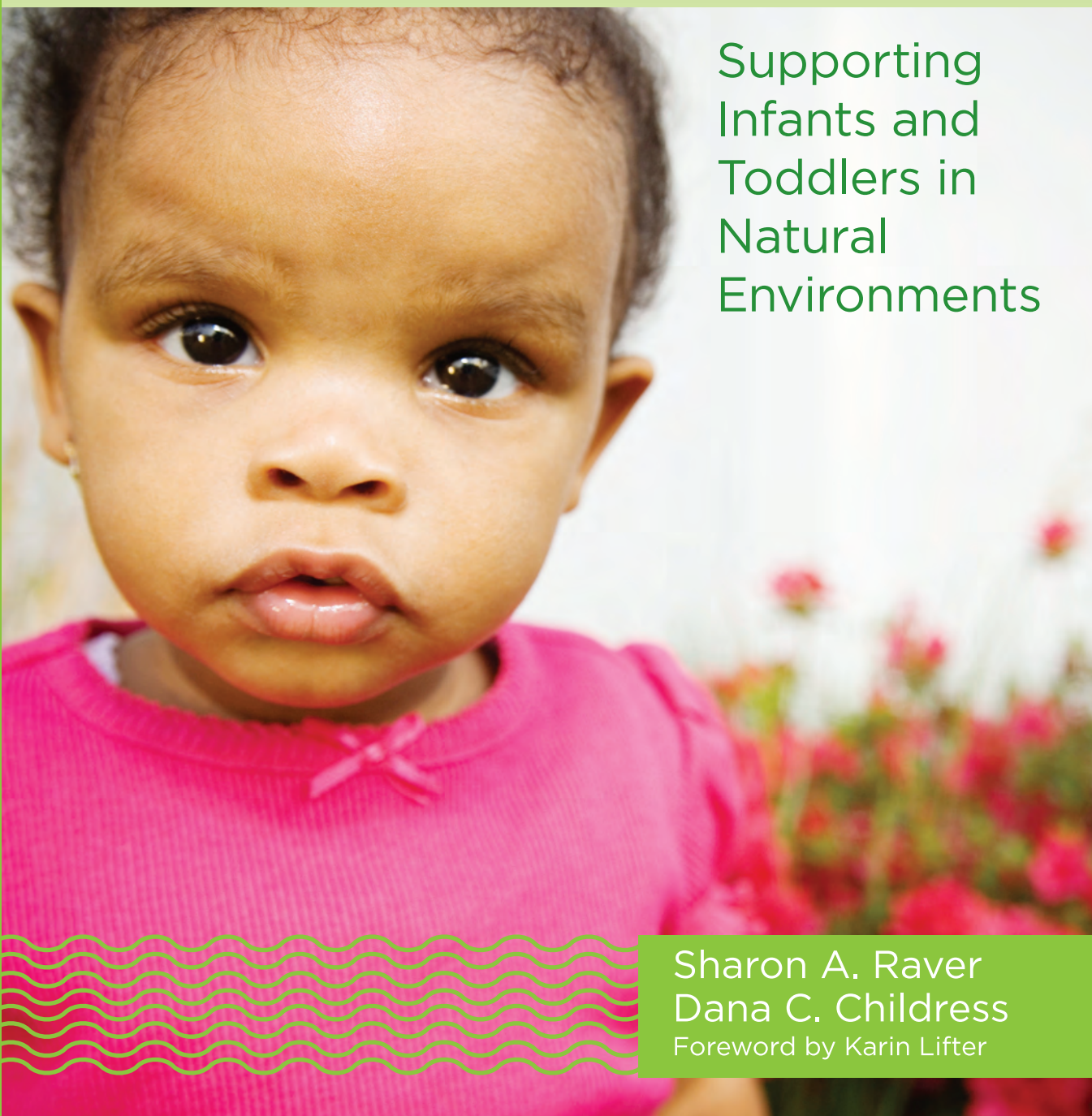
# Family-Centered Early Intervention

## Supporting Infants and Toddlers in Natural Environments



Sharon A. Raver
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Foreword by Karin Lifter

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## *Supporting Infants and Toddlers in Natural Environments*

by

**Sharon A. Raver, Ph.D.**

and

**Dana C. Childress, M.Ed.**

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# Contents

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**Dana C. Childress, M.Ed.,** has worked in the field of early intervention for almost 20 years as an early childhood special educator, service coordinator, supervisor, professional development consultant, and writer. As an early intervention professional development consultant with the Partnership for People with Disabilities at Virginia Commonwealth University, she works as part of Virginia's early intervention professional development team. Ms. Childress develops resources, conducts web-based and in-person training, and manages the content for the Virginia Early Intervention Professional Development Center's web site (http://www.veipd.org/main). She also writes and manages the Early Intervention Strategies for Success blog (http://www.veipd.org/earlyintervention). Ms. Childress's interests include family-centered practices, autism spectrum disorder, supporting family implementation of intervention strategies, and finding ways to bridge the research-to-practice gap through interactive professional development for in-service early intervention practitioners. She regularly presents workshops in Virginia and has presented at state, national, and international conferences. She currently lives in Chesapeake, Virginia, with her family.

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# Foreword

*Family-Centered Early Intervention: Supporting Infants and Toddlers in Natural Environments* provides an important contribution to serving vulnerable young children—infants and toddlers with, or at risk for, delays and disabilities—and their families. It is written for service providers, teachers, administrators, and families, and it is especially useful for these stakeholders. It also serves as an excellent text for university faculty in personnel preparation—those who prepare students to be service providers.

This volume goes a long way to describe and explain, quite clearly, the early intervention system and the children and families served within it. It invites stakeholders into the world of early intervention in a way that is both accessible and meaningful. The book is organized into four sections, beginning with the system of early intervention; then detailing the services and participants; and ending with child development, including milestones and various threats to development. This organization introduces the reader to the beliefs and values embodied in the system of early intervention and the ways those beliefs and values are translated to practice (e.g., creation of the individualized family service plan, or IFSP). Theories and research that underlie development, as well as various methods of assessment and intervention, are emphasized in the chapters on typical and atypical child development.

More specifically, the first section introduces the overarching system of early intervention—the laws, policies, and practices in which early intervention services have been conceptualized and are being administered. It begins with a chapter on the foundations of early intervention, followed by a chapter on collaboration and teamwork with families and professionals. Raver and Childress provide a comprehensive and straightforward introduction to early intervention: where these services came from, what they are, why they are important, and who provides them. Each chapter begins with a case study of an infant or toddler served through early intervention. These cases are extended as new concepts are presented, which serves to deepen readers' understanding.

The second section focuses on supporting families in natural environments. The two chapters are especially useful for families and service providers because they describe the details of the IFSP (Chapter 3 by Hill & Childress) and how the goals of the IFSP are implemented in everyday routines, activities, and settings (Chapter 4 by Childress).

The three chapters in the third section, which are focused on the developing child, are explicitly organized around the three broad child outcomes specified by the Office of Special Education Programs (OSEP) of the U.S. Department of Education. The three child outcomes are children have positive social relationships (Chapter 5 by Richels & Raver), children acquire and use knowledge and skills (Chapter 6 by Bruder, Baril, & George-Puskar), and children take appropriate action to meet their needs (Chapter 7 by Long). Chapters 5–7 describe the developmental domains specified in federal law. They include typical development, the effects of experience on these domains, and relationships among the domains. Also included are assessment and intervention methods to use when development is threatened or delayed and clarification of the role of the service provider in natural environments. The chapters are supported by the theories and research that frame descriptions and explanations of child development.

The final section presents specific intervention strategies for facilitating development and learning in children with particular delays and disabilities, such as autism spectrum disorder (Chapter 8 by Childress, Meyer, & Meadan); sensory disabilities, such as visual impairments and hearing loss (Chapter 9 by Anthony, Wiggin, Yoshinaga-Itano, & Raver); and intellectual and motor disabilities, such as Down syndrome, cerebral palsy, and spina bifida (Chapter 10 by Bobzien, Childress, & Raver). These chapters provide very useful information on the impact of these disabilities on various developmental domains and what service providers, teachers, administrators, family members, and even researchers can do to promote development and learning.

As the field moves forward, stakeholders need to consider how the components of the early intervention system fit together and, in particular, how their beliefs and values intersect with theory and research. The larger culture's beliefs and values created the system of early intervention services, and the importance of promoting the development of children with delays and their families cannot be denied. Nevertheless, early intervention services must be evidence based and derived from evidence-based assessment activities that have been linked to intervention goals. These intervention activities, in turn, must be linked to the IFSP outcomes. Ensuring the connections among assessment, intervention, and outcomes is a tall order for administrators and practitioners. Researchers must be stakeholders in this process. An ongoing collaborative effort among research, policy, and practice would contribute to the productive linkage among components. This volume contributes substantially to the understandings that stakeholders need about the divergent perspectives and histories of each other, which affords increased opportunities for collaboration.

Theory and research heavily influence knowledge about child development. In describing the IFSP process in Chapter 3, Hill and Childress note that outcomes, among other things, should be "strengths-based," encouraging families and service providers to "start with skills the child already has and build toward the next developmental steps" (p. 65). This description of a strengths-based approach is very important in that it incorporates the child development perspective. Bruder, Baril, and George-Puskar (Chapter 6) invoke Piagetian theory to explain development, which conceptualizes children as active participants in their learning. This perspective, along with Vygotsky's zone of proximal development, is fundamental to understanding development. Early intervention assessments accordingly must capture the developmental steps in various developmental domains; in turn, the assessment activities must take into account where the child is along these continua of developmental steps to tap into the zone of active engagement. Intervention activities are enhanced when goals are finely tuned to the child's level of active engagement and interest.

