Facilitating Language Development in the Context of Everyday Routines, Interactions, & Play:
Moving from the Clinical Model to Family/Child Centered Intervention
3 CE HOURS

Course Abstract

This course offers a framework for providing Early Intervention (EI) services in speech-language pathology. Applicable to practitioners at all levels of familiarity with EI, it emphasizes a family/child-centered approach to service delivery over the clinical model, discussing ways to empower parents/caregivers throughout the processes of evaluation, assessment, and implementation. Case studies are presented.

NOTE: Links provided within the course material are for informational purposes only. No endorsement of processes or products is intended or implied.

(ASHA CE BLOCK – SPACEHOLDER ONLY – COURSE IS NOT YET REGISTERED)
(Introductory level, Professional area).

Learning Objectives

By the end of this course, learners will be able to:

- Identify key principles, goals, and practices of Early Intervention (EI)
- Recall characteristics of coaching
- Recognize methods used to build parent/caregiver competency and capacities
- Recall elements of evaluation and assessment
- Differentiate between routine-based intervention tactics
- Recognize relation-based strategies to facilitate language development

Timed Topic Outline

I. Introduction; Key Principles of Early Intervention (45 minutes)
    What Are Family/Child-Centered Programs?; What Is Family/Child-Centered Intervention?; What Are Relationship-Based Interactions?; The Natural Environment
II. From the Therapy Room Table to the Family Room Floor and Beyond (5 minutes)
III. Empowering Parents/Caregivers through Coaching (50 minutes)
    Characteristics of Coaching; Building Parent/Caregiver Competency and Capacities
IV. Identifying Priorities and Routines (30 minutes)
    Evaluation and Assessment; Implementation
V. Facilitating Language (30 minutes)
    Strategies for Parents; Language Learning and Play
VI. Conclusion, References, and Exam (20 minutes)

Delivery Method

Correspondence/internet self-study with interactivity, including a provider-graded final exam. *To earn continuing education credit for this course, you must achieve a passing score of 80% on the final exam.*

Accessibility and/or Special Needs Concerns?
Contact customer service by phone at (888)564-9098 or email at support@pdhacademy.com.

Course Author Bio and Disclosure

Kathryn K. Basco, MA, CCC-SLP, holds a BA in Communicative Disorders from the University of Wisconsin-Madison and an MA in Speech Language Pathology from Northern Illinois University.

Kathryn has worked in a variety of medical and educational settings including the Rehabilitation Institute of Chicago, Northwestern University, Elmhurst Hospital Pediatric Outpatient Clinic and has been in private practice since 2001. Kathryn is a credentialed evaluator and provider for the Illinois Early Intervention Program and has been an EI practitioner since 1989. She also mentors new providers in the program. Kathryn is experienced in evaluating and providing intervention and support to families of infants, children and adolescents with receptive and expressive language delay, autism spectrum disorders, developmental delay, articulation and phonological disorders, fluency disorders, traumatic brain injury, motor speech disorders, childhood apraxia of speech, oral-motor and sensory based feeding disorders (including transitioning infants discharged from the NICU from tube feedings to oral feeds), and specializes in medically complex/medical fragile children.

Kathryn has been an Adjunct Faculty member of Elmhurst College since 2005 and held a two-year appointment as Visiting Assistant Professor from 2014 -2016. She is a Clinical Educator and teaches clinical practicum courses, as well as presenting to students, teachers, and other professionals on a variety of topics.

DISCLOSURES: Financial – Kathryn K. Basco received a stipend as the author of this course. Nonfinancial – No relevant nonfinancial relationship exists.

Introduction

Looking through a family-centered lens, Early Intervention (EI) providers can focus on best practices that enable parents and caregivers to facilitate their child's learning of new skills within the context of everyday routines and experiences. This view can be a stretch from the traditional clinical model of service delivery, and for some professionals an unfamiliar and uncomfortable approach. However, evidence of the effectiveness of parents and caregivers implementing supports in daily routines is growing. Empowering parents through coaching builds competencies for taking a lead role in their child's learning of new skills. Establishing a professional partnership between the family and EI provider facilitates identification of activities and routines in which effective strategies can be developed and implemented to foster language development. As challenging as it may be for providers to make the paradigm shift from the clinical model to one that is family-centered, having the knowledge and flexibility to do so is paramount to fully embracing the principles of early intervention and following the regulations and mandates as established by the Individuals with Disabilities Education Act 2004 Part C (IDEA, 2004).

This course includes an overview of the principles of EI, a description of family/child-centered programs and interventions and relationship-based interactions, and a discussion of the challenges of shifting from a clinical model to a family-centered approach. In the context of the natural environment, building family competencies and capacities through coaching will include how to identify adult learning styles and implement coaching techniques to empower parents and caregivers. A variety of formal and informal assessment measures will be explored to determine family routines and activities appropriate for embedding language strategies. And finally, examples of language intervention strategies will be provided with a discussion on language, learning and play.

Key Principles of Early Intervention

For the past three decades, the federal government has recognized the importance of providing early intervention services for infants and children with disabilities and their families. Since the federal grant program and its accompanying requirements were established in 1986, EI has continued to evolve into the program we know today. In 2011 the U.S. Department of Education released final regulations for the early intervention program under Part C IDEA, incorporating provisions from the 2004 amendments to the Individuals with Disabilities Education Improvement Act 2004 (PL108-446)].

According to the U.S. Department of Education (n.d.), approximately 350,000 children are served by the Part C program. EI service delivery models vary between states, but programs must adhere to federal regulations and mandates to include Child Find, provide no cost evaluations and assessments, complete the Individualized Family Service Plan (IFSP) within 45 days of referral, provide services in the natural environment, and offer transition services to Part B (school district). EI program managers, service coordinators, and direct service providers are charged with implementing best practices while following the guiding principles for early intervention.

In 2008 the Workgroup on Principles and Practices in Natural Environments generated seven key principles which are at the core of EI.

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 in early intervention is to work with and support family members and caregivers in children's lives.
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 family-identified 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, best available research, and relevant laws and regulations.

The main goal of EI is to support families in promoting their child's optimal development and facilitating the child's participation in family and community activities. Intervention occurs in the child's natural environment (i.e., home, daycare, library, playgroup) and the family's routines and activities during the day provide myriad learning opportunities for the child that are naturally occurring and salient for families. The focus of EI is to encourage active participation of families in the therapeutic process, achieved by embedding intervention strategies into family routines. EI acknowledges that parents and caregivers are the driving force behind adapting their child care routines to integrate therapeutic interventions, and empowers their efforts. Situations in which the clinician educates, coaches, and supports caregivers have resulted in overall positive effects on a child's language and communication outcomes (Roberts & Kaiser, 2011). Additionally, a decrease in parental stress over the need to find extra time in which to conduct treatment has also been reported (Kashinath, et al, 2006). In general, with appropriate clinician support and scaffolding, caregiver intervention is as effective in obtaining communication outcomes as a clinician-implemented intervention (Romski, et al, 2007).

For the principles of EI to be fully implemented, active family and caregiver participation is essential. The evolution of EI over the past several decades has resulted in family driven goals and priorities, active involvement as team members, and more education, training, and support through family/child-centered programs.

What Are Family/Child-Centered Programs?

"Family-centered" refers to beliefs, values, and practices that emphasize the role of the family as central to all aspects of the decision-making process regarding the young child (Bruder, 2001; Dunst, 2001). The National Resource Center for Family Centered Practice (n.d.) identified four key components critical for family-centered programs. The program must:

1. identify and build on a family's existing strengths,

2. recognize that the family's informal social support network is a primary resource for meeting the family's needs,
3. target family-centered goals through supports and services, and
4. emphasize and promote strengthening the parents' and family's ability to promote the child's development.

As a program, EI has always been family-focused, and the importance of family has never been questioned. In the past, however, implementation of the core idea/value that families are at the heart of EI has often fallen through the cracks in many programs. Anzola (1997) challenged some programs' philosophy of being "family-centered," indicating that offering opportunities for parent involvement didn't necessarily mean that the program was family-centered. Family-centered services, she stated, "…are an ongoing partnership between parents and professionals that strive to be responsive to families' priorities." She went on to say that family-centered "…is more than an adjective used to describe programs. It is a belief that cannot be separated from us."

Lena is an 18-month old little girl with Down syndrome. She verbalizes mostly open vowel sounds and does not use any signs. Lena can roll over in both directions but cannot yet push herself up in to sitting or sit independently. When seated in her high chair, she has difficulty keeping her body in midline and slumps to either side. Lena takes a bottle without difficulty, but puree consistencies are more challenging due to a tongue thrust. Lumpier consistencies make Lena gag. Lena's parents would like her to be able to sit independently so she can independently play with more toys and sit in her high chair without slumping. They would also like her to be able to communicate so she can let them know what she wants. Although feeding is a concern for the family, they have indicated to the EI team that they do not want to address it at this time. Lena is gaining weight and they feel the other areas of development are currently more important.

During the IFSP the family clearly established their priorities regarding Lena's development and what they would like to see her be able to do as part of the EI program. As intervention visits begin, the parents (who take turns attending the sessions) appear very interested in what goes on during the session and ask many questions. They often sit on a chair or the couch while the provider engages Lena on the floor. During physical therapy sessions, the PT puts Lena in different positions, moving her arms and legs to help her change positions, reach for toys, and balance. Explanations for what is being done are given to the parents during each task. The PT gives the family a few things to work on during the week in between visits. Over several months, the parents are noticing some improvement and are happy with the progress Lena has made.

During speech therapy visits, the SLP asks the parents if they would like to join in the activities and invites them onto the floor. The SLP also asks them to pick out some toys and books they think Lena might enjoy playing with. Both parents know Lena's favorite toys but also have different ideas about what toys they would like Lena to learn to play with. The provider makes note that Lena's mother wants to be able to read books to her daughter, have her play with a baby doll and sing toddler songs. Lena's father would

also like Lena to listen to books, but also play peek-a-boo, roll a ball back-and-forth, and enjoy the swing set out in the family's backyard.

During sessions, Lena is frequently seated on the parent's lap while toys and books are presented to Lena. Lena is encouraged to reach out to make a choice when presented with two toys. The SLP points out to the parents that Lena is communicating by reaching. The parents are asked if there are other times during the day when they notice Lena reaching for something that she wants. They are also encouraged to notice during the week other ways Lena may be letting them know what she wants or doesn't want.

The SLP also discusses the option of using simple baby signs with Lena to help her communicate. The family was hesitant to use sign language because they thought it would keep Lena from speaking. The SLP explained that sign language was an effective bridge between the non-verbal and verbal and was a way for Lena to be able to share what she knows in addition to letting her parents know what she wanted. The SLP offered to leave some information for the family to read about the benefits of using sign language and the family agreed to discuss it during the next EI visit.

In both of these scenarios the parents are offered opportunities for involvement. The PT engages the family by educating them on different techniques and activities that they can practice during the week. The SLP, however engages them in decision making as to what toys they think Lena would like to play with, and acknowledges the different preferences each parent has as to what activity they want to engage in with their daughter. Additionally, the SLP gives the parents a "noticing" assignment as a way of empowering them to make observations regarding how Lena may already be communicating.

According to Dunst (2004) and Trivette & Dunst (2005), family-centered empowerment models are more effective and align more closely with current practices than older service delivery models such as traditional therapist directed practices. Family-centered programs recognize the importance of parents, family, and friends in a young child's life. When given appropriate supports and resources, parents and caregivers play an active role in enhancing their children's development (Arango, 1989). Thus, services must focus on the entire family, not just on the child, and address each family's strengths, needs, priorities, and concerns, all of which are different for each family based on its unique culture and circumstances.

What Is Family/Child-Centered Intervention?

As previously stated, the focus of EI is to encourage active participation of families in the intervention process by embedding strategies into family routines. Intervention – learning opportunities afforded the child – naturally comes from those who spend time with the child, such as parents, other family members, and child care providers (Dunst, et al, 2000a). Services are professional supports, provided intermittently (e.g., weekly, bi-monthly) for short (e.g., 30-60 minutes) durations. When given a choice, most families and caregivers choose to participate actively in their child's intervention plan (Crais, et al. 2006). Services then become more collaborative, and providers serve to support and consult with families and caregivers to achieve outcomes throughout daily routines. These principles underlie the EI model. The professional's role is to provide strategies that guide, support, and scaffold caregiver learning across contexts

that have meaning to the family. Providers focus on working through and with the parent or caregiver with the expressed goal of having the parent assume a leadership role and the provider acting as a facilitator of positive caregiver-child interactions.

> *During a follow-up EI visit, Lena's parents inform the SLP that they noticed Lena is not only reaching for what she wants, but is also vocalizing. They also observed Lena waving "bye-bye" in imitation when her father was leaving for work. They both wanted to learn sign language so they could teach Lena. The SLP and the parents came up with some strategies for learning signs and teaching them to Lena. The SLP asked the parents what signs would be most helpful for them to have Lena know. With the SLP's help, they generated a list of five signs they thought would be most beneficial: milk; baby; book; more; all done. The SLP demonstrated the signs to the parents, made a video recording of the parents performing the signs, and collaborated with the parents on different routines and activities where those signs could be implemented.*

What Are Relationship-Based Interactions?

