the past and current barriers. I felt this information would be meaningful to states, many of which are in different stages of improving collection efforts, therefore we made the decision to include past barriers. We applied the same rule to data transmission barriers.

Just as HQ and DT responses overlapped, so did the corresponding barriers and strategies to address barriers. Unlike HQ and DT, these were more difficult to differentiate. In states that coordinated the collection of child outcomes data through an online system, for instance, a stated barrier may have been "getting data in a timely manner as multiple people and steps in completing form before entered into system", a response which corresponds both to high-quality collection and the transmission of data. Coders jointly felt that collapsing the barriers codes (HQB and DTB) would improve

reliability of the scheme.

Codes: HQ-B-A and DT-B-A. A similar correspondence was found in strategies to address barriers, therefore we combined the H-Q-BA and DT-B-A schemes as well. These category collapses were not reflected in the coding sheet, rather it served as a guideline to create one overarching barrier category and one overarching category to describe addressing barriers category in the data excel sheet.

Coders made two additional decisions. A handful of respondents noted their desires to address barriers. These desires were separate from plans to implement efforts. For this reason, coders did not feel desires constituted ways to address barriers and did not code them. Secondly, across interviews, coders also noted that respondents cited supervisor and/or teacher access to outcomes data in data systems for data review purposes. If these were stated in response to a barrier, they were coded as separate strategies. If they were simply stated as a means to ensure high-quality data and/or as an error review check while entering the data, they were coded as HQ and DT, respectively.

Code CO-C. Both coders noted positive and negative responses in response to the final question on the interview. The definition of concerns was reviewed, and "concerns" was defined in the following manner: "a matter of interest or of importance to someone" which could be positive or negative (Concern, n.d.). Requests for information and praise for the ECO Center's work was also included in this category.

Code: CO-U. Coder 1 recognized the frequency of a probing question in interviews: *What do you feel is unique about your system's collection of high-quality data collection, and/or helpful?* Although this question was not formally on the interview, it was asked of respondents in many, but not all interviews. Coders acknowledged these

unique qualities, unless respondents indicated features were not unique.

   Summary. All revisions to the coding scheme stated above were applied to transcripts coded in reliability sessions. The finalized coding scheme was used to code remaining transcripts. Coder 1 entered all hand-coded data into excel spreadsheets. Simple frequency counts were used to determine the responses to all interview questions. These results are discussed in Chapter 4.

   Response analyses. Once interview responses were grouped together in excel spreadsheets, I used additional strategies, such as frequency counts and text reduction, to determine similarities in respondent responses. I present these analyses strategies in the order in which I conducted them.

   Responsibilities relative to IDEA and young children with disabilities. Participants either described their responsibilities generally or listed their responsibilities in a bulleted format. I searched for descriptors, or words that described these responsibilities, then tallied them to determine similar responses across respondents. For example, one respondent simply answered: "619 Coordinator/[title] in the State Department of Education". I noted the word "coordinator" as a responsibility. Another respondent noted "My responsibility is to implement additional services for children birth to 3 under Part C of IDEA. I manage that Part C program". I identified "implement" and "manage" in a column beside the response. Still others spoke about their responsibilities more generally: "I am the one person that does Part B-619 activities for the state, and that involves all of the IDEA requirements and preparing the SPP and the APR". Though I easily noted "SPP/APR-related work", "involving all of the IDEA requirements" was too general. I therefore created an "oversight" category to designate general IDEA

requirements. I continued identifying responsibility descriptors in this manner and noted a total of 26 descriptors across interviewee responses. I summed up descriptors to determine their frequency across responses and present them in Chapter 4.

Years in position. I asked respondents to identify the number of years they had worked in their stated position. I used these numerical responses to identify the range of experience across respondents and the average number of years indicated across respondents.

Responsibility relative to child outcomes. I used the strategy identified in question 1 to identify common descriptors across reported responsibilities relative to child outcomes. I noted the overarching responsibility or task and limited these descriptors to one or two-words. For example "providing state level training" was described simply as *training.* General terms, such as *training, data, system*, and *policy* proved helpful in organizing the wide range of responses. "Develop preschool measurement system" was described more generally as *system development.* Similarly "putting together team materials was" identified as *resource development*. Additional descriptors were added to differentiate related tasks, for example, *data collection* versus *data reporting*, or *system development* versus *system administration*. Whenever possible categories were combined to simplify the system. A total of 25 categories were created through this process; they are presented in Chapter 4.

Sampling. There were two possible responses to this question: sampling or not sampling. As a result responses I divided responses accordingly, then tallied them.

Processes to ensure high-quality collection of child outcomes data. I used a analysis strategy similar to the one used with questions 1 and 3 to organize and present

responses, as they ranged in length from a list of processes to detailed explanations that included a history of state efforts leading to processes selected. The coding process was helpful in reducing all responses to one- and two-word descriptors. Unlike questions 1 and 3, I developed descriptor definitions to ensure their clarity in characterizing state processes, as many of them overlapped. Descriptors and their definitions are presented in Table 2.

Table 2

*High-Quality Process Descriptors and Definitions*_____

Descriptor	Definition
Building local capacity	Delegating responsibility to others to lead and monitor collection, analysis, and reporting efforts. Includes train-the-trainer model.
Communication/collaboration	Efforts to communicate with practitioners or to encourage collaboration among practitioners. Includes follow-up and updates.
Data review	Human review of data prior to and after data entry. Includes data in systems, file/record reviews, COSF reviews, and/or sharing data. Includes reliability measures.
Guidance/policies/procedures	Any mention of guidance, policies or procedures.
Instruments/assessment tools	Any mention of assessments, instruments, and/or specific tools.

Measurement approach   Indicated the overall approach to collecting and

gathering data. Includes COSF, statewide

assessment tool, Decision Tree.

Resources   Materials development and accessibility. Items

practitioners may reference. May include webinars,

websites, online resources, and manuals. May also

include financial support.

Technical assistance   Any mention of technical assistance, support, and

feedback.

Training   Any mention of training or professional

development.

Data transmission methods. During the analysis of high-quality processes

described above, it became clear that data transmission efforts were linked to those

processes. For this reason, I chose to analyze data transmission methods next. I used a

method similar to the one used to analyze high-quality processes, reducing responses to

one- and two-word descriptors that captured the general transmission approach. As with

the previous coding system, I developed definitions to assist me in differentiating and

categorizing data transmission efforts. In Table 3, I present data transmission descriptors

and their definitions.

Table 3

Data Transmission Descriptors and Definitions

Description	Definition
Access	Individual, program, or state access to data stored in the system.
Data system	The entity in which data is entered and stored at the local and/or state level. Includes live web-based systems, online systems, security portals, and publishers' online tools.
Process	The process by which data is moved forward and/or entered into the data system. Includes reporting efforts.
System elements	Elements embedded in the system. Includes edit checks, ability to generate reports, system alerts, ability to convert assessment scores to functional outcomes.

Barriers in collecting and transmitting data. To categorize data collection and data transmission barriers, I used phrases instead of one- or two-word descriptors to describe initially to whom the barriers pertained and what they consisted of (such as a high-quality process or data transmission). For example, one Part C participant reported that "providers [were] not documenting data in the system quickly enough" as a previous barrier. I determined first that this barrier pertained to *providers* and then to the *data*, but more specifically to *providers* and *data collection*. I replaced specific items with general terms, as well, so "practitioners argu[ing] about using the AEPS" was reduced to *practitioners* and *attitude*. And finally, in some instances, barriers only described the "what", so "missing data" in a 619 program was categorized as just that: *missing data*. I reviewed the initial set of codes and combined codes wherever possible (e.g., practitioners, providers, and personnel were grouped into one overall *practitioner*

category). All coded phrases were transferred to a separate Excel spreadsheet. I

systematically reduced phrases into the following 18 categories: *approach, attitude*,

cross-program, *data*, *data collection*, *data quality*, *data use*, *fidelity*, *financial*,

instrumentation, *knowledge*, *other*, *subjectivity*, *support*, *system*, *time*, *transmission*, and

turnover. I developed definitions to describe each general barrier type and re-coded

barriers a second time to determine the validity of these categories. Barrier categories

and their definitions are presented in Table 4.

Table 4

General Categories of Barriers and Definitions

Barrier	Definitions
Approach	Barriers related to undertaking new tasks, or approaches.
Attitude	Negative attitudes or resistance toward child outcomes activities.
Cross-Program	Barriers that occurred as a result of cross-program or cross-system activities, meaning those activities that extend beyond EI and preschool special education programs and into state-funded preK, Head Starts, and/or other EC settings.
Data	Data-specific issues such as missing data, gaps in data, invalid or impossible data combinations, and the overall clarity of the data.
Data Collection	Challenges pertaining to assessing young children and

measuring child outcomes.

Data Quality	Any mention of data quality. Data quality issues extended beyond data barriers.
Data Use	Barriers related to the analysis, interpretation, and use of data.
Fidelity	Barriers that addressed the accuracy and consistency with which data were collected and entered, and the process used to arrive at or rate child outcomes.
Financial	Financial barriers included those pertaining to cost and funding. Respondents identified costs to initiate or implement child outcomes activities. Respondents also identified a lack of funding needed to sustain activities to support child outcomes collection.
Instrumentation	Instrumentation barriers described variances among assessment tools and the results these tools yield.
Knowledge	Practitioner knowledge, or the lack of specific knowledge is addressed in this category. Respondents noted the need for information and education to accurately, consistently, and appropriately assess young children, and to collect, and enter data into state systems.
Other	Barriers that did not directly mention child outcomes activities.
Subjectivity	Any mention of subjectivity.

Support	Sources of support needed to understand and/or implement data collection activities, including training, TA and capacity.
System	Challenges pertaining to state data systems or to program- or system-wide issues.
Time	Responses that indicated the need for greater time.
Transmission	The ways in which data were transferred statewide and locally. Includes data entry issues, as well as issues in gathering data statewide or locally.
Turnover	Any mention of staff turnover.

I used these descriptors to categorize all reported barriers.

Addressing data collection and transmission barriers. Respondents shared an array of methods to address the barriers in data collection and data transmission; these methods consisted often of one or more specific approaches. I used the descriptors and definitions for high-quality processes and data transmission methods to categorize these specific approaches (see *Processes to ensure high-quality collection of child outcomes data* and *Data transmission methods*). Unlike the previous coding strategy, I applied multiple codes to identify each component of reported approaches. For instance, one barrier may have been addressed with a *training* that focused on *data review*.

Concerns about child outcomes. For the purpose of this analysis, concerns were defined as "a matter of interest or importance" (Concern, n.d). As with other response analyses, I systematically reduced responses into the following one- and two-word descriptors: *validity*, *importance of the data*, *cost*, *meaning of the data*, *process*, *data*

implications, *praise*, and finally, *requests for information*. Concerns are presented in

Chapter 4, along with the other results of the response analyses. Collectively, these

strategies allowed me to summarize and describe better interview content, and thus, child

outcomes activities reported by respondents.

Chapter Summary

In this chapter, I described the use of interviews to collect data. I also detailed

specific content analyses strategies to analyze data gathered. I present the results of these

analyses in the following chapter.

CHAPTER IV: RESULTS

In this chapter, I present the results of the interview analyses. Interviews with 619 and Part C coordinators (from Part B-619 and Part C programs nationwide) were designed to gather their perceptions about state efforts to collect high-quality early child outcomes data. Interviews provided an in-depth look into events not discussed in federal reports. To protect the confidentiality of all respondents, I aggregated interview responses.

Interview Analysis

In this section I discuss the results of the interview and response analyses, beginning with the interview response. Then, I provide an overview of the interview, after which I present results by specific interview questions.

Interview Response

I calculated interview response rate in three ways: by Part C program, by Part B-619 program, and overall. I used Frey's (1989) formula to determine success in reaching participants: *Response Rate = Number of Completed Interviews/Number in Sample (all Eligibles) x 100*. Eligibles may be defined as the total target sample. As stated in Chapter 3, I invited 62 Part C coordinators and 66 Part B-619 coordinators. I successfully recruited 22 Part C coordinators (35.5%) and 23 Part B-619 coordinators (34.8%). It is important to note that the number of interviews conducted does not equate to the sum of participating coordinators. Three Part C participants served in a dual role to represent the Part B-619 program, therefore these individuals were counted in both groups as they represented each program. As a result I interviewed 42 individuals, representing an overall response rate of 32.8%. Thirty-six interviews were conducted

over the telephone, three were conducted face-to-face, and three respondents returned

written responses to the interview questions. Three of the telephone interviews were joint

interviews. Of these three, two were conducted with one Part C participant and one 619

participant and one was conducted with two part C Participants. In joint interviews, I

asked each participant to share information relative to his or her program.

I also examined interview response by region in an effort to determine the degree

to which responses represented program activities across the nation. I used OSEP's

Regional Resource Centers Program map (see http://www.rrfcnetwork.org) to determine

representation in each of 6 regions, which include U.S. states and territories: the

Northeast, Mid-south, Southeast, North Central, Mountain Plains, and Western.

Table 5

Interview Response by Region

Program	Region	State Representation
Part B-619	Northeast	5 of 8
	Mid-south	4 of 9
	Southeast	1 of 10
	North Central	3 of 9
	Mountain Plains	5 of 11
	Western	4 of 13
Part C	Northeast	6 of 8
	Mid-south	2 of 9
	Southeast	2 of 10

North Central 4 of 9

Mountain Plains 4 of 11

Western 3 of 13

At least 1 state Part B-619 program in every region is represented in this study, along with at least 2 Part C programs per region. So while the overall response rate may be appear low, a closer look at regional representation indicates that results in this study represent each region across the country.

Interview

I designed the interview to gather information about participants and their programs and to answer all three of my research questions. Specifically, I used interview questions 1-3 to learn about my respondents' responsibilities relative to IDEA and to the child outcomes requirement. I developed interview question 4 to determine similarities and differences in programs' general collection strategy (i.e., sampling or collecting data on each child). I designed questions 5 and 8 to answer my first research question, 6 and 9 to answer my second research question, and 7 and 10 to answer the third. In these questions, I asked respondents to describe how their programs supported the accurate and reliable collection and transmission of child outcomes data, what barriers programs faced in collection and transmission efforts, and the approaches used to address these barriers, respectively. And lastly, I asked respondents to share their personal concerns about child outcomes efforts in the final interview question. Responses to these questions are presented here in aggregate to protect the confidentiality of respondents and states.

Responsibilities relative to IDEA and young children with disabilities.

Respondent responsibilities relative to IDEA and young children with disabilities varied

and are listed in Table 6.

Table 6

Respondent Responsibilities Relative to IDEA and Young Children With Disabilities

Responsibility	Frequency
Monitoring and follow-up	9
Technical assistance	6
Collaboration	5
Facilitation/coordination	5
Training	5
Implementation	4
Services	4
Policy	4
Oversight	4
Data reporting	4
SPP/APR-related work	4
Accountability	3
Continuous improvement/compliance	3
Procedures	3
Supervision	2
Parents/families	2

Administration	2
Assistance	2
Outcomes	2
Leadership	2
Transition	1
Management	1
Legal analysis	1
Programmatic and practice activities	1
Data	1
Expenditures	1
Medical health	1
Guidance	1

Participants' responsibilities relative to IDEA primarily included monitoring, technical assistance, facilitation/coordination, and training. It was surprising that responsibilities related to *parents and families* were not reported more frequently, given the family-centered nature of Part C. One explanation for this result may be that participants did not work directly with families; rather they monitored and coordinated practitioners' work with families. Another possible explanation might be that interviewees felt job functions beyond the child outcomes may not have been of interest in this study, therefore they did not mention them. Overall, this information was useful in understanding the various functions of the 619 and Part C coordinator (and designee) roles.

Years in position. I asked respondents how long they had worked in their current positions. Thirty-nine (39) respondents shared this information. Respondent experience averaged 7.76 years, but ranged widely from 2 months to 30 years. Table 7 summarizes respondents' years in their current positions.

Table 7

Years in Position _____

Number Participants (n=39)	Years	Percentage
4	<2	10%
13	2-4	33%
9	5-9	23%
7	10-14	17%
4	15-20	10%
2	>20	5%

I realized while transcribing interviews that this question was not asked of all respondents, due in part to administrator error. Fortunately, responses to this question were not needed to answer my research questions. The majority of respondents asked indicated they had been in their current positions for less than 10 years (21 participants), however, many noted they had been with their respective program much longer. Forty-three percent of respondents assumed their current positions after the release of the child outcomes requirement, meaning within the last 5 years. It is noteworthy that four individuals new to their positions participated in this interview, two of whom started their positions within 4 months of the interview.

Responsibilities specific to child outcomes data. Respondents were also asked to describe their responsibilities with respect to child outcomes data. It is important to note that respondents often noted more than 1 responsibility. Responsibilities and their frequencies are presented in Table 8.