Early intervention activities are largely based on behavioral theories—to manage the environment to promote development and learning in children who are developing more slowly than their peers. The linked components of assessment, intervention, and outcomes must be embedded into our knowledge of theory and research on the developing child and also in the context of the family. Raver and Childress contribute substantially to that effort in *Family-Centered Early Intervention*.

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# Preface

*Family-Centered Early Intervention: Supporting Infants and Toddlers in Natural Environments* covers knowledge and skill competencies service providers need to promote optimal development in children with and at risk for developmental delays and disabilities from birth through age 3. This introductory methods book uses the application of evidence-based strategies, family-centered approaches such as coaching and teaming, and services provided in an array of natural environments as thematic threads. Each chapter uses a case study to bring to life disability definitions and characteristics, informal and formal assessment practices, and practical strategies for supporting families as they foster the development and learning of their children. The book is unique in that it is organized around the three Office of Special Education Programs (OSEP) child outcomes or indicators that early intervention programs must address when assessing the impact of their program. This book is designed to meet the unique professional development needs of in-service and preservice early intervention providers across disciplinary and agency boundaries. It provides information and intervention strategies needed to ensure well-prepared, effective practitioners in the field of early intervention.

This book embeds techniques from early childhood special education, speech-language pathology, occupational and physical therapy, and vision and hearing education so that service providers can develop and implement integrated, comprehensive, and meaningful services for very young children and their families. Competencies identified by the Council for Exceptional Children (2014); Division for Early Childhood (2014); and Sandall, Hemmeter, Smith, and McLean (2005) are systematically incorporated throughout the book.

There are four major sections to this book. Section I examines the legal, philosophical, and instructional foundations of serving infants and toddlers with and at risk for special needs in early intervention programs. It discusses the historical perspective supporting early services, working in teams with professionals from diverse disciplines, supporting families, assessing young children, and utilizing evidence-based practices and strategies in a variety of settings. Section II discusses the rationale and development of the individualized family service plan and how to provide services within families' everyday routines. Section III describes practical techniques for maximizing communicative, cognitive, fine and gross motor, adaptive, and social-emotional development in young children using the three OSEP major child outcomes as a framework. Section IV emphasizes specific intervention strategies for promoting development and learning in children with specific needs, such as autism spectrum disorder, sensory disabilities, and cognitive and/or motor disabilities. It is our hope that service providers in early intervention, teachers in early childhood education, administrators, and families will find this book immediately useful.

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A thank you goes to our copyeditor, Lori Barrett, for her work on the manuscript, and to our editor, Johanna Schmitter. However, our deepest appreciation goes to the infants and toddlers, and their families, who have enriched our lives. This book is the outcome of what they continue to teach us each day.

*To Greg, my husband, and Emmy, my daughter,*
*who provide me with continual support, love, and laughs*

—SAR

*To Michael and Caden, who balance me*
*with their love, laughter, and patience*

—DCC

# I

# Foundations of Early Intervention

# 1 Early Education and Intervention for Children from Birth to Three

Sharon A. Raver and Dana C. Childress

This chapter discusses the foundations of early intervention, including the following:

- Definitio and key principles of early intervention
- Current practices in infant and toddler intervention
- History of early intervention
- Provisions of the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 (PL 108-446)
- Prevalence of children receiving early intervention
- Importance of early intervention and inclusive practices
- Best practice highlights

Welcome to the world of early childhood intervention, a field of study and practice that focuses on supporting the development of infants and toddlers, age birth to 36 months, who have developmental differences, delays, or disabilities. Support for these services is provided through partnership and collaboration with a child's caregivers and a team of professionals, all of whom are in the position to make a difference in the life of a child. As a professional in this field, you will play a significant role by working with caregivers to enhance their confidence, competence, and ability to meet the needs of their children. Whether you are training as an early childhood special educator, therapist, child care provider, or early childhood teacher, there is much you can do to help infants and toddlers grow, learn, and participate in their families' lives. In this book, you will learn about teamwork and collaboration, the individualized family service plan (IFSP) process, implementing interventions in the context of a family's everyday routines, techniques for enhancing development across key child outcomes, and strategies to support the development of very young children with a variety of specific developmental strengths and needs.

As you explore this field and acquire strategies that will help you support children and families, remember that, as a service provider, you have the special opportunity to make

a profound difference in the life of each child and family you encounter. By sharing your knowledge of development and intervention strategies and supporting the efforts of families and caregivers, you can help each family build an intervention system and attitude of advocacy that will reach far beyond the first 3 years of a child's life. Now, let us meet Makeba and her family, who provide one example of what early childhood intervention looks like.

## Case Study: Makeba

Makeba is 30 months old and lives with her family in a small apartment near the city park. Makeba's father recently lost his job, and her mother works the evening shift at the local grocery store. Makeba spends her mornings at a local preschool program and her afternoons with her parents and older brother, who is 4 years old. Her mother, Imani, has noticed that Makeba is not talking like Makeba's brother did when he was the same age. Makeba is only saying five words but seems to understand most of what she hears. She is starting to have tantrums by screaming, crying, falling on the floor, and kicking her legs when her parents have difficulty understanding what she tries to say. Imani shared her concerns about Makeba's communication and behavior with the family's pediatrician, who suggested a referral to the local early childhood intervention program.

Soon after the referral was made, Makeba's family met with a service coordinator, who shared information about the early intervention program. The service coordinator gathered information about Makeba's development and discussed a convenient time for a developmental evaluation. Based on information gathered during the evaluation, Makeba was found to be eligible for early intervention services due to developmental delays in her expressive communication and social-emotional development. Child and family assessments were also conducted, during which Makeba's parents expressed their desire for Makeba to learn to talk so that she is less frustrated. They expressed an additional concern about being able to continue to pay for Makeba's preschool while her father searched for a new job. They asked if the service coordinator knew of community resources that could help them pay for preschool so that Makeba could continue to attend. An IFSP was developed, which focused on Makeba's family's priorities. The IFSP team, which included the family, decided that Makeba would receive intervention once per week, provided by an early childhood special educator at the family's home and at Makeba's preschool on alternating weeks. A speech therapy consultation once per month was also added to the IFSP, as well as service coordination. Makeba's family agreed to this plan and signed the IFSP. Services began the following week.

## WHAT IS EARLY INTERVENTION?

Makeba was referred to her local early childhood intervention program (sometimes also known as an infant-toddler program) by her pediatrician due to her mother's and the doctor's observations regarding Makeba's development. Children like Makeba are referred for intervention for many different reasons and have a range of abilities and needs. Each state in the United States operates early childhood intervention programs, as do many countries across the world, such as China, Australia, Sweden, Germany, and Canada (Guralnick, 2008). States and countries establish their own eligibility criteria and operational procedures for their programs. In the United States, there is a federal law that guides how early intervention is provided. This federal law is known as the *Individuals with Disabilities Education Improvement Act of 2004,* or *IDEA* (Trohanis, 2008).

## Early Intervention Under the Individuals with Disabilities Education Improvement Act

Under Part C of IDEA, early childhood intervention is referred to as "early intervention." For consistency with the federal regulations that describe this set of services, the same term will be used throughout this book. The term *early intervention* describes the process of offering family-oriented services for children from birth to age 3 who have disabilities, have identified special needs, or are at risk for developmental delays, as well as services for their parents or caregivers and other family members. Early intervention is a specialized area of early childhood special education (ECSE) that provides services for children with special needs who are between the ages of birth to 9 years. ECSE has a theory of practice and shared values rooted in evidence-based practices (Odom & Wolery, 2003). *Evidence-based practice* refers to decisions and activities that are grounded in published empirical research that documents the relationship between practices and outcomes for children, families, professionals, and systems (Buysse, Wesley, Snyder, & Winton, 2006; Klingner, Boardman, & McMaster, 2013). Evidence-based services in early intervention are *noncategorical* in nature, meaning that services are not organized by disability (e.g., children with motor impairments) but are individualized for a child's and family's strengths and needs. The individualized nature of early intervention services is a federal requirement and underlies effective practices with children and families.

The definition of early intervention services in the federal law includes nine important features. According to *Part C of IDEA*, the phrase *early intervention services* refers to developmental services that include each of the following characteristics.

***1. Services Are Provided Under Public Supervision*** Early intervention programs for infants and toddlers with developmental delays and disabilities are federally funded, meaning that funding is granted to states that choose to operate these programs within the parameters of Part C of IDEA. Providing early intervention services is discretionary, so states can choose whether or not to accept federal funding and offer these programs. All states currently provide early intervention programs using federal funding, and some states provide additional funding at the state and local levels. When states accept Part C funds, they also accept supervision and monitoring by the *Office of Special Education Programs (OSEP)*—the federal agency that is responsible for the implementation of IDEA. If a state is found to be noncompliant with OSEP or IDEA requirements, then that state's federal funding for early intervention services could be withdrawn.

***2. Services Are Selected in Collaboration with Parents*** The determination of which early intervention services most appropriately meet a child and family's needs is a team decision that includes the family, the service coordinator, and any other service provider who is assisting the family with developing the IFSP. The inclusion of this provision in the federal law emphasizes the essential role that the family–professional collaboration plays in early intervention.

***3. Services Are Provided at No Cost, Except Where Federal or State Law Provides for a System of Payments by Families*** In some states, all early intervention services are provided at no cost to families. In other states, services such as developmental screening, assessment, and service coordination are provided at no cost, while other services, such as special instruction, physical therapy, occupational therapy, and speech-language pathology (described in Chapter 2), have costs associated with them. A family's insurance or state funding sources, such as Medicaid, may be billed, but the

family may also be responsible for paying insurance deductibles or copays. In states where services are billable, a *sliding-fee scale* must be available to families. The sliding-fee scale is used to calculate reduced costs based on factors such as a family's income and the number of people in the family. Even when services are billable, families cannot be denied services due to their inability to pay.