A policy statement on family engagement from the U.S. Departments of Health and Human Services and U.S. Department of Education (DHS, n.d.) recognized the important role of families and caregivers in the lives and experiences of infants and young children. The parent/child relationship and interaction between the parent and child forms the earliest learning environment. Henderson & Mapp (2002) stated that "…strong family engagement in early childhood systems and programs is central – not supplemental – to promoting children's healthy intellectual, physical, and social-emotion development."

Paramount to a foundation for safety, trust, and overall development of a child are parental love and attachment, and responsive and sensitive caregiver-child interaction (Hepburn, 2004). Studies indicate that nurturing, responsive, and sensitive parenting promotes social-emotional competence and academic success (Thompson, 2008). Additional studies have found that reading and talking to young children leads to positive outcomes. Better language and cognition skills were reported in children who were read to compared to peers that were read to less often (Raikes, et al. 2006). Quality verbal interactions (conversations versus "business talk") between young children and their caregivers were predictors for an increase in vocabulary, leading to later academic success (Hart & Risley, 1995). Children who are provided enriched learning experiences at home also show more advanced vocabulary and literacy skills (Rodriguez & Tamis-LeMonda, 2011).

In other words, the parent/child relationship forms the core of healthy emotional development that is crucial for early learning and school readiness (Hepburn, 2004). Parent education programs that include information and interaction-based practice can help parents "connect" with their child and be able to read and respond to their child's needs. They should build on the tenet of family-centered programs of strengthening the parents' and family's ability to promote the child's development, thus empowering the parent to take the lead role in their child's learning and development.

A critical component to relationship-based interactions is the partnership between the family and professional: Porter, et al. (2012) stated that positive relationships between families and

providers reinforce learning at home and in the community. EI requires a collaborative and working relationship between providers and families – all are equal partners on the team, and involved in the entire process. As such, an ongoing dialogue is needed between parents and providers: the communication is essential to the development, implementation, monitoring, and modification of therapeutic activities.

Additionally, providers can serve as a link to community resources (i.e., park district programs, funding sources, parent support groups) and help families identify current supports available to them (i.e., extended family members, friends, clergy). According to the National Center for Parent, Family and Community Engagement (2014), positive relationships with other families in the community were considered an active support component for families and resulted in improved communication between parents and children and increased confidence in parenting skills.

Providers must also be culturally and linguistically responsive to the families they support, referring to practices that "…honor the role of families' culture, language, and experience in supporting their children's learning and development," (Bruns & Corso 2001). The American Speech-Language-Hearing Association (ASHA, 2006) states cultural competence "…involves understanding and appropriately responding to the unique combination of cultural variables – including ability, age, beliefs, ethnicity, experience, gender, gender identity, linguistic background, national origin, race, religion, sexual orientation, and socioeconomic status – that the professional and client/patient bring to interactions." Roles and responsibilities as defined by ASHA require that "…audiologists and speech-language pathologists practice in a manner that considers each client's/patient's/caregiver's cultural and linguistic characteristics and unique values so that the most effective assessment and intervention services can be provided." Providers must also recognize their own culture and biases, and work toward valuing differing cultures and languages (Hepburn, 2004).

The Natural Environment

IDEA Part C requires the provision of early intervention services to occur in natural environments, including the home and community settings in which children without disabilities participate (§303.26). However, if the family and Individualized Family Service Plan (IFSP) team determine that early intervention cannot be achieved satisfactorily in the natural environment, an exception to this rule can be made. In other words, services must take place in environments that are typical for same-age peers without disabilities to the maximum extent they are appropriate for the child unless the parents and other team members deem that another environment (e.g., clinic setting) would be more appropriate.

Research supports that EI services are most effective when they take place in natural learning contexts. Daily routines and activities of everyday life are "…important natural learning environments for promoting developmental skills, supporting and strengthening child competence," (Dunst et al., 2001a). Provision of services in the context of natural environments allows for utilization of activities and routines to address a child's skill development at various times during the day as part of their daily schedule. Families and caregivers have more opportunities to support and encourage their child to learn and practice new skills when they are embedded in the environment where a child lives, plays, and learns (Forney n.d.). Enhanced

learning occurs when children are engaged in interactions that provide "…opportunities to practice their skills, explore their environment, and learn and master new abilities," (Dunst, et.al., 2001b). Roper & Dunst (2003) found that acquisition of communication skills was optimized and more readily transferred to everyday contexts when acquired through natural learning contexts. The natural environment also encourages a child's independent participation in communication situations (Paul & Froma, 2011).

The term "natural environment" implies more than a physical locale or event. It also involves the people with whom the child interacts daily, the family, and the opportunities a child has for engagement in communication, social routines, and activities (Paul & Froma, 2011). The natural environment can include family routines, everyday activities, and everyday places. Examples of family routines include mealtime, baths, car rides, and nap time. Everyday activities can be having fun at the playground, going for a walk, shopping, or story time at the library. Everyday places include home, the library, grocery store, neighborhood, or the community center. The Division for Early Childhood (DEC, 2014) used the term "environmental practices" to focus attention not only on the many environments that a child experiences throughout the day but also the "…physical environment (e.g., space, equipment, and materials), the social environment (interactions with peers, siblings, family members), and the temporal environment (e.g., sequence and length of routines and activities) as a means of supporting the child's access to learning opportunities." When embraced by EI practitioners and families, these different environmental elements can be intentionally altered to support each child's learning across developmental domains.

As previously mentioned, one of the key principles established by the Workgroup on Principles and Practices in Natural Environments (2008) stated: "Infants and toddlers learn best through everyday experiences and interactions with familiar people in familiar contexts." The workgroup further identified four concepts to support a child's learning. These include:

1. learning activities – opportunities must be functional, based on child and family interest, and enjoyment;
2. learning is relationship-based;
3. learning should provide opportunities to practice and build upon previously mastered skills, and
4. learning occurs through participation in enjoyable activities.

"Interventions within natural environments with caregivers, providers, and familiar toys and materials allows for generalization of skills, learning opportunities with natural consequences, task specificity, and functional outcomes," (Sheldon & Rush 2001). Providing early intervention supports and services in everyday routines, activities, and places is less disruptive to the natural flow of family life where learning occurs most effectively: the less disruption to this flow, the more opportunities the child has to develop and use their skills where they typically spend time (NM Family Infant Toddler Program, 2002). "Research helps us understand that everyday experiences provide children with continual interest-based learning opportunities that promote and enhance their development. Learning is more meaningful and can be reinforced," (NM FIT, 2002).

Thus, the EI provider needs to become familiar with and understand the context of a family's routines, their interests, and the interests of their child to effectively help the family identify routines and activities in which intervention strategies can be embedded. Focusing on natural learning opportunities within the context of the family's routines and interests enables parents and caregivers to see how their child learns from these everyday occurring activities.

Conversely, providers should also be cognizant of "un-natural" factors that may interfere with or inhibit a family's ability to embed intervention strategies into daily routines. These factors include a provider bringing a specific toy or specialized therapy equipment during an intervention visit before fully exploring what the family already has available to them. For example, a provider might bring Mr. Potato Head ™ (which the family does not have) to a visit for the purpose of having the child name or identify body parts. If the provider takes the toy at the end of the visit, parents will not be able to practice the skills modeled during the session. The novelty of a new toy may pique the interest of the child and motivate participation in learning a new skill, but if the toy is not left for the family to engage the child in play, carryover and practice are missed opportunities. Instead, the use of a child's favorite stuffed animal, action figure, or baby doll, already part of routine play for the child, supports parents in making newly learned skills relevant to the routines the child experiences on a daily basis. As for specialized equipment, some children will require equipment or assistive technology to participate fully in activities, but time should be allowed to learn about a family's interests, culture, needs, preferences, and priorities so the EI provider can better align intervention strategies with the natural learning opportunities afforded the child in their natural environment.

Below is a chart taken from the Workgroup on Principles and Practices in Natural Environments (2008) that illustrates what EI's first key principle *(Infants and toddlers learn best through everyday experiences and interactions with familiar people in familiar contexts*) should and should not look like when implemented in the natural environment.

The Principle Looks Like This	**The Principle Does Not Look Like This**
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 their toys and materials can be used or adapted	Implying that the professional's toys, materials or equipment are the "magic" necessary for child 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 deficits or are not functional or enjoyable
Observing the child in multiple natural settings, using family input on child's behavior in various routines, using formal and informal developmental measures to understand the child's strengths and developmental functioning	Using only standardized measurements to understand the child's strengths, needs and developmental levels
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 a specific way through "massed trials and repetition" in a contrived setting
Focusing intervention on caregivers' ability to	Conducting sessions or activities that isolate the

promote the child's participation in naturally occurring, developmentally appropriate activities with peers and family members	child from his/her peers, family members, or naturally occurring activities
Assuming principles of child learning, development, and family functioning apply to all children regardless of disability label	Assuming that certain children, such as those with autism, cannot learn from their families through naturally occurring learning opportunities

Workgroup on Principles and Practices in Natural Environments, OSEP TA Community of Practice: Part C Settings. (2008, March).

It is important for the EI provider to understand that children learn best through everyday experiences and EI services are most effective when they occur in the context of natural learning opportunities with family and caregivers. This knowledge will support the provider's shift from the traditional clinical model of service delivery to one that is family/child-centered as direct intervention gives way to a supportive/coaching role for the clinician.

From the Therapy Room Table to the Family Room Floor and Beyond

As speech language pathologists, we are well-versed in the traditional clinic service delivery model. We write long-term goals, measurable short-term goals, and functional goals. We collect data from multitudes of trials and document progress using percent accuracy levels. We are trained to diagnose and treat myriad speech and language disorders such as fluency, articulation, aphasia, and swallowing, in different settings such as schools, hospitals, outpatient clinics, and skilled nursing facilities to name a few. Our clients range in age birth-to-90 plus years. Disorders range in severity levels from mild to profound and diagnoses run the gamut from complications due to prematurity of birth all the way to complications secondary to degenerative diseases. Give an SLP any of the above diagnoses, age ranges, or severity levels and you are guaranteed he/she will provide you with a measurable, observable, and achievable goal along with a lesson plan that describes how the goal will be implemented and the materials that will be used. It's what we do. It's what we have been trained to do.

Armed with flashcards, sentence strips, or a cup of ice and a small laryngeal mirror, an SLP will sit with a client at a table or possibly bed-side and provide scheduled, diagnosis- and setting-appropriate intervention. After the therapy, a review of the session may take place with a parent or family member and homework could be assigned. The expectation is that the homework will be completed by the next therapy session. Either the parent/family member or the client (depending on the age) has the responsibility for making sure the homework gets done.

Augmenting the aforementioned clinical model, taking an evidence-based approach to guide clinical decision making and provide treatment recommendations is an ongoing process for the SLP. Recognition of a client's individual differences and communication style requires practitioners to focus on finding pertinent research that addresses techniques or methods that best support their client's needs. In addition, clinicians are generally responsive to family priorities and strive to include parents and caregivers in goal setting and carryover/generalization of skills. Many practitioners help problem-solve with parents and offer strategies that can be implemented at home. They also provide consultative services to parents of children that may not need direct intervention but could benefit from some home program support.

Given the assumption that an SLP is flexible in the implementation of services in various settings, responsive to family priorities, sensitive to individual differences and communication styles, and well-versed in using an evidence-based approach for treatment planning, it is no less challenging making the shift from a clinical model to an EI service delivery model that encompasses the principles of family/child-centered programs and family/child-based intervention models. Naturally, with young children, parents tend to play a more active role in their child's skill development, but not all parents are comfortable taking the lead: healthcare projects the ideology that the doctor/practitioner "knows best," and parents/caregivers often defer to the "expert."

To effectively implement EI services four principles were established by ASHA (2008): (1) services are family centered and culturally and linguistically responsive; (2) services are developmentally supportive and promote children's participation in their natural environments; (3) services are comprehensive, coordinated, and team based; and (4) services are based on the highest quality evidence available. These principles serve as a guideline to be used to inform decisions about EI services rather than promoting a single set of practices.

Moving toward operationalizing the tenets of EI, while adhering to core principles of family/child-centered programs and intervention models, requires a shift in the service delivery model. The SLP now serves in a consultative role providing support, guidance and coaching to parents and caregivers. Taking data and measuring a child's progress based on accuracy levels gives way to facilitating a family's identification of routines and activities where opportunities for natural learning can occur and then supporting the family in their implementation of strategies to facilitate change.

The natural environment is the backdrop to the intervention that will occur and the family and caregivers not only take an active role, but also are key to establishing priorities and identifying the activities and routines in which they will take advantage of natural learning opportunities for their child to gain and practice skills. Providing support to the family is critical. Just as a clinician may be wading into unfamiliar territory, so may the parents. We as clinicians have the opportunity to "engage in practices that are family-centered and designed to strengthen parent/caregiver-child relationships as a means of promoting positive child outcomes" (Bruder, 2000; NECTAC, 2008). One of the many ways we can foster that is through parent coaching.