Table 8

*Primary Responsibilities With Respect to Child Outcomes Data*_____

Responsibility	Frequency	Responsibility	Frequency
Data collection	27	Guidance	3
Data reporting	21	System development	3
Training	20	Compliance	2
Leadership	18	Data management	2
Collaboration	14	Data system	2
Data review	14	Data use	2
Data analysis	11	Resource development	2
System administration	6	System improvement	2
Policy	5	Resource coordination	1
Technical assistance	5	Follow-up	1
Data quality	4	Funding	1
Professional development	4	Gathering input	1
Decision-making	3		

Few participants noted data-specific tasks in their responsibilities relative to IDEA (See *Roles and Responsibilities Relative to IDEA*), however data-specific tasks

related to child outcomes were noted more frequently. A data-task specific to IDEA involved preparation of the entire 619 SPP/APR, whereas a child outcomes data-specific task involved assembling child outcomes information statewide for the SPP/APR. Given the participation criteria for this study (see Chapter 3), it seems appropriate that respondents noted *data collection* and *data reporting* more frequently than other responsibilities. Also, I recruited individuals in lead roles in collection and reporting efforts, therefore greater reports of responsibilities pertaining to *training* and *leadership* were also not surprising. Additionally, it is not surprising that *collaboration* was noted most next, given the massive effort needed to coordinate statewide data collection. Many states employ data managers, whose sole purpose is to review, analyze and report state data. Although these data managers were not recruited for this study, some were selected as designees for participation given their experience with early child outcomes data. Designees also included state technical assistance coordinators. Regardless of whether these roles reflected those of coordinators or designees, this summary indicates that the majority of respondents were knowledgeable about the data collection and reporting process.

Sampling. To gain a comprehensive view of state efforts, I asked respondents whether their programs collected early childhood outcomes on each child in 619 or C programs or on a sample of these children. Though not linked to the research questions, this information provided a broad view of how child outcomes data was collected. Table 9 lists state sampling plans by program. As with question 2, administrator error led to a reduced number of responses for this question, though responses were not needed to answer my research questions.

Table 9

Sample Plan

Program	Each Child	Sample	(n=35)
Part C	17	1	
Part B	18	1	

I presented sampling responses by program rather than by state simply because

Part C and 619 may choose independent sampling plans. Although the majority of states

represented in this study used the same sampling plan across programs, one did not.

Separating plans by program, then, is a useful way of seeing state variances in data

collection efforts.

Collecting and transmitting high-quality child outcomes data. In interview

questions 5 and 8, I asked respondents to describe their perceptions of efforts to ensure

the statewide collection of accurate and reliable child outcomes data and the process of

transmitting data from local programs and practitioners to the state, respectively.

Individuals in joint interviews were asked this question individually to gather information

relative to both 619 and C efforts. Though linked, these responses are discussed

separately.

Processes to ensure high-quality data. Respondents identified 327 processes to

ensure high-quality data collection, which I grouped into nine categories: *training*,

measurement approach, *data review*, *communication/collaboration*,

instruments/assessment tools, *building local capacity*, *guidance/policies/practices*,

resources, and *technical assistance* (see Chapter 3: ***Processes to ensure high-quality***

collection of child outcomes data). I note the frequency of these processes across

interviews in Table 10.

Table 10

Processes To Ensure High-Quality Collection of Child Outcomes Data

Process	Frequency
Training	79
Measurement approach	61
Data review	47
Collaboration / communication	40
Instruments / assessment tools	37
Building local capacity	21
Guidance / policies / procedures	17
Resources	15
Technical assistance	10

Programs who participated in this study reportedly used *training* most frequently

to ensure the accurate and reliable collection of child outcomes data. Training processes

included any mention of professional development or training. "Professional

development" (PD) was only cited nine times, while training processes were cited 70

times. Professional development was used to support program staff's collection of child

outcomes data. One 619 respondent stated that "extensive professional development in

the use of authentic assessment, assessment of observing children and collecting ongoing

data" was used to support this collection. Another 619 respondent reported "providing

professional development on each [assessment] measurement at the outset of the accountability process".   In contrast, a Part C participant simply stated that PD was used and did not describe it further.

Several programs used PD to support the importance of this collection, even if the individuals participating in the PD were not directly responsible for it. In one state, for example, the Part C and 619 participants indicated that "service coordinators are not involved in data collection, but they are made aware of the system, understand it, [and] are provided professional development and training in relation to being aware of it". Still in other states, PD was one element of a larger plan to reinforce proper implementation of the outcomes measurement system. A 619 respondent described the use of "statewide PD and TA plan that looks at implementation of the assessment, quality of authentic assessment, how it is happening, collection and reporting of data, and use of data to inform results".

Training was used also to describe who the training targeted, what skills or knowledge it focused on, how frequently it was offered, and in what mode it was delivered. As mentioned above, training targeted individuals both directly and indirectly involved in data collection efforts. Programs offered training to staff, assessors, individual teachers, providers, "providers and parents", "gen ed and special ed teachers", individual districts and personnel, and new staff. State programs offered a breadth of trainings to these groups that focused on "the use of the [statewide] tool", the use of "good evaluation instruments", "input of data", or a more specific intentions such as to "address fear or teacher bias to maintain objectivity", to "shift mindset to authentic assessment and functional behaviors", or to "improve state effort".

With respect to frequency in delivery, some state programs provided training on an ongoing basis, in the spring and fall, or annually. Training was also characterized in this regard as "past training", "additional training", "initial training", and "refresher training" in three Part C programs and one 619 program. Finally, respondents provided the most detail about the ways in which training was delivered. Training formats included face-to-face trainings across a 619 and Part C program in one state, joint trainings with groups of preschool practitioners, or webinar trainings across another state's 619 and Part C programs, and highlighted content such as "video clips of actual program coordinators using info to get functional outcomes". The use of the statewide initiatives in one Part C program or "train-the-trainer" models to facilitate high-quality collection statewide in three 619 programs and one Part C program were cited, as well as additional steps to ensure trainer focus on data consistency and quality at the local level. Collectively, these methods were administered by an array of entities and individuals (e.g., the ECO Center, publishers of online assessment tools, statewide entities, and lead individuals responsible for statewide training) and there was tremendous variation across states.

Measurement approaches denoted the statewide procedure for collecting data, such as use of the COSF, a statewide tool, or the ECO Center-developed Decision Tree. These approaches were reported 61 times as ways to ensure accurate and reliable child outcomes data. Linked to these efforts were the *data review* procedures, which involved human (versus system) review of data post-collection and prior-to and after- data entry. Data review procedures also included efforts to share data across practitioners, programs, and districts. Several C and 619 programs, for instance, described efforts to conduct

COSF reviews and/or file and record reviews to ensure the consistent use of appropriate

materials in assessing children. Described by one Part C respondent:

> Annually we do a self-evaluation – self-assessment – and as part of that we
>
> choose 10 random records and we require programs to complete a mini file
>
> review … We then check what they've provided for us on a paper file with what
>
> went into our information system. So that's one of our validations.

Such methods were also used to search for evidence of a team approach to arrive at child

outcome ratings in two other Part C programs. In one of these programs, the Part C

respondent attended COSF meetings

> To watch how the teams come to a score for each of the different outcomes for the
>
> kids. And watch[ed] to make sure that [practitioners] were using the techniques
>
> that we trained them on for the decision tree ECO has, that they're using that and
>
> that they're scoring and also writing down rationales on the summary forms, that
>
> we have to describe the reason why they chose that number. And then when we
>
> do site visits in conjunction with some compliance issues, we can then look at a
>
> number of different kids COSFs and make sure that it's filled out appropriately
>
> and those statements – the rationale statements – are written in such a way that
>
> it's clear why the score was chosen.

Supervisors in the Part C program also provided feedback to services coordinators, many

times in the form of phone calls, when monthly data checks indicated missing or

incomplete data.

Efforts to *communicate* with practitioners or to encourage *collaboration* among

practitioners were also reported by participants to ensure the consistency and accuracy of

data collection and analysis. Follow-up with practitioners about data collection and/or updates to local professionals and programs were included in this category. Partnerships with institutes of higher education (IHE) enabled some state programs to monitor and verify the validity and reliability of data systems and systems' abilities to convert raw assessment scores into child ratings. An emphasis on a team approach in rating children's outcomes was cited in several programs and involved collaboration and communication among various professionals. Finally, the use of forums (early childhood coordinator roundtables, statewide administrative briefings, and quarterly newsletters) to communicate collection-related updates to local coordinators was reported in several 619 and C programs to keep professionals abreast of any collection issues.

The use of recommended performance-based measures, state-approved tools, and anchor assessments – or *instruments/assessment tools* – to support high-quality data collection was cited by a number of participants in this study. Participants referenced the general measure or tool or specific assessment instruments, which differentiated this approach from state *measurement approaches* discussed above.

In some state programs, responsibilities to lead and monitor collection, analysis and reporting efforts were delegated to individuals or groups of individuals. Efforts to *build local capacity* were mentioned across both C and 619 programs and included appointing a lead individual, trainers, evaluators, or regions to facilitate elements of data collection, data analysis and data reporting. Local education agencies (LEAs) in one 619 program, for instance, were responsible for ensuring new staff proficiency in instruments and COSF use. In another 619 program, LEAs were given responsibility for these efforts. Stated by the respondent:

It varies by local education agency. Some agencies allow their teachers or

therapists to access the data system individually and other LEAs have a central

site so teachers and therapists complete the Child Outcomes Summary Form

ratings and then submit those forms to a central data entry person. We don't

dictate how they go about doing that as long as they get the data in.

The three least cited methods to support high-quality data collection efforts

included the use of *guidance/policies/procedures*, *resources*, and *technical assistance*.

Guidance, policies, and procedures included instances in which states were required to

submit plans to guide and supervise data collection efforts. These plans were required in

one state 619 program and across one state's 619 and C programs. Resources specifically

included state development of materials or the accessibility of materials to practitioners,

and included webinars, websites, online resources, and manuals, again cited across 619

and C programs. Technical assistance strategies included support. Technical assistance

may not have been as frequently reported, given the ECO Center's and NECTAC's

specific roles in providing assistance to states. Interestingly, these three approaches

overlapped with each other and with more frequently noted high-quality approaches. A

resource-related guide assisted district use of online resources in the data collection

process, which served the dual function of resource support and technical assistance in

one 619 program, for example, while an online page of training materials and procedures

operated as both training and procedural support for local data collection efforts in

another state's Part C program.

Though state processes to ensure high-quality data collection varied in

application, these results illustrate programs used similar types of processes to support

this collection. Efforts to transmit child outcomes data in accurate and reliable ways were less varied.

Data transmission methods. In question 8, I asked respondents how data were transmitted from local programs and practitioners to the state. Participants reported 122 methods for data transmission, which I grouped into four categories. I present these methods and their frequencies in Table 11.

Table 11

Data Transmission (DT) Methods To Ensure High-Quality Child Outcomes Data___

Method	Frequency
Process	34
Data Systems	33
System Elements	29
Access	26

The *process* of moving data toward a shared venue (e.g., state website, program data system, state data system) was cited the most in supporting the accurate and reliable collection of data. It is important to note that process, as discussed here, depended on the existence of a program or state data system. Consequently, actions related to data entry (e.g., who enters it, how frequently should it be entered) or to uploading data into a public website were included in this category. In some programs, practitioners collected and entered the data into state systems independently, whereas in others, practitioners submitted data to individuals solely responsible for entering data into state data systems. Providers in one Part C program directly entered children's exit and entry data into the

state's real-time database. In another Part C program, however, service coordinators were responsible for submitting child ratings on excel spreadsheets to the state. A 619 participant reported that practitioners were responsible for data entry, though supervisors monitored this entry. In still other programs, the responsibility for data entry was relayed to specific individuals. In a 619 program for instance, practitioners sent hard copies of three data sources plus the child's outcomes rating to regional coordinators, who then input data into excel spreadsheets to transmit to the state. In an EI program, a specific individual was assigned the responsibility for entering the data. The process for moving data was deemed a local decision by seven 619 programs and two Part C programs.

Respondents also reported the use of *data systems* to accurately and consistently transmit child outcomes data. Data systems included any entity used to store child outcomes data at the local or state level and included live, real-time systems; security portals; publishers' online systems; web-based data collection systems; electronic data portals or systems; state data systems; web data managers; and online databases. Not all respondents reported the use of such a system in response to question 8, however. It is possible that the remaining programs used data systems, though not as a means of transmitting high-quality data.

System elements, or embedded system features, assisted 29 programs in transmitting accurate and reliable data from local programs to the state. Features included edit checks, system alerts, the ability to generate reports, and the ability to convert assessment scores to functional outcome categories. System elements in one 619 program provided direction to practitioners to ensure data were entered appropriately. Other systems included "built in safeguards" to prevent errors related to entry scores

(e.g., entering an evaluation date that precedes the child's date of birth). Edit checks tied to exit ratings was another example of an embedded system element. Children in one Part C program could not be inactivated from the system without an exit rating. This feature required that practitioners enter a rating to provide a measure of progress and eliminated the possibility of accidentally inactivating a child with this measure. A number of systems could generate reports for both state-level personnel and local staff. These reports allowed for state and local monitoring of timely and appropriate data collection, for example. Similarly, local staff reviewed reports to ensure data reflected their classrooms or programs, and that errors were not present. Still, more specific system features converted assessment scores to functional outcomes categories, thereby reducing practitioner subjectivity in rating a child. The Part C system mentioned above used an online database to tie early childhood ratings directly to IFSP entry data, simplifying the rating process for practitioners.

Finally, individual, program, or state *access* to data stored in state systems was cited 26 times and depended largely on the type of data systems contained. Real-time, web-based systems offer 24/7 access to data. Programs with this type of system provided continual access to both state and local practitioners to view, enter, update, and monitor data. Continuous monitoring reduced and/or prevented errors and allowed practitioners to keep up with entry requirements. More standard, less interactive systems served as a data bank in some state programs. Although data were not available to view on a day-to-day basis, administrators were able to periodically extract the data at anytime or at regular intervals (such as monthly) to conduct checks for missing data or errors. Access included the use of logins and passwords so that only specific individuals could view

child-, classroom-, or program-specific data. Passwords assisted in protecting the confidentiality of information and prevented practitioner modifications to ratings after entering or exiting a child from the data system. Some respondents expressed concern about the temptation and tendency to rate children higher to demonstrate more successful outcomes, which in turn may influence data-based decisions, such as funding. These system elements allowed state and local administrators to monitor child ratings to prevent such occurrences.

Collectively, these results indicate that states used a variety of methods to ensure the collection and transmission of accurate and reliable child outcomes data. Of utmost interest from a participant standpoint are the types of barriers states experienced in these efforts and programs' deliberate attempts to address these barriers to improve data quality.

Barriers in collecting and transmitting high-quality child outcomes data. In questions 6 and 9 I inquired about the major barriers in collecting and transmitting high-quality child outcomes data. Across interviews, respondents reported 180 barriers related to data collection or data transmission, many of which were similar. To make these data useful to the field, I grouped barriers into 18 categories (see Chapter 3, ***Barriers in collecting and transmitting data***). The frequencies of these barriers across transcripts are presented in Table 12 and provide a broad view of issues impacting the quality of child outcomes data.

Table 12

Frequencies of Barriers

Type of Barrier	Frequency	Type of Barrier	Frequency
Data	31	Attitude	8
Transmission	18	Financial	7
Data Quality	15	Time	7
System	15	Subjectivity	6
Fidelity	12	Support	6
Knowledge	12	Instrumentation	5
Data Collection	11	Data Use	4
Approach	9	Other	3
Turnover	9	Cross-Program	2

Participants reported *data*-specific barriers most frequently across interviews. These barriers consisted primarily of missing data, meaning data that did not appear in the system. Human error at entry or at exit resulted often in missing data. Some respondents also reported missing data with respect to mobile children and families, as some data systems were not yet equipped to track outcomes across district and county lines. Missing data also occurred when families pulled children out of services, leaving the program unable to collect outcomes at exit. Invalid combinations of data were also reported by respondents, which may mean children were rated higher at entry into the program than at exit out of the program. Although some children may lose skills, such as children with degenerative conditions, the vast majority of children will gain skills or maintain the same level of functioning. The combination of higher entry/lower exit scores, then, more commonly indicated data-related errors, which in turn may be related to data collection or transmission, but was unknown at the time. Logic errors, such as a

child's birth date after an evaluation date, were also noted as missing data and an invalid

combination of data.

The remaining data-specific barriers revolved around numbers of children within

and across the outcomes category indicators (see Figure 1). Data showed large numbers

of children with speech issues in one Part B-619 program, for example. In other

programs, respondents reported higher numbers of children in the "e" category which,

going back to the outcome category indicators, suggests children entered the program

with skills comparable to same-aged peers and maintained this level of functioning

throughout the program. Subsequent questions then are: Were these children eligible for

services? Or are these data the result of practitioner errors in initial ratings? Are these

data the result of inaccurate cutoff scores in a publisher's online system? Or do children

have delays that are not being captured by the outcome categories? One Part C

respondent suspected "it may be because the child might not have a delay in one of those

three outcome areas so they're looking good coming in and looking good going out".