***4. Services Must Meet the Developmental Needs of an Infant or Toddler with a Disability and the Needs of the Family to Assist the Child's Development as Identified by the Individualized Family Service Plan Team*** Early intervention is designed to address the development of infants or toddlers who are found to be eligible for services and their families. Part C of IDEA defines an "infant or toddler with a disability" using three categories of eligibility. An infant or toddler is eligible for early intervention if he or she

> Is experiencing developmental delays, as measured by appropriate diagnostic instruments and procedures in one or more of the areas of cognitive development, physical development, communication development, social or emotional development, and adaptive development; or has a diagnosed physical or mental condition that has a high probability of resulting in developmental delay. (IDEA 2004, § 303.21[a])

States may also choose to include children who are at risk for delay in their eligibility criteria; this option is the third category of eligibility.

Depending on the state, a child may be eligible for early intervention due to a certain percentage of delay (e.g., 25% delay) or level of deviation when compared to children with typical development (e.g., one standard deviation), a diagnosed condition (e.g., Down syndrome or cerebral palsy), or atypical or at-risk development (e.g., atypical sensorimotor development or a child who has been removed from his family due to abuse). *Developmental delay* is the term used to describe a child's eligibility when that child is demonstrating a significant delay in one or more domains of development. As defined in IDEA, a *diagnosed condition* refers to a physical or mental condition that has a high probability of resulting in a developmental delay. States determine the level of delay and which diagnosed conditions qualify a child for early intervention services. If they choose to serve children with atypical development or children who are at risk, states also define these parameters.

All early intervention programs that operate under IDEA must consider a child's functioning in each of the five areas, or *domains,* of development referenced in the federal definition: physical development, cognitive development, communication development, social-emotional development, and adaptive development. The area of physical development includes gross and fine motor development. *Gross motor development* deals with large muscle planning and coordination, such as squatting and walking. *Fine motor development* addresses small muscle planning and coordination, such as picking up small objects. *Cognitive development* involves thinking, solving problems, and communicating what one knows. *Communication development* includes both a child's *expressive communication* (the ability to produce language) and *receptive communication* (the ability to understand the communication of others). Interacting with others in meaningful ways and understanding and communicating emotions appropriately are aspects of *social-emotional development*. *Adaptive development,* also known as *self-help,* involves the ability to do things for oneself, such as dressing and eating. These five domains are examined during an *evaluation* of the child's development (Greenwood, Carta, & McConnell, 2011).

A child's eligibility for early intervention services is determined by an evaluation, which is conducted by a multidisciplinary team of at least two professionals. These professionals must be qualified in their disciplines to conduct the evaluation and may include an

early childhood special educator, a physical therapist, an occupational therapist, a speech-language pathologist, and/or other appropriate professional depending on the child's needs. In addition, when appropriate, a functional child- and family-directed assessment is also conducted to determine strengths and needs in everyday life. This information becomes part of the *individualized family service plan (IFSP)* development process. Once the early intervention team confirms that the child is eligible, the IFSP is developed so that the child and family can receive services to help them work toward the *outcomes* (goals) that are outlined in the plan.

At the time of the initial evaluation and assessment, a child's development is also compared to same-age peers to determine how the child is functioning in three indicators of overall child development. These indicators have been determined by OSEP (2010) and are also referred to as *child outcomes*. This can be confusing because the OSEP child outcomes are not the same as the outcomes written in the IFSP. The child outcomes identified by OSEP refer to the functional outcomes that are expected to improve as a result of the child's participation in early intervention. The OSEP child outcomes are a global measure of a child's progress that the program reports to its funding agency, whereas the IFSP outcomes are an individualized measure that is specific to a child's strengths and needs and the family's particular priorities for that child's development.

The three OSEP child outcomes that are listed in Box 1.1 relate to a child's positive social-emotional skills, how the child gains and uses knowledge, and how the

**BOX 1.1. The three child outcomes from the Office of Special Education rograms for comparing all children's broad developmental changes over time**

1. *Positive social-emotional skills (including social relationships):* How a child relates with adults and other children; how older children follow social rules. Includes the following:

   Attachment, separation, and autonomy
   Expressing emotions and feelings
   Learning rules and expectations
   Social interactions and play
   Language and communication

2. *Acquisition and use of knowledge and skills (including early language and communication):* How a child uses thinking and reasoning, memory, problem solving, and symbols and language; how a child understands the physical and social worlds. Includes the following:

   Early concepts such as symbols, pictures, numbers, classification and spatial relationships
   Imitation
   Object permanence
   Expressive language and communication
   Early literacy

3. *Taking appropriate action to meet needs:* How a child takes care of basic needs, moves from place to place, and uses tools (e.g., fork, toothbrush, crayon); how older children contribute to their own health and safety. Includes the following:

   Using motor skills to complete tasks
   Self-help skills, such as dressing, feeding, and toileting
   Acting on the environment to get what one wants

From The Early Childhood Technical Assistance Center. (2009). *The child outcomes.* Retrieved from http://ectacenter.org/eco/assets/pdfs/Child_Outcomes_handout.pdf; adapted by permission.

child uses his or her abilities to get needs met. These outcomes are the same for all children and are used by OSEP as a broad measure of child progress across early intervention systems (Early Childhood Outcomes Center, 2005), offering a snapshot of the whole child and how the child is currently functioning in many settings and within real situations. They are considered to be *functional outcomes* because they refer to things that are meaningful to the child during his or her everyday living rather than isolated assessment skills, such as stacking three blocks when asked. These outcomes describe integrated behaviors or skills that allow the child to achieve important daily goals (Early Childhood Outcomes Center, 2005). Functionality means that the child is able to perform a series of integrated behaviors that include multiple domains. For example, it is clear from Box 1.1 that each of the OSEP outcomes involves language and communication.

States are required to report to OSEP the percentage of children who make improvements in each of these three outcomes as a result of their early intervention experience. The data are collected when children enter and exit the Part C system and are used by OSEP to determine the efficacy of early intervention across the United States. They are also measured when children enter and exit *early childhood special education* (ECSE; preschool) services, which are provided under Part B of IDEA.

The three OSEP outcomes are considered to be a more holistic way to view development, reflecting its interrelated nature in the blending of domains into three functional, overarching outcomes of typical development. Because of this, the OSEP child outcomes are also used as a framework for developing the IFSP and providing intervention to children and families. Much work is being done in the field to integrate this framework into actual intervention practices. This book is organized around the skills and strategies necessary to implement this framework. In particular, Chapters 5, 6, and 7 address multiple ways to support this new vision of promoting positive development in young children.

***5. Services Must Meet the Standards of the State in Which They Are Provided*** States that receive federal funding must follow the guidelines established at the federal level. Among these guidelines is the requirement that states set standards for how early intervention programs are implemented. These state-level policies and procedures describe how each state interprets federal guidance on the operation of programs. State-specific procedures may include state- and program-level infrastructure, eligibility criteria, service billing systems, monitoring and compliance procedures, and requirements and standards for service providers.

***6. Service Options Must Include Those Services that Are Identified in the Law*** A variety of services are available to eligible infants and toddlers and their families. Service type, length, frequency, location, and methods are determined by the IFSP team, with significant input from the family. Services are individualized based on the child's needs, family's priorities, and the outcomes written in the IFSP. The only service that all families in early intervention receive is *service coordination*. Possible services offered in early intervention are listed in Box 1.2.

**BOX 1.2. Early intervention services available to families under Part C of the Individuals with Disabilities Education Improvement Act of 2004**

- Family training, counseling, and home visits
- Special instruction
- Speech-language pathology and audiology services, and sign language and cued language services
- Occupational therapy
- Physical therapy
- Psychological services
- Service coordination services
- Medical services, only for diagnostic or evaluation purposes
- Early identification screening, and assessment services
- Health services
- Social work services
- Vision services
- Assistive technology devices and assistive technology services
- Transportation and related costs

*Source:* Individuals with Disabilities Education Improvement Act (2004).

***7. Services Must Be Provided by Qualified Personnel*** Each state determines the qualification standards of service providers who work within its early intervention system. These standards include minimum education, licensing, and competency requirements. Professional requirements vary greatly across states and may include requirements for state-level certification and ongoing professional development. Box 1.3 lists some of the professionals who may provide services and supports.

**BOX 1.3. Qualified early intervention personnel who provide services to children and their families under Part C of the Individuals with Disabilities Education Improvement Act of 2004**

- Special educators
- Speech-language pathologists and audiologists
- Occupational therapists
- Physical therapists
- Psychologists
- Social workers
- Nurses
- Registered dietitians
- Family therapists
- Vision specialists, including ophthalmologists and optometrists
- Orientation and mobility specialists
- Pediatricians and other physicians

*Source:* Individuals with Disabilities Education Improvement Act (2004).

***8. To the Maximum Extent Appropriate, Services Must Be Provided in Natural Environments*** The *natural environment* refers to settings that are important to a specific child and family, as well as places and activities that the child and family would engage in if the child did not have a delay or disability. Early intervention services are provided in natural settings where children and families spend time, such as the home, child care center, local park, library, or the grocery store. These services are provided during *intervention visits* when the caregiver and service provider work together to enhance the child's development in the location where support is needed. This provision of the law has an inclusive component that describes how services are provided, emphasizing the importance of helping caregivers embed intervention into routines and activities that are familiar and natural for the child and family (Dunst, Hamby, Trivette, Raab, & Bruder, 2000). It also emphasizes the importance of encouraging the delivery of services in community placements where children and families without special needs participate. Specific ways to conduct intervention visits in natural environments are explored further in Chapter 4.