Empowering Parents/Caregivers through Coaching

Rush & Sheldon (2013) defined coaching as "….an adult learning strategy in which the coach promotes the learner's ability to reflect on his or her actions as a means to determine the effectiveness of an action or practice and develop a plan for refinement and use of the action in immediate and future situations." Coaching in EI is a way to build a parent's capacity to improve their existing abilities, develop new skills, and gain a fuller understanding of their actions and practices for use in current and future situations (Hanft et al., 2004). Coaching is not telling a parent what to do; instead, it allows parents the chance to examine what they are currently doing and how their actions support their child's learning and development (Dunst & Trivette, 1996;

Flaherty, 1999). Additionally, coaching promotes "…self-reflection and refinement of current knowledge and skills by the person being coached," (Doyle, 1999). The goal is to build the parent's capacity and confidence, rather than dependency on the professional to enact change, thus promoting their child's learning and development.

Coaching includes the child participating in everyday experiences and interactions with family members and peers across settings (Shelden & Rush, 2001; Rush, et al., 2003). In order to promote the child's participation in everyday family and community settings, the EI provider uses coaching to create a supportive environment for the parent to encourage action, reflection, and engagement of dynamic sharing of information based on the parent's intentions and current level of knowledge and skills (Flaherty, 1999; Kinlaw, 1999). As parents interact with their child in everyday situations, they can better assess their practices and then improve upon the results (Bruder & Dunst, 1999; Hanft et al., 2004). Coaching in this manner is not a model of how parents and providers work together. Rather, it is a method of interacting with families and caregivers that is designed to promote a sense of confidence and competence in the parents and caregivers (EI Excellence, n.d.).

Evidence-based research in the efficacy of early intervention supports coaching as a means to enhance interactions with caregivers to promote child and family outcomes (Integrated Training Collaborative, n.d.). Parents receiving this kind of support from staff are better equipped to build nurturing relationships with their young children (Zero-to-Three, n.d.). Using the principles of EI as a guideline for imparting information to families and fostering their skill development, coaching interactions between providers and parents during early intervention visits helps parents to develop the ability to interact with their child in ways that support development (Rush & Sheldon, 2005). Further studies provide evidence in support of using a coaching model in EI. Dunst, et al. (2007) found a correlation between the number of EI provider visits (i.e., frequency of EI services) and the direct negative effect on self-efficacy beliefs and parent and family well-being. Visits provided too frequently can be disempowering or send the message that the parent is not competent (Jung, 2003; Dunst, 2004).

Garcia-Grau (2016) also found that the number of professionals working with a family was inversely related to the family's quality of life. The more disciplines involved and the frequency of provider visits, the less confident parents felt in their ability to support their child's learning. Additionally, Moh & Magiati (2012) revealed higher parental stress associated with more professionals being consulted and less collaboration between parents and professionals.

Coaching allows parents to take the lead role of intervention with their child. If done successfully, "…the role of a practitioner should change from being the primary person responsible for promoting child learning to serving as a coach supporting parents and other caregivers. In this new role, the practitioner works alongside the parent(s) to jointly identify strategies to support child participation and learning as well as to support the adults' identification of, access to, and evaluation of needed resources," (Rush & Sheldon 2011). For example, coaching can be integrated into naturally-occurring family routines in the home or community: practitioners can help parents identify strategies to use during routines, and activities then practice these strategies during EI visits, reflect on their interactions with their

children, problem solve challenges, and receive supportive feedback from the provider. (Rush & Sheldon, 2005).

Characteristics of Coaching

Families need to play an integral role in EI services to support their child's goals and development, and coaching has proven to be an effective way to support greater family involvement. In order to coach effectively, providers need to have an awareness of a parent's communication style. There are three different styles of communication – auditory, visual, and kinesthetic. Some individuals may primarily use only one style of communication, while others may incorporate two or all three styles into their interactions and learning. Knowing a parent's communication style can help the provider adapt their coaching style to one that is more readily understood by the parent. For example, auditory learners receive information best when they hear it spoken to them and have the chance to repeat and hear it again for clarity. If a parent or caregiver is an auditory learner, they may ask you to repeat what you have said or ask questions, so they are clear on what has been discussed. Auditory learners frequently talk to themselves as they implement new information. Visual learners receive information best when they can see it and can review it again by looking at it. Parents that are visual learners may want to write down information discussed during a session so they can re-read it. Video recording is another effective tool for the visual learner, which could include the provider demonstrating a strategy and the parent implementing a new skill. Kinesthetic learners receive information best when they can experience it and understand how it works. Parents may want to be actively engaged in implementing a strategy or skill as the provider is explaining it or demonstrating it.

Coaching is as much a process as it is a practice. Rush & Sheldon (2005) identified five characteristics that promote the use of newly learned practices or improvement of existing skills. These coaching characteristics were joint planning, observation, action, reflection, and feedback.

Joint planning takes place during each EI visit. The parent and provider collaborate and develop a plan for what the parent will work on between visits or how the parent will utilize any new information gained during the current session. The plan takes into consideration the parent's existing skills and any new skills learned or practiced during the current session. Also included in the plan are the routines or activities in which the strategies will be implemented. It is important for practitioners to employ both active and reflective listening practices. Active listening requires the listener to concentrate fully, understand, respond, and remember what is said. Active listening is restating what the parent has said, in the provider's own words, so both parent and provider confirm the parent's thoughts and ideas. Reflective listening is a strategy primarily used in counseling but is one that is effective in coaching as the provider reflects back to the parent, what the parent is thinking and feeling. It serves as an affirmation that the parent has been heard and understood by the provider.

Observation refers to the appraisal of another person's actions or practices to be used to develop new skills, strategies, or ideas. There are two ways observation can be accomplished during an EI visit: direct observation and modeling. The provider can directly observe the parent implementing a skill or strategy during their interaction with the child. This observation is critical to the coaching process because it provides an opportunity for discussion, reflection, and important feedback between the caregiver and provider. Observation can occur as the parent

demonstrates what they have worked on during the week (or between EI visits) and as the parent demonstrates a newly learned skill from the current session. The parent can also observe the provider modeling a new skill, one that builds upon what the parent might already be doing or one that demonstrates the use of new strategies. After modeling, the parent and provider can discuss how the strategy or new information might be used to achieve the desired outcome for the child. The parent should always have an opportunity to practice a new skill or strategy while the provider is present to engage in real-time reflection and feedback before expecting to implement it on their own between visits.

> SIDEBAR: an important note about modeling. Modeling helps determine how a strategy developed in collaboration between the parent and provider might be implemented. The provider should fully explain what is intended and have the parents observe something specific. Following the modeling, the provider should explain what they did and the response of the child. The parents should be given an opportunity to try the strategy. Afterwards, reflection on how it worked should take place, and a plan for implementing the strategy between visits should be put into place (Rush & Sheldon, 2012).

Parents and caregivers need opportunities to practice, refine, and analyze new or existing skills. *Action* provides these opportunities: the parent and caregivers can use the information discussed with the provider, or practice newly learned skills either during or between EI visits. As previously discussed, part of joint planning is determining what skills or strategies will be worked on and in what contexts. Arenas in which strategies can be practiced can include familiar routines, planned activities, or spontaneous events. It may be easier to practice newer skills in the context of familiar routines because of the predictability of, for example, getting dressed, than it would be to implement a new skill for a spontaneous event such as an impromptu visit to the neighborhood fire station. Instead, using unplanned events for skill refinement, or practicing existing skills in less familiar situations, is an effectual way to scaffold parent's capacities and build confidence.

Reflection takes place following an observation or action. With the support of the provider, parents analyze their actions or use of existing strategies and determine if they remain adequate or if modifications or changes are needed to achieve the intended outcome for their child. Reflection can take place immediately following an interaction between the parent and child, guided by the provider if present, or in between EI visits and shared with the provider during the next visit. Joint planning, observation, and action—especially practicing new skills during an EI visit—provide a framework for reflection. Over time parents and caregivers become more skilled and confident in their ability to analyze actions, judge experiences as successful or unsuccessful, and make any necessary adaptations or changes in real time or for future situations. Successful coaching in this area relies on both active and reflective listening skills. Practitioners should work toward helping the parent answer their own questions, and provide support and knowledge necessary to guide decision making. Providers might use objective questions to prompt the parent to reflect on what happened, interpretive questions to encourage reflection and draw conclusions about their observations, and comparative questions to support the parent in evaluating events and action/interactions with their child. (Hanft et al, 2004). Examples of questions that could be used by the provider to facilitate the parent's reflection include: Describe what happened when you ....?; How did your child respond to ….?; I noticed that you….Tell me

more about that strategy; What do you think would happen if ….?; What might you try next time? Reflection is important because it empowers the parent to assess their performance. Awareness of their strengths and areas in which they need to build skills, allows parents to make corrections and adaptations in their actions that feel more natural and are generated from within (Zero-to-Three, 2016).

Feedback takes place after the parent has reflected on observations and actions and has had the opportunity to practice new skills during the EI visit. As the parent engages in reflection, the provider gives feedback about what was observed, the quality of the actions, strategies, or techniques, and what skills can be improved upon. Feedback is used to expand the parent's current level of understanding and knowledge or to affirm their thoughts and actions related to the intended outcome. Parents can then reflect on the feedback and plan next steps, make adjustments to their practices, and generate new ideas. It might also lead them to ask for assistance or additional resources to help improve their child's learning. An essential element of the coaching process, feedback is a conversation about what worked and what was challenging, and can be delivered via both supportive and constructive/informative methods. Supportive feedback is specific encouragement given to the parent. The provider might comment on the successful implementation of a strategy, or point out an improvement in a new skill, or highlight the parent's accomplishment as it relates to an outcome. Constructive, or informative, feedback provides the parent with information directly related to observation, action, or reflection. The goal is to improve the parent's implementation of a strategy or action by identifying the problem, generating options, deciding on possible solutions, and then evaluating the solution. How constructive feedback is delivered should be carefully considered by the provider. A trusting relationship is important, so feedback is not interpreted as evaluative or judgmental (Collaborative Coaching Partnership, n.d.).

> *When Lena's parents wanted to learn sign language so they could teach their daughter, the SLP provided instruction using multiple adult learning styles. The SLP provided information both auditorily and in written form, and videotaped the parents performing the signs so they could have hands-on practice and review the video if needed. During the EI visit the parents and SLP engaged in* ***joint planning*** *as to how the five new signs would be used between sessions. The parents had both practiced the signs and felt comfortable performing them without needing to look at the book or review the video. The parents decided that the signs for 'more, all done, and milk' could be used during mealtime, 'baby' would be used in play, and 'book' and 'more' would be used during story time before bed. During the week, the parents practiced using the signs with Lena. They did not expect Lena to imitate the signs rather only observe them producing the signs in the context of the chosen routines and activities.*
>
> *When the SLP arrived for the next EI visit, the parents reported their successes and perceived failures at using the signs during the routines. The SLP actively listened to the parents and reflected back what was being said to make sure it was understood. The parents were pleased with how often they were able to sign "more" and "milk" during mealtime but realized there was only one opportunity to sign "all done" when the meal was over. They also reported that "baby" was easy to sign frequently because Lena loved her baby doll and it was easy to engage her in play with it. The parents were*

initially unsure how they could successfully incorporate "more" during reading, but Lena seemed to enjoy one book in particular so they figured out they could sign "more" and re-read the book to her. They indicated they only signed "book" one or two times during story time before bed.

The SLP had previously asked the parents to video record a few of their interactions using signs with Lena during the week as well as demonstrate their use of signs during the visit. Upon reviewing the video recording and watching the parents "in action" during the session, the SLP was able to ***observe*** *how the parents implemented their use of signs during the chosen routines. The parents and SLP engaged in a discussion regarding how the parents felt about their use of signs as well as how Lena responded to the signs. The SLP provided some additional opportunities where "book" could be used during story time such as pairing it with "more" (i.e., "more book"). It was also suggested that "all done" could be incorporated into story time after each reading of a book. The SLP modeled for the family how they could use these signs in this particular activity and then asked the family to try it with Lena as the SLP observed the interaction.*

With the support of the SLP, the parents ***reflected*** *on their use of signs during the previous week. They were able to analyze their strengths as well as where they needed some additional guidance. They described how Lena responded to their use of the sign for "more" by reaching out and grabbing their hands. They also discussed what might happen if they tried to help Lena perform the sign. They were excited to incorporate more opportunities to use the signs they already knew and learn some additional signs.*

After the family practiced using the familiar signs, they asked if they could be provided with a few additional signs. They had been noticing Lena trying to pull off her socks and thought they could show her the sign for "socks" as they talked about what she was doing. They also wanted to learn the sign for "swing" because the weather was nice and they were going outside more often to play on the swing set. The SLP modeled the signs, video recorded the parents using them, and had the parents demonstrate their use in the context of the specific routines they had identified. The SLP provided ***feedback*** *following the parent's use of "socks" as Lena was reaching for her socks while laying on her back, suggesting they talk about what Lena just did, emphasizing the word as they signed it (i.e., "Lena pulled her socks off….socks…..").*

Building Parent/Caregiver Competency and Capacities

In addition to coaching, providers can help parents and caregivers continue to build competency and capacities through parent education, engagement throughout the IFSP/IEP process, and involvement in community collaboration/engagement.

Parent Education

Mahoney, et al. (1999) defined parent education as "…the process of providing parents and other primary caregivers with specific knowledge and child-rearing skills with the goal of promoting the development and competence of their children." Parent education can build on a parent's knowledge and skill set, strengthen the relationship between parent and child, and provide

guidance in choosing age appropriate care and activities that can support a child's health, development and social and emotional skills (Hepburn, 2004).

