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Assessing the Home Environment to Promote Infant-Toddler Learning within Everyday Family  
Routines

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### **Abstract**

DEC Recommended Practice E3 guides practitioners to partner with families to adapt the physical, social, and temporal environments of the home to promote child participation and learning. To design such adaptations, EI practitioners and families assess how the environment impacts a child's participation in everyday routines and learning of IFSP outcomes results in potential strategies for adapting that environment. The purpose of this article is to share the importance of physical, social, and temporal environments to child learning in home routines and ways to assess environmental strengths and needs respectful of individual family strengths, priorities, and culture.

Assessing the Home Environment to Promote Infant-Toddler Learning within Everyday Family Routines

*Talia is an early intervention (EI) practitioner who prides herself on using the most up-to-date recommended practices, such as coaching families within their everyday routines. To plan these interventions, Talia conducts authentic assessments by observing individual child functioning in everyday life, and discussing with the family their observations. Talia uses these assessment data to identify strategies with the family to meet the outcomes on their Individualized Family Service Plan (IFSP). As Talia reflects on the past week, she thinks about how her assessments frequently resulted in the same strategies, applied in very similar ways, across families. Are the strategies truly individualized to the particular child and the particular family? Talia wonders, what is she missing?*

EI practitioners like Talia are expected to coach families in embedding intervention strategies for their infant or toddler within their everyday routines. EI practitioners use authentic assessment approaches (i.e., observation and discussion) to gain a real-life picture of what the child is good at (i.e., strengths) and what can be difficult (i.e., needs) in order to identify individualized intervention strategies targeting the family's IFSP outcomes (Bagnato, 2007). Authentic assessments “rely on naturally occurring materials and activities of the home or classroom in evaluating what the children are learning, how they are developing, and what their skills and learning needs are” (Meisels, Wen, & Beachy-Quick, 2010, p. 56). The resulting intervention strategies are expected to “fit” or be tailored to the family's routines, rather than generic strategies that can result when assessing children outside those everyday routines.

As Talia begins to suspect however, understanding a child's strengths and needs is only half the picture. Child functioning does not occur in a vacuum but is influenced by the social

interactions, physical features, and timing of the family's routines that make up the child's learning environment (Thurman, 1997). What the environment "looks like" is why a child may function differently in their own home, community, and child care classrooms from settings other than these natural environments. It's also why a child might demonstrate different strengths and needs across everyday routines. To conduct a comprehensive assessment, EI practitioners analyze both the child *and* the environment. Assessing how the environment impacts a child's participation in routines and learning of IFSP outcomes results in potential strategies for adapting that environment. The purpose of this article is to share the importance of social, physical, and temporal environments to child learning in home routines and ways to assess environmental strengths and needs respectful of individual family strengths, priorities, and culture.

### **Environmental Features within Family Routines**

*Talia brings her question to her next reflective supervision session. Talia and her mentor look at the DEC Recommended Practices (RP; 2014) for guidance. They review the environment RP E3: "Practitioners work with the family and other adults to adapt the physical, social, and temporal environments to promote each child's access to and participation in learning experiences" (p. 7) and wonder if that is the missing piece. Talia realizes she is focusing her assessments on the child in the environment rather than the child and the environment. With this new perspective, she and the family could identify adaptations to foster child learning within routines. She also realizes she does this when coaching in child care centers, but not in homes. Talia and her mentor discuss how all DEC RPs are expected for both homes and classrooms, and brainstorm why this practice is important during home visits.*

Meeting DEC's RP of adapting the environment can feel more comfortable in classrooms than in homes. Since EI practitioners are expected to work within the family's already existing

routines, they may assume assessing and adapting the environment is not necessary or even prohibited. However, research has demonstrated the importance of assessment and intervention that focuses on the social, physical, and temporal environments of everyday family routines.

