First Things First: Establishing the Essentials of Communication and Learning
Engagement, Participation and Independence

Presented by
Ladell Kraft, M.C.D., CCC-SLP
Judy Prehn, PT, DSc, PCS

The Children’s Center for Communication and Development
University of Southern Mississippi
Birth to Three: Early Years

• For babies and toddlers cognitive, language and literacy skills develop as a result of engagement and participation in rich everyday learning opportunities

• Key to engagement are the abilities to joint attend, take turns, imitate, and sustain eye contact
Birth to Three: Early Years

• Baby/ toddler learning and development are influenced by:
  • personal characteristics of the baby/ toddler
  • characteristics of the social and nonsocial environments that the baby/ toddler experiences every day

• Learning occurs when:
  • baby or toddler actively engages
  • environmental characteristics are consistently and predictably responsive
Engagement

• Engagement is the foundation for exploration and meaningful participation in learning opportunities

• Components of engagement are joint attention, turn taking, eye contact and imitation

• For early learners imitation, eye contact, turn taking and joint attention are approached together

• Components of engagement are addressed in natural contexts, embedded in routines, and based on child interest
Engagement

• Babies and toddlers with developmental delays or sensorimotor impairments may not readily engage during learning opportunities, and therefore, may not be able to learn from typical baby and toddler experiences.

• The purpose of early intervention for these children is to enhance and structure learning opportunities to increase the baby and toddler’s participation and engagement in meaningful everyday learning opportunities, which support the acquisition of pivotal developmental concepts.
Engagement
Engagement
Engagement

• All disciplines involved in early intervention should work toward baby and toddler engagement in everyday learning opportunities

• The goal of all disciplines is child-initiated, active engagement in everyday learning opportunities, encompassing all areas together: motor, communication, and cognition

• We all focus on the whole child!
Engagement
Engagement

• Base efforts around baby/toddler interests
  • Likes, preferences, favorites, strengths that motivate children to engage and participate in desired activities
Engagement - Interest Based Activities

• If intervention is interest-based:
  • More likely infant/ toddler will try to communicate
  • More likely to hear vocal play
  • Will get more repetitions of exchanges
  • Will get longer periods of interaction
Engagement- Child Interests

• Identify child interests
  • Interest-based assessments
    • Dunst et al

• Ask parents
  • What makes your baby smile?
  • What does your baby enjoy?
  • What makes your toddler excited?
  • What makes your toddler laugh?
  • If your toddler could do anything she wanted, what would that be?
Engagement – Child Interests

• What gets and keeps the baby’s or toddler’s attention?

• What will the baby/ toddler work hard at doing?

• What “brings out the best” in the baby/ toddler?

• What is your baby/ toddler good at?
Interest Based Activities

• What does the baby/ toddler/ child find fun and enjoyable? What gets her excited?

Places___________________________________________________________
Toys/Materials_____________________________________________________
Activities_________________________________________________________
Routines___________________________________________________________
People____________________________________________________________
Other______________________________________________________________
Interest Based Activities

• What gets and keeps the baby/toddler/child’s attention? What does the baby/toddler/child work hard at doing?

Places______________________________________________________________
Toys/Materials________________________________________________________
Activities____________________________________________________________
Routines______________________________________________________________
People_______________________________________________________________
Other_______________________________________________________________
Your Child’s Interests

Keep in mind your child’s interests (things he or she likes to do, enjoys doing, that get him or her excited, and so forth), and check all activities that you think would be ones that would give your child opportunities to use or express those interests.

Everyday Activities

The following is a list of activities many children experience as part of everyday living. Please check those activities that best match your child’s interests. Don’t forget about tag along activities.