The importance of the early parent-child relationship in influencing child growth and development has been established, making parent involvement critical to the effectiveness of early intervention (Kelly & Barnard, 1999). Able-Boone (1996) reported that outcomes of infants and toddlers are best addressed in the context of their family – more specifically, within the parent-child relationship. EI practices are designed to support and enhance the parent-child relationship as the foundation for infant-toddler development, with research documenting the efficacy of making relationship-based intervention the focus of EI efforts (Kelly & Barnard, 1999). It is important for practitioners to help parents meet the needs of the family to provide a nurturing environment for their child, thus reducing stress and promoting a healthy parent-child relationship (Dinnebeil, 1999). But what are these needs? Results of a parent survey (Mahoney et al., 1999) indicated that parents and caregivers wanted information about specific ways to help their child achieve desired outcomes through educational activities rather than through other forms of assistance (e.g., resource and family assistance). Therefore, it is important to include parent education as part of any early intervention program.

Integral to providing effective parent education is the understanding of what parent education looks like as part of a relationship-based model. Historically, parent education might call to mind a small group or classroom situation where various topics are presented to parents and caregivers on child development, behavior management, or effective discipline practices. Conversely, as part of a relationship-based model, Dinnebeil (1999) described parent education as "…systematic activities implemented by professionals to assist parents in accomplishing specific goals or outcomes with their children." Some of the goals of parent education include "…teaching strategies to assist children in attaining developmental skills, helping parents manage children's behavior in the course of daily routines, and enhancing parents' skills in engaging their children in play and social interaction," (Dinnebeil, 1999). In other words, the process includes the expectation that parents will acquire, and build on, the knowledge and skills that allow them to provide intervention throughout daily routines and in between EI visits. Because parents and caregivers will be employing intervention strategies in between EI visits, it is essential that EI providers impart to parents how and why interventions should be used in everyday routines.

Given that the parent-child relationship is the context in which development takes place, parent education activities are key components of EI programs. Parent education should be presented in the form of a range of individualized activities that help parents learn a new skill or acquire new information. Activities should be designed to address specific learning needs identified by the family, with the support of the EI provider. According to Dinnebeil (1999), parent education must address three essential elements: (1) intended outcomes; (2) instructional or educational activities designed to facilitate learning; (3) matching instructional strategies to intended outcomes. An intended outcome might be a parent wanting to apply a new skill or an already acquired skill in a new situation. For example, a parent learning sign language might want to learn five new signs or be able to incorporate signs already learned to new situations. Identifying instructional or educational activities could include watching a video or reading a book. The parent and provider collaborate on which signs would be most beneficial based on

family routines and desired outcomes. Implementation of the intended outcome is then matched to identified routines and activities. If the parent chose five new signs related to food, he or she could model (and reinforce) the signs to the child during mealtime. The provider might employ coaching strategies as the parent practiced their newly acquired skill.

Another goal of parent education is to strengthen the parent-child relationship, which can often be achieved through play activities based on a parent's expressed interests and concerns. McCullom & Yates (1994) identified play as a way to enhance the following abilities in parents: (1) be comfortable and engaged with their children in play activities; (2) observe and interpret their children's developmental levels; (3) expand their understanding of the influence that the environment has on children's development; and (4) feel confident in their role as a parent in supporting their child's learning and development.

Optimal interactions between a parent and child are based on contingent responses, with both parties providing a reciprocal range of clear communication cues and responses to one another (Kelly & Barnard, 2000). Parents are encouraged to recognize, interpret, and respond contingently to the communication cues of their children. However, some interactions between a parent and child are challenging and difficult to develop or sustain – for example, if the child has a communication delay. Such factors may adversely affect the parent-child relationship as a result of continuous negative interactions and responses (Sameroff & Fiese, 2000). Consequently, specific interventions (via parent education) may be needed to enhance parent-child interactions (Mahoney, Finger, & Powell 1985).

> SIDEBAR: There has been some pushback to using the term *parent education* in the context of a relationship-based model of interaction. Winton et al. (1999) stated that *parent* conveyed the message that only the mother and father were the focus, leaving out siblings, extended family, and other caregivers. Additionally, the term *education* implied the direction of information was being passed from the professional/expert (one who knows) to the parent (one who doesn't know) and therefore misrepresented the interactions between the provider and family in EI's relationship-based model. It was suggested that a more accurate representation would be the term *parent-professional collaboration* as it best described the sharing of information in a "…two-way fashion to help parents accomplish goals or outcomes for their children."

Engagement through IFSP Process

Part C of IDEA (2004) requires family members to be involved in all aspect of their child's services. Therefore, parents and caregivers are vital to the implementation of early intervention. Parent input is invaluable throughout the entire Individualized Family Service Plan (IFSP) process from the initial intake to the development of the IFSP, and beyond. Engaging parents and caregivers as equal team members along with professionals is essential to the process of identifying a child's strengths and needs and generating an IFSP that ensures meaningful outcomes with services that address the needs of the child and family (ifspweb.org n.d.a)

Because of the shift from the traditional clinic service model to one that is family/child-centered, the child, along with the child's family and caregivers are now the principal recipients of EI services and support (Raver & Childress, 2014). The collaboration between parents and

professionals strengthens parents' natural abilities to influence their child's development and learning. When parents are provided with information, reassurance, and support, they become strong advocates for their children (Trivette & Dunst, 2004). It is through meaningful parent-professional relationships that parents are afforded experiences that lead to positive outcomes for their child and family (Raver & Childress, 2014).

As fully participating members of the early intervention team, parents become the primary decision makers throughout their family's time in EI. This includes decisions regarding the types of services their child and family receive, the location where services will occur (e.g., home, daycare, etc.), identifying child and family outcomes, and assessing whether or not their child and family have benefited from recommendations made collaboratively by the EI team.

Additionally, parents and caregivers are the primary and most necessary source of information during the assessment process that precedes development of the IFSP, as they are the only members of the IFSP team who can describe their child's abilities in the context of everyday routines and activities. Byington & Whitby (2011) reported that parents generally become more active contributors in the assessment and planning process when they feel comfortable and prepared. It is important for EI practitioners to prepare parents for the evaluation by providing information on what questions will be asked, what tasks their child will be asked to perform as well as helping them prepare information they would like to share with the other members of the team.

During the IFSP process the team makes decisions collaboratively; however, parents have the final decision on the kinds of services received as well as the frequency and intensity of those services. The commitment of the family to the decision-making process is paramount to the success of their child's intervention. Parents and caregivers are encouraged to participate in all aspects of the intervention process as they are the primary "change agent" in their child's life and have a direct influence on their child's learning and development (Raver & Childress, 2014). Involvement of family members varies, and participation should be encouraged at a level that is best for the family's identified needs. Some parents may be directly involved in all aspects of their child's services while other parents may decide to participate in a less active way. Each choice is supported by the rest of the team because it represents the preference of that family. Often, a parent's priorities regarding their child's development will differ in importance from those of professionals, and they may view their child's development differently regarding importance or necessity. However, it is the role of the family to prioritize their needs and concerns in order of importance. This is critical because it is the family, not the providers, who know their family best and who will ultimately be supporting their child and family during everyday routines and activities to achieve their goals (ifspweb.org, n.d.b).

Trivette & Dunst (2004) found when families were encouraged to be active members of the team parents were likely to participate more resulting in more positive long-term developmental outcomes for the child, and parents reported an increase in their sense of empowerment or their belief they could make a difference in their child's life. Supportive parent-professional collaboration and strong family-professional relationships also increased the chance of families participating in experiences that led to positive outcomes for themselves and their child (Wolery & Hemmeter, 2011; Raver & Childress, 2014; ifspweb.org, n.d.c).

Family and Community Engagement

"Early intervention provides supports and services to assist families and caregivers in enhancing their child's learning and development to assure his or her successful participation in home and community life," (Best Practices in Family Engagement, 2014). Beyond early intervention, parents can continue to support their child's development and build upon their knowledge and skills through family and community engagement. Family and community engagement in early care and education (ECE) is defined by "…strong relationships and partnerships between ECE programs and families to enhance children's learning and development," (Excelerate.org, n.d.).

The approach of family and community engagement recognizes that children develop within the context of families and communities; families, communities, and early childhood programs all play a role in children's development (Epstein, 1995; Halgunseth et al., 2009; Weiss et al., 2006). The National Center on Parent, Family, and Community Engagement (n.d.) defines strong family and community engagement as "…building relationships with families that support family well-being, strong parent-child relationships, and ongoing learning and development of parents and children alike." It is a shared responsibility for all entities that support a child's learning to include parents, ECE programs, school, and the community.

Research has concluded that families have the greatest impact on their children's development. ECE programs that are responsive to families and engage parents and caregivers in their child's learning will contribute to shaping positive outcomes for children in their programs. Programs that work on building responsive and strength-based relationships with families increase the likelihood of families engaging in their children's learning experience and becoming more involved in the ECE program itself (Excelerate.org, n.d.)

As children transition from EI to ECE programs, parents continue to be integral in guiding the development of child and family outcomes through collaborative decision-making with education professionals. The transition between programs can be an uncertain and daunting experience for many families. Gooler (2010) explains the difference between the two programs as follows:

“The methods of service delivery in the two settings are very different. In EI, the focus of intervention is the child within the family, using a relationship-based model. In early childhood, the focus shifts to the child within the community of learners, using an education-based model. Successful transitions engage parents and caregivers in developing the transition team, focusing on strengths to identify goals and challenges, sharing information between families and the sending and receiving programs, preparing the child for change, monitoring the child's and family's experiences, and evaluating the transition process. The result of a successful transition is smooth placement of the child in the most appropriate environment.”

ECE program professionals actively work with families to bring parents' strengths and resources to the program. There is ongoing reciprocal communication between families and professionals with family goals, interests, needs, and expectations considered the utmost of importance. Through a working partnership, parents continue to be active in collaborative decision-making about goals for their family and child. Professionals work with families to enhance their capacity

and confidence to support their child's learning, and parents participate and share leadership responsibilities for decision making.

Because of research indicating family engagement is a necessary component in all early learning environments, Best Practices in Family Engagement (2006) was established by the Governor's State Advisory Council on Early Care and Education in Maryland, through the State Department of Education to monitor the improvement in early care and education. The coalition adopted the following seven goals:

1. promote family well-being;
2. promote positive parent-child relationships;
3. promote families as lifelong educators of their children;
4. promote the educational aspirations of parents and families;
5. promote families through the care and educational transitions of early childhood;
6. connect families to their peers and to the community; and
7. support the development of families as leaders and child advocates.

ECE programs understand the importance of families in the program and the lives of their children and recognize that parents are developing skills to encourage and engage their child; thus, many ECE programs now implement these seven goals.

The importance of supporting and encouraging parents during their child's time in EI empowers them with knowledge, new skill sets, and confidence as they transition to community programs to include early childhood and school programs where they will continue to play an important role in enhancing their child's ongoing learning and development.

Identifying Priorities and Routines

Evaluation and Assessment

The principles of early intervention include helping families identify areas of strengths and needs and develop family-based outcomes. This can be accomplished through both formal and informal measures. Formal measures are typically standardized tests (norm-referenced, criterion-referenced) or questionnaires that result in information used to calculate a standard score, percentile rank, and age-equivalent, whereas informal measures may include interviews and observation of the child and family in their existing routines. Throughout a child's time in EI, they will be subject to both formal and informal measures.

Formal measures (evaluations, defined as a series of activities conducted to determine a child's eligibility) are used to determine a child's eligibility for EI program services. Eligibility criteria vary from state to state (i.e., percent delay needed to qualify) and all programs utilize specific evaluation tools used to determine eligibility. Because of the recognized limits of standardized testing, professional clinical judgment or clinical opinion can be used to determine eligibility if the evaluator feels the evaluation tool (test) does not fully represent the child's performance or their delays in a specific area of development.

Informal measures (assessments, defined as a series of activities conducted to determine a child's specific needs) reveal more valuable information about the family's routines and the child's

participation level in those routines. This gives a complete picture of the child's overall functioning and can provide much-needed information as to how a child's challenges interfere with or inhibit their full participation in family routines and community activities.

For speech-language pathologists, several different evaluation instruments have been approved for use in EI, including norm-referenced, criterion referenced, and parent questionnaires. Among them are *The Rossetti Infant-Toddler Language Scale* [criterion-referenced], *Sequenced Inventory of Communication Development (SICD)* [norm-referenced], *Mac Arthur-Bates Communicative Development Inventories* [parent questionnaire], *Pre-School Language Scale (PLS 4 or 5)* [norm-referenced], *SKI-HI Learning Development Scales* (Hearing Impaired 0-3) [curriculum-based] and *Receptive-Expressive Emergent Language Scale III (REEL III)* [norm-referenced]. These tools provide a snapshot of skills based on age-level and can be used to calculate a percent delay based on a child's chronological age compared to their age level scored on the test. (Note: Evaluation tools to determine eligibility may vary from state to state.)