The *social environment* is the interactions occurring between child and others, comprised of sensitivity, consistent responsiveness, contingent responsiveness (i.e., following and building on child's lead), and engagement in everyday routines. Quality parent-child interaction positively impacts child development (e.g., Innocenti, Roggman, & Cook, 2013). For families in EI, quality interactions can be harder to attain as their children's interaction cues may be subtler than or different from what the family expected (Innocenti et al., 2013). For example, when playing peek-a-boo, a child who overwhelms easily may turn away from their parent, communicating "I need a break." The parent may interpret this as disinterest in face-to-face games. Research found quality interactions impact how much EI actually influences child outcomes (Innocenti et al., 2013; Mahoney, Boyce, Fewell, Spiker, & Wheeden, 1998; Raikes et al., 2014). Therefore, EI practitioners focus on quality interactions as a critical component of any intervention.

The *physical environment* consists of the inanimate features of a particular routine, including the environmental layout, objects and materials, and level of environmental stimulation. A child's sense of competence and growing self-determination can be promoted when the physical environment of everyday routines is designed for active child engagement (Albrecht & Khetani, 2016; Erwin et al., 2016; Palisano et al., 2012). For all young children to participate in routines, environmental considerations include a variety of easy-to-reach, child-sized materials and environmental layouts that are safe with room to explore. For infants and toddlers in EI to participate and learn, the physical environment may require more

individualized, low- (e.g., a string tied to a toy and high chair to easily obtain) or high- (an augmentative communication device) tech adaptations.

The *temporal environment* focuses on time – when routines and transitions occur (schedule), how long routines and transitions occur (duration), and how slow or quick the routines and transitions progress (pacing) (De Arment, Xu, & Coleman, 2016; Jeffries & LaForme Fiss, 2016). For all young children, temporal considerations include mixing active and quiet times (i.e., scheduling), providing sufficient time, but not too long, to engage in routines, and attending to the individual child’s temperament characteristics, such as pacing transitions based on the child’s response to change. These temporal characteristics are further individualized according to the unique developmental characteristics of the particular child in EI to promote participation and learning. For example, a parent might spread out grocery shopping across the week so that (1) each trip to the store is shorter in duration than one trip that is too long for the child to handle and (2) going to the store after child care pick up is the same each day so the child gets used to the routine.

### **Assessment of Participation in Learning Experiences**

*Talia and her mentor decide Talia will assess the physical, social, and temporal environments in upcoming home visits. They note the assessment purpose is to inform the planning of adaptations (i.e., DEC RP E3). That is, assessing the environment is expected to uncover aspects of the environment where individualized adaptations could increase the child’s participation and learning in everyday routines. They plan out specifically what and how to assess the environmental goodness of fit to the individual child’s learning characteristics.*

As noted, there are general environmental features important for all young children. While these features are also important in EI, the purpose of environmental assessments is to

examine “how well” the environment *fits* a particular child’s developmental characteristics in particular routines to meet particular IFSP outcomes (Jeffries & LaForme Fiss, 2016; Palisano et al., 2012; Thurman, 1997). Environmental aspects that could be a better fit lead to potential adaptations. That way, the learning *opportunities* available in everyday family routines are maximized as learning *experiences*.

### **Characteristics for Learning Experiences**

Learning experiences occur when the environment is set up for active participation, with moderate challenges to achieve and multiple opportunities to practice and generalize (Bronfenbrenner, 1993; Copple & Bredekamp, 2009; Vygotsky, 1978). *Active participation* occurs when the child is interested, attentive, and engaged in the routine’s “goings-on” and interacting with the people and materials that are a part of the routines. *Moderate challenges* occur when the child is working towards meeting targeted skills that are not too hard nor too easy for the child to achieve. *Multiple opportunities to practice and generalize* occur when the child repeatedly uses, or tries to use, the learning goals within one routine as well as during different routines throughout the day. Note these learning characteristics are described as what the child does. EI practitioners assess the environmental features by answering the question, *how well does the environment facilitate the individual child’s learning experiences?*

### **Assessing the Social, Physical, and Temporal Environmental Features**

Most environmental assessments for all young children focus on classrooms (see Table 1). One frequently used home environmental assessment is the *Home Observation Measurement of the Environment* (HOME; Caldwell & Bradley, 1984), which includes items for the social (e.g., affection) and physical (e.g., types of toys) environment overall (National Research Council, 2008). However, EI practitioners need resources to guide their analysis of the

environmental goodness of fit to the individual child. Two resources, the *Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO)* (Roggman et al., 2013) for the social environment and *CARA's Kit for Toddlers: Creating Adaptations for Routines and Activities* (Campbell, Kennedy, & Milbourne, 2012) for the physical and temporal environments, are designed to identify individual environmental strengths and potential adaptations.