☐ Going on a hike
☐ Going on a stroller ride
☐ Going on a neighborhood walk
☐ Going on nature walks
☐ Going to siblings’ ball games
☐ Going to the library
☐ Having picnics
☐ Helping with household chores
  (e.g., vacuuming)
☐ Listening to bedtime stories
☐ Listening to music
☐ Listening to story times
☐ Listening to/saying nursery rhymes
☐ Looking at and talking about photographs
☐ Looking at/reading cereal boxes/labels
☐ Looking in mirrors
☐ Picking up siblings from school/childcare
☐ Picking up toys
☐ Playing finger games

☐ Attending a playgroup
☐ Attending church/synagogue
☐ Being read to
☐
Expanding Your Child’s Learning Opportunities

Now that you have selected the best activities for everyday child learning, the next step is to use this information to provide your child lots of opportunities to use his or her interests to do things (s)he is able to do and to learn new things. The following is a helpful way for providing your child interest-based learning opportunities.

<table>
<thead>
<tr>
<th>Interest-Based Activities</th>
<th>When/Where Activities Will Occur</th>
<th>What My Child Will Get to Do</th>
<th>What I Can Do To Help My Child Learn</th>
<th>How I Will Know My Child Benefited</th>
</tr>
</thead>
</table>

Let’s Continue Doing These Activities...
Engagement – Child Interest

• More attempts
• Sustained attention
• More likely to get attempts at communication
• More likely to get vocalizations
• More likely to get active movement attempt
Parent Quiz

Which object will a baby find most interesting?

- Dead Fly
- $40.00 Stuffed Bear
- $25.00 Baby Gym
- $30.00 Activity Quilt
# Child Interests Checklist

**Did you help the parent ...**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identify the objects, people, activities, and actions that capture and hold the child's attention?</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Identify the objects, people, activities, and actions that are the child's favorites?</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Identify the objects, people, activities, and actions that make the child smile and laugh?</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Identify the objects, people, activities, and actions that are especially exciting to the child?</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Identify the child's preferences for different objects, people, activities, and actions?</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Identify the objects, people, activities, and actions that the child chooses most often?</td>
<td></td>
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<tr>
<td>7.</td>
<td>Identify the objects, people, activities, and actions that the child spends the most time with or doing?</td>
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<tr>
<td>8.</td>
<td>Identify the objects, people, activities, and actions that the child works hard at doing?</td>
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</tbody>
</table>
Engagement Goals

• Increase the kinds/variety of engagement opportunities (based on interests), the number of engagement opportunities per day, and the level of engagement and participation in natural everyday learning opportunities

• Use child interests and engagement to promote more rapid learning and development and:
  • Increase opportunities to practice existing skills
  • Increase exploration of environment
  • Learn new competencies
Relative Effectiveness of Two Contrasting Approaches to Natural Environment Intervention Practices

- **Child Interest-Based Intervention**
- **Family-Directed Intervention**

**Chart Details**
- **Y-axis:** Mean Child Developmental Age
- **X-axis:** Weeks of Intervention
- The chart shows a comparison between the mean developmental age of children receiving Child Interest-Based Intervention and Family-Directed Intervention over a period of 20 weeks.
Responsive Environment

• Response – Contingent Child Learning:
  • Arrangement of social and non-social environments so that the child’s production of a behavior produces or elicits a reinforcing or interesting consequence that results in an increase in the rate, frequency or strength of the behavior.

• Look! I MADE THAT HAPPEN!

• Recognition between what infant/toddler/child did, and what happens in response to their behavior
Responsive Environment

• Social reinforcers are often more effective than non-social reinforcers

• Response should be prompt and appropriate

• Response should occur consistently, and within seconds
Responsive Environment

• Non-social Responsive Environment:
  • Arrange play area so that his actions cause objects and toys to do interesting things. Make sure interesting reward occurs immediately following the child’s actions.

• Social Responsive Environment:
  • Baby interactive games such as “Peek-A-Boo” teach baby that her actions cause a rewarding social response. When baby pulls covering away from adult’s face, she is rewarded with a smile and “Peek-A-Boo.” This game can be expanded to promote imitation and turn taking.
Responsive Environment

Turn Taking - Baby Games

• Focus on an action the baby does – kicking, making a sound, etc.