This respondent also indicated that the Part C evaluation tool was not "subtle enough to

capture the child's progress in functionality", thereby leading to ratings that do not

correlate with the three outcome categories. Varying definitions of eligibility may also

be a factor in this occurrence, as some states serve at-risk children who may not enter the

program with a developmental delay or a diagnosed disability. These children may enter

the program with skills similar to their same aged-peers and maintain those skills as a

result of program participation.

The second most cited group of barriers revolved around *transmission*, eight of

which pertained to data entry issues. Data entry issues were attributed to delays in

practitioner and LEA input, the process of entering data into the state system, and manual

data entry. The means of transferring data from practitioners either into the system or to

the state constituted the additional transmission barriers. In one Part C program,

practitioners, local representatives and service coordinators each completed a COSF.

These COSFs were then compiled into one COSF that was submitted on behalf of the

child by the local program. According to this program's Part C respondent: "I think one

of the concerns as far as collecting and submitting these data is how are those multiple

COSFs getting translated into one summary COSF for the child." Several 619 and C

respondents also expressed concerns about the accurate transmission of scores,

particularly when data were transferred from clinicians to the data individual, when data

were hand-keyed into the state system, and when data were recorded on forms and then

entered into the system. These same respondents reported a previous barrier related to

data transmission and the resulting inaccuracy that could occur when the data processor,

responsible for entering data, was not available. A 619 program also experienced a

related barrier in getting the program and data input people to work together, a challenge

at the time this study took place. Finally, in one Part C program, multiple steps prior to

transmission invited opportunities for errors:

> We have a variety of people completing the outcomes summary forms and then
>
> completing a hard copy form that gets data-entered by another person … [so]
>
> ultimately we end up with fairly reliable data, but it's not always a quick process
>
> and it's not always really solid data the first time around, you know, it does need
>
> cleaning.

Barriers related to *data quality* followed reports of transmission barriers. Data

quality, alone, was cited 10 times. Beyond these 10 instances, 5 respondents identified

data quality as the primary issue evidenced by additional barriers. For example, a Part C

respondent reported data quality and linked it to instrumentation issues, more specifically

the possibility that the state selected measurement approach and tools led to

inconsistencies in the data.   The same respondent also indicated data quality as a result

of gaps in the data and as a result of data collection challenges. Whether or not data

reflected children assessed constituted another example, in which the 619 respondent

linked data quality to inconsistencies in staff ratings. Finally, the inclusion of children

with mild speech delays into the data was reported to "confound" and therefore skew the

data in both the Part C and 619 programs in one state. As stated by one respondent:

> Speech and language verification is sort of a soft, I mean soft in the
>
> sense of it doesn't sound scary. It sounds, you know, soft in that way. It's
>
> different than if you say your child has a mental handicap, or we think your child
>
> may be at risk for what, what, what. So developmental delay and speech
>
> language are often, and I'm not saying misused, but you know, yeah, a child may
>
> have a speech and language delay and other issues. But when you only report
>
> primary and you're gonna call that speech language, then you get apples and
>
> oranges in that speech language basket. You get kids who are [articulation]-only
>
> to kids who have quite a lot of other involvement but right now they're being
>
> called in their primary disability category, speech language.

Unlike data quality barriers, respondents reported a range of system-related

barriers. *System* barriers pertained to programs' data systems as well as any system- or

program-wide issues. Two participants referred to conversion challenges, meaning the system's ability to convert raw assessment data into the three outcome areas. Other data system-specific challenges included a lack of user-friendly and time-consuming software, an inability to track mobile children, and system inability to make local comparisons. Timing also seemed to be an issue. One Part B-619 respondent felt that the lack of real-time system posed a primary challenge that led to other challenges, such as tracking mobile children. A real-time system is capable of storing data and is always accessible to practitioners. So when children move, the child's new district can simply reference the child's previous data instead of collecting a new set of data. Without a real-time system, children's data may not be available to new districts. At the time of the interview, practitioners collected data at specific points in time, submitted individual data to local data sites, who then stripped data of identifiable information, aggregated and analyzed the data, then sent data to the state. There was no way to link entry data to any children. So if children moved, their entry data was not identifiable. As a result, practitioners in the child's new district had to collect entry data and they had to wait until the next scheduled reporting period to do so.

The accuracy with which practitioners collected and transmitted outcomes data, or collection and transmission *fidelity*, was the next most frequently noted barrier. Overall concerns with the consistency and reliability of assessment were evident first across 619 programs. Getting practitioners "up to speed" on how to complete an authentic assessment process was of concern in one 619 program. In another program, the accuracy and consistency of assessment administration was not clear, as the participant could not see teams arrive at child ratings:

Our real barrier is that you really don't know the exact accuracy of the assessors

and implementation and use of the measures, assessment measures, so you're

relying on the local LEA to ensure that they, that those assessors are

administering this instrument in a reliable way in getting reliable and valid data.

A "drift" in COSF use was also reported in this program, meaning practitioners were not

carrying out the COSF process as trained to. Still, in a different 619 program,

practitioners seemed to be using IEP goals to assess and rate children's progress rather

than assessment tools.

Fidelity concerns in Part C programs were related to the complexity of the

assessment process and to ensuring professionals' understanding of the assessment and

rating process and how to use it with fidelity. One Part C respondent felt more could be

done to improve interrater reliability among Part C practitioners, as well as across C and

619 practitioners in the state. The impact of the functional outcomes categories on

practitioner ratings of children was of concern in several programs. Thinking about

children from the broad functional outcomes categories rather than from the traditional

developmental domains was a challenge for C practitioners and one that may have led to

practitioners using "hunches" rather than true deliberations to arrive at child ratings in

that program. As stated by one Part C respondent:

I think there's another level of quality that we're only just starting to explore and

that is: How do we feel about the ratings themselves? Are the ratings on the three

indicator areas, or outcomes areas, really reflecting the true level of the child

development compared to typical? And, you know, I still have a fear that some

teams are, I think some teams are being pretty rigorous and they're looking at the

results of assessment information and they're really deliberating about where on

the 7-point scale the child is. And for others it's really just a, I have a hunch or

let's ask the parent what they think, even though that's not what we train here. I

still think, you know, for some of them it's not a very rigorous process that

they're going through. And I think it's going to take us feeding the data back to

them, as well as them seeing their difference between where they put the child on

a 7-point scale at intake and where they were putting them at exit.

Similarly, getting agreement on the functional outcomes versus developmental domains

was a challenge felt in another Part C program. The tendency to emphasize children's

strengths in the Part C culture also may have colored child ratings, further impacting the

accuracy and consistency with which practitioners assessed children's abilities. Finally,

fidelity issues in one Part C program revolved around a specific set of practitioners who

were not direct employees, but were subcontracted employees. As subcontractors, these

practitioners did not have direct access to the system and were asked to send assessment

results and ratings to individuals responsible for data entry. The participant noted,

however, that subcontractors were not sending this information along and, when they did,

many had calculated incorrectly the chronological ages for children. Incorrect

calculations of age may mean results do not reflect children's abilities, as practitioners

would have compared children's abilities to a set of skills or developmental milestones

appropriate for a different age group. Calculation errors may reflect practitioners'

knowledge of assessment, the next set of barriers reported by participants.

The lack of practitioner *knowledge* was cited twelve times in this study.

According to three participants, practitioners lacked knowledge about the assessment

and/or measurement process. One respondent who represented the state's 619 and C programs cited a lack of training across the EI/ECSE field about the expectations for measuring outcomes in children. One 619 respondent learned during COSF trainings that local practitioners needed more training on assessment basics, as did practitioners in another 619 program. The latter respondent noted that practitioners needed further training in what constitutes an observation, and that observations may be more than just written products, such as a visual observation of a child's work, or a description of what the child's has worked on.

Interestingly, respondents cited a lack of understanding of typical child development across one 619 program, three Part C programs, and the C and 619 programs in one state. A Part C respondent stated bluntly "not everyone knows child development … child development people are great, but just because you came out of OT[occupational therapy] school doesn't mean you know typical child development", while another respondent described service coordinators as having an "array of understanding and experience with child development". Finally, concern about new staff knowledge was reported in one 619 program and practitioner use of the data system without the knowledge to use it was reported in a Part C program.

Barriers related to *data collection* were reported in four C programs, six 619 programs, and in one state across both C and 619. The majority of data collection barriers pertained to practitioner's ongoing collection of outcomes data (6) - some states were simply not seeing data from either program, while in others, collection occurred at a slower pace, or not at all. In two 619 programs, practitioners strayed from data collection procedures. Individual student issues, such as child mobility, prevented the regular

collection of data and spurred questions related to data collection procedures in an additional 619 program. One challenge included practitioner collection from a combination of standardized information, parent report, and observations in each outcome area. And finally, a participant representing the state 619 and Part C programs commented that practitioners did not prioritize data collection activities, as they did not recognize and understand the focus of their work under IDEA, and further, with respect to the child outcomes requirement:

> I think I'm discovering a weakness in what the providers' perception is of what they need to provide. I think they've been doing a lot of measurement that would be okay for public insurance reimbursement, the Medicaid rules. They'd been following that rather than following IDEA.

New tasks, or *approaches*, associated with child outcomes data collection constituted the next set of barriers. Looking at children's progress from a functional outcomes perspective was difficult for practitioners both in C and 619 programs. One 619 respondent noted that specialists, such as speech-language pathologists (SLPs) and physical therapists (PTs), found this approach particularly challenging given their traditional disability-specific approaches. Stated by the respondent:

> It's been a challenge working with LEAs to instruct their PTs or SLPs in looking at holistically how they are addressing children's speech or how they are addressing, you know, children's physical activity across domains and, you know, those functional skills that are imperative across activities and across the curriculum.

Further challenging for SLPs in two 619 programs was the comprehensive assessment of

a child across all three domains, not just in the language and communication outcome

area or in speech-specific domains (e.g., expressive language, receptive language), to

determine their overall outcomes as a result of services received. The departure from

one-time assessment practices to ongoing monitoring also proved arduous for Part C and

619 practitioners in one state. And one last approach-specific barrier consisted of IEP

teams choosing different rating systems to assess children's growth in a 619 program.

Staff *turnover* further complicated the outcomes data collection process, challenging

programs to find ways to acquire, train, and support new staff.

Attitudinal barriers included practitioner resistance toward functional outcomes,

instruments, procedures, and transmission practices. Three respondents noted separately

practitioner resistance to the statewide requirement for assessment and accountability,

general resistance to the child outcomes requirement, and a lack of buy-in to enter child

outcomes data into the state system. Part C participants reported resistance to the use of

the AEPS in one program, the child outcomes requirement and the functional outcomes

approach in two programs, and finally "a bit of resistance on getting folks to include the

rationale statements" to support children's scores. It may be fair to say resistance arose

as a result of the complexities involved in implementing the outcomes requirement.

Summarized by one 619 respondent:

> This is the first time in this state that we've had a statewide requirement for
>
> assessment data and accountability data so it was at first attitudinal, and then
>
> second, it was operational. Didn't take too long to get past the attitudinal because
>
> I think most people agree and understand the benefit of both accountability and

having data around kids' progress. And then it would be operationalizing the whole system. I mean, it was a brand new system to get up and running in the entire state in a relatively short amount of time. So the challenges had to do with getting everybody on board, making sure that the information got to everyone, making sure that the right people understood what they needed to do because this was a fairly hefty budget item for local programs, although we supported them through a [federal] grant in the first year and half or so of this endeavor, they still have to buy the subscriptions for kids. And they have to commit teacher time so it was a pretty hefty commitment on their part. The programs have to figure out how they were going to assure that they had staff trained and they have to assure that they have an in-house mechanism for making sure that all of the people who need to get the data in get the data in when it needs to be in the systems – it needs to be in three times a year. So it was a matter of redesigning a local district systems as well.

The *financial* barriers associated with support and implementing child outcomes activities were also cause for concern in several C programs and in one 619 program. One Part C respondent claimed:

What we've been challenged to do is to continue providing training. We don't really have like an entity that we contract with to do our training and TA with, it's kind of us who contracts specifically. And before ARRA we had no money, we really had no money for CSPD[Comprehensive Systems for Personnel Development].

Other financial barriers included an increased workload with less funding and the

"financial aspect of ongoing evaluations". One Part C respondent commented that in this

economy programs were less willing to release practitioners "from their billing time to

attend trainings because they lose so much revenue". Cuts in professional development

in one 619 program were responsible for decreased training opportunities related to child

outcomes. Lastly, apart from training, one Part C respondent noted "we've grown

tremendously over the past 10 years without an increase in funding" which led to barriers

both related to and beyond the child outcomes.

Issues related to *time* were reported in seven programs. More time was needed to

see trends in erroneous data and to determine barriers and data outliers in two Part C

programs, respectively. According to another Part C respondent, year 3 was still too

early to determine barriers. Finally, demands on practitioner time impacted the quality of

practitioner work in another Part C program, while the size of districts in a 619 program

necessitated more time than teachers may have had.

Six participants felt that *subjectivity* played a role in measuring child outcomes.

Though specific to three programs, these results indicated that subjectivity influenced

how practitioners rated children's abilities. A participant representing both C and 619

programs explained that "[special education] people working with young children for a

long time sometimes have a skewed perspective of child development" which may

influence how they rate a child compared to their same-aged peers. The type of setting

practitioners worked in also seemed to influence practitioner ratings. According to one

619 participant: "Teachers who work in a setting with typically developing peers tended

to rate the kids lower than teachers who worked in a special ed only environment."

Subjectivity was also recognized in the assessment of young children. Two respondents noted subjectivity with the COSF and one mentioned practitioner dissatisfaction with components of the AEPS.

Barriers regarding *support* were also reported by six programs in this study. These barriers referred to sources needed to understand and/or implement data collection activities, including training, TA and capacity. For example, teachers in one 619 program requested TA around assessment and instruments, however getting out to districts and teachers proved to be an additional challenge for the state program. One Part C participant noted the need for ongoing training in the form of booster sessions to support appropriate teacher practices. Updating individuals who led train-the-trainer sessions quickly was identified as a challenge in one 619 program. Unfortunately, the capacity to train practitioners was not available in one C program, and a 619 program noted the need for a TA entity.

Barriers pertaining to *instrumentation* were also cited in this study. In one instance, practitioners across C and 619 programs were not all implementing age-anchored assessments that allowed for easy comparison of a child's development to typically developing peers. The lack of appropriate instruments for children birth through 3 was one example noted by a 619 participant. This participant also noted the use of different instruments for the 619 population which led the participant to wonder, "Are we truly comparing children consistently?" A "hodge-podge" of information resulting from the lack of a uniform assessment instrument in a state Part C program was reportedly complicating the process of translating results into the outcomes categories. Finally, one participant who expressed interest in connecting the C exit data with 619

entry data noted "there's a lot of things to discuss" as different tools amounted to different results in C exit outcomes in comparison with the tools used to measure 619 entry outcomes. In general, these results indicate that variations in assessment instruments led to variations in assessment results.

Four barriers related to the analysis, interpretation, and general use of child outcomes data (i.e., *data use*) were reported in this study. Emerging data from one Part C program indicated outcomes differences across two local programs; learning how to use these data to the programs' benefit became a challenge in this state C program, as well as in a separate state 619 program. Practitioners in a different state C program did not understand how the outcomes data translated into the OSEP-required outcomes summary statements. Similarly, one 619 respondent reported that "teachers and staff aren't seeing the usefulness of the data" even though the program intends to use the data for program improvement. Overall, questions remained about what the data meant and for what purpose it would be used.

Other barriers in this study included those barriers beyond the direct involvement in program child outcomes activities, such as the OSEP timeline issued in 2005. One 619 participant felt the timeline was not adequate to roll out child outcomes activities as desired. Another respondent indicated that local challenges existed but did not identify to whom or what these challenges pertained to. Lastly, one 619 respondent noted that some children with disabilities were not being identified through the IEP process, given parental preference to remain uninvolved in the public school system.

Two final barriers addressed cross-program issues, meaning those that extended beyond EI and ECSE programs. A 619 participant explained, "there are children that are

enrolled in a Head start you know for some special ed services" which could mean double the assessments for the child if not considered. In another 619 program, consideration of cross-system child outcomes training was an initial challenge that warranted attention.

Overall, 619 and C programs contended with 18 types of barriers. Some of these barriers prompted programs to take action. These efforts are presented next.

Efforts to address data collection and transmission barriers. In questions 7 and 10, I asked respondents to describe efforts to address data collection and transmission barriers, respectively. Respondents addressed 106 of the 180 barriers listed above using 144 approaches. I present barriers addressed and the approaches programs used to address them in Appendix P. The general type of barrier is listed in the first column. In the second column, I describe the specific barrier. Participants noted one or more approaches to address each barrier. I present these approaches in the third column. Finally, I identify the orientation of reported approaches in the fourth column (see Chapter 3: *Processes to ensure high-quality collection of child outcomes data* and *Data transmission methods*). The type of approach is what I discuss here, beginning first with their frequencies, presented in Table 13.