**Social environment.** The *PICCOLO* (Roggman et al., 2013) assesses quality parent interactions in four domains: Affection, Responsiveness, Encouragement, and Teaching. *Affection* reflects the family's warmth or sensitivity. *Responsiveness* examines the parent's understanding and response to the child's interests, communications, and behaviors. *Encouragement* supports the child's exploration, attempts, and overall participation. *Teaching* scaffolds new learning. Each domain includes evidence-based interactive behaviors. These behaviors can be expressed differently in different families. For example, one family might "show enthusiasm for what child is doing" (Engagement item) by clapping and shouting while another family might quietly nod and smile. These differences might reflect the family's individual style and/or the child's developmental and learning characteristics.

**Physical and temporal environment.** *CARA's Kit for Toddlers* (Campbell et al., 2012) presents a hierarchy of adaptation types to assess how the physical and temporal environment fits a particular child. The adaptation types are: (a) *environment* such as room arrangement and equipment, (b) *schedule* of when routines occur, (c) how *routines* are designed, (d) *materials* such as toys and objects, and (e) *requirements* of a routine such as the number of steps involved and what is occurring within the routine (Milbourne, 2012). EI practitioners observe routines to determine "what's working" and "what could be working better" to promote child participation and learning. What's working are current environmental strengths. What could be working better



are environmental needs that can lead to potential adaptations. The adaptation types are ordered by level of intrusiveness. Part of the assessment could determine if there might be less intrusive adaptations to replace more intrusive ones. For example, if a child keeps putting his leg on his highchair tray, the family's *requirement* of putting his leg back down can be replaced by an *environment* adaptation to the highchair for better positioning that decreases the ease of the child getting his leg onto the tray in the first place. *CARA's Kit for Toddlers* provides sample adaptations that can then be individualized for the particular family during intervention planning.

*Talia and her mentor recognize Talia needs to look at (i.e., assess) the social, physical, and temporal characteristics with a particular eye to child opportunities to participate in routines, and practice, generalize, and engage in moderate challenges around IFSP outcomes. They define each item in the PICCOLO and adaptation type in CARA's Kit, and brainstorm examples of how they might look different for different children. Talia and her mentor craft specific questions to observe how the environmental characteristics in these guides transact with expected learning experience characteristics and turn these questions into an open-ended guide to organize Talia's analysis (Figure 1). Finally, they plan out how to complete this assessment. Talia will (1) take a week to familiarize herself with these guides prior to her first observation, (2) take a running record of her observations based on the guides, and (3) transfer her observations and analyses to the guides immediately after the observation.*

*Talia calls the Bautista-Cooer family to plan a time to visit. She shares that, by looking at what's going on around Julio, they can see what's helping Julio learn and identify ways he could learn even more during their day. She assures the family she is not judging what they are doing, but focusing on Julio's learning characteristics. Clara, Julio's mother, confirms it makes sense and they welcome any new ideas just like the ideas Talia has already shared. Talia and the*

*family decide the visit should occur during three routines – eating, playing, and dressing. The family chooses these particular times as when they would like to focus on their IFSP outcomes. The IFSP outcomes address Julio interacting with others, requesting, and making choices.*

*At the visit, Talia asks the family to go about the three routines as they usually do. She clarifies whoever usually interacts with Julio during the routines should interact in whatever ways they do, with whatever objects they use. Daniel, Julio’s father, explains that his parents usually come over for dinner. Talia affirms that, not only is their presence welcomed, but preferred so she could get as real a picture as possible. That way, any ideas would make sense to the way their family works. As she takes running notes, Talia focuses on promoting Julio’s active participation in the routines, and attends to the level of challenge for and opportunities to practice the IFSP outcomes (i.e., interacting with others, requesting, and making choices). She notes environmental features and Julio’s abilities and responses.*