The majority of infants and toddlers with disabilities (80.6%) receive early intervention services in their homes, with their parents and families present (OSEP, 2010). Services are provided by early intervention professionals, therapists, and/or health care providers. Many service providers believe that this is the most effective model for delivering services because infants or toddlers are in a familiar, stress-free environment (Torrey, Leginus, & Cecere, 2011). Although this approach is the most common, there has been a shift toward a more community- and resource-based model. According to OSEP (2010), approximately 7.6% of infants and toddlers receive early intervention services in an established child care setting and approximately 5.6% receive center-based services. A *resource-based model* is built on the notion of providing intervention services in parks, libraries, child care centers, and/or community centers physically located in the family's community (Mott & Dunst, 2006). Families then have the opportunity to take their child to new environments to play and explore, and they may feel more comfortable taking their child into the community. In addition, parents may have the opportunity to see their child react and play differently in the presence of other children (Torrey et al., 2011). Similarly, some early intervention programs offer additional *center-based* or clinic-based services; families must bring their children to a center or clinic to take advantage of these services. Center-based services might include *intakes,* initial meetings with families, parent support groups and classes, and child playgroups.

***9. Services Are Provided in Conformity with the Family's Individualized Family Service Plan*** The IFSP is a written document that serves as a foundation for the early intervention process. The IFSP includes information about the child's development based on a team evaluation and assessment; the family's priorities, concerns, and resources related to the child's development; the outcomes to be expected from the child's and family's participation in intervention; the supports and services the child and/or family will receive; and the transition plan for when the child exits the system. The IFSP is discussed in detail in Chapter 3.

The federal guidelines outlined in Part C of IDEA were established by the U.S. Congress due to what is described in the law as an "urgent and substantial need" to support the development of infants and toddlers with disabilities, reduce long-term educational costs, maximize the independence of individuals with disabilities, enhance the capacity of families to meet the needs of their children, and enhance the capacity of states and local

agencies to "identify, evaluate, and meet the needs of all children" (IDEA 2004, § 631). Congress recognized the importance of the first 3 years of life on a child's brain development. It also recognized the importance of supporting caregivers so they are able to meet their own needs, including those of their children. With the guidance in Part C and the financial assistance provided to implement it, a wide network of early intervention services and supports are now available to children and families who choose to participate.

## KEY PRINCIPLES OF EARLY INTERVENTION

According to the Workgroup on Principles and Practices in Natural Environments (2008a), the mission of early intervention is to build on and support the efforts of families and caregivers as they enhance the development of their children. The context for early intervention is the activities of everyday life, recognizing that all children learn best during interactions and experiences with the important people in their lives. As is seen with Makeba, infants and toddlers spend most of their time with their families, who naturally engage in activities that affect development. Early intervention is a supplement to these family activities and interactions, and it is most effective when provided within the family context.

The Workgroup (2008b) described seven key principles that guide the provision of early intervention. These principles focus on the importance of a flexible, family-centered, individualized, and evidence-based early intervention process that supports the capacity of families and caregivers to meet the needs of their children. Service providers are described as supports to *families and children,* rather than as the primary agents of change in the child's development. Each of these principles represents a foundational professional belief and standard that drives all interactions and assistance provided to very young children and their families (Pletcher & Younggren, 2013). Table 1.1 describes how these principles should be implemented with children and families.

### Key Principle 1: Infants and Toddlers Learn Best Through Everyday Experiences and Interactions with Familiar People in Familiar Contexts

All children, including infants and toddlers with developmental delays and disabilities, learn within the context of the interactions and activities that occur during their daily lives. Early intervention services can help families and caregivers learn additional strategies to use in their daily routines to support a child's development. This focus on learning in the context of natural daily routines with familiar people also reflects the importance of facilitating learning between visits, when the service provider is not with the family to provide support. Because most learning happens when the service provider is not with the family, intervention must focus on helping family members make the most out of these everyday experiences and interactions using the materials and activities that are natural to their family patterns and traditions. In practice, this principle is implemented when service providers respect the importance of unique family interactions, problem-solve with families, and help family members practice strategies during visits so that they are prepared for how to interact with the child between visits.

### Key Principle 2: All Families, with the Necessary Supports and Resources, Can Enhance Their Children's Learning and Development

This principle reflects the family-centered, strengths-based foundation of early intervention. Every family has strengths, and every family has the capacity to have a positive impact

**Table 1.1.** Examples of how to implement the seven key principles of early intervention

| The principle DOES look like this | The principle DOES NOT look like this |
|---|---|
| **1. Infants and toddlers learn best through everyday experiences and interactions with familiar people in familiar contexts.** | |
| Using toys and materials found in the home or community setting | Using toys, materials, and other equipment the professional brings to the visit |
| Helping the family understand how its toys and materials can be used or adapted | Implying that the professional's toys, materials, or equipment are the "magic" necessary for the child's progress |
| Identifying activities the child and family like to do, which build on their strengths and interests | Designing activities for a child that focus on skill impairments or are not functional or enjoyable |
| Helping caregivers engage the child in enjoyable learning opportunities that allow for frequent practice and mastery of emerging skills in natural settings | Teaching specific skills in a specific order in specific way through "massed trials and repetition" in a contrived setting |
| Focusing intervention on caregivers' ability to promote the child's participation in naturally occurring, developmentally appropriate activities with peers and family members | Conducting sessions or activities that isolate the child from his or her peers, family members, or naturally occurring activities |
| **2. All families, with the necessary supports and resources, can enhance their children's learning and development.** | |
| Assuming all families have strengths and competencies; appreciating the unique learning preferences of each adult; and matching teaching, coaching, and problem-solving styles accordingly | Basing expectations for families on characteristics, such as race, ethnicity, education, or income; categorizing families as those who are likely to work with early intervention and those who are not |
| Suspending judgment, building rapport, and gathering information from families about their needs and interests | Making assumptions about families' needs, interests, and ability to support their child because of life circumstances |
| Identifying with families how all significant people support the child's learning and development in care routines and activities meaningful and preferable to them | Expecting all families to have the same care routines, child-rearing practices, and play preferences |
| Matching outcomes and intervention strategies to the families' priorities, needs, and interests; building on routines and activities they want and need to do; collaboratively determining the supports, resources, and services they want to receive | Viewing families as apathetic or exiting them from services because they miss appointments or do not carry through on prescribed interventions, rather than refocusing interventions on family priorities |
| **3. The primary role of the service provider in early intervention is to work with and support family members and caregivers in a child's life.** | |
| Using professional behaviors that build trust and rapport and establish a working partnership with families | Being "nice" to families and becoming their friends |
| Valuing and understanding the provider's role as a collaborative coach working to support family members as they help their child; incorporating principles of adult learning styles | Focusing only on the child and assuming the family's role is to be a passive observer of what the provider is doing "to" the child |
| Providing information, materials, and emotional support to enhance families' natural role as the people who foster their child's learning and development | Training families to be "mini" therapists or interventionists |

*(continued)*

**Table 1.1.** *(continued)*

| The principle DOES look like this | The principle DOES NOT look like this |
|---|---|
| Pointing out children's natural learning activities and discovering together the "incidental teaching" opportunities that families do naturally between the providers' visits | Giving families activity sheets or curriculum work pages to do between visits and checking to see if these were done |
| Involving families in discussions about what they want to do and enjoy doing; identifying the family's routines and activities that will support the desired outcomes; continually acknowledging the many things the family is doing to support the child | Showing strategies or activities to families that the provider has planned and then asking families to fit these into their routines |
| Allowing families to determine success based on how they feel about the learning opportunities and activities the child/family has chosen | Basing success on the child's ability to perform the professionally determined activities and parents' compliance with prescribed services and activities |
| 4. The early intervention process, from initial contacts through transition, must be dynamic and individualized to reflect the hild's and family members' preferences, learning styles, and cultural beliefs. | |
| Evaluation/assessments address each family's initial priorities, and accommodate reasonable preferences for time, place, and the role the family will play | Providing the same "one-size-fits-all" evaluation and assessment process for each family/child regardless of the initial concerns |
| Collaboratively tailoring services to fit ea h family; providing services and supports in flexible ways that are responsive to ea h family's cultural, ethnic, racial, language, and socioeconomic characteristics and preferences | Expecting families to "fit" the services; giving families a list of available services to choose from and providing these services and supports in the same manner for every family |
| Treating each family member as a unique adult learner with valuable insights, interests, and skills | Treating the family as having one learning style that does not change |
| Acknowledging that the individualized family service plan (IFSP) can be changed as often as needed to reflect the hanging needs, priorities, and lifestyle of the child and family | Expecting the IFSP document outcomes, strategies, and services not to change for a year |
| Recognizing one's own culturally and professionally driven child-rearing values, beliefs, and practices; seeking to understand, rather than judge, families with differing values and practices | Acting solely on one's personally held child-rearing beliefs and values and not fully acknowledging the importance of families' cultural perspectives |
| 5. IFSP outcomes must be functional and based on children's and families' needs and priorities. | |
| Writing IFSP outcomes based on the families' concerns, resources, and priorities | Writing IFSP outcomes based on test results only |
| Listening to families and believing what they say regarding their priorities and needs | Reinterpreting what families say in order to better match a service provider's ideas |
| Writing functional outcomes that result in functional support and intervention aimed at advancing children's engagement, independence, and social relationships | Writing IFSP outcomes focused on remediating developmental impairments |
| Writing integrated outcomes that focus on the child participating in community and family activities | Writing discipline-specific outcomes without full consideration of the whole child within the context of the family |