Table 13

Approaches Used to Address Barriers

Approach	Frequency
Collaboration/Communication (CC)	48
Training (T)	48

Data Review (DR)   40

Resources (R)   14

Guidance / Policies / Procedures (GPP)   13

Process (P)   13

Technical Assistance (TA)   13

Instruments / Assessments Tools (IA)   12

Data Systems (S)   11

Measurement Approach (MA)   7

System Elements (SE)   7

Building Local Capacity (BLC)   6

Access (A)   1

One-third of approaches centered around *collaboration* and *communication* (CC) and *training*. CC approaches included interaction with local practitioners, data managers and other partners and any efforts to encourage this interaction. Participants' reports primarily consisted of "follow-up" with practitioners, face-to-face conversations, discussions, and meetings to address barriers. Several programs utilized follow-up phone calls with practitioners to address issues, such as data quality. Practitioner concerns about the child outcomes requirement and the use of a statewide tool were met with administrative messages: "It's what we've been given and we're going to make the best of it" and "There is no perfect tool." Practitioner resistance to statewide accountability requirements led state-level 619 staff to visit local programs individually to address concerns. Online discussions with specific practitioners in one 619 program were used to address concerns and resistance to data collection methods and requirements. In contrast,

statewide briefings were held in another 619 program to update all local practitioners about child outcomes requirements. A Part C participant reported the use of quarterly "pep talks" or meetings with regional staff to underscore the importance of measurement fidelity, to review related policies, and to review data.

Partnerships were also considered CC approaches. When faced with the task of building a system in a short period of time, one 619 program sought the partnership of an IHE to accomplish this task. A Part C and a 619 respondent from the same state discussed their efforts with IHEs to improve in-service training around observation and data collection. Participants also reported partnering with publishers to ensure assessment results appropriately linked to the functional outcome categories in the data system. Finally, any efforts to seek guidance from the ECO Center were noted as CC approaches.

A number of barriers indicated practitioners needed additional training to improve their understanding of child development, assessment, and the functional outcomes. In response to these barriers, many programs planned formal trainings to teach and review practitioner knowledge and skills. Reported training efforts included assessment and data review, both on introductory and advanced levels (i.e., level 2 trainings) and in varied formats. Many training opportunities were designed to improve fidelity of assessment, rating, and data entry fidelity in small group formats, statewide trainings, and in one Part C program, as a "traveling show" across the state given practitioners' demanding schedules. "Level 2 trainings" revisited the content of initial trainings in-depth, improving practitioner understanding of how to use an assessment tool to guide instruction, for example, or focusing on an aspect of data collection. Training approaches

were also used to broaden practitioner knowledge of child development and requirements around the child outcomes, and more specifically responsibilities relative to IDEA across one state's Part C and 619 programs.

Given previously noted concerns about the quality of child outcomes data, it was not surprising that participants reported repeated use of *data review*. Often times data review methods involved posting data in public domains, such as in data systems or on websites. Such methods captured the attention of practitioners, as in one Part C program:

Because we have control of our website we're able to post data verification reports whenever we want. And [practitioners] don't like it when I post reports that show them at a low percentage. So just that sort of shining the light on the data piece makes them attend more. And so I think we'll see that that'll change more, people don't want to look like they don't want to put their data in.

Participants also talked about local reporting efforts. How and why data were reported varied across programs, but generally reporting efforts enabled practitioners to review data accuracy. One participant discussed plans to enhance the data system with electronic reporting features and more frequent reviews of data. Verification reports of data were conducted in one Part C program's real-time, statewide data system to compare compared child scores at entry and exit and to identify missing data. Publicly posted reports enabled practitioners to view and address data errors. Other data review approaches included state reviews of data, typically within state data systems. Ongoing reviews of data, specific reviews of data that looked at the distribution of entry and exit scores, guided reviews with teachers, and routine reviews of the system were noted across 619 and Part C programs. And still some programs assigned specific individuals

to review data as it was collected locally. Overall, these approaches suggest programs developed procedures to review the quality of data.

Programs also developed many *resources* to assist practitioners in addressing barriers. Practitioner data entry errors in one state's C and 619 programs led administrators to back off item-level data requirements and develop a guide for minimum requirements. Similarly, a webinar was developed for both programs to guide practitioners through the data entry process to avoid errors (i.e., transmission). In response to data-use barriers (i.e., practitioners not seeing the usefulness of child outcomes data), one 619 program developed a one-page summary of the child outcomes requirement and what it means for families. One Part C participant reported pulling resources from other states, "typically online self-study materials" to support new staff understanding of the collection process, while another representing a state's C and 619 programs reported the development of resources on child development to address variations in assessing children's development. Resources in one Part C program were also developed in the form of a detailed case record of a child, used to enhance practitioners' rating fidelity and subsequent data quality. Though cited less frequently than training and data review, resources enabled programs to design specific tools to address a range of barriers.

Participants also reported revisions in *guidance/policies/procedures* and the *process* for data transmission in response to several barriers. Missing data was met with compliance and enforcement, given the need for child outcomes data in local determination decisions. To address practitioner delayed data entry, meaning transmission barriers, one program required practitioners enter data more frequently than

in the past, on a quarterly basis. To streamline variations in assessment results, one

program required practitioner use of a specific tool to better synthesize results and ratings

for children with developmental delays. This same Part C program also required the use

of three sources of information – assessment results, professional observation, and parent

input - to inform each rating. Many of these approaches also doubled as revisions to the

collection and transmission *process*.

Technical assistance* was offered to practitioners and programs to address a range

of barriers, and included any mention of TA, support, or feedback. More obvious

strategies included conducting needs assessments for local programs and providing the

requisite support. Participants also identified specific individuals, such as regional

coordinators, responsible for delivering this support. Feedback to local districts and

programs were also considered TA and differ from follow-up efforts categorized as

collaboration and communication efforts. For instance, one Part C program extends

ongoing training with local follow-ups to ensure "training is working" and "people are

getting mentored" as discussed. Follow-up, then, involves communication rather than

TA, which provides specific feedback in response to a stated barrier. In response to SLP

resistance, one 619 program provided SLPs with online feedback, or techniques, to

understand and collect child outcomes data per requirements. Financial support of any

kind was also considered a TA approach.

Instrumentation approaches were reported less frequently, but interestingly were

used in tandem with other approaches to address barriers. One 619 participant expressed

barriers related to practitioner assessment fidelity, essentially practitioners were using

IEP goals to assess children rather than formal assessment instruments. To deal with this

issue, the program convened a preschool committee (CC) first, reviewed assessment tools (IA), and selected one to recommend for practitioner use (GPP). Training was then used to relay committee recommendations to practitioners statewide. Instrumentation approaches were used alone to address fidelity issues. To verify proper use of the COSF, one Part C program assigned a staff member to review COSF forms to ensure practitioner use of state-approved tools. And practitioner requests for TA (support) led the 619 participant to conduct crosswalks of state approved tools, as practitioners did not feel current approved instruments provided assessment information needed to make child ratings.

The next most frequently noted approach involved *data systems*. Participants either described systems' capacities to prevent errors or they reported system enhancements in response to barriers. One program's real-time data system prevented impossible combinations of data. Recognizing that a large number of children were ending up in the "e" category (i.e., data-specific barrier), respondents from the 619 and C programs in one state partnered with publishers to ensure the publishers' systems accurately translated assessment scores to child ratings by fine-tuning crosswalks between the publishers' online tools and by resetting cut scores, meaning the scores that determine child ratings in the three functional outcomes categories. System construction was seen as an immediate and necessary step for one 619 program after OSEP released the reporting timeline for child outcomes. One 619 respondent felt the lack of a real-time system was a barrier and revealed plans to shift to a real-time system.

Within systems, specific *elements* were added or revised to improve data quality. For instance, one program's new data system required input of accurate scores. One Part

C program addressed data quality efforts through a series of approaches, one of which included the addition of system edit checks. Part C practitioners' confusion about the use of data, specifically how state administrators arrived at OSEP-required summary statements, led state administrators to include calculators into the data system, encouraging practitioners to manipulate data independently. Program- and statewide measurement approaches were also revised to address program barriers, such as varying approaches in assessment and data review. Though SLPs in one program traditionally used disability-specific approaches to address children's speech delays, this 619 respondent encouraged individuals to broaden their approach to address children's speech holistically, meaning across all domains and functional outcome areas. Another individual representing a state's 619 and C program defined expectations for outcomes measurement after learning practitioners lacked training in child measurement. Overall, methods pertaining to measurement approaches were few in number.

The least mentioned methods included *building local capacity* and *access* to data systems. Efforts to build local capacity primarily addressed data quality issues. Individuals involved in training-the-trainers in one state were given responsibility for providing local practitioners with feedback and assistance in calculating chronological ages for children, an error that could skew assessment data and child ratings by extension. A 619 program delegated COSF monitoring responsibilities to local areas to ensure data gets onto the form and into the system. Early efforts to support data quality were targeted through a multi-step plan in one state that included the development of a team process model. Rather than implement the model, the participant felt it was important to "get the model and the process before we kind of roll it out as a statewide procedure". And a final

approach, noted only once, revolved around state *access* to the data system, a feature that enabled state staff to review data quality at any time.

Though participants reported a wide range of methods to address barriers, this summary indicates that programs primarily used collaboration/communication, training and data review procedures to address barriers pertaining to data collection and transmission. Many of these approaches also involved the use of other high-quality collection and transmission efforts, such as resources and technical assistance. Despite programs' active attempts to address these challenges, participant concerns around child outcomes persisted. The following section details these concerns.

Concerns about child outcomes data. In the final interview question, I asked respondents to share any state- or nationwide concerns about the coordination and collection of early childhood outcomes data. This question was added to the formal interview after the second participant in this study independently voiced concerns. Due to administrator error, however, this question was only asked to 27 programs, across which respondents reported 81 concerns. Though informative, these concerns did not directly answer my research questions. I found responses fit into seven categories, presented in Table 14.

Table 14

Respondent Concerns About Child Outcomes Data

Concern	Frequency
Validity	29
Data implications	14

Process   14

Importance of data   8

Meaning of data   7

Praise   5

Cost   3

Requests for information   3

Concerns about *validity* related to the data, the process of collecting data, and the

overall validity of the outcomes system nationwide. Many respondents expressed

concern that child outcomes data would be compared across districts and states, a

challenging task that may not take into account varying eligibility requirements and other

factors that differentiate state programs. For instance, some districts may have a greater

number of children with more significant needs than others, however numbers alone will

not illustrate these differences. The phrase "comparing apples to oranges" was used

several times, though one 619 respondent suggested "nationally every state does it

differently so you're comparing apples to cows … it's not even fruit to fruit!" Though

respondents acknowledged OSEP's intent to avoid state-to-state comparisons,

respondents felt this comparison would be natural, particularly by individuals and policy

makers unaware of the diversity both within and across systems.

Related to these concerns were issues with target setting. Given the variance in

systems and measurement approaches, is the practice of setting a target an appropriate

practice? Also, can local districts and states accurately determine how much progress

their children will make given the diversity in early childhood and in state demographics?

Finally, one respondent expressed concern about states taking this process more seriously

than others, a factor that may compromise the integrity of the data if states do not

emphasize or enforce valid and reliable collection.

Implications for data related to the impact the child outcomes requirement had on

state systems. Increasing practitioner workloads, a strain on staff time, and the need for

continuous training constituted some of these concerns. Two respondents expressed

concern that a greater focus on outcomes and data collection was diverting resources

from the very services that assist children in making gains. One 619 respondent

expressed concern for the use of outcomes data:

> I do hope it's used well. That the data on the federal level is used to support the
>
> success of EC programs and not, you know, won't be used in any way to decrease
>
> funding or close programs. And that people with poor outcomes get assistance not
>
> punishment.

In related comments, respondents questioned the practice of target setting with

respect to children's gains. Is it appropriate to expect that this population of children

make gains comparable to their same-aged peers? And by extension is it appropriate to

hold local districts and states accountable for these gains? A 619 respondent expressed

specific concern about the practice of target setting:

> I have to say I certainly have concerns at the moment because we are going to be
>
> setting targets as of Feb 1, [2010]. And I'm concerned that we are going to be
>
> required to demonstrate, how can I put that, a curve in the improvement of
>
> children's performance. So there's a perception there that all children regardless
>
> of their disabling condition will ultimately perform like their same-age peers.
>
> And I think that that's a misguided perception on the part of some policy makers

in Washington … I mean, to me, it's an application of No Child Left Behind of 3-

5 year olds with disabilities and that's an inappropriate perspective to take with

this population of children.

Further, will programs and states be penalized for children not making progress?

Respondents generally understood the need to demonstrate child progress, but wondered

if just showing substantial progress for these children would be a better approach.

Concerns related to the *meaning of the data* were related to validity concerns and

focused more on the messages surrounding these data. Stated best by one 619

respondent:

I think as with anything we have to be careful not to send the message that we

expect all children with disabilities to exit preschool special education for

functioning at the same level as typical peers, that it isn't about fixing all kids.

That we have to be careful about the messaging we do around this. And I think

there's a lot of attention to that going on at the national level so I'm not overly

concerned, but I think it's something we have to keep in the forefront.

Concerns related to *process* revolved around progress being made at the state and

local levels. Several respondents noted that with time, system efforts were improving

and that the vision for this nationwide outcomes system was becoming clear.

Respondents shared what they felt was important in moving forward in this effort:

establishing a partnership among Part C and 619 folks; making a better connection

between evaluation, the IFSP, assessment, and team efforts; determining how to work

around HIPAA regulations to follow student progress from the Part C system through the

619 system; and finally looking at children holistically, rather than from a disability-

specific approach. One 619 respondent noted it is "important to have those hard conversations about what the challenges are and what's not working and how do you fix it".

Eight respondents discussed the benefits and *importance of the data* on local, state, and national levels, and reiterated the need for this data to demonstrate children are improving as a result of services received. One respondent stated that looking at the impact of the C and 619 programs beyond exit was just as important, therefore plans were in place to look at a cohort of children's outcomes through the second grade. Simply looking at outcomes was not enough, however. Respondents noted that it would be important to use these outcomes for accountability purposes and to direct and inform instruction. One 619 respondent discussed plans to "spread this outcome system to all children, so that within the LEA they're not just looking at some children, they're assessing all children, because it's just good practice".

Remaining process concerns focused on the *cost* of collection efforts, related to building state infrastructure and traveling to conferences. Three requests for information were made:

- Samples of age-functioning that align with the COSF 1-7 rubric and one tool to illustrate this link;

- Information related to standardized methods of data analysis and interpretation; and

- A list of states in which Part C exit data is used as Part B entry.

Finally, several respondents specifically noted their appreciation for NECTAC and ECO Center support and felt the annual conference and resources developed for states were highly useful.

Many concerns related back to the barriers participants reported, namely barriers related to the quality of data. Respondents recognized that programs vary both within and across states, but wondered how these differences would be communicated with the larger, general population of researchers and policy makers who may look to these data to make decisions about the future of Part C and Part B-619 programs. These concerns influence recommendations for future practice and research and are discussed further in Chapter 5.

Overall, interviews with Part C and Part B-619 coordinators and designees suggest that state programs have been working to ensure the quality of their child outcomes data, by focusing on improving statewide collection and transmission activities. The implementation of these efforts, alone, may not be enough to sustain the collection and transmission of quality data, as evidenced by barriers reported. Routine monitoring strategies such as communication, collaboration, training, and data review seem to be more widely used in sustaining high-quality collection and transmission efforts.

Chapter Summary

Interviews with 619 and Part C coordinators nationwide provided descriptive information about state efforts to collect accurate and reliable child outcomes data. Though aggregated, responses indicate that 619 and Part C programs across the country are approaching this collection and the barriers emerging from it in similar ways. Programs used similar processes and transmission methods to ensure the statewide

collection and transmission of accurate and reliable child outcomes data. Training was the most commonly reported process, which in sum, educated practitioners about the importance and collection of these data. The use of a statewide measurement approach, data review, and specific instruments and assessment tools were also used to support practitioners' consistent and accurate collection efforts, while less mentioned processes – building local capacity; the use of guidance, policies, and procedures; the use of resources; and technical assistance – were used in tandem to guide practitioners' efforts. Similar data transmission methods across 619 and Part C programs included the development of a process and the use of a system to transmit and store data, respectively. Embedded system features and access to system data further enabled practitioners to monitor the quality of data as it moved from local programs to the state.

Despite efforts to ensure data quality, respondents reported an array of barriers surrounding data. Issues pertaining to the data (e.g., missing or invalid data, data quality, data collection, and the use of data) persisted across programs, though they varied from program to program. Also evident across programs were transmission-specific barriers, half of which revolved around practitioner entry of data into systems. These results indicate collectively that data quality is a common issue across 619 and Part C programs. Barriers involving the system, transmission fidelity, and practitioner knowledge may also contribute to the quality of child outcomes data. Additional challenges associated with new approaches and practitioner resistance (i.e. attitudes) may reflect the relative newness of the requirement, while issues related to turnover and practitioner subjectivity suggest continued support may be needed to support practitioners' practices in these efforts. Issues related to finances, time, instrumentation, and multiple programs (i.e.,

cross-program) may require further consideration within 619 and Part C, given their impact on collection and transmission efforts.