*Tables 2 and 3 provide a sampling of Talia’s notes on items from the PICCOLO and CARA’s Kit for Toddlers, respectively, during eating. Talia intentionally identifies environmental strengths and potential environmental needs. Table 4 illustrates specific examples of social, physical, and temporal features for each learning experience characteristic across the three routines. With these notes, Talia analyzes whether the feature was an environmental strength or potential area for adaptation. For example, Talia considers:*

- *Are the three bowls of food on Julio’s highchair tray an opportunity to make independent choices (IFSP outcome) or do three bowls overwhelm Julio, reducing the opportunity to participate and learn? Talia thinks Julio looks overwhelmed by the choices and only eats out of one bowl. Talia identifies this might be a place for an adaptation, such as giving Julio one bowl at a time to promote self-regulation.*

- *Does positioning Julio in front of a mirror, supported by Clara behind him, help him participate and learn? While Talia initially thinks Julio might keep turning around to look at Clara, the current positioning seems to work as Clara provides Julio with the support to sit up so he could participate and still interact with Clara (IFSP outcome) through the mirror.*
- *While playing with a pop-up toy, does the slow pace give him needed “breaks” or does he lose interest? Since Julio continues to try, it seems these breaks are working.*

*Once Talia collects these data, she knows her assessment is not complete. She discusses her observations with Clara and Daniel to understand how the environmental features work within the family’s routines, priorities, and culture.*

### **Gathering and Applying Family Insights on Routines, Priorities, and Culture**

Just like any assessment, the family is an active team member in gathering and interpreting assessment data on the environmental goodness of fit. This includes the family describing: (a) environmental features of routines the EI practitioner did not observe, (b) how closely the routines observed happened the way they usually happen, (c) how child responses differ across routines and the particular environmental features (e.g., materials, pacing, people interacting) of those routines, and (d) their interpretations of what these features mean for promoting their child’s learning. How routines occur in an individual family is a reflection of that family’s priorities and culture. By uncovering those aspects during assessment, adaptations can be designed to fit the family’s priorities and culture as much as they fit the child’s developmental characteristics. EI practitioners do this by affirming environmental strengths, understanding environmental needs within family context, and respecting family culture.

### **Affirming Environmental Strengths**

Strengths-based interventions (SBIs) acknowledge what's working well as the first step in coaching families (Rush & Shelden, 2011). Since the family created the way routines occur, environmental strengths are a reflection of family strengths. EI practitioners can start the assessment conversation with the family by affirming how those strengths help the child learn. This provides an opportunity for families to share their thinking and how those features reflect the family's culture and priorities.

*Talia discusses with Clara and Daniel the following environmental strengths at dinner:*

- *Pretending to take a bite when Julio "shares" his food,*
- *Saying "thank you" after pretending to take a bite, and*
- *Scheduling dinner when Julio is motivated to eat but not too late that he is too hungry to focus and needs to be fed.*

*Clara and Daniel share how they didn't realize their interactions are helping Julio learn. Daniel explains that it's important Julio use please and thank you. Talia confirms with the family that teaching these social conventions is an important family priority. She adds that, at the same time, this is an opportunity to work on the IFSP outcome of interacting with others. Clara identifies that, while she is glad scheduling dinner works well for Julio, the schedule has more to do with when the entire family, including her in-laws, could come. Talia notes if, in the future Julio's needs change around timing when to eat, it's important that dinner stay at its current time.*

### **Understanding Environmental Needs within Family Context**

EI practitioners use this assessment conversation to understand how particular environmental features might reflect the family's culture and priorities. This is particularly true when there is a potential environmental need. That way, any adaptations to address those needs fit the family's culture and priorities.