• Provide immediate, interesting social reward – singing, tickling, funny sound, etc.

• Wait for baby to repeat action

• When baby repeats action, immediately provide same interesting social reward
Engagement and Responsive Environment

• Frequency of baby/ toddler participation in everyday home/family and community activities is associated with better child language and literacy outcomes

• Establishment of joint attention and reciprocal baby/ toddler – adult interaction sustains engagement

• Contingent responses enhance and prolong baby/ toddler engagement
Responsive Environment
Extending Interaction with Turn Taking - Baby Games
Engagement and Responsive Environments

Developmental Delay

• Cues may be more subtle

• May initiate components of engagement (eye contact, joint attention imitation, turn taking) less frequently

• May elicit responses from environment less frequently

• Baby/toddler may not be participating in everyday family activities
Engagement and Responsive Environments
Developmental Delay

• Parents and providers become more directive, telling baby/toddler what to do

• Participation becomes less based on child interest, less child initiated, and more adult directed

• Do not get many repetitions, attempts to move or vocalize, or efforts to communicate

• Less learning occurs
Engagement and Responsive Environments
Developmental Delay

• Adaptations for babies / toddlers with motor delays:
  • Provide extended wait time to allow them to realize their action caused a response
  • If motor play is involved, make sure the focus movement is easily successful, and requires little effort
  • Provide support for trunk if needed in order to get fastest and most accurate upper extremity function
  • Use high contrast colors if vision is suspect
Engagement and Responsive Environments
Developmental Delay

• Provide strategies for maximum participation in everyday learning opportunities. Increase level of participation as a goal of intervention.
Engagement and Responsive Environments

Developmental Delay

- Position
- Adapt language
- Slow pace of interaction
- Adapt environment
- Adapt materials
- Adapt activity
- Add prompts
  - Model
  - Verbal prompt
  - Physical prompt
DO!

• Be sensitive to baby/toddler’s attempts to interact with people or materials. Pick up on subtle cues and teach parents to recognize subtle indications that infant/toddler is showing interest and/or initiating a game.

• Interpret baby/toddler behavior as attempts to communicate.

• Provide contingent social responses. Allow increased response time when needed.
  WAIT – just wait.

• Use joint attention and turn taking to prolong interaction.
Do!

• Discuss family routines and child interests. Determine how and when to increase the baby’s/ toddler’s participation in family routines. Examples:
  • Home: bath time, bedtime, dressing, looking at books, playing with siblings
  • Community: petting zoos, Sunday school, playground, grocery shopping

• Routines provide experiences that are predictable for baby and toddlers – more easily add to complexity of tasks and to add language

• The more routines a family has, the more likely they are to add literacy and language activities
Do!

• Incorporate child-led activities – not adult directed
  • Use activities baby/toddler wants to do and thinks he can do

• Follow toddler’s lead
Do!

• Explore, initiate, and set-up successful everyday activities in family routines, including experiences and opportunities that invite and encourage active child participation in sustained interactions with people and materials, producing development enhancing consequences
DON’T!

• Stress parents with expectations for carrying out home programs --- instead, teach parents to provide adaptations that allow baby/ toddler to learn from regular play and participation in everyday family routines

• Do therapy/ intervention “to” the baby/ toddler
• Choose activities for baby/ toddler
• Adult-direct – let baby/ toddler take the lead

• Rush – allow time for baby/ toddler to initiate play and for infant/ toddler to respond to you
Don’t!