Interestingly, respondents reported meeting these barriers with the very processes and methods used to support collection and transmission efforts, most notably training, communication and collaboration, and data review. Respondents also reported the use of resources; guidance, policies, and practices; a process; technical assistance; instrumentation; and data systems, to address barriers, though not as frequently. Revisions or enhancements to the statewide measurement approach, system elements, building local capacity, and access to data systems to enhance quality data collection and transmission efforts were used the least and may suggest the need to modify outcome measurement systems' infrastructure depending on the barriers that arise.

Although these results pertain to one-third of 619 programs and one-third of Part C programs nationwide, they provide a critical first look at the ways in which state 619 and Part C programs are both supporting and sustaining high-quality early childhood outcomes efforts. In the following Chapter, I discuss these findings and how they relate to the published efforts highlighted in Chapter 1 and reviewed in Chapter 2.

CHAPTER V: DISCUSSION

The purpose of this investigation was to gather information about how state

programs are supporting the collection of high-quality child outcomes data to meet

federal requirements and to determine whether they have experienced any challenges in

these efforts. Three questions directed this study:

1. What processes and methods are Part B-619 and Part C programs using to

    support the collection of accurate and reliable child outcomes data?

2. What barriers are these programs facing in the collection of accurate and

    reliable data?

3. In what ways are the Part B-619 and Part C programs addressing these

    barriers?

I address each of these questions by reviewing briefly the findings from telephone

interviews with 619 and Part C coordinators nationwide; then I discuss how these

findings illustrate the continuous monitoring efforts in child outcomes accountability

systems, after which I address the limitations of the research, future directions for

research, and recommendations for policy and practice; and I end with conclusions from

this investigation.

Collecting High-Quality Child Outcomes Data

Across 39 interviews, respondents reported similar methods believed to support

the accurate and reliable collection of child outcomes data. Methods included the use of

training; a statewide measurement approach; data review; collaboration and

communication; specific instruments and assessment tools; efforts to build local capacity;

the use of guidance, policies and procedures; the development and use of resources; and

technical assistance. Interestingly, these methods align with recommended practices for system development (NECTAC, 2006). Per NECTAC, determining a measurement approach and instrumentation, establishing guidelines for and resources to support collection efforts, communicating guidelines with practitioners, building local capacity, training practitioners, and reviewing system activities (data review) with respect to systems' intentions and aims are all important elements in designing a child outcomes measurement system. Respondents' repeated mention of a statewide measurement approach, efforts to build capacity, training, and data review, among other methods, suggests state programs have invested in a structure to support accurate and reliable collection efforts. Such structures were also established in Pennsylvania, Kansas, and Kentucky to guide practitioners' assessment practices and child ratings, and to illustrate the value of outcomes measurement in relation to expectations for child growth and development (Campbell & Anketell, 2007; Greenwood et al., 2007; Rous et al., 2007, respectively), and are consistent with Hebbeler and colleagues' (2008) recommendations to produce valid child outcomes data. Established structures not only communicate system intentions, but also set forth principles and practices that guide practitioner efforts, which in turn, improve the quality of a system and the quality of data the system produces.

State programs' investment in data quality was further evident in programs' attention and efforts to strengthen practitioner assessment of young children. Frequent reports of training, data review, and efforts to keep practitioners apprised of collection-related challenges (communication and collaboration) suggest states are making a concerted effort – on several levels – to use processes to ensure data accuracy and

reliability. Further, state program's decisions to use data systems (complete with system features) and a consistent process to enter data, and to provide practitioners with regular access to system data, demonstrated deliberate efforts to protect the quality of assessment data and child ratings as they were transmitted from local programs and districts to the state.

Perhaps the most interesting finding pertaining to high-quality collection efforts, however, is the perceived value of training in both guiding practitioner efforts and in improving data quality. Respondents' reported a range of training opportunities that differed in their role and scope (e.g., the importance of the collection, how to collect quality authentic assessments), their target audience (e.g., practitioners, parents, therapists), the skills they focused on (e.g., using an assessment tool, addressing specific issues such as shifting practitioner mindset from domains to functional outcomes), their frequency (i.e., ongoing, spring/fall, initial, refresher), and in their format (e.g., face-to-face, webinar, train-the-trainer). The frequent reports of training alone suggest its importance in supporting high-quality collection efforts, whereas the wide variations illustrate the many ways in which training may support initial collection efforts. Several implications for policy and practice are discussed in light of these findings.

Identifying and Addressing Barriers

Despite the use of high-quality processes and data transmission methods, barriers surfaced in the collection of child outcomes data across both 619 and Part C programs. Interestingly, respondents from both programs reported similar types of barriers in the collection and transmission of these data. Most notable were the higher incidences of data-related barriers (including data quality) and data transmission barriers. Also

deserving of attention are barriers that pertained to practitioner knowledge, approach, fidelity, and subjectivity, critical components needed to a) consistently and reliably assess young children, and b) rate children's abilities in each outcome category.

Collectively, these barriers suggest that simply creating a structure to support collection efforts is not enough. Further, ongoing investment in state infrastructure, by way of training may be needed to support continued efforts to collect high-quality child outcomes data, a finding supported by Hebbeler and colleagues' (2008). Given reports of inadequate practitioner knowledge about typical child development, it is important first to ensure all practitioners who work with and assess young children with disabilities possess a strong understanding of typical child development. This knowledge is not only needed understand the developmental milestones children should achieve, it is also necessary to make accurate child ratings in comparison to same-aged peers. One way to ensure practitioner knowledge is through personnel preparation programs, or in-service training, not just for early interventionists and preschool special education teachers, but also for therapists and other individuals who provide services to young children with disabilities.

Given barriers related to fidelity, approach, attitude, and subjectivity, it is also clear that practitioners need a strong foundation in assessment to support their continued use of appropriate, consistent, and accurate assessment practices. One way to provide this foundation is to include content related to appropriate assessment practices for both typically developing children and for children with disabilities at the pre-service level. This content should address the types of assessments (e.g., criterion-referenced, norm-referenced) and the value of each type. Another way to provide this foundation is to ensure that all practitioners get this training. Professional preparation programs for early

interventionists, preschool special education teachers, speech-language pathologists, occupational therapists, and other related service providers responsible for working with young children with disabilities should also address how best to assess young children with disabilities, which instruments to use, and how to use these instruments. Therapists and service providers whose work extends often beyond the early childhood years may also need additional training in how to administer comprehensive assessments to children, meaning those measures that assess abilities outside of the therapist's area of specialty. Findings from this research also indicate practitioners may need additional guidance on how to link assessment results to the three outcome categories, particularly those involved in the Part C program. Provided pre-service these opportunities would build practitioner capacity to collect high-quality child outcomes data.

Barriers related to attitude also warrant attention in this study, as they indicate some resistance to the use of the functional outcomes categories. Respondents noted resistance specifically in the Part C culture, as well as among SLPs. Traditionally, children's development has been measured and categorized by developmental domains. Finding ways to link developmental milestones and/or the developmental domains with the functional outcome categories in pre-service training may ease this resistance. According to one Part C respondent, her program provided practitioners with resources in-service, specifically:

> Laminated kind of cheat sheets that organize child development according to the
> three functional outcomes and, you know, have different milestones for different
> age groupings. So you know it's just something that just kind of keeps it in front
> of them if they're not familiar with it. And what we've done is organize it more

around the functional outcomes rather than domain-specific.

Provided in-service, these opportunities would strengthen practitioner understanding around the functional outcomes, though addressed pre-service, barriers related to resistance may be reduced.

How 619 and Part C programs chose to address barriers is noteworthy in this study as it demonstrates the perceived value training and communication, two methods used to support high-quality collection efforts, to address many of the barriers that have arisen. Though trainings differed with respect to program needs, the use of training in response to barriers highlights further the need for ongoing professional development to support good assessment practices (Hebbeler et al., 2008) to meet the numerous challenges associated with designing procedures to measure children's outcomes. These findings emphasize collectively the need not only for initial training related to the outcomes and assessment, but also continued and targeted support to address specific barriers to sustain quality collection and transmission efforts.

Without addressing these barriers, errors in data collection, data, child ratings, and data transmission, and others may arise. When addressed barriers should decrease. It is therefore important for state programs to continuously monitor collection and transmission efforts to keep track of barriers, an activity expected in a standards-based accountability system such as a child outcomes measurement system.

Continuous Monitoring in Child Outcomes Measurement Systems

Though NECTAC (2006) provided states with a concrete series of tasks to develop a child outcomes measurement system, the system will never be complete. The theory of action in an accountability system calls for the continuous monitoring of each

aspect of the system, as well as the system as a whole to determine "the extent to which it is achieving the goal of improving teaching and learning" (National Research Council, 1999, p. 22). In child outcomes measurement systems, this task may be accomplished by determining the quality of the data produced. The better the quality of child outcomes data, the more useful child outcomes will be in differentiating the weak from the strong programs.

One way for states to monitor their child outcomes measurement systems and the data they produce is by tracking the barriers that arise, and barriers are bound to arise in a system that requires the coordination and communication of practitioners, programs, and districts statewide. Barriers function as feedback to inform the system of activities that need fine-tuning. Referring back to Appendix O, one can see that the first attitudinal barrier (*SLP resistance*) informed the state that additional efforts were needed to support speech language pathologists. This barrier prompted the program decision to a) provide feedback to SLPs via online discussion forums, and b) work with districts to support SLPs. Once addressed, barriers related to resistance were likely reduced and the quality of assessment data they collected likely improved.

Though I grouped barriers into similar categories to better describe them in this investigation, the specific barrier examples shown in Appendix O remain important in that they reveal state programs' ensuing investments and decisions perceived to improve collection efforts, and by extension the quality of data the child outcomes measurement system produces. In the example provided, the state program invested in an online forum to support SLPs; the program also decided to communicate and collaborate with districts to support SLPs. In another state program, a lack of child development knowledge

(barrier) led the program to incorporate child development into trainings (decision). And in a Part C program, challenges related to the initial subjectivity item in Appendix O - *COSF subjectivity* - were addressed through quarterly meetings with regional supervisory staff designed to provide pep talks, review policy, and share and compare regional data.

Barrier tracking, then, enables states to not only improve the quality of data collected, but also compare data statewide to determine the value of services provided to children and whether steps need to be taken to improve those services. The implications of this continual process influence directions for research as well as recommendations for policy and practice and are addressed following the limitations of this research.

Limitations

Limitations in this study primarily related to the generalizability of results. First, findings reflect activities in approximately one-third of Part B-619 and one-third of Part C programs nationwide thereby limiting their generalizability, though all regions across the nation were represented. Repeated efforts were made to recruit individuals in the pretest and the interview; those attempts were largely unsuccessful. Efforts to accommodate coordinator participation via joint interviews, written responses, and face-to-face interviews, were somewhat successful in recruiting participants, though limited. These variations in interview procedures may have further minimized the reliability of findings (Lavrakus, 2001), a second limitation of this research. Respondents participating in joint interviews discussed activities often at greater length than respondents participating in single interviews, whereas respondents who offered written responses provided one or two sentence responses. Also, the written format was not

conducive to seeking greater clarification or probing in comparison with telephone and/or face-to-face interviews, thereby limiting the consistency of information obtained.

The lack of screening procedures to verify both coordinator and designee involvement in child outcomes per participation criteria may also have influenced the generalizability of responses in this research, as well as the internal validity of results. As evidenced by respondent reports, coordinator roles may vary from state to state and program to program. Coordinators' and designees' level of involvement in and knowledge about the child outcomes requirements and associated activities may have led to a range of responses that did not thoroughly detail state programs' collection and transmission efforts and the challenges surrounding them. In future efforts, it would be worthwhile to verify prior to the interview participant involvement in the child outcomes effort. A simple, separate checklist accompanying the recruitment email might encourage participants and designees to cite quickly their eligibility for participation, and simultaneously allow me to keep track of how many criteria participants meet.

I identified the lack of a pilot implementation as a fourth limitation in this research. Interview pretest efforts did not allow for a true interview pilot due to declined participation and non-response, a limitation of the strength of the interview guide (Lavrakus, 2001). A final limitation pertained to the interview method. Though broad, my interview questions gathered detailed information about ongoing, statewide efforts to collect child outcomes data. The level of detail varied from state to state and depended largely on successful administration and participant interest. I refined my interview skills during initial interviews. My ability to probe effectively for details developed as my confidence in leading the interview grew. As such, I may not have encouraged a similar

level of detail across all interviews. Participant interest in providing detailed responses

may also have influenced the depth of responses. Though the majority of interviews

lasted 20-30 minutes, several ran under 15 minutes possibly limiting the level of detail

gathered. Despite these limitations, the information gathered in this investigation

provided an informative first look at how states are working to improve the quality of

their child outcomes data.

Future Research

There are a several directions for future research. First, it would be interesting to

determine if the barriers and approaches described in this study span the entire nation.

My findings show that despite variances in child measurement approaches, the barriers

share similarities across 39 Part B-619 and Part C programs nationwide. Second, because

the majority of states use the COSF to summarize assessment results, it may be useful to

interview coordinators in those states, specifically, to determine the similarities and

differences in the barriers they have experienced and whether they are the function of

specific factors such as assessment tools or system infrastructure. This information may

be useful in several ways. For those states that felt COSF subjectivity was an issue, this

specific information may provide them with useful, concrete strategies to reduce

subjectivity in collection and rating process. This information may also supplement the

ECO Center's validity and reliability efforts around the COSF.

Lastly, one question remains: Can the wide range of assessment instruments used

provide data that can be compared on a national level? Although OSEP may not use

these data to compare state programs, respondents insisted there is a natural, human

tendency to do so. The temptation to compare data across states and programs, which

have varying eligibility criteria, is indeed concerning. How can data be compared when they come from different sources and procedures? How can data be compared across programs that include children who are at-risk for developing delays with programs who do not include these children? It is not yet clear from a research standpoint how valid these comparisons will be.

It will be important to address these questions in future research efforts, as these data will be used to support the effectiveness of federal and local early intervention and preschool special education programs. For years, practitioners, researchers, and families have supported the effects of early intervention. Now the two fields are faced with the immense task of providing evidence of this success in the form of children's functional gains in comparison to their same-aged peers. If these data are accurate and reliable and if they show that children are making progress as a result of early intervention and preschool special education, these programs may receive additional funds. If they are not, however, these programs risk a loss in funding. Continued research that explores the validity and reliability of assessment instruments and measurement procedures is needed to confirm their utility in measuring child outcomes for accountability purposes. In addition, research that compares validity and reliability across procedures would be helpful in strengthening data comparisons, if made.

Recommendations for Policy and Practice

Respondent concerns about the validity of the collection process deserve attention in policy and practice as well in the research. Concerns pertaining to the validity of the data, the validity of the process used to collect the data, and the overall validity of the national outcomes system highlight the need for professional development and training

efforts around data quality. Though, the ECO Center has recognized the need for greater

support around data quality through TA efforts and reviewed plans to create communities

of practice related to professional development and data quality (Rooney, 2010), more

training is needed on a state level to ensure practitioners are knowledgeable about and

trained in the assessment of young children with disabilities. States must take the

initiative to develop more comprehensive training plans to ensure the following

components: a) practitioners understand the child outcomes requirement and its purpose;

b) practitioners understand typical child development; c) practitioners are aware of

appropriate assessment practices for young children with disabilities, which includes

authentic assessment principles recommended for the collection of child outcomes data,

appropriate instruments and how and when to administer them, and d) practitioners are

informed about the state's procedures for measuring and child outcomes. Much of this

information may be provided pre-service, prior to practitioners entering the field. It may

also be valuable to refresh practitioner knowledge prior to the start of the academic year

in the form of an initial, intensive training, conducted in a format conducive to state

circumstances. In larger states, for example, webinar trainings may be efficient and cost-

effective in reaching greater numbers of staff, whereas, face-to-face trainings may be

possible in smaller states.

In addition to initial trainings, it is important for states to provide continual

support in the form of abbreviated or intensive trainings to reinforce initial training

content, visit an aspect of data collection in depth (such as using data for program

improvement purposes), and/or address arising collection concerns. Intensive training to

reinforce initial training content may be useful for new staff, for example. Reviewing

uses for data may be helpful for practitioners who are more confident in data quality.

Given these recommendations, providing professional development and training

may become an overwhelming task. For this reason, states may find it useful to develop

a state- or district-wide TA center designed to coordinate training specific to the child

outcomes collection effort. This TA center should have an in-depth understanding of the

child outcomes measurement systems' aims and procedures and could then develop

training experiences that carry out system aims and ensure practitioners are well-

equipped to collect high-quality data.

State and local programs may also take ownership for data quality by

continuously monitoring their collection efforts. Continuous monitoring of data in one

state, for example, led the participant to explain that the emphasis in the statewide

collection remains on "generating valid ratings to begin with"; rather than the

transmission of data, which the participant felt was secondary in accurately and

consistently assessing and rating young children. State programs may monitor their

individual collection processes to ensure, first, that practitioners are aware of the

importance of child outcomes data; second, that they possess the knowledge needed to

assess child outcomes; and third, that mechanisms are in place to support practitioner

efforts, not just initially or on a one-time basis, but consistently throughout the collection

process.

