



Embedding in Family Guided Routines Based Intervention

There are many evidence based intervention strategies that are appropriate for use in family-guided routines and activities. The key to success is for the family to guide the intervention process by identifying procedures and strategies that “match” their own and their child’s learning style within the routine. Determining that “match” can be accomplished through observation of the caregiver and child within the routine and through conversations with the caregiver.

Because families generally are not familiar with intervention procedures or strategies supportive of embedding intervention, it is the responsibility of the interventionist to provide information and examples. To support a good match, the EI will:

- observe the caregiver - child interactions within the routine;
- identify strategies the caregiver is already using successfully to enhance feeling of competence;
- delineate potential opportunities for embedding within the routine without interfering;
- share the signals and skills the child currently uses within the routine to provide developmental information;
- demonstrate potential strategies as choices for the caregiver to use;
- observe and synthesize the sequence and strategies used by the caregiver to support implementation.

This multi-step process is completed through observations, joint problem solving and reflection between the caregiver and interventionist.

Some caregivers, as part of their usual pattern of interactions, use facial expressions that encourage responses from others, are likely to wait for responses, before proceeding, or ask open-ended questions. Others may use gestures as cues, provide repetition, or model more sophisticated skills for the child. Before “teaching” new intervention strategies to caregivers, it is essential to build upon what each caregiver already knows and uses. Identification of effective strategies again enhances the competence of the caregivers, increases the likelihood that the teaching and learning opportunities will occur frequently, and respects the uniqueness of each caregiver and child dyad.

Many caregivers equate “teaching” with a very directive style, often associated with the education system they last attended. It is crucial to explain “why” naturalistic intervention strategies are appropriate for routines and to share the efficacy data regarding different procedures. Families can’t learn to guide the intervention process unless interventionists share the information they need in order to make decisions.

In Naturalistic Interventions, adults tend to:

- provide opportunities for the child to initiate;
- use indirect questions or comments to maintain interaction;
- continue the exchange for multiple turns;
- pause expectantly to provide time for the child to respond or initiate;
- use naturally occurring consequences (juice becomes the reinforcer, not “good talking”).

In Directive Instruction, adults tend to:

- initiate the focus/topic of the teaching interaction;
- use direct comments or questions requiring a one word response or simple motor action;
- change focus/topics after the child responds;
- expect immediate responses;
- rely on directives (e.g. “Tell me, juice,” “Push the button.”); and,
- use extrinsic reinforcers (“Good”).

There is really not a dichotomy of directive vs. naturalistic strategies but rather a continuum with many variations available from which interventionists and caregivers choose. Naturalistic interventions increase opportunities for children to communicate, to initiate interactions, and to respond with a complex or more sophisticated turn. While children may need to begin learning with physical or verbal assistance, decreasing the support needed increases the child’s independence.

When introducing new intervention strategies, actions speak louder than words. Caregivers appreciate the demonstration of new strategies by service providers. It is easier to remember to embed opportunities and use specific strategies when they have observed them rather than just heard or read about them. Providing opportunities for the caregiver to practice using the strategy within the routine is crucial. The service provider then has the chance to observe and provide feedback. The demonstration and practice also allows the service provider to be more confident that the goals and strategies within the routine are appropriate for the child. Discussion and joint problem solving between the family members and service providers continue to support the family-guided nature of the intervention.

Keep in mind that teaching strategies should not interfere with the flow of the normal routine or activity. Equally important to remember is that not all care providers will be comfortable with various strategies. Just as individualizing outcomes is crucial for young children, teaching strategies must be individualized for the outcomes, the child and family preferences, and the environment. It is important to give caregivers choices of strategies they wish to use, and then follow up later by asking them how comfortable they feel with the teaching strategy they selected. A final caution to the early interventionist is not to overload caregivers with multiple strategies in routines. More is not necessarily better!

General Principles

Within routines and play activities, implementation of the following guidelines facilitate successful interventions:

- **The caregiver incorporates developmentally appropriate communication and actions.**

Interactions between the caregiver and child are more successful for teaching and learning when they closely reflect the child's current developmental level. The child must be able to participate meaningfully. The caregivers challenge is to "up the ante" by introducing a moderate change that will increase the child's use of the skill either qualitatively (e.g. how?) or quantitatively (e.g. how often?).

- **Children learn most efficiently when they are actively engaged.**

Young children (and probably most old ones) need to be involved in the teaching and learning process. The adage of the child as "an empty vessel waiting to be filled with knowledge" portrays the child as passive throughout the process. Quite to the contrary, children learn by doing. They look, touch, taste, climb, tell, throw, poke, and smell. Encouraging the child's active participation increases learning.

- **The caregiver's attention provides a reason for interaction.**

Attention from a caring, interested adult can provide both the interest to interact and the reinforcement for trying. Children (as well as adults) seek to communicate or participate in activities with others who are approachable, responsive, attentive, and fun! Caregivers who plan to embed intervention into daily routines need to appreciate the power they have with the child. Caregivers can be the child's favorite toy and best reinforcement!

- **Following the child's lead enhances attention.**

Using the child's interests promotes joint attention. The caregiver focuses where the child is engaged and in doing so, accomplishes the first step of a successful interaction. Participation initiated by the child often results in longer attention to the activity, increased opportunities to practice skills, and decreased need for external reinforcement. However, to be effective, the environment or routine must be arranged to attract the interests of the child.

- **Positive expectation increases child participation.**

If the caregiver expects the child to participate, the child is very likely to do so! In the same manner, if the caregiver does not expect participation and plan for it to occur, then it is also very likely that the child will fulfill that prophecy and not participate. The caregiver should approach each opportunity positively, expecting the child's interest and interactions. When positive expectations are combined with the other principles described, the child will, in turn, reinforce the adult with attention and interaction.



- **Introduce new skills in familiar routines and use new routines for generalization of skills.**

The framework of a familiar and predictable routine supports learning new skills. The child can focus attention to the new skill rather than dividing attention between the activity, the environment, and the skill. Once the skill is learned, the child can practice it successfully in a variety of new routines because it is familiar and predictable.

As mentioned previously, there are many evidence-based strategies for caregivers to use when embedding intervention. The following list provides examples of strategies for the EI to consider. The first tier includes strategies that promote positive and responsive interactions between caregivers and children and are important for everyone. Strategies in the next two tiers are more focused for specific child targets and routines.

Intervention Strategies Caregivers Use to Support Participation