- Over-help, over-direct, promote adult-dependency

- Present same task. Repeated presentation of the same task in EI has been shown ineffective.
IFSP Goals

• Written by parent
• Non discipline specific
• Family friendly wording
• Outcome based
• Written in context of family and/or community activity
• Should involve increasing interactions with people or objects
• Can involve the development of functional behaviors that promote or encourage child participation in everyday activities
Summary

• Learning occurs as the result of an environment (social and non-social) that supports engagement

• Early intervention is provided to help infants and toddlers who are unable to learn from typically occurring natural opportunities

• Learning occurs for these infants and toddlers as we modify the learning activities, the environment, and baby/toddler characteristics to allow meaningful participation in everyday learning

• Help parent identify learning opportunities; provide supports so that baby/toddler is able to participate and play more fully with his family
Summary

• Responsive, contingent responses are key to engagement

• Increase the number of opportunities for participation each day; increase the level of participation; increase complexity of learning

• May need to provide adaptations to baby/ toddler position, to the environment, or to the materials to allow baby/ toddler to participate and fully engage in activity.
Preschool Engagement:
Establishing Joint Attention, Turn Taking, Eye Contact, and Imitation

Ladell Kraft
Preschool Engagement

• For preschoolers the skills necessary to concentrate, make observations, maintain a sustained effort, stay focused, demonstrate interest in on-going events have their basis in earlier learned pre-linguistic skills such as eye contact, joint attention, turn taking and imitation.
Preschool Engagement

• Clients lacking eye contact, joint attention, turn taking and imitation skills will often be difficult to engage. Their efforts at communication have been stressful and non-reinforcing. Simple words or short phrases that have been learned are not functional for the child in simple social, conversational situations.

• We need to set the stage and scaffold therapy sessions so that eye contact, joint attention, turn taking and imitation will be primary goals.
Engagement - CTs

• Communication temptations (CTs)
• “Gentle sabotage”
• The goal is to tempt, the child, not to frustrate.....try again another time

• Why use CTs?
  • To create reasons for the child to engage non-verbally or verbally
Engagement - CTs

• When to use CTs?
  • Throughout the day, during any routine

• How to use CTs?
  • Set up the situation...wait...point, prompt, model...wait for some indicator of engagement (this may be very subtle)...reinforce...build on his communication (verbal or nonverbal) just a bit to help move to the next stage of development
Engagement - CTs

• The routines and communication temptations must be of interest to the child. Consider whether the visual, auditory, sensory and motor aspects need to be increased or decreased.

• Watch for small, sometimes almost imperceptible, shifts in eye gaze, movements of the head or hands, slight smile…..this may be the beginning!
Engagement

• Facilitate classroom engagement by providing:
  • Different levels of instruction (concrete to symbolic)
  • Multiple means of representation and expression
  • Structured learning tasks
  • Interactive/hands-on activities
  • Built in routines/repetition
Do Not!

• Do not practice the skills of eye contact, joint attention, turn taking and imitation in isolation. Practice of these skills needs to be incorporated into incidental teaching across activities, throughout the day, by teachers, therapists, parents.

• Do not force eye contact.
Do!

• Follow the child’s lead and interests
• Provide immediate, positive reinforcement
• Take the responsibility for creating and maintaining positive interactions with the child
• Arrange your teaching environment and surroundings to encourage increased interactions, child: teacher and child: child
• Create communication routines that become familiar to the child and allow for repetition and refinement of skills
Eye Contact

• Eye contact is probably the infant’s earliest means of communication. Eye contact is used to request, greet, direct attention.

• In the preschool classroom or therapy room, attention must be given to the area being visually over-stimulating or under-stimulating. Auditory distractions need to be minimized.
Eye Contact

• To draw the child’s attention to you, hold objects, pictures, toys, etc. that are highly preferred near your face, and at the child’s eye level to guide the child without verbalizing.

• Say the child’s name as you attempt to gain attention and eye contact.