| The principle DOES look like this | The principle DOES NOT look like this |
|---|---|
| Having outcomes that build on a child's natural motivations to learn and do, match family priorities, strengthen naturally occurring routines, and enhance learning opportunities and enjoyment | Having outcomes that focus on impairments and problems to be fixe |
| Describing what the child or family will be able to do in the context of their typical routines and activities | Listing the services to be provided as an outcome (e.g., "Johnny will get physical therapy in order to walk") |
| Identifying how families will know a functional outcome is achieved by writing measurable criteria that anyone could use to review progress | Measuring a child's progress by "therapist checklist/ observation" or readministration of initial evaluation measures |
| 6. The family's priorities, needs, and interests are addressed most appropriately by a primary provider who represents and receives team and community support. | |
| Talking to the family about how children learn through play and practice in all their normally occurring activities | Giving the family the message that the more service providers that are involved, the more gains their child will make |
| Keeping abreast of changing circumstances, priorities, and needs and bringing in both formal and informal services and supports as necessary | Limiting the services and supports that a child and family receive |
| Having a primary provider, with necessary support from the team, maintain a focus on what is necessary to achieve functional outcomes | Having separate providers seeing the family at separate times and addressing narrowly defined, separate outcomes or issues |
| Coaching or supporting the family to carry out the strategies and activities developed with the team members with the appropriate expertise; directly engaging team members when needed | Providing services outside one's scope of expertise or beyond one's license or certificatio |
| Developing a team based on the child and family outcomes and priorities, which can include people important to the family and people from community supports and services, as well as early intervention providers from different disciplines | Defining the team from only the professional disciplines that match the child's impairments |
| Working as a team, sharing information from first con acts through the IFSP meeting when a primary service provider is assigned; all team members understanding each other's ongoing roles | Having a disjointed IFSP process, with different people in early contacts, different evaluators, and different service providers who do not meet and work together with the family as a team |
| Making time for team members to communicate formally and informally and recognizing that outcomes are a shared responsibility | Working in isolation from other team members with no regular scheduled time to discuss how things are going |
| 7. Interventions with young children and family members must be based on explicit principles, validated practices, the best available research, and relevant laws and regulations. | |
| Updating knowledge, skills, and strategies by keeping abreast of research | Thinking that the same skills and strategies one has always used will always be effective |

Adapted from Workgroup on Principles and Practices in Natural Environments, OSEP TA Community of Practice: Part C Settings. (2008, March). *Seven key principles: Looks like/doesn't look like.* Retrieved from http://www.ectacenter.org/~pdfs/topics/families/Principles_LooksLike_DoesntLookLike3_11_08.pdf; adapted by permission.

on their children's development. It is the job of the early intervention practitioner to recognize each family's strengths and build on them. Some families may want many supports or resources, whereas others may only want minimal supports. Families are part of the decision-making process and help identify how much support they think they need to help their children grow. When supports are implemented, service providers show respect for all families, use family-centered practices, and individualize the early intervention process to each family's priorities, needs, and resources.

### Key Principle 3: The Primary Role of the Service Provider in Early Intervention Is to Work with and Support Family Members and Caregivers in a Child's Life

This principle is especially important for early intervention service providers to understand. The role of the provider is not to focus on "working with the child" by playing with educational or therapeutic toys that teach developmental skills missed on the child's assessment, such as teaching the child to stack blocks. Instead, the role of the service provider is to collaborate with caregivers to identify and practice intervention strategies that support the child's development and ability to participate in and learn from everyday experiences. In the case of stacking blocks, this can be accomplished just as easily by the child helping the babysitter put canned goods away in the cabinet. The service provider should share his or her knowledge and expertise in instructional strategies that enhance development with the child's caregivers—those important people who are in the best position to make the biggest difference in the child's life. The implementation of this principle reflects a strong family–provider partnership that is built on the shared goal of increasing the family's competence and confidence with meeting the needs of the child.

### Key Principle 4: The Early Intervention Process, from Initial Contacts Through Transition, Must Be Dynamic and Individualized to Reflect the Child's and Family Members' Preferences, Learning Styles, and Cultural Beliefs

Although the steps of the early intervention process are similar across families, each family's experience in early intervention is unique. The process, much like the IFSP, should be flexible to adjust to the family members' changing priorities, resources, activities, and outcomes for their child. The process should also consider the family's cultural beliefs and values, which affect how the family members choose to participate and the decisions they make. This is not a "one-size-fits-all" approach. Rather, early intervention adjusts to fit families by considering their priorities and working together to implement meaningful and individualized supports that fit their lives. One key aspect of this principle centers on the idea that early intervention is only one part of family life and should not be its focus. Families should not have to rearrange their lives around intervention. When done well, early intervention blends into the family members' daily lives and becomes a part of how they interact with each other, rather than adding "therapy time" to their day.

### Key Principle 5: Individualized Family Service Plan Outcomes Must Be Functional and Based on Children's and Families' Needs and Priorities

The outcomes of the IFSP belong to families. Well-written outcomes reflect what is important to families and are functional, meaning that they describe activities the child needs to learn in order to accomplish activities that are necessary in the life of the child and his or

her family. This is very different from writing outcomes based on skills the child missed on assessments. An IFSP's functional outcomes build on what naturally motivates and interests the child, fit into existing family routines, and help families learn to take advantage of natural learning opportunities as they happen to help their child develop because they see the importance of working on these outcomes for their child.

### Key Principle 6: The Family's Priorities, Needs, and Interests Are Addressed Most Appropriately by a Primary Provider Who Represents and Receives Team and Community Support

Early intervention is implemented by a team that includes the family, the service coordinator and service provider(s), and any other people who are important in the family's life, such as a child care provider, neighbor, or grandparent. Professional team members are included based on who has the appropriate expertise to support the child and family, rather than being assigned based on the child's impairments. The primary service provider's role is to collaborate closely with the family, keeping up with any changes and supporting the family in using intervention strategies between visits that are adapted for the child based on the team's input. The primary provider also communicates regularly with other team members to ensure that he or she is well prepared to coach the family on how to address the child's needs across developmental areas. When needed, other team members are brought in to meet with the family. The team's primary service provider may also change.

For example, Makeba had delays in communication and social-emotional areas of development. Rather than receiving weekly services from both the educator and the speech-language therapist, the educator acted as the primary provider with support from the speech therapist. When early intervention services are implemented using a primary provider, families are less likely to feel overwhelmed, the child is more likely to be viewed from a whole-child perspective, and services tend to be better coordinated.

### Key Principle 7: Interventions with Young Children and Family Members Must Be Based on Explicit Principles, Validated Practices, the Best Available Research, and Relevant Laws and Regulations

Providing high-quality services to all children and families must be a priority for all service providers. This principle stresses the importance of service providers making a commitment to keeping their discipline-specific knowledge current, as well as staying current in the field of early intervention. Being a lifelong learner helps providers to stay aware of changes in the laws and emerging evidence-based practices. Early interventionists must be committed to ongoing professional development so that they are ready to make good practice decisions when working with an array of very different children.

These key principles help service providers take the intention of federal regulations and link them to what they do each day in their actual practice. Using a common core of principles such as these helps all early intervention service providers, regardless of their discipline, to work as a team and provide services with a similar understanding of their program's mission. These principles are addressed repeatedly throughout this book and are woven through the professional competencies expected of all early interventionists.

## PROFESSIONAL COMPETENCIES

Similar to the key principles of early intervention, a standard set of competencies is required for all early intervention service providers. Regardless of their discipline, all

early interventionists must demonstrate the following professional competencies, which were adapted from a position paper from the Council for Exceptional Children, Division for Early Childhood Task Force (1993), titled "Personnel Standards for Early Education and Early Intervention":

- View each family as unique and as being a part of a larger community
- Offer services and supports that enhance each child's and family's social networks and address the family's concerns, priorities, and needs
- Support and partner with families and caregivers to enhance the child's development
- Ensure that families are key decision makers
- Use communication that is respectful, unbiased, and focused on person-first languag
- Recognize a continuum of services and supports based on a child's needs
- Understand the right of children to receive services with their peers in natural or inclusive environments
- Focus on inclusive practices that include the child with disabilities into the activities of his or her peers with and without disabilities, individualizing for the child's developmental status and age
- Facilitate a continuum of collaborative services and supports for children and their families
- Honor diverse backgrounds and develop cultural competence
- Maintain ethical conduct at all professional activities
- Engage in advocacy activities

Competency standards are intended to ensure that all service providers in the field have a similar foundation of knowledge and skills to best service children and families. These competencies may be developed through both education and experience and require ongoing professional development in order to stay current with best practices. Because the field of early intervention is relatively young and what is known about quality practices is constantly evolving, a commitment to remaining current in knowledge and skills is a necessity for all early interventionists.

## CURRENT PRACTICES IN INFANT AND TODDLER INTERVENTION

Early intervention has evolved since it first appeared as a new field in the 1970s. Family-centered practices, intervention in natural learning environments, routine-based intervention, participation-based intervention, and coaching and consultation are now considered to be evidence-based practices that offer the best possible outcomes for young children and their families. Each approach is discussed in the following sections.

### Family-Centered Practices

Early intervention employs an ecological approach to supporting children and families by attempting to strengthen the following (Bronfenbrenner, 1986):

1. The child–family relationship, such as relationships with parents, siblings, and significant individuals outside the family
2. The family's resources, such as improving access to services, information, skills, and knowledge for supporting a child's development

3. The family's social supports, including those who assist a family in meeting the needs of the child and family

This approach highlights the importance of the child's family on influencing the child's development.