However, results delivered from standardized testing may not be definitive. Caution should be taken when reporting age-level results, as the testing is done in contrived situations and not naturalistic routines. Other shortcomings for standardized tests include too few testing items in an age range to accurately gauge a child's performance at that specific age level. Application of the skills being tested are limited to test kit materials or situations and do not take into account how a child might apply those same skills in their everyday environment. Additionally, standardized tests are normed on typically developing children and therefore do not take into account a child's individual differences. A child with cerebral palsy may not have the fine motor skills to be able to follow specific directions using manipulatives as part of a receptive language evaluation but might be able to demonstrate those same skills in an informal play-based activity or setting. A child with apraxia of speech would have difficulty with the imitation of sounds, naming objects, or sequencing two or more words together, but might use gestures and vocalizations to communicate a variety of different intentions. Both of these children would score lower based on standardized criteria, and the age-level score would not be representative of their functional skills. Conversely, some children score within their age range on tests where rote verbal skills such as naming pictures, colors, and letters, counting tasks, and identifying pictures on request are evaluated. These children have higher language output but might not be able to use their language functionally to communicate their wants and needs or to interact with others. These examples support the need for additional informal observations and parent report as co-equal evaluation and assessment measures to accurately identify a child's strengths and needs in the context of their routines in their natural environment.

Two assessment instruments providing a framework for helping families identify priorities and routines are the *Routines-Based Interview™ (RBI)* (McWilliam, 2009) and the *Wisconsin Assistive Technology Initiative Assessment* (*WATI)* (Wisconsin Assistive Technology Initiative, 2004). Both measures allow families to express concerns, identify priorities, and determine barriers to their child's participation in daily routines and activities.

The RBI is an informal, semi-structured interview process which assesses the child's engagement, independence, and social relationships within everyday routines as well as and families' satisfaction with those routines. The RBI can also be used to get a parent's description

of their child's functioning in different areas of development, including communication, motor, cognitive, social relationships, and self-help skills. Throughout the interview, evaluators can tease out the perceptions and expectations parents and caregivers might have for their child's participation in priority routines and identify the challenges to participation in those routines: helping families determine what barriers interfere with their child's participation is the first step in intervention. Using the RBI is a way of establishing a positive relationship and collaborative partnership with a family, allowing the evaluator to become familiar with the family and how it functions. Participants in the interview should include parents and caretakers that spend more than 15 hours per week with the child.

During the interview, the evaluator helps the family share detailed descriptions of their child, learns about the family's concerns and priorities, and identifies routines within the life of the family where there are strengths and/or needs specific to their child's disability or challenges. Inherent challenges in a child's disability are often most salient in the simplest family routines, and may include routines that take place in settings outside of the home such as daycare or at a grandparent's home. The RBI teases out those challenges, as well as identifying how the family might already be coping with or adapting to those challenges.

When routines are identified, families are asked a series of questions to enable them to describe how their child functions within that routine: how does your child participate, what is their communication like, how independent is your child, how does your child interact or get along with everyone else, etc. The evaluator explains to the parents and caregivers the value of embedding therapeutic intervention outcomes into everyday activities and routines (families and caregivers are more apt to take an active role if they understand how vital their participation is to their child's development). The family then prioritizes their goals and develops outcomes for achievement.

The WATI is designed as a protocol (not a test) for performing a functional evaluation to assess a student's need for assistive technology (AT). It is currently used state-wide in Wisconsin, as well as in school districts across the country, as a process-based and systematic tool for gathering information about a child and their potential need for AT. While it is specific to AT, it is easily adapted for as a useful tool in EI to identify a child's strengths and needs and guide families in identifying activities and routines where the child's disability impacts participation.

The WATI is organized in an easy-to-use format with a combination of checklists and sections for including additional information and examples related to the child's abilities or challenges. Different sections can be chosen based on a child's and family's specific needs, including communication, hearing, mobility, fine motor, seating and positioning, pre-literacy and literacy, and vision.

The communication section of the WATI is comprehensive and includes sections that target all aspects of communication (receptive, expressive, pragmatic, etc.). It is replete with questions about a variety of different aspects of communication and represents an expressive language/communication hierarchy identifying the primary means of communication. It includes non-verbal means of communication such as changes in breathing patterns, facial expressions, gestures, eye-gaze/eye movement, and sign language and progresses through vocalizations,

single words, and multi-word utterances. It also surveys how understandable the child is to strangers, teachers/therapists, peers, siblings, parents, and caregivers thus framing communication within a child's everyday activities in different environments. The WATI also uses a series of questions that ask about the communication expectations in different environments such as home, daycare, and the community as well as informal and formal situations and interactions with peers. This includes a checklist for the child's interaction skills (how they communicate with others) and a rating scale for how often (always, frequently occasionally, seldom, never) they initiate interactions, ask questions, respond to communication interaction, require verbal prompts/physical prompts and terminate communication. The communicative intent is also shared by parents through examples of communicating wants/needs, social interactions, social etiquette, denials/rejections and sharing information.

Additional sections can be added to complete the assessment. The Referral/Question Identification Guide provides basic information such as areas of concern, environmental settings, current service providers, and medical considerations. The General Information section contains questions about behaviors (both positive and negative) that might significantly impact the child's performance. Strengths, learning styles, interests, coping strategies, fatigue, and changes in performance at different times of the day are also addressed in this section.

> *At two years old, Christopher had one word in his vocabulary ("dada") which he used meaningfully for his father; in addition, he also used "da" to name objects and make requests. He primarily vocalized open vowel sounds and had no other consonant sounds in his repertoire.*
>
> *Christopher was evaluated for delayed expressive language skills. His scores on the Preschool Language Scale (PLS-4) revealed age-appropriate receptive language skills and an equivalent age score of 13 months in expressive language skills, resulting in a 45% delay in expressive language. All other areas of development (fine motor, gross motor, social-emotional, adaptive) were within normal limits. Christopher qualified for early intervention services based on results of his evaluation, but the evaluator was interested in obtaining additional information which would help the family share concerns and priorities and identify routines where their child had difficulty with participation due to his delayed communication skills.*
>
> *Utilizing portions of the WATI and RBI, the family identified mealtime as one routine that was challenging because of the lack of communication skills. Christopher, going through a "picky-eater" phase, had gone from eating anything his mother presented to him to wanting specific food items. His mother indicated that she felt she was playing "twenty questions" every time she prepared Christopher's meals: when she asks what he wants to eat, he typically responds with "da." She then starts asking Christopher if he wants certain items and he will continually shake his head no until she finally asks about a food item he wants. He then smiles and shakes his hands in excitement. This routine reportedly occurs multiple times during each meal. If it takes too long for her to guess what Christopher wants, he fusses briefly before escalating to screaming in frustration. Both Christopher and his mother are becoming more frustrated during these moments.*

The evaluator asked how Christopher was able to get his needs met. His mother stated that he might take her hand and lead her to what he wanted, point and vocalize, or reach out toward an object he desired, but if she is unable to understand what he wants, Christopher throws himself on the ground in a temper tantrum. She also stated that she and her husband can figure out what he wants more often than his grandmother, who cares for him one day per week in her home. When he is with grandma, he has many tantrums during the day. Further questioning revealed that Christopher was better able to cope with not being understood when well rested versus when tired.

When asked if the family had tried anything to help the mealtime situation, Christopher's mother reported that she had started offering him two choices at a time, showing him the actual food items instead of just naming them. The evaluator asked if there were any changes in Christopher's behavior with this new method and his mother reported that it was cutting down on time spent finding out what he wanted but not having much of an impact on his screaming episodes or temper tantrums.

When asked about how the communication delay was impacting the family during mealtimes, Christopher's mother started to cry as she expressed how stressful it was and that she dreaded mealtime. She shared that she often tried to feed Christopher his dinner before her husband came home, so there wasn't a disruption or temper tantrum while they were eating together. She also indicated that she was fearful of taking Christopher to a restaurant because of the screaming.

The above example is only a portion of the information gathered during the interview with Christopher's mother, but it illustrates a few important points. First, the parent interview gathers much different information than the standardized evaluation and is of more functional value as it highlights the impact of the communication delay on family routines. Second, it establishes the family's priorities (communication, frustration, and temper tantrums), identifies a routine significantly impacted by the barriers to full participation, and identifies a family's strengths and needs. Third, and arguably the most important element, it fosters the establishment of a rapport and collaborative partnership between the parent and provider as the provider becomes familiar with the family and its functioning.

Implementation

The evaluation and assessment process is a critical component in EI, not only to determine eligibility for the program but to also ascertain a child's strengths and needs and identify family priorities, family routines, and child participation in routines. Formal and informal measures, collectively, provide the platform for identification of family priorities, which is reflected in the Individualized Family Service Plan (IFSP) as part of the child and family outcomes. Helping families define their priorities is paramount for developing strategies to facilitate change and foster the child's development.

In other words, the groundwork for identifying family routines and activities is laid during the assessment process and then refined once intervention services are implemented: it is within the sequences of events that make up routines that opportunities for communication and learning can occur.

The most effective framework to support and sustain early intervention activities for children is made up of routines that occur in the natural environment (Jennings et al., 2012). Familiar routines are predictable, functional, and occur a number of times through the day, providing meaningful contexts for children to learn new skills (Woods et al., 2004). When developmental interventions are embedded in children's regular routines and activities, skills learned are functional and meaningful for children and their caregivers (Kashinath et al., 2006). Thus, ideally, children should learn and practice the targeted skills identified from IFSP outcomes as they engage in activities in their natural environment that have intervention integrated into them (Jennings et al., 2012).

Just as in the evaluation process, conversations with parents, extended family, and caregivers are important in helping the family to identify potential routines and activities that can be used for teaching and learning. Sharing information about their day, the places they go, and the routines and activities that occur most often for their child (as well as the time of day in which they occur), will give the provider an opportunity to flesh out which routines are repetitive and predictable, resulting in a framework in which to embed intervention (Dunst, et al 2000b).

TaCTICS (2000) developed a series of questions to help families and providers identify specific activities, environments, and routines that could be used to embed intervention strategies. These questions elicit information like the types of activities or routines the child enjoys, what the child usually does during each routine, the length of time it takes for each activity, who the other participants are, and whether or not the child interacts with other children during the activity. Also addressed are routines that the child does not enjoy, and what makes these routines difficult or uncomfortable for the child. Additional questions tease out the expectations the parent have for the child during these activities, and how the parents and caregivers convey then to the child. Lastly, a series of questions helps to identify the optimal times of day and locations for those routines where the child and family might be most comfortable supporting intervention.

Activity-based intervention incorporates teaching and learning within a variety of daily routines and activities within the child's and family's lives. Routines and activities become the context for intervention, and not adult structured teaching lessons (FACETS, 1999). It is important to use routines that are predictable and meaningful activities that match the child's interests. These can include both simple (single step) and complex (multiple steps) activities, ranging from waving bye-bye to mommy every morning to an evening bedtime routine. Routines with the greatest potential for developmental intervention are those activities that keep the child engaged and interested (Dunst, et al., 2001a). Interventions embedded into the child's favorite play routines increase motivation and engagement of the child and parents while promoting skill development.

FACETS (1999b) published a list of key components to consider when choosing activities and routines as the context for intervention.

- Routines and activities should be:
    - Identified from the child's and family's settings and schedule preference,
    - based on identified goals and outcomes,
    - identified to increase the family member's time, availability, and confidence,

    - chosen to ensure several opportunities to practice skills which are fun for the child to increase attending and motivation
    - short and positive, and
    - frequent and predictable.
- Use each family's schedules and interests.
- Incorporate family practices and values.

TaCTICS (1999) also developed a list of considerations when planning routines-based intervention with key areas to address interventions within a given routine. These include questions for providers to ask themselves:

- What are the targeted outcomes that fit within the routine?
- What are the opportunities for intervention on each targeted outcome?
- Who will facilitate the intervention being used in the routine?
- What methods of intervention strategies will be used?
- How will the child's participation be cued in the routine?
- What contingencies will be required for the child's response in the routine?
- Are all locations where the routine occurs included for consideration?

One approach to developing a routines-based intervention plan was suggested by Flores & Schwabe (2000) and includes five components. First, identify the child's targeted developmental *outcomes* in the IFSP. Second, identify *natural environments* where interventions will occur. Third, analyze *activities and routines* in environments that have the potential for targeted interventions linked to developmental outcomes. Fourth, develop and implement a *plan* with embedded intervention strategies in routines. Fifth, collect child *data* and review to monitor progress.

.

Rori is 27 ½ months old. She initially had an evaluation through EI when she was 15 months old due to delayed gross motor skill development. At the time of the evaluation, Rori was found eligible for the program but the family decided to seek private therapy through a clinic because of their insurance coverage. Rori was discharged from physical therapy three months later.

At 24 months Rori's parents were concerned that she was not using many words, did not seem to understand directions, and had a short attention span. There were no specific health concerns at the time, but Rori had had chronic ear infections between 12 – 15 months of age and had surgery for bilateral PE tube placement when she was 17 months old. Her hearing had been recently tested and was within normal limits. Rori was reevaluated through EI and was found eligible for services with delays in receptive and expressive communication and sensory regulation (e.g., she presented with sensory seeking behaviors that interfered with her ability to attend to tasks).