*When Talia sees Julio appears overwhelmed with three bowls on his highchair tray, her initial thought is to give him only one bowl at a time. This adaptation would also give him more opportunities to practice requesting (IFSP outcome) another type of food. In her discussion with the family, as part of the assessment, Talia asks, “I noticed you put three bowls on Julio’s tray. Can you tell me more about your decision to do that?” Daniel states they want Julio to participate in the meal like the rest of the family. Each family member chooses what they want when they want it. Talia realizes her initial idea does not fit this particular family priority and any adaptation would need to make sure Julio could easily access different food choices.*

*Talia describes to the family her observation regarding Julio’s regulation (i.e., developmental characteristic) and affirms the importance of him easily accessing food choices (i.e., family priority). She wonders aloud if Julio might use one bowl with three sections (material adaptation) rather than three bowls. That might be less overwhelming, but still give him food choices. Clara identifies they already have such a bowl and shows it to Talia. Talia thinks the bowl could work great as each section was a different color. That could make it easier for Julio to distinguish each section (moderate challenge). And with less food in the bowl, Julio would have more opportunities to practice the IFSP outcome of requesting. Talia also notes the new environmental strength (i.e., material) discovered – a bowl the family already had.*

Identifying potential adaptations is part of assessment as the data gathered are interpreted and recommendations created. EI practitioners partner with the family in conducting these assessment steps so adaptation recommendations fit both the child and family.

### **Respecting Family Culture**

Environmental assessments focus on those features that influence child participation and learning. Any other environmental features are respected as how the family chooses to go about

their routines. These features may be discussed to avoid making assumptions about family priorities and culture when planning interventions (Dunst, Hamby, Raab, & Bruder, 2017).

*During the observation, Talia notices Clara is the one taking the lead in helping Julio eat and get dressed. Talia wonders if, in this family, Clara is always responsible for caregiving routines, perhaps reflective of their individual family culture. Talia asks about this, not to change how this family functions, but to avoid making assumptions. If Daniel takes the lead other times, she would want to assess during those times too as Daniel's interactions (i.e., social environment) could look different from Clara's. Talia explains this rationale to the family prior so the family is assured their cultural choices are respected.*

### **Conclusion**

Adapting the social, physical, and temporal environmental features in homes is a DEC recommended practice. To plan such interventions, EI practitioners assess the environmental strengths and needs of family routines. This assessment focuses on the environmental goodness of fit to the child's individual developmental characteristics, attuned particularly to the IFSP outcomes. The assessment also includes understanding how those environmental characteristics reflect family priorities and culture. That way, EI practitioners can partner with each family to create adaptations that uniquely fit their child and their family.

*As Talia reflects on her most recent week, she thinks families really appreciate learning how they already help their child learn, their environmental strengths. Instead of generic intervention strategies, Talia thinks she and each family created adaptations uniquely tailored for that family and their child. Talia identifies this only occurred by truly understanding the family's environment, priorities, and culture.*

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Table 1

*Social and Physical Environmental Assessments for Classroom and Other Group Settings*

| <b>Assessment Family</b>  | <b>Infant-Toddler Specific Versions</b>  |
|---|--|
| <i>Environmental Rating Scales</i><br><a href="https://ers.fpg.unc.edu/">https://ers.fpg.unc.edu/</a><br><a href="https://www.tpress.com/ERS">https://www.tpress.com/ERS</a>  | <i>Infant/Toddler Environment Rating Scale (ITERS-3; Harms, Cryer, Clifford, &amp; Yazejian, 2017)</i><br><i>Family Child Care Environmental Rating Scale-3 (FCCERS-3; Harms, Cryer, Clifford, &amp; Yazejian, 2019)</i> |
| <i>Classroom Assessment Scoring System (CLASS)</i><br><a href="https://store.teachstone.com/class-manual/">https://store.teachstone.com/class-manual/</a>   | <i>CLASS Infant (Hamre, LaParo, Pianta, &amp; LoCasale-Crouch, 2014)</i><br><i>CLASS Toddler (LaParo, Hamre, &amp; Pianta, 2012)</i>   |
| <i>Pyramid Model for Promoting Social Emotional Competence in Infants and Young Children</i><br><a href="https://products.brookespublishing.com/Teaching-Pyramid-InfantToddler-Observation-Scale-TPITOS-for-InfantToddler-Classrooms-Research-Edition-P1117.aspx">https://products.brookespublishing.com/Teaching-Pyramid-InfantToddler-Observation-Scale-TPITOS-for-InfantToddler-Classrooms-Research-Edition-P1117.aspx</a> | <i>Teaching Pyramid Infant–Toddler Observation Scale for Infant–Toddler Classrooms (TPITOS; Bigelow, Carta, &amp; Irvin, 2019)</i>   |