• Often the words “Look” or “Look at me” have no meaning for the child, and attempting to process the language becomes frustrating.
Eye Contact

• If the child will allow, place your hand on his face to gain momentary attention and eye contact

• As eye contact increases you can give the verbal cue “Look”
Eye Contact

Use engaging, novel items...always in proximity to your eyes and face

• Funny face games in the mirror
• Flashlight games
• Masks and puppets and sunglasses
• Looking through tubes at one another
• Peek-a-boo type games
• Adding surprise to games will build interest; for example, hiding things or wrapping them in paper
Joint Attention

• Joint attention is the sharing of an experience between a child and a partner.

• A shared experience is looking at or directing attention to an object or event.

• Joint attention leads us into conversations related to shared experiences.
Joint Attention

• The meaning of the teacher’s reminder to “pay attention” is “pay attention to what I am paying attention to at this time”. This is a frequent classroom request for joint attention.

• Without joint attention, success in many learning situations will be difficult to achieve.

• Without joint attention, social competence will likely be impaired.
Joint Attention

• Providing visual exploration in classroom/therapy activities will encourage eye contact and joint attention.

• Always sit so that you are presenting materials at eye-level for the child, and that the materials are near your face.

•
Joint Attention

Joint attention might be encouraged by:

• Painting with different materials, objects, and techniques
• Making collages, and handprint or fingerprint pictures
• Looking at movement, looking through objects, looking under objects might encourage joint attention
Joint Attention

• Practice attending to on-going activities and objects that are near you, not far away.

• Use the verbal cue “Look,” but at the same time guide the child’s gaze non-verbally, by moving or positioning the object or yourself, or re-positioning the child into a better line of sight, and using your finger to point.
Turn Taking

• Turn taking skills first develop during play, and setting up play routines in the classroom and therapy room are probably the best to encourage and develop this skill.

• Turn taking becomes essential in conversation as speech and language develops.
Turn Taking

• Encourage turn taking by:
  • Stacking blocks
  • playing with pop-up toys
  • rolling balls to one another
  • dropping items in a bucket

• As motor skills increase, outdoor games like “Duck, Duck, Goose” provide practice at turn taking.

• Keep objects for activities out of the child’s reach. This will allow you to control turn taking and develop the skill.
Turn Taking

• To encourage the child, it might be necessary to give the child two turns for every one that you take.

• Provide tactile, visual and verbal cues. Pat your chest when it is your turn. Take the child’s hand and use it to pat his chest for his turn. Use the words “your turn” “my turn” in a gentle, playful manner.

• Continue to incorporate strategies for maintaining eye contact and joint attention in turn taking activities.
Imitation

• Imitation of motor movement is an essential skill in speech development. Learning to imitate movements will improve eye contact and attention.

• Sit at the child’s level in a face to face position. This will assist eye contact and help direct attention.

• Practice imitating gestures that will help children communicate with intention. Functional, natural gestures such as: wave, high five, shrug shoulders, move someone’s hand to touch something, point to something, push someone’s hand away, push an object away, touch someone to get attention, extend an open hand, clap hands, pull off socks, blow a kiss, scribble, turn a page
Imitation

• Incorporate this gesture imitation into turn taking play.

• Sometimes imitation leads to imitation with regard to language, attaching a word to an action that is done repeatedly, such as “up, up, up, up”, “pat, pat, pat”, or “down, down, down, down”

• Imitation of environmental sounds and animal sounds

• Include the child in classroom and home tasks, such as wiping the tables, putting toys/books away
Give Choices

• When engaging children in activities to promote eye contact, joint attention, turn taking and imitation, try to always give choices.

• Choices can easily be worked into anything that you want a child to do. It gives the child a sense of power and often minimizes behavioral disruptions.

• Allowing the child to make a choice is to allow the child to communicate!
Developmental Levels of Attention (Reynell, 1977)

• Level 1: (0-1) This is characterized by extreme distractibility, when the child’s attention flits from one object, person, or event to another. Any new event (such as someone walking by) will immediately distract him.