According to a respondent representing a state's 619 and Part C program, "data

quality has to be a partnership between the state agency and the local programs".

Through such a partnership, critical statewide decisions and investments may be made to

support improved collection efforts and substantiate program success. To address

validity issues, for example, local programs may invest in a process to provide

descriptive data to the state to "tell the story" behind numerical child ratings. Numerical

gains alone may not support a program's effectiveness with children at-risk for

developing delays. Providing qualitative evidence to support the gains children

maintained as a result of program participation may substantiate better the effectiveness

of these programs. This practice would be particularly useful in describing the variation

in children's progress that numerical child outcomes data may not accurately capture. As

states review and report their data, it will be important for the field to find ways to

illustrate children's progress to ensure policy makers see the value of EI and ECSE

services in supporting children's development.

It will also be important to share these findings with the larger community. This

large-scale accountability effort needed to address and improve the quality of outcomes

data requires considerable coordination and communication efforts, not only within the

EI/ECSE fields, but also across state EC programs. Broadening accountability efforts to

the EC field is a priority for the current administration, and one that requires direction

and thoughtful action. Stated best by one 619 respondent, collecting outcomes data is

> A huge coordination and communication process, that there are lots of
>
> people involved and that would be with any system. I mean it's just a matter of
>
> trying to have a statewide system across multiple agencies … [and][word addition
>
> for clarification] that requires constant communication and coordination. So I
>
> think that's your ongoing work.

Sharing this information with the EC community may not only allow the EI/ECSE field to reflect on directions for practice, but also assist the EC field in developing and implementing sound accountability and improvement systems.

Summary and Conclusions

In the present study I described the ways in which states support the valid and reliable collection of child outcomes data. Although the practice of measuring outcomes on a large-scale is relatively new in the field, states have taken many efforts to ensure the success of this massive collection effort. Despite these efforts, many states experienced barriers in collecting and transmission child outcomes data. The findings of this research indicate that states are working continuously to ensure high-quality collection and transmission of child outcomes data statewide, whether it is to establish high-quality processes and transmission efforts or to follow up with any events or issues that impede these efforts.

The findings of this study also provide a critical first look at the barriers states are facing in producing valid child outcomes. Though the ECO Center and NECTAC provide states with considerable support through papers, conferences, and targeted technical assistance, this study may alert these centers to potential trends or commonalities in barriers, so that they may better tailor their support both on a broad scale and in a targeted manner. The collection of valid data seems to require continual cost, continual training, and continual data review. The monitoring provisions set forth in IDEA (2004) provide a structure for states to annually monitor and report on the implementation and the success of the Part B and Part C programs. It may be useful for states to develop a TA entity charged with providing professional development specific to

the outcomes requirement. On a more frequent basis, it may also be useful for states to

monitor system operation to efficiently address existing and emerging barriers to ensure

child outcomes reflect the abilities of the young children being addressed.

Beginning this year child outcomes data will be used to evaluate the effectiveness

of early intervention and preschool special education to parents, to researchers, and to

policy makers. The community as a whole seems hopeful these results will support the

effectiveness of these programs and subsequently increase investment to serve the

nation's youngest children.

APPENDIX A

Impact of GPRA in General Education and Early Childhood Education

Year	Federal Event	Purpose
1994	*Goals 2000: Educate America Act* P.L. 103-227 20 U.S.C. § 8001	To "improv[e] student learning through a long-term broad-based effort to promote coherent and coordinated improvements" (Goals 2000: Educate America Act, Title III, Sect. 302) in the education system To develop a state-wide comprehensive plan to address improved student performance States encouraged to "develop clear and rigorous standards for what every child shown know and be able to do" (http://www.ed.gov/pubs/G2KReforming/g2exec.html; Goals 2000, p. 3 Title III
1994	*Improving America's Schools Act,* P.L. 103-382	A reauthorization of ESEA To articulate standards for learning in the K-12 years To detail state plans to improve student performance States required to specify what they wanted their students to learn OR they needed to "include a strategy and schedule for developing these standards for learning in order to continue to receive federal funding (Title I source)
1998	*Head Start Act* Reauthorization P.L. 105-285	Developed the Child-Outcomes Framework
2001	*No Child Left Behind Act* P.L. 107-110 20 U.S.C. § 6301	(Reauthorization of ESEA) To reduce the achievement gap between minorities and disadvantaged children and their peers Required the assessment of child performance toward learning standards in grades 3-8
2002	*Good Start, Grow Smart Initiative*	Strengthen early learning by creating "quality criteria for early childhood education" Head Start programs to develop an accountability system Establish partnerships to provide information about best practices to teachers, caregivers and parents (http://www.whitehouse.gov/infocus/earlychildhood/tochtml#

Appendix B

State Part B-619 and Part C Programs Listed in ECO Center Summary Tables &
State Part B-619 and Part C Programs Listed on NECTAC* Contact Lists

Part C Programs	Part B-619 Programs
1. Alabama	1. Alabama (AL)
2. Alaska	2. Alaska (AK)
3. American Samoa	3. American Samoa (AS)
4. Arizona	4. Arizona (AZ)
5. Arkansas	5. Arkansas (AR)
6. California	6. California (CA)
7. Colorado	7. Colorado (CO)
8. Connecticut	8. Connecticut (CT)
9. Delaware	9. Delaware (DE)
10. District of Columbia	10. District of Columbia (DC)
11. Florida	11. Federated States of Micronesia (FSM)
12. Georgia	12. Florida (FL)
13. Guam	13. Georgia (GA)
14. Hawaii	14. Guam (GU)
15. Idaho	15. Hawaii (HI)
16. Illinois	16. Idaho (ID)
17. Indiana	17. Illinois (IL)
18. Iowa	18. Indiana (IN)
19. Kansas	19. Iowa (IA)

20. Kentucky	20. Kansas (KS)
21. Louisiana	21. Kentucky (KY)
22. Maine	22. Louisiana (LA)
23. Maryland	23. Maine (ME)
24. Massachusetts	24. Marshall Islands (MH)
25. Michigan	25. Maryland (MD)
26. Minnesota	26. Massachusetts (MA)
27. Mississippi	27. Michigan (MI)
28. Missouri	28. Minnesota (MN)
29. Montana	29. Mississippi (MS)
30. Nebraska	30. Missouri (MO)
31. Nevada	31. Montana (MT)
32. New Hampshire	32. Nebraska (NE)
33. New Jersey	33. Nevada (NV)
34. New Mexico	34. New Hampshire (NH)
35. New York	35. New Jersey (NJ)
36. North Carolina	36. New Mexico (NM)
37. North Dakota	37. New York (NY)
38. Northern Mariana Islands	38. North Carolina (NC)
39. Ohio	39. North Dakota (ND)
40. Oklahoma	40. Northern Mariana Islands (MP)
41. Oregon	41. Ohio (OH)
42. Pennsylvania	42. Oklahoma (OK

43. Puerto Rico	43. Oregon (OR)
44. Rhode Island	44. Palau (PW)
45. South Carolina	45. Pennsylvania (PA)
46. South Dakota	46. Puerto Rico (PR)
47. Tennessee	47. Rhode Island (RI)
48. Texas	48. South Carolina (SC)
49. Utah	49. South Dakota (SD)
50. Vermont	50. Tennessee (TN)
51. Virgin Islands	51. Texas (TX)
52. Virginia	52. Utah (UT)
53. Washington	53. Vermont (VT)
54. West Virginia	54. Virgin Islands (VI)
55. Wisconsin	55. Virginia (VA)
56. Wyoming	56. Washington (WA)
57. Bureau of Indian Education*	57. West Virginia (WV)
58. Department of Defense*	58. Wisconsin (WI)
	59. Wyoming (WY)
	60. Bureau of Indian Education*
	61. Department of Defense*

APPENDIX C

FINAL INTERVIEW

Interviewee (assigned pseudonym will be used): _____

State (assigned pseudonym will be used): _____

Date of Interview: _____

Background Information

1.   What is your responsibility relative to IDEA and young children with

disabilities in your state?

2.   How long have you been in this position of responsibility?

3.   What is your primary responsibility with respect to child outcomes data?

Child Outcomes Measurement

4.   Is your state collecting data on each child or is your state sampling?

5.   What processes has your state put into place to ensure the collection of

high-quality child outcomes data?

6.   What do you consider to be the major barriers in collecting high-quality

child outcomes data?

7.   How did/is your state attempt/ing to address these barriers?

   a.   Do you feel your state has been successful in addressing these

   barriers?

   b.   Why do you think these challenges continue?

8.   How are child outcomes data transmitted from local practitioners and

programs to the state?

9.   What do you consider to be the major barriers in transmitting these data from local programs to the state?

10.   How did/is your state attempt/ing to address these barriers?

    a.   Do you feel your state has been successful in addressing these barriers?

    b.   Why do you think these challenges continue?

11.   Do you have any overarching concerns about the coordination and collection of child outcomes data within your state or across the nation?

APPENDIX D

Recruitment Email for Pilot Study

I am writing to inquire about your interest in participating in the pilot phase of a research project being conducted by Sarika S. Gupta, a doctoral candidate at the University of Maryland, College Park. This research will be conducted under the supervision of Dr. Joan Lieber. We are inviting you to participate given your knowledge of the early intervention/preschool special education programs and of the child outcomes requirement issued under the 2004 reauthorization of the *Individuals with Disabilities Education Act*.

Seven state administrators of early intervention and preschool special education programs and two national researchers will be invited to participate in this pilot study. I will be seeking feedback on the quality and content of an Interview Draft, a series of questions I intend to ask state-level administrators of early intervention and preschool special education programs in states that have reportedly submitted child outcomes data to the Office of Special Education Programs. This interview will be used to gather information about state efforts to collect these data.

If you are interested in participating in this project, please respond to this email in the affirmative. We will then send you the consent forms describing the research project and its aims, the procedures involved, and your rights as a participant. You will receive a $10 Starbucks gift card for your participation.

Similarly, if you are not interested, please send us a response within one week declining participation.

We look forward to your response and we thank you for your time.

Sincerely,

Sarika S. Gupta
Doctoral Candidate in Early Childhood Special Education
Department of Special Education
University of Maryland, College Park
ssar@umd.edu

APPENDIX E

Pilot Phase 1 Letter and Instructions

July 9, 2009

The purpose of this research project is to determine how states are collecting and using child outcomes data. The 2004 reauthorization of the Individuals with Disabilities Education Act requires states to collect child outcomes data for children participating in both the Part C (early intervention) and Part B-619 (preschool special education) programs. This investigation will provide researchers will descriptive information about state efforts to collect child outcomes data, any challenges states have experienced in these efforts, and finally, any uses for these data beyond the federal reporting requirement. The purpose of this pilot investigation is to refine the interview instrument.

Enclosed you will find an Interview Draft. I am seeking your feedback on the quality, content, and organization of this Interview Draft. I plan to interview state administrators of the Part C and Part B-619 programs from states that reportedly submitted child outcomes data to the Office of Special Education Programs in 2008. Please provide written feedback either on the Interview Draft itself or on a separate sheet of paper. The following questions may guide your feedback:

- Are the questions clear (i.e. are they worded in a manner that makes sense)?
- Do the questions utilize vocabulary that is appropriate and relevant to the topic?
- Can any questions be eliminated?
- Should any questions be added?
- Are the questions organized well?
- Do the headings reflect the general categories of questions (e.g., *child outcome measurement procedures*, *uses for child outcomes data*)?
- Are any categories missing?
- How likely is it that these questions will be answered?
- Is anything missing overall from the interview?

Please send your feedback back to me in the mail. You will find a self-addressed stamped envelope for your convenience.

If you have any questions, please feel free to contact me via email (ssar@umd.edu) or by phone (443/415-4619).

Sincerely,

Sarika S. Gupta, M.Ed.

APPENDIX F

Interview Draft – Phase 1

Interviewee Position in State: _____

Date of Interview: _____

Background

1. How long have you been a *(interviewee position)*_____?.

2. Tell me about your involvement in the collection and reporting of child outcomes

   data.

Child Outcomes Measurement Procedures

3. What instruments and procedures is your state using to collect child outcomes data?

   PROBES

   - Would you elaborate on how your state uses the

     __(*instruments*)_____?

   - Could you explain those procedures more?

4. How did your state decide to use these procedures and instruments?

   PROBES

   - Would you elaborate on how your state selected these procedures and/or

     instruments?

   - That's helpful, I'd appreciate if you could give me more detail about

     how you selected these procedures and instruments.

5. Tell me about any barriers your state has faced in the collection of child outcomes

   data.

PROBES

- When did that happen?

- What happened as a result of these barriers?

6. What factors or processes helped to facilitate the collection of child outcomes data?

PROBES

- When did that happen?

- What happened as a result of these barriers?

Uses for Child Outcomes Data

7. Is your state planning to use child outcomes data beyond the mandatory federal

reporting requirements for local determinations?

PROBES

- If so, how?

- Would you elaborate on that?

- How is your state planning to analyze child outcomes data?

Location of 2008 State APR

_____

APPENDIX G

CONSENT FORM FOR PILOT – PHASE 1

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Why is this research being done?	This is a research project being conducted by Sarika S. Gupta under the supervision of Dr. Joan Lieber at the University of Maryland, College Park. We are inviting you to participate in this research because 1) you are national-level researcher that supports state efforts to understand and collect child outcomes data, or 2) you are an administrator of the early intervention and/or preschool special education program in a state that has published information about its child outcomes measurement systems and therefore has in place procedures to collect and report child outcomes data. The purpose of this research project is to determine how states are collecting and using child outcomes data. The 2004 reauthorization of the Individuals with Disabilities Education Act requires states to collect child outcomes data for children participating in both the Part C (early intervention) and Part B-619 (preschool special education) programs. This investigation will provide researchers with descriptive information about state efforts to collect child outcomes data, any challenges states have experienced in these efforts, and finally, any uses for these data beyond the federal reporting requirement. The purpose of the pilot investigation is to refine the interview instrument.
What will I be asked to do?	The procedures involve obtaining your feedback on an interview instrument, in an effort to improve it for the main investigation. You will be mailed the interview instrument and a self-addressed stamped envelope. You will be asked to provide written feedback about the quality, content, and organization of the interview. You will be asked to return the instrument to me in the mail. These procedures should not exceed one hour. You will receive a $10 Starbucks gift card in the mail following your participation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality, the researcher will create a coding system to mask your identity. Your name will be linked, for example, with a general term, such as Administrator A or Researcher 1. If you are a state administrator, your state will be assigned with a pseudonym (i.e., the Green state). If you are a national-level researcher, you will be described as such. Data will be organized and stored according to these terms. For example, your feedback will be stored as "Researcher 1's Feedback" or "Green State, Administrator A's Feedback". Hard copy data will be stored without identifiable information in the researcher's home office in a locked file cabinet. Access to these data will be limited to the researchers on this project. These data will be destroyed 5 years following the completion of this study. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. For example, general terms will be used to describe you and your role, such as "a state administrator involved in the collection of child outcomes data". Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results will help the investigator refine the interview instrument for the main investigation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.
What if I have questions?	This research is being conducted by **Sarika S. Gupta** under the supervision of **Joan Lieber, Ph.D. in the Department of Special Education** at the University of Maryland, College Park. If you have any questions about the research study itself, please contact **Joan Lieber, Ph.D. at Department of Special Education, 1308 Benjamin Building, College Park, Maryland, 20742; (telephone) 301/405-6467; (email) jlieber@umd.edu.** If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (email) irb@deans.umd.edu; (telephone) 301-405-0678.** This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Age of Subject and Consent	Your signature indicates that: • you are at least 18 years of age; • the research has been explained to you; • your questions have been fully answered; and • you freely and voluntarily choose to participate in this research project.
Signature and Date	**NAME OF SUBJECT** _____ **SIGNATURE OF SUBJECT** _____ **DATE** _____

APPENDIX H

Interview Draft – Phase 2

Interviewee (assigned pseudonym will be used): _____

Date of Interview: _____

Background

1. What is your position in the state?

   a.   If you are a Part C coordinator, what is your state's lead agency?

   b.   If you are a 619 coordinator, what department/agency is 619 housed in?

   c.   What department/agency is Part B housed in?

2. How long have you been in this position?

3. Tell me about your involvement in the collection and reporting of child outcomes

   data.

   a.   What does "involvement" mean to you?

   b.   Is this an easy or difficult question to answer?

   c.   Would it help to probe?, i.e. Are you primarily responsible for the

   outcomes work in your state?

Child Outcomes Measurement*

4. What instruments is your state using to collect child outcomes data?

5. What procedures is your state using to collect child outcomes data?

   a.   What does the term "procedures" mean to you?

   b.   Is this an easy or difficult question to answer?

   c.   Would it help to probe?, i.e. Who conducts assessments? How often are

they trained? How are data transmitted from local programs to the State?

How do you ensure that data are valid and reliable (i.e. quality checks)?

6. What do you consider to be the major barriers in the collection of child outcomes

data in your state?

    a.   Were these barriers in the past?

    b.   Are they over?

    c.   How did your state address these barriers? / How is your state

    addressing these barriers?

    d.   Would it help to offer some possibilities?, i.e. financial, staff turnover,

    lack of state staff, level of knowledge of providers about typical child

    development?