### Questions to Assess Environmental Features as Learning Experiences

| Observation Questions  | Assessor Notes |
|--|----------------|
| <b>Active Participation:</b> What does it take to participate in the particular routine and how well does that fit the child?  |                |
| <i>Physical Environment</i>  |                |
| How does the physical environment distract or help the child attend to the routine?  |                |
| How is the physical environment set up so the child can move around easily? What about the environment gets in the way of the child moving around easily?                |                |
| How is the physical environment set up so the child can access objects and others? What about the environment gets in the way of the child accessing objects and others? |                |
| How is the child positioned to see, participate in face to face interactions, manipulate objects and use his/her hands? How could the child be better positioned?        |                |
| How interested is the child in the objects? What changes in the objects could create interest?   |                |
| How does the child react to the level of sensory input in the physical environment?  |                |
| <i>Temporal Environment</i>  |                |
| How does the daily schedule (i.e., when specific routines occur) fit the child's regulatory and other needs?   |                |
| How does the pacing of the routine fit the child's pace?   |                |
| How do certain routines occur? How is down time minimized?   |                |
| How do transitions occur? How is the child prepared for transitions?   |                |
| <i>Social Environment (How do adults...)</i>   |                |
| Read and respond to the child's signs of stress, fatigue, reactions to different levels of stimulation, and challenging behaviors?                                       |                |
| Express warmth and caring?   |                |

|   |  |
|---|--|
| Attend to what the child is attending to?   |  |
| Respond based on what the child is doing/communicating?   |  |
| Encourage turn-taking?  |  |
| Help the child sustain attention to the routine/task?   |  |
|   |  |
| <b>Moderate Challenge:</b> How does the environment create a just right challenge for the child, neither too hard nor too easy to try?  |  |
| <i>Physical Environment</i>   |  |
| How easy/difficult are the objects for the child to see, touch, manipulate, use? What could make it easier or more difficult for the child to see, touch, manipulate or use the objects?                            |  |
| How do the object's properties fit the child's developmental strengths and needs?   |  |
| How do the objects help the child learn her/his IFSP outcomes?  |  |
| <i>Temporal Environment</i>   |  |
| How long are the routines? Is the duration of the routine long enough for the child to participate, learn, and/or complete tasks within those routines? Is the duration not too long that the child tires or bores? |  |
| <i>Social Environment (How do adults...)</i>  |  |
| Show ways to engage in the routine/task, such as modeling?  |  |
| Identify times to step in (e.g., increasing frustration) and times to allow independent attempts (e.g., determined persistence)?  |  |
| Support child learning by imitating and elaborating on behaviors, commenting, and responding to requests for assistance?  |  |
|   |  |
| <b>Multiple Opportunities to Practice and Generalize:</b> How much practice is available within and across routines?  |  |
| <i>Physical Environment</i>   |  |
| How does quantity (objects, food, etc.) allow for multiple opportunities within routines?   |  |

|  |  |
|--|--|
| How do the responses to the physical environment questions above differ in different routines?   |  |
| <i>Temporal Environment</i>  |  |
| How does pacing and duration of the routine allow for multiple practice opportunities?   |  |
| How does pacing and duration of the routine look different in different routines? How do the similarities or differences affect the child's opportunity to practice? |  |
| <i>Social Environment (How do adults...)</i>   |  |
| Support child in repeating attempts/actions within and across routines?  |  |
| Imitate or take turns with child to continue practice?   |  |
| Use consistent interaction approaches in different routines?   |  |