During the evaluation process the family identified two priorities they wanted to address: communication and attention. With the help of the EI team, Rori's parents ***developed an outcome*** *that addressed her understanding and use of language and her need for improved attention so she could learn, play, and interact with others. In collaboration with the providers, the family* ***identified several possible routines in which intervention***

could occur *(playing outside in the back yard, rough-housing with dad, meal time), and they chose to start with bath time because Rori loved her baths and enjoyed playing in the water with her bath toys. Her parents also indicated that Rori did more vocalizing during her baths and seemed to have a longer attention span when playing in the bath tub.*

Some of the strategies developed as part of the ***intervention plan*** *included incorporating vocabulary associated with Rori's bath experience. Words such as water, bubbles, names of her bath toys (fish, boat) were incorporated into the bath routine. Having the parents narrate Rori's actions (e.g., the fish is under the water, you popped the bubbles), as well as their actions (mommy is putting soap on the washcloth, I am washing your tummy), were also added strategies. Since Rori liked movement, using the parent's larger jacuzzi bath tub was identified as an ideal size for Rori to be able to splash and make waves. The parents also suggested that maybe Rori's older brother might be able to get into the jacuzzi but with her and engage in back-and-forth interactions such as blowing bubbles in the water, or pushing a float toy back and forth. Rori liked to imitate her brother, so incorporating games of imitation during bath time was suggested: playing "Simon Says," for instance, would incorporate direction-following and provide a model for Rori to imitate. Pointing to body parts, performing different actions, etc. would be included. Opportunities to make choices were also included in the strategies, such as presenting Rori with two bath toys and asking her to choose which one she wanted added to her bath. This could be accomplished through an eye gaze, pointing, or vocalizing her preferences. Expanding the routine to include the steps of undressing, getting in and out of the tub, drying off, and getting her clothes back on were all addressed in the development of strategies.*

During each early intervention visit, the provider used coaching strategies to guide the family in reflection and analysis of the intervention plan, ***evaluate results****, and modify strategies as warranted. This included building on and expanding to other routines, such as playing in the plastic blow-up pool in the backyard or a visit to the beach, all of which were enjoyable for Rori, her parents, and her older brother.*

A final consideration that applies to evaluation, assessment, and intervention planning alike: All families enter EI because their child is either delayed in one or more areas of development or considered to be at risk for a developmental delay. During the process of identifying a child's needs, daily challenges, and barriers to participation in routines and activities, the provider should be mindful of affording the family an opportunity to share their child's likes/dislikes and favorite/least favorite food, drinks, people, friends, toys, objects, etc. Sharing this information allows the family to celebrate their child for who he or she is as a person rather than focusing purely on their child's challenges.

Facilitating Language

Children learn to communicate through social interactions with their parents or caregivers. From the moment a child is born, contingent responding is taking place. When an infant cries, he or

she is soothed by their caregiver. Cooing and smiles also result in contingent responding between parent and child. Engaging in back-and-forth interactions can be reinforced through playing peek-a-boo, rolling a ball to each other, or taking turns blowing raspberries. Toddlers can learn new skills such as dressing or washing hands if caregivers take turns with their child during these routines. For example, the parent can take off one of the child's socks and the child can take off the other. Using turn-taking for making animal sounds, waving, dancing, or stacking blocks gives the child an opportunity to engage with the parent and to be part of the interaction.

When a child has a speech and language delay, specific strategies utilizing relationship-based interactions during natural learning opportunities are embedded into identified routines and activities. These strategies are developed for parents and caregivers to implement in the context of activities to support new learning for the child and foster growth and development in the child's language skills. Because strategies are developed to meet the needs of the individual family and reinforce child outcomes, every family's routine will look different. Before new strategies are formulated, providers need to explore responsive strategies that the parents and caregivers might already be using. The provider should not create activities to promote the development of a specific skill or suggest development enhancing activities because the provider feels they would be good for the child. Rather, child interests should drive the activity setting. Providers should never jump in and direct the parents to try specific strategies that the provider would themselves use. Current strategies in use should be built upon by the parents and provider through collaboration and consideration of new ideas and information.

Strategies for Parents

One set of strategies that can easily be adapted and individualized for families across a variety of contexts and settings is to increase response opportunities. As the parent and child engage in different tasks and activities, the parent sets up situations that encourage the child to initiate an interaction or respond in some manner. This strategy includes providing opportunities to make choices. The child might be asked to choose which snack he or she wants or which shirt to wear when getting dressed in the morning. A parent giving inadequate portions of a snack or materials needed for a craft project can encourage the child to ask for more or try and get the attention of the caregiver. Using interesting materials or putting needed materials out of reach will also encourage a response from the child. Creating silly situations, imitation, and role-playing also provides opportunities to engage and respond. The simplicity of setting up an activity, followed by the clean-up provides myriad opportunities for child response through direction following, sorting toys into appropriate bins, and encouraging some need for assistance.

Parallel talk and self-talk are strategies parents and caregivers can use to talk about what is happening in the moment and reinforce vocabulary that is salient to what the child is interested in and currently experiencing. Parallel talk is used by the parent or caregiver to verbally describe what the child is doing. If the child is stacking blocks or pretending to pour tea into a teacup the parent describes the actions of the child. For example, "Look how high you stacked the blocks," or "You knocked the blocks down…crash!" As the child is performing an action, he or she is learning vocabulary associated with those actions or activity. Parallel talk can also be used to describe what the child is looking at or attending to. For example, "Look at that wet doggie, he is shaking off" or "There goes the choo-choo train." Self-talk is used by the parent or caregiver to

talk about what they are doing. "Mommy is stirring her hot coffee," "I'm putting on my shoes so we can go outside." These strategies can occur during mealtime, bath time, diaper changes, trips to the park, or anytime the child is interested in what is going on around him or her.

Modeling and repetition support a child's use of specific words or gestures to communicate different intents such as requesting, terminating an activity or sharing information (labeling or commenting). Parents and caregivers model specific words and gestures (which includes pointing or use of signs) that are meaningful to the child such as a favorite book, food items, toys. Specific words are used by the parent or caregiver in their context and over emphasized. A child's first words are related to people and objects that are most meaningful and interesting to the child. Snack time for a food-motivated child is an ideal opportunity to model the sign for "more" each time the child is given a few more fish crackers. When the parent finishes reading a book to their child, modeling and repeating, "all done" reinforces the termination of an activity. Modeling the sign for cat, naming the cat and saying "meow" every time the child alerts to the family cat continually reinforces vocabulary development for words the child will eventually use when he or she is ready to talk.

Imitating a child's productions is a strategy that fosters the development of verbal imitation skills. Imitation of productions can include babbling sounds, animal sounds, single words, phrases, and sentences. When a child produces a vocalization or utterance, the parent or caregiver repeats what the child has said. Reciprocal vocalizations (back-and-forth between child and parent) is an engaging activity and can be a valuable strategy for teaching verbal imitation skills to infants and children. If an infant or child is not yet imitating another's verbalizations, the parent is encouraged to imitate the child's vocalizations. The reciprocal verbal interaction gives the child the opportunity to learn how to imitate new sounds, words, gestures, and actions.

As a child's communication develops, additional strategies for facilitating longer utterances can be employed to enhance the child's learning. Expansions are used to give a child the grammatically correct form and provide additional information. For example, the child may see a dog and say, "doggie." The parent or caregiver can then state, "Yes, that's a big doggie." If the child says, "doggie run," the parent can expand the phrase by saying, "The doggie is running on the grass." This provides additional information to the child's production and provides a grammatically correct version of their thought or idea. Extensions are similar to expansions but add additional information that is beyond the child's intended idea. For example, the parent adds on to his or her expansion by saying, "The doggie is running on the grass. He runs very fast." The child may not always repeat expanded utterances, but the model provides them with the opportunity to add multi-word utterances to their repertoire of productions.

For children who have challenges understanding or processing language, strategies utilizing visual and gestural cues can be utilized to support their learning. Gestures such as pointing can be used to direct the child's attention to what is being talked about. Modeling an action while giving the child a verbal directive can also focus their attention on the task. For example, as the child is directed to "put the ball in the bucket," the parent can perform the action and then give the child an opportunity to repeat the action. Repetition of finger plays, songs, and speech routines also support understanding of words and phrases. Songs such as "Head, shoulders,

knees, and toes" reinforces body parts. "So big," "blow a kiss," and "high-five" are actions that are easily modeled to the child and are paired with simple word combinations and performed by important people in the child's life. Directives that are associated with a child's immediate environment are ones that are often repeated and can quickly become meaningful such as throwing a diaper away in the garbage, getting shoes to go outside, and going bye-bye.

For children who have difficulty with shared attention or using simple gestures to indicate what they want or don't want, an effective strategy is to have a parent get down on the same level as their child, such as on the floor, and join in what the child is doing. By following the child's interests, parents and caregivers can capitalize on opportunities to interact, face-to-face with their child. Having a snack, looking at a book, racing cars down a track, playing chase, or tossing a ball are just some of the activities where this strategy can occur.

Language Learning and Play

Penelope Leach stated "…for a small child, there is no division between playing and learning; between the things he or she does 'just for fun' and things that are 'educational.' The child learns while living and any part of living that is enjoyable is also play."

Children develop language within the context of social interactions, both with adults and other children. However, the importance of play as a vehicle for the development of language is often disregarded. Play is an ideal conduit for the development of language because games involve turn-taking (similar to a conversation), shared topics, attention, and little or no stress.

Beginning play for toddlers is simple and concrete. Blocks, puzzles, cause and effect toys, and noisemakers are some of the first toys for children. As a child's cognition matures, play becomes more complex and less concrete (Levey & Polirstok, 2011). During the preschool years, children incorporate themes and scripts into their play representing familiar situations (e.g., cooking food, playing house) and use functional and realistic props such as a toy phone, plastic pots, and a baby doll with accessories (Westby, 2000).

As children get older they engage in more imaginative play and use props such as a block for a car and plastic checkers for coins. With more developed social and cognitive skills "…comes the ability to use language to assign meaning to these props and to different roles they delegate to the participants during play (i.e., "you be the daddy"). During this type of play, language is used to negotiate (e.g., "if you are the mommy, I'll be the baby) and to clarify ("you can't do that if you are the baby")" (Levey & Polirstock, 2011). By the time children reach Kindergarten, they no longer need props in play and can use language exclusively to maintain their play schemes (Westby, 2000).

It makes sense then that children who have challenges in language might also have challenges in play. Like language, play is a symbolic ability, and a child who has limited play skills just doesn't play much, similar to a child who has limited language skills might not talk much. Language and play are closely linked and working with children with challenges reminds us of that relationship.

Play challenges typically seen in children with language disorders include limited play skills with very few play interactions: a child might blow bubbles, run a car down a ramp, or put shapes into a shape sorter, but often don't know what to do with toys that have a more abstract use such as blocks, stuffed animals, or a doll house. Some children with language disorders also have additional factors that interfere with their play skill development, such as motor planning challenges, cognitive delays, or regulatory dysfunction. Again, these children may not know what to do with toys or will use toys to self-regulate (e.g., repeatedly moving a car along a window sill or lining up all of the trains).

Some children get stuck at a particular play level and have difficulty moving to the next level. Their play repertoire may be small, and they might prefer to play with the same toy over and over again. They also have difficulty expanding their play schemes or incorporating new elements into familiar schemes. For example, a child may be able to pretend to feed a baby doll but unable to expand the feeding to include stuffed animals. Some children engage in atypical play activities, such as spinning wheels on a car or playing with a string on a toy, or have short and unorganized play schema where they can start to play but end the play by moving from one thing to another.

Language can be best facilitated in the context of play, and understanding the relationship between language and play is key to supporting child-initiated play schemes that will foster both language and play development. Embedding the same strategies discussed in the previous section into a child's play schemes will help maximize the opportunities for learning new skills.

The following developmental principles of play should also be considered when collaborating with families on how best to embed intervention strategies into play activities.

1. Play should be *intrinsic*. Children play because they want to and play activities are done for their own sake—not to achieve goals, necessarily. When adults play with children, goals are very apparent.
2. The *process* is more important than the product. A child is more invested in the ongoing activity than she is the goal. When providers look through the intervention lens, we start to impose goals onto some of these play interactions, when in reality in typical development the play interactions are characterized by the lack of goals. Because the focus in on the means rather than the end, play has flexibility and variation and is not a linear progression.
3. Play is *child-structured*. A child's purpose structures the activity, rather than the properties and conventional use of a particular object. Most children will first explore the properties of a toy/object before engaging in play. For example, a child who receives a toy helicopter for a present may spend time examining and exploring the parts and features before engaging in play with it. [Think about the parent who is eager for their child to immediately engage in playing with a toy when the child is more interested in turning the toy upside down and exploring all the moving parts].
4. *Active engagement* differentiates play from observation. In play, the child is actively engaged. The child who is observing without direct participation in play, or who is daydreaming, is not playing.

5. In play there is *free choice*, which is related to the fact that it is intrinsically motivated. Young children may not be interested in a play activity that an adult might present to them. They need to have free choice for it to be play.
6. *Positive affect* is an important part of play. Children value play activities and show positive affect during play. They repeat play activities when they have done it before—even when it may involve anxiety, like going down a slide—they may engage in it again.
7. There are *intrinsic rules*, or structure in play but the rules are internal to the play activity. Rules are created by the child or negotiated and agreed upon when two or more children play.
8. Play activities are *nonliteral* and treated differently than "real" activities. Children are released from the rules, routines, and consequences of daily activities.