• Level 2: (1-2 years) The child can concentrate on a task of his own choosing, but will not tolerate any intervention by an adult, whether visual or verbal. The child may appear obstinate or “willful”, but in fact his attention is single-channeled and all extraneous stimuli must be ignored in order to concentrate on the task at hand.
Developmental Levels of Attention

• Level 3: (2-3 years) Attention is still single-channeled in that the child cannot attend to auditory and visual stimuli from different sources. A child cannot listen to an adult’s directions while playing, but whole attention can be shifted to the speaker and back to the game/activity, with the adult’s help.
Developmental Levels of Attention

• Level 4: (3-4 years) The child must still alternate full attention (visual and auditory) between the speaker and task, but now does this spontaneously without the adult needing to focus his attention.

• When a child is developmentally at the 3-4 year level, the aim is to integrate auditory and visual channels, and to begin to transfer attention skills to the small learning group or preschool. The goal of activities would be for the child to listen and take in what is being said without stopping what he is doing.
Developmental Levels of Attention

• Level 5: (4-5 years) The child’s attention is two-channeled (that is, he understands verbal instructions related to the task without interrupting his activity to look at the speaker). Concentration span may still be short, but the child can be taught in a group.

• At the 4-5 year developmental level the aims are to increase the child’s concentration span, and to continue transfer of skills to a larger classroom environment. The complexity of both the activity and the required response will be increased.
Developmental Levels of Attention

• Level 6: (5-6 years) Auditory, visual and manipulatory channels are fully integrated and attention is well established and sustained.

• At the 5-6 year developmental level the child’s ability to concentrate on more and more complex stimuli in a classroom situation would be the focus.
Adaptations, Modifications, Accommodations

• Adaptations, modifications and accommodations will be needed for some children. OTs, PTs, Audiologists, Psychologists, Augmentative Communication Specialists, and other professionals as needed, along with the Speech Pathologist, will form a transdisciplinary team.

• Environmental/classroom accommodation, such as FrontRow to Go
IEP Goal/Objectives

(the student) will maintain ___% engagement during a ___minute small group lesson as demonstrated by:
Maintaining body and eyes on the teacher or learning materials
Responding to a simple request to manipulate learning materials for 10 consecutive days

________ will appropriately play with at least ______ cause and effect toys by pressing buttons, shaking, tuning knobs, turning levers, etc in order to produce desired immediate feedback in the form of lights, sounds, music, vibrations, etc across ______ days.
IEP Goals/ Objectives

____________ will engage in __________ turn-taking exchanges by relinquishing to the other person, waiting while the other person takes a turn, and then requesting a turn (or taking a turn) without prompting in ______________ different activities for ______ days.

____________ will imitate _______ functional play activities (number and actions will depend on the toy) by watching the play partner, then imitating the play action within 5 seconds of the presentation of the opportunity. ______________ will correctly respond in the first trial of each action with at least ______________ toys across ______ days.
IEP Goal/ Objectives

___________ will break attention with competing stimuli in the environment and will participate in activity with an adult without exhibiting challenging behaviors for a minimum of ______ minutes for ________ days.
IEP Goal/ Objectives

While engaged with a social partner, ______________ will respond to bids for joint attention by switching his/her gaze between the partner and the object by following the partner’s gestures (pointing at the object), looking in the direction of a noise made by a toy, or following other attention direction tactics (verbal cues such as “Look!” “Oooooh!”). The child will respond within 5 seconds of the opportunity being provided with each new toy/object, etc, for __________ days.
Resources

• www.babycenter.com/0_lets-play-weekly-activities-for-your-babys

• http://www.earlyliteracylearning.org/pgparents.php

• http://www.parentingcounts.org/professionals/parenting-handouts/information-for-parents-imitation.pdf

• http://www.igdi.ku.edu/interventions/Promoting_Communication_rev3-19-09.pdf
CONTACT US

118 College Drive Box 5092
Hattiesburg, MS 39406
(601) 266-5222
Childrens.center@usm.edu
www.usm.edu/childrenscenter