7. What factors or processes do you feel helped to facilitate the collection of child

outcomes data in your state?

Uses for Child Outcomes Data

8. Is your state planning to use child outcomes data beyond the mandatory federal

reporting requirements for local determinations?

    a.   What to you does "use" mean?

    b.   Is this question easy or difficult to answer?

    c.   Would it help to probe?, i.e.

        i.   **What kinds of questions will your state address with these**

           data?

       ii.   **What will your state do with the answers?**

      iii.   **How will the state use these data to support policy and**

practices?

    d.   Other probes: Program improvement at the state/local level? If so, how?

Determining where and what professional development is needed?

Developing IEPs/IFSPs? Use with state legislatures to highlight

importance of program or need for funding?

Online location of 2008 State APR _____

APPENDIX I

CONSENT FORM FOR PILOT – PHASE 2

Project Title	An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act
Why is this research being done?	This is a research project being conducted by Sarika S. Gupta under the supervision of Dr. Joan Lieber at the University of Maryland, College Park. We are inviting you to participate in this research because 1) you are national-level researcher that supports state efforts to understand and collect child outcomes data, or 2) you are an administrator of the early intervention and/or preschool special education program in a state that has published information about its child outcomes measurement systems and therefore has in place procedures to collect and report child outcomes data. The purpose of this research project is to determine how states are collecting and using child outcomes data. The 2004 reauthorization of the Individuals with Disabilities Education Act requires states to collect child outcomes data for children participating in both the Part C (early intervention) and Part B-619 (preschool special education) programs. This investigation will provide researchers with descriptive information about state efforts to collect child outcomes data, any challenges states have experienced in these efforts, and finally, any uses for these data beyond the federal reporting requirement. The purpose of the pilot investigation is to refine the interview instrument.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What will I be asked to do?	The procedures involve obtaining your feedback on an interview instrument, in an effort to improve it for the main investigation. You will be asked to provide oral feedback on the quality, content, and organization of the interview instrument. We may conduct this phase over the telephone or in person, per your preference. With your consent, the researcher will audiotape this interview. _____ I agree to be audiotaped during my participation in this study. _____ I do not agree to be audiotaped during my participation in this study. These procedures should not exceed one hour. You will receive a $10 Starbucks gift card in the mail following your participation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality, the researcher will create a coding system to mask your identity. Your name will be linked, for example, with a general term, such as Administrator A. Similarly, your state will be assigned with a pseudonym (i.e., the Green state). Data will be organized and stored according to these terms. For example, your feedback will be stored as "Green State, Administrator A's Feedback". This research project involves making audiotapes of your interview. Transcripts of these audiotapes will be helpful for the investigator to review details from the interview. Electronic copies of interview transcripts will be stored without identifiable information in encrypted file formats on the researcher's password protected laptop. Tape recordings and hard copies of interview transcripts will be stored without identifiable information in the researcher's home office in a locked file cabinet. Access to these data will be limited to the researchers on this project. These data will be destroyed 5 years following the completion of this study. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. For example, general terms will be used to describe you and your role, such as "a state administrator involved in the collection of child outcomes data". Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results will help the investigator refine the interview instrument for the main investigation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.
What if I have questions?	This research is being conducted by **Sarika S. Gupta** under the supervision of **Joan Lieber, Ph.D. in the Department of Special Education** at the University of Maryland, College Park. If you have any questions about the research study itself, please contact **Joan Lieber, Ph.D. at Department of Special Education, 1308 Benjamin Building, College Park, Maryland, 20742; (telephone) 301/405-6467; (email) jlieber@umd.edu.** If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (email) irb@deans.umd.edu; (telephone) 301-405-0678.** This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Age of Subject and Consent	Your signature indicates that: • you are at least 18 years of age; • the research has been explained to you; • your questions have been fully answered; and • you freely and voluntarily choose to participate in this research project.
Signature and Date	**NAME OF SUBJECT** _____ **SIGNATURE OF SUBJECT** _____ **DATE** _____

APPENDIX J

Interview Draft – Phase 3 & 4

Interviewee (assigned pseudonym will be used):

_____

State (assigned pseudonym will be used):

_____

Date of Interview: _____Telephone: _____   In-person: _____

Background Information

1. What is your responsibility relative to IDEA and young children with disabilities in

    your state?

2. How long have you been in this position of responsibility?

3. What is your primary responsibility with respect to child outcomes data?

Child Outcomes Measurement

4. Based on information from the ECO center website, your states utilizes the

    following instruments to collect child outcomes data. *Verify/Add/Eliminate*

5. Is your state collecting data on each child or is your state sampling?

6. How are child outcomes data transmitted from local programs to the state?

7. What do you consider to be the major barriers in transmitting these data from local

    programs to the state?

    a.   How did/is your state attempt/ing to address these barriers?

      i.   Do you feel your state has been successful in addressing these

        barriers?

      ii.   Why do you think these challenges continue?

8. What factors or processes do you feel are helpful in transmitting these data from local programs to the state?

9. What processes has your state put into place to ensure the collection of high-quality child outcomes data?

10.   What do you consider to be the major barriers in collecting high-quality child outcomes data?

    a.   How did/is your state attempt/ing to address these barriers?

      i.   Do you feel your state has been successful in addressing these

        barriers?

      ii.   Why do you think these challenges continue?

11.   What factors or processes do you feel are helping to facilitate the collection of high-quality child outcomes data?

APPENDIX K

CONSENT FORM FOR PILOT – PHASE 3

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Why is this research being done?	This is a research project being conducted by Sarika S. Gupta under the supervision of Dr. Joan Lieber at the University of Maryland, College Park. We are inviting you to participate in this research because 1) you are national-level researcher that supports state efforts to understand and collect child outcomes data, or 2) you are an administrator of the early intervention and/or preschool special education program in a state that has published information about its child outcomes measurement systems and therefore has in place procedures to collect and report child outcomes data. The purpose of this research project is to determine how states are collecting and using child outcomes data. The 2004 reauthorization of the Individuals with Disabilities Education Act requires states to collect child outcomes data for children participating in both the Part C (early intervention) and Part B-619 (preschool special education) programs. This investigation will provide researchers with descriptive information about state efforts to collect child outcomes data, any challenges states have experienced in these efforts, and finally, any uses for these data beyond the federal reporting requirement. The purpose of the pilot investigation is to refine the interview instrument.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What will I be asked to do?	The procedures involve obtaining your feedback on an interview instrument, in an effort to improve it for the main investigation. You will be asked, first, to participate in a mock telephone interview and, then, to provide oral feedback on the interview instrument and the interview process. This telephone interview should not exceed one hour and will be conducted at a time convenient to you. With your consent, I will audiotape the interview. _____ I agree to be audiotaped during my participation in this study. _____ I do not agree to be audiotaped during my participation in this study. You will receive a $10 Starbucks gift card in the mail following your participation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality, the researcher will create a coding system to mask your identity. Your name will be linked, for example, with a general term, such as Administrator A. Similarly, your state will be assigned with a pseudonym (i.e., the Green state). Data will be organized and stored according to these terms. For example, your feedback will be stored as "Green State, Administrator A's Feedback". This research project involves making audiotapes of your interview. Transcripts of these audiotapes will be helpful for the investigator to review details from the interview. Electronic copies of interview transcripts will be stored without identifiable information in encrypted file formats on the researcher's password protected laptop. Tape recordings and hard copies of interview transcripts will be stored without identifiable information in the researcher's home office in a locked file cabinet. Access to these data will be limited to the researchers on this project. These data will be destroyed 5 years following the completion of this study. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. For example, general terms will be used to describe you and your role, such as "a state administrator involved in the collection of child outcomes data". Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results will help the investigator refine the interview instrument for the main investigation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.
What if I have questions?	This research is being conducted by **Sarika S. Gupta** under the supervision of **Joan Lieber, Ph.D. in the Department of Special Education** at the University of Maryland, College Park. If you have any questions about the research study itself, please contact **Joan Lieber, Ph.D. at Department of Special Education, 1308 Benjamin Building, College Park, Maryland, 20742; (telephone) 301/405-6467; (email) jlieber@umd.edu.** If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (email) irb@deans.umd.edu; (telephone) 301-405-0678.** This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Age of Subject and Consent	Your signature indicates that: • you are at least 18 years of age; • the research has been explained to you; • your questions have been fully answered; and • you freely and voluntarily choose to participate in this research project.
Signature and Date	**NAME OF SUBJECT** _____ **SIGNATURE OF SUBJECT** _____ **DATE** _____

APPENDIX L

Recruitment Email

I am writing to inquire about your interest in participating in a research project being conducted by Sarika S. Gupta, a doctoral candidate at the University of Maryland, College Park. This research will be conducted under the supervision of Dr. Joan Lieber. We are inviting you to participate given your knowledge of the early intervention/preschool special education programs and of the 2005 child outcomes requirement issued by the Office of Special Education Programs (OSEP).

Two individuals from each state will be invited to participate in this investigation: 1) the Part B-619 coordinator, and 2) the Part C coordinator. These individuals will be interviewed separately. Per your preference we can conduct the interview over the telephone at a time convenient to you *or* in-person when you attend the 2009 OSEP National Early Childhood Conference in Arlington, VA. Interviews will not exceed 1 hour.

If you are interested in participating in this project, please respond to this email in the affirmative. We will then 1) send you the consent form describing the research project and its aims, the procedures involved, efforts to protect your confidentiality and the confidentiality of your state, and your rights as a participant, and 2) contact you to schedule the interview. You will receive a $5 Starbucks gift card for your participation.

If you are not interested in participating, or are unable to, please suggest a designee that we may recruit. The designee must be 1) a previous or current state-level administrator of early intervention or preschool special education, 2) knowledgeable about the child outcomes requirement, and 3) was, or is, currently involved in efforts to collect child outcomes data. Please send me the designee's email address.

We look forward to your response and we thank you for your time.

Sincerely,

Sarika S. Gupta
Doctoral Candidate in Early Childhood Special Education
Department of Special Education
University of Maryland, College Park
ssar@umd.edu

APPENDIX M

<u>CONSENT FORM</u>

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Why is this research being done?	This is a research project being conducted by Sarika S. Gupta under the supervision of Dr. Joan Lieber at the University of Maryland, College Park. We are inviting you to participate in this research because you are an administrator of the early intervention and/or preschool special education program in a state that reportedly submitted child outcomes data to the Office of Special Education Programs (OSEP) in 2009. The purpose of this research project is to determine how states are collecting and using child outcomes data. In 2005, the OSEP began requiring states to collect child outcomes data for children participating in both the Part C (early intervention) and Part B-619 (preschool special education) programs. This investigation will provide researchers with descriptive information about state efforts to collect child outcomes data, any challenges states have experienced in these efforts, and finally, any uses for these data beyond the federal reporting requirement.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What will I be asked to do?	The procedures involve one telephone interview at a time convenient to you OR an in-person interview during the 2009 OSEP National Early Childhood Conference in Arlington, VA. The researcher will ask you a series of questions about your state's efforts to collect child outcomes data. First, the researcher will ask you about your responsibility with respect to the IDEA Part B-619 or Part C programs and your primary responsibility with respect to your state's child outcomes data. Then, she will ask you to confirm the instruments your state uses to collect child outcomes data, describe how these data are collected, describe how these data are transmitted from local programs to the state, describe any challenges in these efforts, describe the factors that facilitated child outcomes data collection, describe the processes your state has in place to collect high quality child outcomes data, and finally, describe the barriers in collecting high-quality data. The interview will not exceed one hour. With your consent, this interview will be audiotape-recorded. You will receive a $5 Starbucks gift card following your participation.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality, the researcher will create a coding system to mask your identity. Your name will be linked, for example, with a general term, such as Administrator A. Similarly, your state will be assigned with a pseudonym (i.e., the Green state). Data will be organized and stored according to these terms. For example, your feedback will be stored as "Green State, Administrator A's Feedback". This research project involves making audiotapes of your interview. Transcripts of these audiotapes will be helpful for the investigator to review details from the interview. Electronic copies of interview transcripts will be stored without identifiable information in encrypted file formats on the researcher's password protected laptop. Tape recordings and hard copies of interview transcripts will be stored without identifiable information in the researcher's home office in a locked file cabinet. Access to these data will be limited to the researchers on this project. These data will be destroyed 5 years following the completion of this study. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. For example, general terms will be used to describe you and your role, such as "a state administrator involved in the collection of child outcomes data". Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results will help the investigator determine how states are collecting and using child outcomes data.

Project Title	**An Investigation of State Efforts to Collect Child Outcomes Data for the Part B-619 and Part C Programs Under the Individuals with Disabilities Education Act**
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.
What if I have questions?	This research is being conducted by **Sarika S. Gupta** under the supervision of **Joan Lieber, Ph.D. in the Department of Special Education** at the University of Maryland, College Park. If you have any questions about the research study itself, please contact **Joan Lieber, Ph.D. at Department of Special Education, 1308 Benjamin Building, College Park, Maryland, 20742; (telephone) 301/405-6467; (email) jlieber@umd.edu.** If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (email) irb@deans.umd.edu; (telephone) 301-405-0678.** This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

APPENDIX N

<u>**Contact Summary Sheet**</u>

State: _____ (use pseudonym)

Respondent: _____ (use pseudonym) **Part B-619** or **Part C**

Interview Date: _____

Telephone: ____ OSEP Conference: ____*Location (if in person)*: _____

Audiotape consent: _____ Interested in receiving results: _____

Collecting data on each child? Or sampling?	Processes in place to ensure high quality data collection?
Major barriers in collecting high-quality child outcomes data?	Primary ways of addressing barriers?
Primary method of transmitting data from local programs to the state	Major barriers in data transmission
Factors/processes helpful in transmitting data from local to state?	Concerns about child outcomes data?

APPENDIX O

Coding Scheme

Coding Rules

- See coding sheet – code page number, code and note text excerpt (phrases defined as the unit of coding)
- Can double code items in scoring, but need to be separate when entered into excel
- General rule of thumb: Look for lead question on how to code.
- Because lead questions may not always indicate the type of response (i.e. HQ-B/DT-B) and respondents often offered expressed barriers that involved both people and data system-specific barriers, the decision was made to combine the HQ-B and DT-B categories. Similarly the decision was made to combine HQ-B-A and DT-B-A. Decision was also made to keep HQ and DT separate to note processes specific to people and data system-specific elements.
- Decision was also made to broaden the category "concerns" to include issues or events that were of importance to respondents, as many respondents noted both positive and negative "concerns" in response to the question
- All responses will be entered into excel file. Although HQBs and DTBs are noted separately here to identify specific barriers, they will be combined into one overall "barrier category" in excel file. Same rules apply to HQBAs and DTBAs. Efforts to visually connect HQ-B-A-s/DT-B-As to HQ-Bs to HQs for example will be made to maintain the specific ways in which states addressed specific barriers if noted as such.

Interview Questions	Code	Code Definition	DECISIONS MADE 2/19
What is your primary responsibility relative to IDEA and young children with disabilities?	PR-IDEA	Individual's primary responsibility relative to IDEA. Responses may include overseeing Part B-619 or Part C implementation, monitoring implementation, writing APRs or SPPs (data reports that describe how states monitor IDEA program implementation), staff training, etc.	Note position title and tasks separately. If respondent states "oversight" or general term and then describes it, may keep responses combined, but note each described task.
How long have you been in this position?	PR-Y	Years indicated in position. Excludes years in another position.	Exception: Respondent indicates additional years in previous title, but same role
What is your primary responsibility with	PR-CO	Individuals' stated responsibilities with respect to child outcomes. Responses	List each task/responsibility separately

respect to child outcomes data?		may be similar to responses for PR-IDEA, but participant may elaborate more.	If conducts training for several components, may keep together, but list all components (so this may be separated later)
Is your state collecting data on each child or is your state sampling?	S	States are either sampling or collecting data on each child. Census typically means collecting on each child. If a response is "cohort" determine whether it's a cohort of all children, or a sample of children.	
What processes has your state put into place to ensure the collection of high-quality child outcomes data?	HQ	Processes or efforts in place to support **high-quality** data collection (i.e., accurate and consistent, or valid and reliable) collection of child outcomes data. Examples may include one statewide data tool, training for staff, refresher trainings, e-modules, etc.	Examples of HQ include anchor tools, state-approved tools, COSF, one statewide tool, one statewide approach. Separate types of training to differentiate between initial and refresher for example HQ focuses more on "people" rather than data system-specific elements or components to ensure HQ. May include uniform data system, but then do not double code in DT.
What do you consider to be the major barriers in collecting these data?	HQ-B	Stated barriers related to HQ. Barriers may be defined as factors, events, or processes that challenge, interrupt, or impede collection efforts.	Note initial barriers, even if in the past.
How is your state addressing these barriers?	HQ-B-A	Ways in which state is addressing barriers stated in HQ-B.	If initial barriers noted in HQ-B, code how they were addressed. Code plans to address barriers in the near future Do not code "wishes", "desires", "preferences". Code supervisor and

			teacher access to data, unless in response to barrier, then HQBTA/DTBA.
How are child outcomes data transmitted from local programs and practitioners to the state?	DT	The way in which data is transmitted from local programs to the state. Methods may include electronic data system, excel spreadsheet, hand-keying the data, giving data to data entry individual, compiling it in a summary form such as COSF first then providing it to an individual or data site.	Code web-based data system as separate DT. Code how data is entered. For example, may be a local decision. Or may be a uniform statewide process.
What do you consider to be the major barriers in transmitting these data from local programs to the state?	DT-B	Identified barriers in transmitting data to the state via DT process. Barriers may be defined as factors, events, or processes that challenge, interrupt, or impede transmission efforts.	Code each input-specific barriers. Do not lump together as "data entry errors".
How is your state addressing data transmission barriers?	DT-B-A	Ways in which state is addressing barriers stated in DT-B.	
Do you have any overarching concerns about the coordination and collection of child outcomes data within your state or across the nation?	CO-C	Stated concerns on both a statewide and national level.	Concerns defined as "a matter of interest or of importance to someone". Could indicate worries, desire for additional information, or praise.
What do feel is unique about your system's collection of high-quality data collection? And helpful?	CO-U	Factors, processes, efforts to support child outcome data collection that are respondent identifies as unique to the state, even if they say it may not be unique to all states.	If respondent says "not unique", do not code. If respondent says not sure if unique, code.