It is easy for adult-directed activities to get in the way of a child's play. Even when adults say they are working with a child in a play context, there are structured elements. Adults tend to lead, give ideas, direct the child on how to play, or interpret the play in a way the child did not intend. Just because it involves toys does not necessarily make it play.

The Department for Children, Schools, and Families (2009) developed the following strategies for parents, caregivers, and providers when joining in on the child-initiated play:

- Take time to observe, find out what the children are playing, and what are their roles and intentions.
- Consider whether you need to enter the play, and for what purposes (such as offering suggestions, introducing new ideas or vocabulary, managing the noise or behavior, extending the activity through additional resources or negotiating entry for another child).
- Try to play on the children's terms by taking on a role that they suggest, and following children's instructions. With the youngest children, often participating alongside and imitating a child's actions with the same type of materials will signal that you are in tune and start a playful interaction.
- Offer your own ideas when you are sure that they are consistent with the flow of the play.
- Avoid going into closed questioning (How many? What color? What size?'). Instead, try to maintain playful ways of engaging by following children's directions, and tuning into their meanings.
- Try not to direct the play to your own learning objectives or assessment agenda. Instead, be alert to the qualities of play, and to the knowledge and skills that children are using and applying.

As a final note, changes in play can lead to changes in language. Often when working with a child who has words and phrases but does not initiate much language, play can be another domain to explore and work on that ability. For example, a child that is not spontaneously initiating language may be doing some initiating on his own in play, such as moving a car from one place to another. We could consider that action to be spontaneous initiation. There are advantages to using play in this manner. The flow of the interaction, not being put on the spot, using what the child is naturally doing to create the interaction between play and initiation. We may see an overflow to language and get more initiation from the child. Similarly, we might observe spontaneous imitation of actions or a sequence of actions in the context of play, when

imitation of sounds or words has not yet been observed in other contexts. Building new skills through play may generalize to other domains.

Conclusion

The primary goal of early intervention is to support families in promoting their child's optimal development and facilitating the child's participation in family and community interactions. Within the framework of family/child-centered programs and interventions, parents and caregivers take the lead role in fostering their child's development and learning of new skills. EI providers are charged with supporting parents and recognizing them as essential team members from the initial evaluation/assessment through the development and implementation of the IFSP.

Following the tenets of EI can be challenging for providers who have primarily implemented therapeutic interventions via a clinical-based model of service delivery. Adopting a family/child-centered approach adheres to best practices and provides a framework for service delivery that relies on a child's natural environment for the context and parents and caregivers for the intervention. Active participation of families in the therapeutic process requires the collaboration between parents and providers. Parents are central to the process of establishing family priorities and identifying routines and activities in which intervention strategies will be embedded. The parent/professional relationship is key to building rapport, and for developing, implementing, monitoring, and modifying therapeutic activities throughout the child's time in the EI program.

EI services have been deemed to be most effective when delivered in the context of routines and activities that are part of the family's everyday environment, thus providing rich learning experiences that are salient and functional for the child. Using familiar routines as the backdrop for intervention affords parents and caregivers more opportunities to support their child's learning and practicing of new skills. The role of the EI practitioner under this model of service delivery becomes more consultative rather than providing direct intervention. Everyday situations are being used to support a child's learning; therefore, the intervention takes place between EI visits rather than during the EI session.

For families to take a more active role in their child's learning and development, coaching has been proven an effective tool for supporting parents and caregivers in the acquisition of new skills and for building their capacities and competencies. Different learning styles should be taken into consideration as the provider coaches parents and caregivers in the implementation of intervention strategies. Communication between the parent and provider is critical to the coaching process where joint planning, observation, reflection, action, and feedback are used to teach parents and caregivers new skills and to practice and modify ongoing strategies.

The EI provider's shift from interventionist to coach and collaborator begins with the initial evaluation and assessment process where they guide parents in identifying priorities and establishing child and family outcomes utilizing formal and informal assessment measures. The EI provider must also assist families in choosing routines and activities appropriate for

embedding intervention strategies and adapt evidence-based interventions for naturally occurring learning opportunities.

Myriad strategies are available to facilitate a child's language development but implementation needs to be individualized to reflect relationship-based interactions between the parent/caregiver and child and align with family priorities and child outcomes. The importance of play as a means of relationship-based interactions should not be overlooked when collaboratively identifying routines and activities in which strategies can be embedded. The social interaction and turn-taking that take place in play provide ample opportunities for shared attention and shared experiences, and parents can support child-initiated play schemes to foster both language skills and play development. True play is intrinsic to the child where the process of play is more important than the product and children have free choice and are actively engaged. Embedding intervention strategies into play activities can yield positive outcomes when parents and providers are mindful to follow the child's lead in play and not impose their own structure or agenda during the play interactions.

Following the principles of EI, practitioners can empower parents to become effective facilitators of their child's learning and development. Building competencies and capacities through coaching may fall outside the therapeutic comfort zone of some practitioners but the end result is a parent who can readily assume the pivotal role in the parent/child relationship-based interaction and enact positive changes in their own child's growth and development.

REFERENCES

Able-Boone, J. (1996). Ethics and early intervention: Toward more relationship-focused interventions. *Infants and Young Children, 9(2),* 13-21.

Anzola, K. (1997). *Family-Centered Services.* [Manuscript]. Retrieved from https://www.d.umn.edu/~kbrorson/TSWadapted/resources/PDFS/Family-CenteredServices.pdf

American Speech-Language-Hearing Association. (ASHA, 2008). Roles and responsibilities of speech-language pathologists in early intervention: Guidelines. Retrieved from www.asha.org/policy

The American Speech Language Hearing Association (ASHA, 2006). Cultural compentence. Retrieved from http://www.asha.org/Practice-Portal/Professional-Issues/Cultural-Competence/

Arango, P. (1989). Family-centered care: Making it a reality. In Hanft, B. (Ed.), *Family-centered care: An early intervention resource manual*. Rockville, MD: American Occupational Therapy Association.

Best Practices in Family Engagement (2006). Governor's State Advisory Council on Early Care and Education in Maryland. Maryland's vision for engaging families with young children. Maryland Family Engagement Coalition. State Department of Education.

Bruder, M. (2000). Family centered early intervention: Clarifying our values for the new millennium. *Topics in Early Childhood Special Education, 20(2),* 105-115.

Bruder, M. (2001). Infants and toddlers: Outcomes and ecology. In Guralnick M. (Ed), *Early childhood inclusion: Focus on change* (p 203-228). Baltimore, MD: Brookes Publishing.

Bruder, M., & Dunst, C. (1999). Expanding learning opportunities for infants and toddlers in natural environments: A chance to re-conceptualize early intervention. *Zero to Three, 20(3),* 34-36.

Bruns, D., & Corso, R. (2001). Working with culturally and linguistically diverse families. *ERIC Digest*. Champaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. Retrieved from ERIC website: http://www.eric.ed.gov/PDFS/ED455972.pdf

Byington, T., & Whitby, P. (2011). Empowering families during the early intervention planning process. *Young Exceptional Children, 14(4),* 44–56. doi:10.1177/1096250611428878

Collaborative Coaching Partnership. (n.d.). Component 3: Reflection and feedback. Practice-based coaching. The National Center on Quality Teaching and Learning. Retrieved from https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/pbc-brief-rf.pdf

Crais, E., Roy, V., & Free, K. (2006). Parents' and professionals' perceptions of the implementation of family-centered practices in child assessments. *American Journal of Speech-Language Pathology, 15*, 365–377.

The Department for Children, Schools, and Families. (2009). Learning, playing, interacting: good practice in the early years foundation stage. Retrieved from https://www.foundationyears.org.uk/wpcontent/uploads/2011/20/Learning_Playing_Interacting.pdf

Division for Early Childhood. (2014). DEC recommended practices in early intervention/early childhood special education 2014. Retrieved from http://www.dec-sped.org/recommendedpractices

Dinnebeil, Laurie A.. (1999). Defining parent education. *Topics in Early Childhood Special Education, 19(3).* 161-164. doi:10.1177/027112149901900307

Doyle, J. S. (1999). *The business coach: A game plan for the new work environment.* New York, NY: Wiley and Sons.

Dunst, C. (2001). *Parent and community assets as sources of young children's learning pportunities.* Asheville, NC: Winterberry Press.

Dunst, C. (2004). An integrated framework for practicing early childhood intervention and family support. *Perspectives in Education, 22(2),* 1-16.

Dunst, C., Bruder, M., Trivette, C., Haby D., Raab, M., McLean, M. (2001a). Characteristics and consequences of everyday natural learning opportunities. *Topics in Early Childhood Special Education, 21(2),* 68-92.

Dunst, C., Bruder, M., Trivette, C., Raab, M., McLean, M. (2001b). Natural learning opportunities for infants, toddlers and preschoolers. *Young Exceptional Children, 4(3),* 18-25.

Dunst, C., Hamby, D., Brookfield, J. (2007). Modeling the effects of early childhood intervention variables on parent and family well-being. *Journal of Applied Quantitative Methods 2(3).* doi:10.1.1.490.2834.

Dunst, C., Hamby, D., Trivette, C., Raab, M., & Bruder, M. (2000b). Everday family and community life and children's naturally occurring learning opportunities. *Journal of Early Intervention, 23,* 151-164.

Dunst, C., Herter, S., & Shields, H. (2000a). Interest-based natural learning opportunities. In S. Sandall & M. Ostrosky (Eds.), *Young Exceptional Children monograph series no. 2: Natural environments and inclusion* (pp. 37-48). Denver, CO: The Division for Early Childhood of the Council for Exceptional Children.

Dunst, C. & Trivette, C. (1996). Empowerment, effective help giving practices, and family-centered care. *Pediatric Nursing, 22,* 333-337.

EI Excellence (n.d.). *Coaching definition.* Retrieved from http://www.eiexcellence.org/evidence-based-practices/coaching-interaction-style/

Epsetein, J. (2001). *School, family, and community partnerships: Preparing educators and improving schools.* Boulder, CO: Westview Press.

Excelerate.org. (n.d.). *Family and community engagement.* Governor's Office of Early Childhood Development, the Illinois Department of Human Services, the Illinois State Board of Education. (http://www.excelerateillinoisproviders.com).

FACETS. (1999a). *Family-guided routines for early intervention*. A joint project of Kansas University Affiliated Program and Florida State University.

FACETS. (1999b). *Identifying family activities and routines – conversation starters.* A joint project of Kansas University Affiliated Program and Florida State University.

Flaherty, J. (1999). *Coaching: Evoking excellence in others*. Boston: Butterworth-Heinemann.

Flores, S., & Schwabe, D. (2000). Early childhood corner: Activity-based intervention. *T/TAC bulletin,9* (2). Retrieved from http://tac.elps.vt.edu/htmldocs/Newsletters/newsletters.

Forney, P. (n.d.). Providing early intervention services in natural environments – concerns and tips. Retrieved from: http://hpcswf.com/downloads

Gooler, F. (2010). *Moving from early intervention to prek: what parents and caregivers want to know.* Retrieved from: http://illinoisearlylearning.org/askanexpert/gooler/

García-Grau, P., McWilliam, R., Martínez-Rico, G., Grau-Sevilla, M. (2017). Factor Structure and Internal Consistency of a Spanish Version of the Family Quality of Life (FaQoL). *Applied Research in Quality of Life. 1(14).* Doi:10.1007/s11482-017-9530-y.

Halgunseth, L. (2009). *Family engagement, diverse families, and an integrated review of the literature*. National Association for the Education of Young Children & Pre-K Now. Chapel Hill: University of North Carolina. Retrieved from: https://www.naeyc.org/files/research/family_engagement_halgunseth.pdf

Hanft, B., Rush, D., & Shelden, M. (2004). *Coaching families and colleagues in early childhood.* Baltimore, MD: Brookes.

Hart, B., & Risley, T. R. (l995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Brookes.

Henderson, A. & Mapp, K. (2002). *A new wave of evidence: The impact of school, family and community connections on student achievement.* Austin: SEDL.

Hepburn, K. (2004). *Building culturally and linguistically competent services to support young children, their families, and school readiness.* Baltimore, MD: The Annie E. Casey Foundation. Retrieved from http://www.aecf.org/upload/publicationfiles/hs3622h325.pdf

Ifspweb.org (n.d.a). *Developing an IFSP: Developing and prioritizing functional child and family outcomes*. Retrieved from http://www.ifspweb.org/module3/developing-outcomes.php

Ifspweb.org (n.d.b). *Developing an IFSP: Describing a child's present abilities*. Retrieved from http://www.ifspweb.org/module3/describing-abilities.php

Ifspweb.org (n.d.c) *Developing an IFSP: Family-professional relationships*. Retrieved from http://www.ifspweb.org/module2/relationships.php

Individuals with Disabilities Education Act 2004 Part C (IDEA, 2004). Retrieved from: http://www.wrightslaw.com/info/ei.index.htm

Individuals with Disabilities Education Improvement Act of 2004, (PL 108-446, 2004) §118 *United States Statute at Large*, pp. 2647 (2004).