Because learning and development for all infants and toddlers occurs within the context of the family, early intervention is described as being family centered. *Family-centered practice* refers to a way of organizing and delivering assistance and support to families based on distinct, interconnected beliefs and attitudes that are expressed through the behavior of service providers (Pletcher & McBride, 2004). This practice has been described as using families' strengths, encouraging collaborative partnerships with families, supporting informed family decision making, and developing families' independence and competence (Keilty, 2008; Tomasello, Manning, & Dulmus, 2010). Box 1.4 shows the assumptions rooted in family-centered practices. This approach is discussed further in subsequent chapters.

## Interventions in Natural Learning Environments

According to Dunst, Trivette, Humphries, Raab, and Roper (2001), *natural learning environment interventions* are intervention methods and practices that focus on teaching and providing support in settings that are common, natural, and familiar to a child and family. These interventions can be conceptualized by thinking about the degree to which they are *contextualized* (provided in the context of natural or contrived activities), adult or child focused, and implemented by the interventionist or the family during or between visits. These three distinctions will be discussed further in Chapter 4. Natural learning environment interventions focus on helping families learn to use the many natural learning opportunities that occur in their daily lives.

The routines and activities that are part of a family's life offer many *natural learning opportunities,* in which the child can practice a skill or learn a new one during a regular routine. Guiding caregivers so they recognize and seize natural learning opportunities whenever they occur is a primary goal of early intervention. When families are able to successfully use the natural learning opportunities that occur during their daily lives, they become more competent in supporting their child's development between intervention visits (McWilliam, 2010).

**BOX 1.4. Assumptions grounding family-centered practices and services**

- All people are basically good.
- All people have strengths.
- All people need support and encouragement.
- All people have different but equally important skills, abilities, and knowledge.
- All families have hopes, dreams, and wishes for their children.
- Families are resourceful, but all families do not have equal access to resources.
- Families should be assisted in ways that help them maintain their dignity and hope.
- Families should be equal partners in the relationship with service providers.
- Service providers work for families.

From Pletcher, L.C., & McBride, S. (2004). *Family-centered services: Guiding principles and practices for delivery of family-centered services.* Retrieved from https://www.educateiowa.gov/sites/files/ed/documents Family%20 Centered%20Services.pdf

Prior to this current focus on interventions in natural learning environments, early intervention was child focused, with the service provider working with the child while the caregiver passively observed (Campbell & Sawyer, 2007). Intervention centered on what could be accomplished during the brief intervention visit, and the caregiver was given "homework" to do with the child between visits. This approach focused on what could be accomplished with the child during visits and provided limited support to caregivers for the time between visits. Early intervention has evolved to a more triadic approach, in which the service provider helps the caregiver practice strategies during visits with the child in the context of a target routine. The natural learning environment is broadened beyond the intervention visit. The visit is used as a practice session so that the caregiver learns strategies he or she can use every day with the child when those learning opportunities occur. The focus of intervention visits now supports the child's development through the parent–child interaction, as opposed to through the service provider working primarily with the child (Woods, Wilcox, Friedman, & Murch, 2011).

For example, Mullins (2002), the mother of a toddler with Down syndrome, stated that having her child walk along the bleachers while at his brother's baseball games allowed him to have fun practicing walking while reinforcing a narrow center of gravity, which improved his gait. This activity, embedded into a regular family routine of baseball practice and games, allowed the child to practice a new skill in a way that was enjoyable for him and his parents. The baseball field was one of this family's natural environments at that point in their lives. Mullins stated that early intervention in natural environments allowed "learning to be embedded into our daily activities … so intervention became a *part* of our lives" (p. 23). In this example, the service provider might have joined the Mullins family at the baseball field for the intervention visit. The service provider could help the mother think about and try out ways to help her child practice walking, rather than constraining intervention to therapeutic exercises for the child during the intervention visit in the family's home. This example is contextualized because the intervention is provided in the context of the family's routine of visiting the baseball field. The intervention, which is adult and child focused, can be implemented by the family because the mother knows how to support the child's walking between visits.

## Routine-Based Intervention

*Routine-based intervention* uses a family's routines and activities as the context for intervention (McWilliam, 2010). Everyday caregiving routines such as mealtimes, dressing, diapering, and other family activities such as camping, child care, and "mommy and me" groups are common settings for caregivers to embed parent-selected outcomes and objectives. Many families find that embedding the teaching of needed skills into their routines feels comfortable and generally saves them time. When routine-based intervention is not used, many natural learning opportunities are overlooked, and intervention can feel as if it is "owned" by the service provider.

The mother of a toddler with motor delays stated the following about her child's physical therapy:

> The therapists did not often include me in the actual "hands-on" therapy so I was not comfortable trying at home what they did in the therapy session. I did not know what to do, or when or how, or why to do it. (Mullins, 2002, p. 23)

When therapists and service providers support parents as they learn the "how" and "why" of learning activities, the child benefits from the extra time learning and practic-

ing skills between intervention visits because the parent is confident in how to use those strategies.

Routine-based intervention encourages all family members or friends who wish to be involved to participate in assisting the child's development. Intervention that is contextualized in child and family routines makes sense because the consistent adults in a child's life—not the early interventionist—have the greatest influence on learning and development.

### Participation-Based Intervention

In *participation-based intervention,* the emphasis is placed on a child's participation in natural family and community activities and daily routines, rather than only teaching skills missed on assessments (Campbell, 2004; Campbell & Sawyer, 2007). In other words, the focus is on increasing a child's involvement and *participation* with his or her family, and other people important to the child, by increasing the child's functional skills and learning opportunities. The service provider's interactions with parents and caregivers should be relaxed, structured, supportive, and professional. The service provider must have the intent of enhancing parents' or caregivers' confidence in their role of fostering their child's development. Functional outcomes improve participation in meaningful activities for both the child and parent because they build on natural motivations to learn and participate. The family comes to understand that collaboratively determined strategies and outcomes are worth using because they lead to practical improvements in the child's development and, consequently, in the family's life.

### Coaching and Consultation

*Coaching* and *collaborative consultation* involve the use of specific strategies and interactions to support and guide the learning of adults who can be of assistance to a child with special needs (Rush & Shelden, 2011; Woods et al., 2011). Both of these strategies are types of *indirect services* because the service provider is training another adult who will be implementing the interventions with the child when the service provider is not present. Although the service provider may work with the child to model or demonstrate how to play with a toy or engage the child, the objective is to support the other adult in feeling confident in performing these interventions when the provider is not in that setting. Using coaching and collaboration with parents or caregivers involves helping them reflect on what they currently are doing with their child, engaging in shared problem solving and planning to develop intervention strategies that can be used during those interactions, developing a joint plan for how the family or caregivers will implement intervention in their daily routines, and following up at each intervention visit to answer questions and provide support (Rush & Shelden, 2011). Helping families understand how their toys, activities, and interactions can be used or adapted to promote positive developmental changes in their child is a key focus of coaching and collaboration. Examples of this are evident in Makeba's case.

### Case Study: Makeba

Makeba and her family have been partnering with the early childhood special educator and speech therapist for 3 months now. During each intervention visit, the educator talks with family members about what is going well and discusses any challenges they have faced

regarding Makeba's communication and social-emotional development. Together, they identify a familiar routine to target that visit, and the educator observes the parent–child interactions during the activity. The educator then coaches the parents (often both are present) in ways to interact with Makeba to encourage her to learn to use more words. The educator also has helped the parents learn strategies to manage Makeba's tantrums. They report that ignoring her tantrums works well most of the time. When the speech therapist joins them for visits, he consults by problem solving with them on strategies and activities that will boost Makeba's variety of sounds, use of purposeful communication, and overall vocabulary. The services focus on how to support this family by building intervention around what they are already doing with Makeba and her interests, as well as by suggesting strategies that the family members can embed in their routines to help Makeba learn.

The service providers check in with the family at each visit to see if the parents have been able to successfully use the intervention strategies between visits; then, they brainstorm and plan together for the next intervention visit. The service coordinator also visits the family about once each month; she has worked closely with the family to find a community group that provides stipends to families for preschool costs. The service coordinator has helped Makeba's father take advantage of a local job center, where he is taking a class to gain computer skills, which he hopes will help him find a job in sales.

The early intervention services Makeba and her family received reflected the Workgroup (2008a, 2008b) practices, which emphasize the importance of parent–child interactions during daily routines. Recognizing the centrality of parent–child interactions and building interventions around supporting and adapting what families already do are the characteristics of early intervention that have most changed in recent years.

## HISTORY OF EARLY INTERVENTION

Early intervention is a relatively young specialty area of special education. Although the history of special education dates back to the 1800s, the early intervention provision of IDEA only became part of the law in the United States in 1986. Services for infants and toddlers with disabilities were available in some states before they became a federal priority, although most special education services focused on the education of older children who attended public schools. Progress with implementing early intervention internationally has varied from country to country.

Before 1986 in the United States, families who were interested and could afford it sought private therapy through local hospital programs or private agencies. Families who were unable to access private services worked with their children at home using more informal family and community supports. It was not until after provisions were added to IDEA to mandate educational support for preschoolers with special needs that similar services were considered for children younger than 3 years old.

The federal law known today as IDEA was originally called the Education for All Handicapped Children Act (EHA) of 1975 (PL 94-142). When originally passed, EHA represented a landmark in special education law because it afforded all school-age children the right to a free appropriate public education, regardless of disability. EHA was also important because it was the first time that federal funding was provided for the education of school-age children with special needs. The law included a voluntary option for states to serve preschoolers with disabilities under the Preschool Incentive Grant program, but this option did not include serving children younger than 3 years of age (Raver, 1999, 2009).