APPENDIX P

Program Identified Barriers, Strategies Used to Address Barriers, and Orientation of Strategies

Barrier Type	Specific Stated Barrier	Strategies to Address Barrier	Orientation of Strategies
Approach	*Functional Outcomes Approach*	Worked with contractors on how to look at OSEP categories.	CC
Approach	*IEP Teams Choose Rating Systems*	Designed COSF-similar scale.	MA
Approach	*Practitioner Functional Outcomes Approach*	Training re: buy-in and exposing people to the data.	T
Approach	*PTs and SLPs Disability-Specific Approach*	Use holistic vs. disability-specific approach to review baseline data.	MA, DR
Approach	*Special Education "Lone Ranger" Approach*	Encourage team participation.	CC
Attitude	*SLP Resistance*	• Providing feedback to SLPs via online discussion forums. • Working with districts to support SLPs	T, CC CC
Attitude	*Part C Functional Outcome Approach Resistance*	Working with ECO Center to determine how to measure.	CC
Attitude	*Practitioner Attitude toward AEPS*	Response -"There is no perfect tool."	CC
Attitude	*Practitioner Attitude toward Statewide Requirement*	Face-to-face conversations.	CC
Attitude	*Practitioner Resistance*	Response - "It's what we've been given and we're going to make the best of it."	CC
Attitude	*Region Resistance to Data Entry*	Trainings at state emphasize importance of data entry. Regions review data for child progress and find it beneficial.	T DR

Attitude	*Resistance*	Brought back ECO researchers to look at data to revise the process, to get more buy-in.	CC, DR
Cross-Program	*Children Enrolled Cross-Program*	Working to build collaboration among programs to encourage special educator and regular educator collaboration on observations and ratings, even though they will both report somewhere different. Collaboration enhances picture of child.	CC
Data	*Data Clarity to Families, Policy Makers*	Looking at data elements to paint a better picture of children.	DR
Data	*Data Errors*	- Formulas in spreadsheet usually allow for local clean up of data. - More training re: looking at data for progress and using data to improve program instruction.	R T, DR
Data	*Data Errors*	Yearly videoconference training re: data and reporting, common errors.	T, DR
Data	*Data Errors*	Follow-up with district re: errors annually.	CC
Data	*Gaps in Data*	- Worked with districts over last year. - Making individual TA consultant available to districts having difficulty. - Did some compliance and enforcement to reinforce missing data, as it could be a factor in IDEA determination. Then tried to provide support to help problem-solve and implement plans.	CC TA GPP, DR, TA
Data	*High E Percentages*	Will start reporting data at local levels so local programs can see where they are. Plans to use data as an opportunity for improvement.	DR, P
Data	*High Entry Ratings For Children*	Asking school to go back and determine if child is eligible for services.	CC
Data	*Impossibles Data*	Data verification reports look at difference between scored entries and scores at exit, shows outliers. Then follow-up with providers.	DR, CC

		• Adding ECO quality checks and posting to data verification page. Providers to look at own data and contact office if they know why they may have outliers.	SE, DR, P, CC
Data	*Impossibles Data*	Real-time data system prevents impossibles.	S
Data	*Invalid Combination Data*	Level 2 training planned - share data, opportunity for quality discussion.	T, DR, CC
Data	*Large Numbers in E category*	Working with publishers to fine-tune crosswalks, reset cut scores.	CC, S, SE
Data	*Missing Data*	Data manager clarifies activities re: data via phone and email. Includes how to complete outcome information, use the data system, and change ratings. Explains "sources of information" and foundational skills.	CC, TA
Data	*Manual Data Entry*	Enhancing online data system to include electronic reporting as child rating collecting. Will also allow for monthly/quarterly review of data.	S, DR, CC, TA
Data	*Missing Data*	Follow-up with district to determine needs and TA.	CC, TA
Data	*Missing Data*	• If one item is missing, the entire protocol off. Conducting special study on missing data, how to interpret it.	DR
		• Guiding reflective data analysis. Working with teachers individually, then posting it online for other programs to read.	DR, CC
		• Talk to local special ed directors	CC
Data	*Missing Data*	Take reports back to staff and follow-up.	CC, TA
Data	*Missing Data on Mobile Families*	Showed who the data is counting and who it is not.	CC, DR
Data	*Missing Entry Data*	Lot of effort to ensure data collected on kids meeting selection requirements for C and B to identify them later.	DR
Data	*Practitioner Missing Data*	Follow-up calls.	CC

Data	*Target Setting Using Limited Data*	Work with staff person at IHE to evaluate data.	CC, DR
Data Collection	*Practitioner Data Collection*	Real-time data system requires input of accurate score.	SE
Data Collection	*Practitioner Data Collection*	State requires programs enter data more frequently in the past - quarterly	GPP, P
Data Collection	*Practitioner Ongoing Collection*	Working with IHEs to improve in-service training re: observation/ongoing data collection.	CC, T
Data Collection	*Practitioner Measurement Priorities*	Training – "Here's what the focus of your work is under IDEA." "Here's how you interface with the requirements of public insurance or private insurance or anything else." For SLPs – "Here's what you have to do under IDEA." "Here's what the requirements are."	T, GPP
Data Collection	*Teacher Lack of Data Collection*	Personnel issue v. data issue, so regional folks work with school principals to address teacher collection.	CC
Data Quality	*Confounded Data with Children with Mild Speech Delays*	• Discussion about giving general education responsibility of children with very mild speech delays. • Plans to pull out children with mild speech delays from data to see what data looks like on state level. Plans to share info in upcoming APR	CC DR
Data Quality	*Data Quality*	Creating a partnership between state and local programs. Plans to work with local programs to analyze data.	CC, DR
Data Quality	*Data Quality*	Education re: uses of data.	T
Data Quality	*Data Quality*	• Establishing reliability training with assessment formats around entry and exit. • Plans to first develop team process model through focus groups with districts, then roll it out statewide. • Looking at measures beyond statewide tool to supplement current collection. • Full-day training in authentic assessment	T, P BLC IA T

		• Full-day training on statewide tool for assessment and to guide instruction.	T, IA
		• Plans for level 2 trainings which will provide an in-depth understanding of how to use statewide tool to guide instruction.	T, IA
		• Planning a more intensive up-front training where teachers will be required to establish reliability on data measures.	T, DR
		• Looking at doing a random sample of students to look at multiple measures of students to see what kind of reliability we're having with other measures.	IA, DR
Data Quality	*Data Quality*	• Reviewing distribution of entry/exit data.	DR
		• Redoing training to focus on what entry data should look like.	T, DR
		• Created case record of a child for small group training sessions/workgroups.	R, T
		• Getting back to programs to teach them how to use their data.	CC, TA
		• Adding edit checks.	SE
Data Quality	*Data Quality*	• Training.	T
		• Data manager conducts annual training re: data requirements.	T, GPP
		• Encourage local levels to take ownership for monitoring and TA, to create a system where someone oversees data entry person's role.	BLC, TA
		• Running monthly errors reports to review for logical errors (e.g. birth date after evaluation). Reports are periodically sent to programs for clean-up.	DR, CC
		• Highlight programs doing a good job.	CC
Data Quality	*Data Quality – Data From*	Increasing staff development.	T

	Measurable Source versus Fabricated		
Data Quality	*Data Quality, Gaps in Data, Data Collection*	Ongoing data monitoring and review to ensure consistency.	DR
Data Quality	*Data Quality with COSF and Multiple Tools*	Conducting review of assessment tools to determine if state-approved.	IA
Data Quality	*Reflective Data*	- Developed working sessions for locals to analyze the data. Developed guidelines for what they would not want to do and began looking at individual child data at entry and exit and its meaning. - Limited individual TA.	T, DR, GPP TA
Data Use	*Data Usefulness to Practitioner*	Developed a one page explanation specifically for families that outlines the outcomes requirement and what it means for children.	R
Data Use	*Making Sense of Data*	Created an Excel pivot table training to help disaggregate the data and use it for program improvement purposes.	T, DR
Data Use	*Practitioner Attempts to Calculate Summary Statements*	Adding calculators to database to allow staff to calculate/understand summary statements.	SE, DR
Fidelity	*Practitioner Scoring Errors*	Backed off item-level data requirements. Now working to create guide for minimum requirements.	R
Fidelity	*COSF Fidelity*	Planning for COSF and Decision Tree training.	T, MA
Fidelity	*District Assessment Fidelity*	Preschool committee met, reviewed assessments, and selected AEPS. Training on AEPS provided to districts.	CC, IA, GPP, T
Fidelity	*Practitioner and System Scoring Reliability*	Routine training.	T
Fidelity	*Practitioner Assessment Fidelity*	Planned trainings around authentic assessment and how to complete a quality assessment.	T
Fidelity	*Practitioner Rating Fidelity*	Ongoing professional development.	T
Fidelity	*Practitioner Scoring*	Would like to see/use interrater reliability information from	R, DR

	Reliability	ECO Center.	
Fidelity	Rating Process	Divided training into small groups. Groups conduct ratings on same make-believe child, review interrater reliability. Groups then rate 2/3 kids they are very familiar with.	T, DR
Fidelity	System Fidelity and Process Fidelity	Online training tied to CSPD requirements for all service coordinators and services providers serving on children's IFSP teams.	T
Financial	Training Cost	Planning to use ARRA funds to develop a training module for child outcomes. Plans to use module around the state, to figure out "does it work?" Goal is to have a module with CD.	R
Instrumentation	Appropriate Instruments for 0-3	Working toward better instruments that capture 0-3 functioning.	IA
Instrumentation	Selection of Assessment Instrument	Freed up 619 discretionary dollars. Gave local programs a "boost" to purchase assessment tools or secure training on tools.	R, IA, T
Instrumentation	Variation in Assessment Instruments and Results	• Required the DAYC on children with developmental delays. • Identified the need to identify three types of information sources that every rating needs: assessment results, professional observation, and parent input.	GPP GPP, MA, IA
Knowledge	Assessment Knowledge	• Train-the-trainer individual responsible. • Considering different module around the collection of data and environmental design.	T, BLC R
Knowledge	Child Development Knowledge	Incorporated child development into trainings.	T
Knowledge	New Staff Knowledge	• Individual programs have in place plans to help new staff learn the process. Includes individual training. • Programs given resources from other states in the country, typically online self-study materials.	T R

		• Updates conducted around the state.	CC
Knowledge	*Practitioner Assessment Knowledge*	Additional trainings.	T
Knowledge	*Practitioner Child Development Knowledge*	• Some supported training about typical child development available. Encouraging practitioners to attend, providing scholarships if needed. • Making training available in a "traveling show" to each program.	T T
Knowledge	*Practitioner Child Development Knowledge*	Routine training.	T
Knowledge	*Practitioner Knowledge of Outcome Measurement*	Defining parameters for expectations, for measurement.	MA, GPP
Knowledge	*Preservice Training in Child Development*	Working with higher education to enhance observation and assessment training, how to use the online system.	CC, T, S
Knowledge	*Special Education Teachers' Child Development Knowledge*	Regional coordinators address support.	TA
Other	*Local Challenges*	Listen to local concerns to better tailor training.	CC, T
Other	*OSEP Timeline*	• Built system in 4 months. • System includes features to guide data entry process. • Partnership with IHE technology center • Data in system may be viewed by the state at any time. • Collaboration with general education. • Phase-in implementation.	S SE, P CC A CC GPP, MA
Subjectivity	*COSF Subjectivity*	Quarterly meetings with regional supervisory staff: 1) provide "pep talks" about importance of doing this correctly, 2) review policy, 3) share data publicly to determine if numbers in categories make sense.	CC, P, GPP, DR
Subjectivity	*COSF Subjectivity*	Training efforts address: 1) ECO tools being used, 2) quality	T, IA, R, DR, MA

		assurances forms and activities, 3) interrater reliability, 4) COSF quality checks, 5) using data for program improvement.	
Subjectivity	*Practitioner Child Development Subjectivity*	Resources on typical child development.	R
Subjectivity	*Practitioner Mindset Toward Functional Outcomes*	Showing districts that data is not just numbers, can help improve services.	DR
Subjectivity	*Practitioner Rating Subjectivity in Integrated Settings*	Analyzing data to determine if different by disability and environmental categories.	DR
Subjectivity	*Practitioner Subjectivity*	Asking programs to ground scoring in assessment tools and to use ECO Center-developed crosswalks.	IA, R
Support	*Ongoing Training*	- Trying to find the right interval to keep people get trained. Provide yearly staff training. Recommended that new providers recommended complete online training and seek mentorship at own agency. - Local follow-up to make sure training is working and that people are getting mentoring.	T, GPP
Support	*Practitioner Data Quality Support*	Reviewing crosswalks for state-approved tool.	TA
Support	*Updating Trainers*	Statewide administrative briefings held yearly for local preschool coordinators.	CC
System	*Child Mobility in Publisher Online Tool*	Plans to implement trainings focused on data collection and data entry.	T, P
System	*Conversions in Publisher Online Tool*	Plans to coordinate training on how to 1) use data to inform your practice, 2) look at the individual child, 3) "tweak" the curriculum and special services. 4) determine what is going on in classes, 5) determine what is going on in districts, and 6) communicate data to community.	T, DR, CC
System	*Not Real Time*	Real-time system plans.	S

System	*Practitioners Accessing Different System to Submit Child Outcomes Data*	Ongoing discussions with Part C data manager and data system programmer.	CC
System	*Subcontractor - System Access, Data Input, Fidelity*	Train-the-trainer accuracy measures include 1) feedback and assistance to people in calculating chronological age.	BLC, T, TA
System	*System Development and Coordination*	Training to address operational efforts.	T
System	*System Software*	Webinar demonstrates data entry.	R, P
Transmission	*Accurate Data Transmission between Clinician and Data Person*	Training.	T
Transmission	*Data Transmission onto Form, into System*	Moved to local control - administrators responsible for disapproving/approving the form, monitoring transmission.	BLC
Transmission	*Hand-keyed Data Transmission Into System*	Purchased web-based data manager.	S
Transmission	*Multiple Transmission Steps Prior to System Entry*	Moving to a web-based data system where every provider will enter data entry rather (vs. hard copy format where one person entered all data).	S, P
Transmission	*Paper and Pencil Data Transmission*	Staff training.	T
Transmission	*Translating Multiple COSFs Into One Summary COSF*	IHE-conducted data quality checks for missing info (e.g., outliers).	DR
Transmission - Data Input	*LEA Data Input*	Follow-up.	CC
Transmission – Data Input	*Practitioner Data Entry*	Constant reviews of system to make sure people complete steps (fidelity)	DR, S
Transmission - Data Input	*Practitioner Data Entry*	Train-the-trainer accuracy measures: 1) Ensure field scores align with data in data manager. 2) Feedback to individual as needed.	T, BLC, DR, TA
Transmission -	*Practitioner Data Input*	Eliminating transmission step. Teachers will report online	P

Data Input		directly. Data will then be uploaded to state.	
Transmission - Data Input	*Practitioner Delayed Data*	• Data verification of participation to ensure children who are in system also have child outcomes ratings. • Data verification reports posted on state website highlight who has entered and has not entered data. Motivates locals to enter data. • Follow-up phone calls.	DR, SP, P DR, CC, S, P CC
Transmission Data Input	*Practitioner Delayed Data Input*	Discouraging delayed input.	CC
Turnover	*Practitioner Turnover*	Ongoing training to update practitioners.	T, C
Turnover	*Practitioner Turnover*	• Online access to training and resources (vs. reliance on face-to-face trainings). • Making changes to provider contracts to ensure responsibility is made clear	T, R GPP
Turnover	*Practitioner Turnover*	Planning new rounds of statewide professional development on most widely used assessments.	T, IA

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