Integrated Training Collaborative. (n.d.) *EI research to practice brief #5: what coaching strategies do we really use?* Virginia's Integrated Training Collaborative and the Partnership for People with Disabilities. Virginia Commonwealth University. Retrieved from http://veipd.org/earlyintervention/2015/11/03/ei-research-to-practice-brief-5-which-coaching-strategies-do-we-really-use/

Jennings, D., Hanline, M., Woods, J. (2012). Using routines-based interventions in early childhood special education. *Dimensions of Early Childhood, 40, 2*, 13-21.

Jung, L. (2003). More is better: Maximizing natural learning opportunities. *Young Exceptional Children, 6(3),* 21-26.

Kashinath, S., Woods, J. & Goldstein, H. (2006). Enhancing generalized teaching strategy use in daily routines by parents of children with autism. *Journal of Speech, Language, and Hearing Research, 49,* 466-485

Kelly, J. & Barnard, K. (1999). Parent education: relationship based model. *Topics in Early Childhood Special Education, 19 (3).* 151-157. doi: 10.1177/027112149901900305

Kelly, J. & Barnard, K. (2000). Assessment of parent-child interaction: implications for early intervention. Meisels, S. (Ed.) *Handbook of early childhood intervention.* Cambridge, UK: Cambridge University Press. 258-289.

Kinlaw, D. (1999). *Coaching for commitment: Interpersonal strategies for obtaining superior performance from individuals and teams.* San Francisco: Jossey-Bass

Levey, S. & Polirstok, S. (Eds.). (2011). *Language development: understanding language diversity in the classroom.* Los Angeles, CA: Sage Publications.

Mahoney, G., Finger, I., & Powell, A. (1985). Relationship of maternal behavioral style to the development of organically impaired mentally retarded infants. *American Journal of Mental Deficiency, 90.* 296-302.

Mahoney, G., Kaiser, A., Girolametto, L. (1999). Parent education in early intervention: A call for a renewed focus. *Topics in Early Childhood Special Education, 19(3).* 131-140. doi: 10.1177/027112149901900301

McCollum, J. & Yates, T. (1994). Dyad as focus, triad as means: A family-centered approach to supporting parent-child interactions, *Infants and Young Children, 6(4),* 54-63.

McWilliam, R. (2009). *Routines-Based Interview*™ [Measurement Instrument]. Retrieved from: http://www.siskin.org/downloads/RBI_report_Form.pdf

Moh, T. & Magiati, I. (2012). Factors sssociated with parental stress and satisfaction during the process of diagnosis of children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 6(1),* 293-303.

The National Center on Parent, Family, and Community Engagement (n.d.). Office of Head Start, The National Center on Parent, Family and Community Engagement, p. 1. Retrieved from https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/rtp-family-well-being.pdf

National Center for Parent, Family and Community Engagement (2014). *Understanding Family Engagement Outcomes: Family Connections to Peers and Community.* Retrieved at http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/family/docs/rtp-family-connections.pdf.

National Early Childhood Technical Assistance Center (NECTAC). (2008). *Early intervention program for infants and toddlers with disabilities (Part C of IDEA), Overview to the Part C program under IDEA.* Retrieved from: www.nectac.org.

The National Resource Center for Family Centered Practice. (n.d.). *What is family centered practice?* The University of Iowa. Retrieved from https://clas.uiowa.edu/nrcfcp/what-family-centered-practice

New Mexico Family Infant Toddler Program. (2002). *Technical Assistance Document – Natural Environments.* (www.health.state.nm.us/ltsd/fit).

Paul, D. & Froma, P. (2011). Guiding principles and clinical applications for speech-language pathology practice in early intervention. *Language, Speech, and Hearing Services in Schools, 42,* 320-330.

Porter, T., Guzman, L., Kuhfeld, M., Caal, S., Rodrigues, K., Moodie, S., Chrisler, A. & Ramos, M. (2012). *Family-provider relationship quality: Review of existing measures of family-provider relationships,* OPRE Report #2012-47, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Raikes, H., Green, B., Atwater, J., Kisker, E., Constantine, J. & Chazan-Cohen, R. (2006). Involvement in early Head Start home visiting services: Demographic predictors and relations to child and parent outcomes. *Early Childhood Research Quarterly, 21,* 2-24.

Raver, S. & Childress, D. (2014). *Family-Centered Early Intervention.* Baltimore, MD: Brookes Publishing Co., Inc.

Roberts, M. & Kaiser, A. (2011). The effectiveness of parent-implemented language interventions: a meta-analysis. *American Journal of Speech-Language Pathology, 20(3),* 180-99. doi: 10.1044/1058-0360(2011/10-0055.

Rodriguez, E., & Tamis-LeMonda, C. (2011). Trajectories of the home learning environment across the first five years: Associations with children's language and literacy skills at pre-kindergarten. *Child Development, 82(4),* 1058-1075.

Romski, M., Sevcik, R., Adamson, L., Smith, A., Cheslock, M., Bademan, R. (2007). Parent perceptions of the language development of toddlers with developmental delays before and after participation in parent-coached language interventions. *American Journal of Speech-Language Pathology, 20(2),* 111-118. doi: 10.1044/1058-0360(2011/09-0087).

Roper, N. & Dunst, C. (2003). Communication intervention in natural environments. *Infants & Young Children, 16,* 215–225.

Rush, D. & Sheldon, M. (2005). Evidence-based definition of coaching practices. *CASEmakers, 1(9),* 1-3.

Rush, D. & Shelden, M. (2011). *The early childhood coaching handbook.* Baltimore, MD: Brookes Publishing Co. Inc.

Rush, D., & Sheldon, M. (2012). *The early intervention teaming handbook: The primary service provider approach*, pp. 118-124. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.

Rush, D. & Sheldon, M. (2013). *The Early Childhood Coaching Handbook.* Baltimore, MD: Brookes Publishing Co. Inc.

Rush, D., Shelden, M., & Hanft, B. (2003). Coaching families and colleagues: A process for collaboration in natural settings. *Infants and Young Children, 16,* 33-47.

Sameroff, A. & Fiese, B. (2000). Transactional regulation: The developmental ecology of early intervention. In Shonkoff, J. & Meisels, S. (Eds.), *Handbook of early intervention (2nd ed. 135–159).* Cambridge, MA: Cambridge University Press.

Shelden, M. & Rush, D. (2001). The ten myths about providing early intervention services in natural environments. *Infants and Young Children, 14(1),* 1-13.

Shelden, M. & Rush, D. (2005). Characteristics and consequences of primary coach teaming practices. CASEmakers, *1(8).*

TaCTICS. (1999). *Considerations for planning routines-based intervention.* Retrieved from http://tactics.fsu.edu/pdf/HandoutPDFs/TaCTICSHandouts/Module2/Considerations.pdf

TaCTICS (2000). *Building routines with children and care providers.* Retrieved from http://tactics.fsu.edu/pdf/HandoutPDFs/TaCTICSHandouts/Module3/Building.pdf

Thompson, R. (2008). Early attachment and later development: Familiar questions, new answers. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment* (2nd ed., pp. 348-365). New York: Guilford.

Trivette, C. & Dunst, C. (2004). Evaluating family focused practices: Parenting Experiences Scale. *Young Exceptional Children, 7(3),* 12–19. doi:10.1177/109625060400700302

Trivette, C. & Dunst, C. (2005). Community-based parent support programs. In *Encyclopedia on early childhood development.* Montreal, Quebec, Canada: Centre of Excellence for Early Childhood Development. Retrieved from http://www.excellence-earlychildhood.ca/documents/BulletinVol6No1mars07Ang.pdf.

U.S. Department of Education (2011). Retrieved from: https://www.ed.gov/news/press-releases/education-department-announces-regulations-improve-outcomes-infants-and-toddlers-disabilities-and-their-families.

U.S. Department of Education (n.d.) Retrieved from http://idea.ed.gov/part-c/search/new.html

U.S. Department of Health and Human Services & U.S. Department of Education (n.d.). *Policy Statement on family engagement: from the early years to the early grades* Retrieved from: https://www2ed.gov/about/inits/ed/earlylearning/files/policy-statement-on-family-engagement.pdf

Weiss, H., Caspe, M., & Lopez, M. (2006). *Family involvement in early childhood education.* Cambridge, MA: Harvard Family Research Project.

Westby, C.E. (2000). A scale for assessing development of children's play. In K Gitlin-Weiner, A. Sandgrund , & C. Schaefer (Eds.), *Play diagnosis and assessment.* New York: Wiley.

Winton, P., Sloop, S., & Rodriquez, P. (1999). Parent education: A term whose time is past. *Topics in Early Childhood Special Education, 19(3),* 157-161.

Wisconsin Assistive Technology Initiative. (2004). *Wisconsin Assistive Technology Initiative Assessment* [Measurement Instrument]. Retrieved from: http://www.wati.org/content/supports/free/pdf/WATI%20Assessment.pdf

Woods, J., Kashinath, S., & Goldstein, H. (2004). Children's communication outcomes. *Journal of Early Intervention, 26,* 175-193.

Wolery, M. & Hemmeter, J. (2011). Classroom instruction: Background assumptions, and challenges. *Journal of Early Intervention, 33(4),* 371-380. Doi:v1177/1053815111429119

Workgroup on Principles and Practices in Natural Environments, OSEP TA Community of Practice: Part C Settings. (2008, March). *Agreed upon mission and key principles for providing early intervention services in natural environments*. Retrieved from http://ectacenter.org/~pdfs/topics/families/Finalmissionandprinciples3_11_08.pdf

Zero-to-Three (2016). *Coaching and engaging families in early intervention*. Washington D.C. Retrieved from https://www.zerotothree.org/resources/1184-coaching-and-engaging-families-in-early-intervention-services

Zero-to-Three. (n.d.) *Making hope a reality: Early intervention for infants and toddlers with disabilities.* Washington, D.C. Retrieved from https://www.zerotothree.org/resources/83-making-hope-a-reality-early-intervention-for-infants-and-toddlers-with-disabilities

a. Mac Arthur-Bates Communicative Development Inventories
b. Receptive-Expressive Emergent Language Scale III (REEL III)
c. Routines-Based Interview™ (RBI)
d. Wisconsin Assistive Technology Initiative Assessment (WATI)

21. Which of the following statements regarding routines-based intervention is INCORRECT?
a. Familiar routines are predictable, functional, and occur a number of times through the day, providing meaningful contexts for children to learn new skills
b. Ideally, children should learn and practice the targeted skills identified from IFSP outcomes as they engage in activities in their natural environment that have intervention integrated into them
c. The most effective framework to support and sustain early intervention activities for children is made up of routines that occur in the natural environment
d. When developmental interventions are embedded in children's regular routines and activities, skills learned are irrelevant to children and their caregivers

22. _____ developed a series of questions to help families and providers identify specific activities, environments, and routines that could be used to embed intervention strategies.
a. Flores & Schwabe (2000)
b. Jennings et al., 2012
c. Kashinath et al., 2006
d. TaCTICS (2000)

23. FACETS (1999b) published a list of key components to consider when choosing activities and routines as the context for intervention. Routines and activities should be _____.
a. Based on identified goals and outcomes
b. Congruent with the provider's setting and schedule preferences
c. Lengthy and detail-oriented
d. Short, randomly-occurring, and unpredictable

24. TaCTICS (1999) developed a list of considerations when planning routines-based intervention, with key areas to address interventions within a given routine. Questions providers should address include _____.
a. Are all locations where the routine occurs included for consideration?
b. How will the child's participation be cued in the routine?
c. Who will facilitate the intervention being used in the routine?
d. All of the above

25. The first component of the routines-based intervention plan suggested by Flores & Schwabe (2000) is _____.
a. Collect child data and review to monitor progress
b. Develop and implement a plan with embedded intervention strategies in routines
c. Identify natural environments where interventions will occur
d. Identify the child's targeted developmental outcomes in the IFSP

26. When a child has a speech and language delay, specific strategies utilizing relationship-based interactions during natural learning opportunities are embedded into identified routines and activities. One such strategy, _____, uses tactics such as "providing opportunities to make choices," and "giving inadequate portions of a snack or materials needed for a craft project."

a. Imitating a child's productions
b. Increasing response opportunities
c. Modeling and repetition
d. Parallel talk and self-talk

27. Statements such as "Mommy is stirring her hot coffee," and "I'm putting on my shoes so we can go outside," discuss what the parent or caregiver is doing, and are examples of the strategy called _____.

a. Expansions
b. Modeling and repetition
c. Parallel talk
d. Self-talk

28. As a child's communication develops, additional strategies for facilitating longer utterances can be employed to enhance the child's learning. _____, for example, are used to give a child the grammatically correct form and provide additional information beyond the child's intended idea.

a. Expansions
b. Extensions
c. Imitations
d. Reciprocal vocalizations

29. Play challenges seen in children with language disorders include difficulty with _____.

a. An extended play repertoire
b. Incorporating new elements into familiar play schemes
c. Lengthy, highly organized play schema
d. All of the above

30. The Department for Children, Schools, and Families (2009) developed the following strategies for parents, caregivers, and providers when joining in on the child-initiated play. Which of the following is NOT among them?

a. Consider whether you need to enter the play, and for what purposes
b. Take time to observe, find out what the children are playing, and what are their roles and intentions.
c. Try not to direct the play to your own learning objectives or assessment agenda.
d. Use closed questioning to engage (How many? What color? What size?)