It was not until the 1986 reauthorization of EHA that special education services for infants and toddlers were addressed in the law. Under Part H of EHA, discretionary funds became available for states to operate early intervention programs. The addition of Part H (similar to what we now know as Part C of IDEA) came about through the efforts of organizations and families who lobbied on behalf of infants and toddlers (Erickson & Kurz-Riemer, 1999). Once the reauthorization took effect, all states began the process of developing federally funded early intervention programs or helping local and state programs make the transition to match the requirements in the federal law. In 1990, EHA was amended again and renamed the *Individuals with Disabilities Education Act (IDEA) of 1990* (PL 101-476). Part C of this law outlined early intervention services for infants and toddlers and their families.

Part C of IDEA (2004) includes provisions for offering early intervention services. These provisions have been implemented by states and include the following criteria: 1) eligibility, 2) time lines, 3) evaluation and assessment, 4) the IFSP, 5) early intervention services, 6) natural environments, 7) transitions, and 8) procedural safeguards. These criteria are discussed in the following sections.

### Eligibility

As mentioned previously, IDEA provides guidance regarding eligibility criteria for early intervention, but states define the specific criteria for services in their state. Some states include children who are at risk for developmental issues, whereas others do not.

### Time Lines

IDEA designates time lines for the completion of some parts of the early intervention process, such as the completion of the IFSP and requirements for IFSP reviews (which will be discussed in Chapter 3). IDEA also describes the need for timely initiation of early intervention services, resolution of disputes with families and/or agencies, and the development of the transition plan. Some functions, such as transition planning, do not have a specified time line, but states are responsible for choosing time lines to ensure that these actions are timely.

### Evaluation and Assessment

Under the law, families have the right to a "timely, comprehensive, multidisciplinary evaluation" (IDEA 2004, 34 CFR Part 303.113) of their child's development and a determination of the child's eligibility for early intervention services. IDEA describes an assessment of the family's resources, priorities, and concerns related to their child's development and their family's functioning. It is stipulated that evaluation and assessment must be conducted by qualified personnel and must include the use of *informed clinical opinion* (the perceptions and observations of professionals trained in a specific discipline), as well as the administration of evaluation instruments that determine the child's functioning in each domain of development. Procedures for completing the evaluation and assessment are further outlined in the federal regulations.

### Individualized Family Service Plan

IDEA requires that an IFSP be developed by a multidisciplinary team for each eligible child. The multidisciplinary team must include the child's parent(s), the service coordinator, and professionals representing at least two different disciplines of service, such as a physical therapist and an educator. Among other things, the IFSP documents the early

intervention services that will be provided to the child and family. Specific requirements related to the plan and its development are addressed in Chapter 3.

### Early Intervention Services

The federal regulations designate the kind of information that must be addressed in the provision of early intervention services. Services must be *outcome driven*—that is, driven by the outcomes the family desires to see as a result of the child's participation in the program. IDEA requires that service frequency (i.e., the number of sessions, such as once per month), intensity (i.e., individual or group services), method (i.e., how a service will be provided, such as using coaching), length (i.e., length of time, such as 60 minutes per visit), duration (i.e., how long the services will be provided, such as 3 months or 1 year), and location (i.e., the place[s] where the service will be provided, such as the home or child care center) must be specified.

### Natural Environments

IDEA defines *natural environments* as settings such as the family's home or other community places where the child's same-age peers who do not have disabilities spend time. Services must be provided in natural environments to the maximum extent possible and must be justified in the rare circumstances where they are provided in nonnatural settings.

### Transitions

Each child's IFSP must include a plan that outlines the steps to be taken to ensure a smooth transition from the early intervention system. IDEA describes the specific steps that must be included, such as developing activities that will help the child prepare for the next setting. Specific information about this process is discussed in Chapter 3.

### Procedural Safeguards

According to IDEA, families who choose to participate in early intervention have certain rights and procedural safeguards available to them. Some of these procedural safeguards address confidentiality, parental consent, prior notice of proposed activities, access to the child's records, and the right to dispute resolution.

The careful implementation and monitoring of each of these key provisions is vital to creating a successful early intervention experience. These provisions are discussed in more detail in later chapters.

Part C of IDEA currently remains a discretionary program, meaning that states can choose to accept or decline federal funds and thereby agree or decline to operate this kind of program. When a state agrees to offer a Part C early intervention program, the state is also agreeing to comply with federal regulations, including these major provisions, and to federal oversight and monitoring by OSEP. Although the provision of early intervention services continues to be a priority at the federal and state levels, challenges continue as programs face inadequate funding and struggle to serve the growing number of children and families who are in need of these services.

## PREVALENCE OF CHILDREN RECEIVING EARLY INTERVENTION

According to the Data Accountability Center (2011), 453,406 infants and toddlers ages birth to 36 months received early intervention services under Part C of IDEA in 2011. This

number represented approximately 2.79% of the entire population of infants and toddlers living in the United States. Attempts to estimate the number of children who are in need of early intervention services are known to underestimate the actual number of children who are potentially eligible but who do not receive services (Rosenberg, Robinson, Shaw, & Ellison, 2013). One study examined prevalence data from a nationally representative sample of children, ages 9–24 months, who were enrolled in early intervention programs; the authors found that 17% of children under the age of 5 years who were potentially eligible for early intervention or special education services did not receive them (Rosenberg, Zhang, & Robinson, 2008). Ongoing and comprehensive *Child Find activities* are an important part of early intervention. These programs try to identify and recruit these potentially eligible children and families who are in need of these services.

To investigate who actually participates in early intervention, the National Early Intervention Longitudinal Study (NEILS; Hebbeler et al., 2007) was conducted as a 10-year project under the U.S. Department of Education and OSEP. According to the NEILS report, children entered early intervention at an average age of 17 months. Most children were male, and most were enrolled due to a communication delay or a disability. Other common reasons for enrollment included motor delays, prenatal and perinatal factors (one third of children were premature), and global developmental delays (i.e., delays in all areas of development). Children who were found to be eligible due to a developmental delay tended to enter programs after the age of 24 months due to concerns about communication. Children who were found to be eligible due to a diagnosed condition, such as Down syndrome or visual impairment, typically entered intervention earlier, before their first birthdays.

Demographically, an overrepresentation of children from low-income families was noted, and there was a higher proportion of Caucasian children receiving intervention. Children from ethnic minorities were also represented, with children of African American and Hispanic origin representing the two other populations most often receiving early intervention. A large number of children receiving early intervention have also been found to receive foster care, have low birth weight, and be more likely to be rated as having only fair health (Scarborough, Spiker, Mallik, Bailey, & Simeonsson, 2004).

The most common services received, in order of frequency, were service coordination, speech therapy, special instruction, occupational therapy, and physical therapy. These services were provided in families' or child care providers' homes, with most families receiving one to two services at a time for 2 hours or less each week. The average length of stay in early intervention was approximately 17 months. Most children received services until they reached their third birthday, at which point they were no longer age-eligible for early intervention. The trajectory of a child's participation in early intervention differed depending on the child's reason for eligibility. Children with speech or communication problems remained in the program for the shortest amount of time, and those with at-risk or diagnosed conditions tended to receive intervention the longest.

Children with diagnosed conditions may have received early intervention longer because many disabilities can be identified at birth. A diagnosis of Down syndrome is one example. Children with *Down syndrome* manifest the most common biological condition associated with intellectual disability and can demonstrate a range of intellectual abilities (American Association on Intellectual and Developmental Disabilities, 2010). During the first or second year of life, children with *cerebral palsy,* which results from a brain lesion or abnormal brain growth, are often identified. This condition, a disorder affecting voluntary movement and posture, is commonly served in early intervention programs.

Less than 1% of infants who receive services typically have low vision or blindness (discussed in Chapter 9); hearing impairment or deafness (discussed in Chapter 9); or

multiple and complex disabilities, such as fragile X syndrome (discussed in Chapter 10). *Fragile X syndrome* is a chromosomal abnormality associated with mild to severe intellectual disabilities; it affects males more often and more severely than females. The behavioral characteristics of this condition can be similar to those seen in children with autism spectrum disorder (ASD; Meyer & Batshaw, 2005). The incidence of children with ASD has significantly increased in recent years to 1 in 88 births (Centers for Disease Control and Prevention, 2012). As a consequence, serving infants and toddlers with this condition is becoming increasingly more common in early intervention programs. ASD is further discussed in Chapter 8.

## IMPORTANCE OF EARLY INTERVENTION

It is now well established that early experiences can have significant long-term effects on the developmental outcomes of children, regardless of the level of delay or disability (Ramey & Ramey, 2004). A child's brain is highly responsive to early experiences because these experiences directly affect the neural connections and functions within the brain. In fact, early experiences can actually change the way a child's genes are expressed or alter the types and amount of neural connections in the brain, with both negative and positive trajectories possible (Medina, 2011; National Scientific Council on the Developing Child, 2010). This *neural plasticity* is why early intervention is so important, especially for children who live in impoverished circumstances and those with limited early childhood experiences. Although early intervention cannot eliminate most disabilities, it can have a positive effect on the development of many young children and lessen the effects of the disability or delay on the child's interactions and participation in everyday life.

A child's foundation for all learning for the rest of the child's life is established during the first 5 years of life (Ramey & Ramey, 2004); as the child ages, this foundation is elaborated and refined. Early childhood specialists agree that infancy is the right time to begin providing support to children with special needs or those who are at risk for developmental difficulties. Services should generally begin as early as possible. A child's age at the start of services has been found to be a significant variable in predicting a child's later intellectual or cognitive progress (Lee & Kahn, 1998).

This early start unfortunately does not always occur. Many children are referred to early intervention later in the first 3 years of life—or not at all—for a variety of factors, including the family's or physician's preference to "wait and see" if the child's development catches up, ineffective or no developmental screening efforts, a family's choice to obtain similar services outside of the Part C system (e.g., outpatient therapy services), cultural factors, or late diagnoses. To address these issues, IDEA stipulated that early intervention programs conduct ongoing Child Find efforts to raise public awareness among potential referral sources and families regarding the positive benefits of individualized support during the first 3 years. Child Find efforts also concentrate on locating children who are in need of services. These efforts are important because of the complexity and array of challenges that can be associated with having a developmental disability early in life.

A child with cognitive delays may also have motor or language delays, sensory difficulties, or health conditions such as seizure disorders. Because of the complexity of these problems, it can be difficult to determine precisely how much children have benefited from early intervention. However, there is strong evidence that the declines in child functioning that occur in the absence of early intervention can be substantially reduced by providing services to a child and the child's family during the early years (Guralnick, 1997, 1998,

2005a, 2005b; Pungello, Campbell, & Barnett, 2006). Furthermore, early intervention programs have been shown to mitigate the stresses and challenges associated with family and child risks or a child's disability or delay. Today, it is accepted that the benefits of early intervention justify its costs (Barnett, 2000; Trohanis, 2008). Makeba's family's story is a good example of this.

### Case Study: Makeba

Makeba and her family continued to receive early intervention services until her third birthday. Just before her birthday, Makeba's father found work at a local car dealership and the family's concern about paying for preschool was resolved. To prepare for the transition out of early intervention, the family's service coordinator assisted them with developing a transition plan for the services they wanted Makeba to receive after she was no longer age-eligible for the program. Because she continued to show a developmental delay, her family was interested in a referral to the local ECSE preschool program at her neighborhood school. Following her discharge from early intervention, Makeba began attending the school system's preschool morning class four days a week, where she also received speech therapy. In the afternoons, the ECSE preschool teacher offered continued support to the teacher in the community child care preschool Makeba had been attending. As her vocabulary increased, Makeba had fewer tantrums, which made life at home and school easier. Makeba's family was pleased with the support they received in early intervention and commented that Makeba was making progress every day.

## INCLUSIVE PRACTICES IN EARLY INTERVENTION

In early intervention, *inclusion* refers to helping families, child care providers, preschool teachers, and other adults in a child's natural environments to support the child's participation in activities that are typical for a particular setting. At their core, inclusive practices for early intervention focus on the idea that all children are valued and have the right to participate in activities that are typical for infants and toddlers without special needs. Inclusive practices involve guiding adult providers to use strategies and accommodations that increase a child's participation in the setting. For example, it could be collaboratively decided that taping down the paper for a child with cerebral palsy (see Jennifer's case study in Chapter 10), could help the child better manage painting at the art table. Embedding sign language or a communication switch into the welcome routine may support a child with limited communication abilities in asking for what he or she wants to do during the day. These are examples of easily implemented changes, or *adaptations,* in a setting that will allow a child to more effectively participate.

### Case Study: Makeba

While Makeba was still enrolled in early intervention, the family's service providers visited with her child care center's preschool teacher to help her support Makeba's communication and social-emotional development. They collaborated with the teacher about once every 2 weeks to find out how Makeba was managing. The child care provider indicated that group activities were especially challenging for Makeba. Together, they decided that providing

Makeba with an *activity mini-schedule,* a Velcro list of the four different activities that occurred during opening circle, might help Makeba, as well as the other children, feel less anxiety and have more understanding of what was about to occur. This strategy has been found to be effective in improving the attention of children with ASD, behavior challenges, or hearing loss (Raver, Hester, Michalek, Cho, & Anthony, 2013). As one activity was completed, the label for it was removed; then, the teacher pointed to the next activity to help guide Makeba's attention to the appropriate materials. The collaborative process involved a lot of give and take, with the child care provider developing several strategies that proved to be helpful. After Makeba made the transition out of early intervention, the speech therapist from the ECSE preschool program continued this collaboration. The purpose of these consultations was to support Makeba's inclusion in classroom activities so she could fully participate in ways that enhanced all of her development.

A principal tenet of inclusion in early childhood education and early intervention is using *developmentally appropriate practice* (DAP; Garguilo & Kilgo, 2000). This means creating environments that match every child's developmental level and are also appropriate for a child chronologically. In this way, each child's individual abilities and interests are supported (Bredekamp & Copple, 1997). The principle of DAP supports developing individualized activities for children, including those with and without disabilities. When Makeba attended her inclusive child care preschool class, her family, the program staff, and the early interventionist met frequently to discuss the type of instructional supports and accommodations necessary for Makeba to be included successfully in that program. Through observation, the service provider noted what seemed to work for Makeba and areas that presented challenges for Makeba and her child care teacher. Through indirect services, such as monitoring and consultation, Makeba's service providers provided informal coaching to the child care staff. It was important during this process that the service providers helped the early childhood staff understand how the consultation process worked.

Some early interventionists have unfortunately expressed concern about poorly coordinated interventions in inclusive settings and a lack of understanding regarding what early childhood staff can expect from the consultation process (Horn & Sandall, 2000; Wesley, Buysse, & Skinner, 2001). This book discusses ways to individualize inclusion so that both the child and the professional in the inclusive setting feel supported. Just like services provided to young children and their families, each inclusive situation requires a slightly different kind and style of support for the adults involved to learn ways to facilitate a particular child's learning. By using contextualized, collaborative interventions that are embedded into the setting's routines, professionals are supported in enhancing children's development. Successful inclusion of infants and toddlers with special needs requires good communication, clear expectations for the consultative process, and regular monitoring by the adults in the inclusive setting.

## BEST PRACTICE HIGHLIGHTS

Specific best practices used in the field of early intervention will be highlighted in each chapter of this book to help you remember and apply key information. As you begin your exploration of the field of early intervention, keep these best practices in mind:

- Effective early intervention programs focus on the importance of providing flexible, family-centered, and individualized supports that intentionally develop the capacity

and competence of families and caregivers to meet the needs of their young children with special needs.

- Early intervention programs provide a variety of supports to children and families—not merely to children—because caregivers are the primary agents of change in a child's development.
- Programs follow seven key principles in providing early intervention (Workgroup on Principles and Practices in Natural Environments, 2008b):
    1. Infants and toddlers learn best through everyday experiences and interactions with familiar people in familiar contexts.
    2. All families, with the necessary supports and resources, can enhance their children's learning and development.
    3. The primary role of a service provider is to work with and support family members and caregivers in a child's life.
    4. The early intervention process, from initial contacts through transition, must be dynamic and individualized to reflect the child's and family members' preferences, learning styles, and cultural beliefs.
    5. IFSP outcomes must be functional and based on children's and families' needs and priorities.
    6. The family's priorities, needs, and interests are addressed most appropriately by a primary provider who represents and receives team and community support.
    7. Interventions with young children and family members must be based on explicit principles, validated practices, the best available research, and relevant laws and regulations.
- An understanding of federal regulations and state procedures helps service providers in presenting interventions that are respectful of families' rights and preferences and are aligned with a state's early intervention system expectations.
- According to Part C of IDEA, effective early intervention programs do the following:
    1. Support the development of infants and toddlers with disabilities and delays
    2. Reduce long-term educational costs
    3. Maximize children's independence
    4. Enhance the capacity of families to meet the needs of their children
- Service providers must meet established professional competencies; commit to following explicit early intervention principles; and use validated, evidence-based practices so that interventions are effective, appropriate, meaningful, and supportive of each child's participation in his or her family's natural environments.
- The primary objective of early intervention is to offer an array of services and supports that helps families and caregivers know how to support the child's development in his or her daily living routines so that the child learns between intervention visits, when most learning naturally occurs.

## CONCLUSION

As Makeba's story demonstrates, early intervention involves a number of professionals using a family-centered approach to support children and their families in order to provide coordinated services. The first 3 years of a child's life are critical for later development. As

Part C of IDEA explains, services and interventions must be tailored to the unique needs of each child and family and should begin as soon as possible. The best outcomes occur when caregivers and early intervention professionals work together because the majority of change occurs while children are interacting with their families. Early intervention service providers use coaching and consultation to guide parents or caregivers, as well as other adults who are important to the family, in developing participation-based interventions within the routines of families' natural environments. As much as possible, inclusive activities that involve children without disabilities are encouraged. Encouraging families to use natural learning environment interventions is a good way to support the learning of children. Service providers need to remember the fundamental purpose of early intervention: to help families and caregivers know how to support a child's development using individualized intervention strategies between visits, when most learning naturally occurs.

## DISCUSSION QUESTIONS AND APPLIED ACTIVITIES

1. Using at least three of the Workgroup's (2008b) seven key principles, write a one-paragraph definition of early intervention. Use common language so the definition could be shared with a parent or caregiver who is considering having his or her child assessed to determine if the child is eligible for services.
2. Write the nine provisions of Part C of IDEA (2004) and describe each as if you were sharing them with a parent or caregiver.
3. Visit an early intervention program in your community. Ask the director the following questions:
   - What is the process by which a child, and the child's family, are determined to be eligible for services?
   - How are services paid for?
   - What is the most common type of service setting your program offers (e.g., intervention visits in the home, inclusion setting consultations, community location)?
   - What are the three greatest challenges your staff face in providing early intervention services? Describe how you and your team have responded to these challenges.

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