Figure 1. Questions to Assess Environmental Features as Learning Experiences

Table 2

*Talia's Assessment Notes (Sampling) from the PICCOLO*

| <b>PICCOLO<br/>Domains</b> | <b>Sample Assessment Notes</b>  |
|----------------------------|---|
| Affection                  | <ul style="list-style-type: none"> <li>• Family interacts with Julio in a warm tone, frequently smiling at him</li> <li>• When Julio shares his food with different family members, they say "thank you"</li> </ul>   |
| Responsiveness             | <ul style="list-style-type: none"> <li>• Clara balances watching Julio – ready to respond – and eating/talking with others</li> <li>• When Julio scoops potatoes with a spoon and brings it to his mouth, family cheers and says, "good job"</li> <li>• When Julio shares his food, family pretends to take a bite</li> </ul> |
| Encouragement              | <ul style="list-style-type: none"> <li>• Clara asks Julio if he wants his bib (increase challenge – choice of 2 bibs?)</li> <li>• Clara signs and says more; accepts Julio lifting of arms as sign approximation (wait slightly longer?)</li> </ul>   |
| Teaching                   | <ul style="list-style-type: none"> <li>• When putting leg off tray, Clara explains why Julio's leg needs to stay off the tray</li> <li>• Family consistently imitates Julio's sounds (increase challenge – expand new sounds?)</li> </ul>   |

Note: Potential environmental needs/adaptations are described in parentheses

Table 3

*Talia's Assessment Notes (Sampling) of the Physical and Temporal Environment using CARA's Kit Adaptation Types*

| <p><b>CARA's Kit</b><br/><b>Adaptation Types</b></p> | <p><b>Sample Assessment Notes</b></p>   |
|--|---|
| <p>Environment</p>                                   | <ul style="list-style-type: none"> <li>• <i>Julio is positioned to see all family members, facilitating interactions</i></li> <li>• <i>Ample room on each side of Julio in highchair (less space to support more stability?)</i></li> </ul>                     |
| <p>Schedule</p>                                      | <ul style="list-style-type: none"> <li>• <i>Julio was on the floor moving and playing before dinner – alternating active and quiet routines</i></li> <li>• <i>Dinner time occurred when Julio was a little hungry so motivated to eat</i></li> </ul>            |
| <p>Routines</p>                                      | <ul style="list-style-type: none"> <li>• <i>Julio gets his food first, limiting wait-time</i></li> <li>• <i>When Julio is done eating, he can play with toys at his highchair</i></li> </ul>  |
| <p>Materials</p>                                     | <ul style="list-style-type: none"> <li>• <i>Julio uses a Cup with handle and child utensils that allow easy grip to use on his own</i></li> <li>• <i>Julio has 3 bowls of food on his highchair tray within his reach (potentially overwhelming)</i></li> </ul> |

## Requirements

- *Simplifies by stabbing food with fork then Julio bring fork to mouth; scoops with spoon on his own*
- *When Julio puts his leg on his highchair tray, Clara puts it back down (less intrusive options?)*

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Note: Potential environmental needs/adaptations are described in parentheses



Table 4

*Examples of Learning Characteristics by Environmental Features*

| <b>Learning Characteristic</b>                           | <b>Physical Environment</b>   | <b>Social Environment</b>  | <b>Temporal Environment</b>   |
|--|---|--|---|
| <i>Active Participation</i>                              | Clara puts a bowl of vegetables, another bowl of mashed potatoes, and a third bowl with cut up chicken on Julio's highchair tray within his reach. ( <i>Materials</i> ) | Family responds to Julio "sharing" his food by pretending to take a bite ( <i>Responsiveness</i> ) and saying "thank you" ( <i>Affection</i> ) | Family has dinner at a time when Julio is a little hungry and is motivated to eat. ( <i>Schedule</i> )  |
| <i>Moderate Challenge</i>                                | Daniel keeps open one door on a pop-up toy as Julio focuses on opening all the doors while playing. ( <i>Requirements</i> )   | Every time Julio opens a door, Daniel claps and says "Pop"! ( <i>Encouragement</i> )   | Once Julio successfully opens one door, Daniel waits for Julio to show he is ready to tackle the next door, then slowly taps on the lever, drawing his attention. ( <i>Pacing</i> ) |
| <i>Multiple Opportunities to Practice and Generalize</i> | Clara sits Julio in front of a mirror whenever getting  | For each article of clothing, Clara says and shows the   | Family plans plenty of time for dressing so they can discuss  |

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dressed (e.g., putting on/taking off pajamas; dressing to go outside). (*Environment*)

respective body part (“here is your sock. It goes on your foot” and points to Julio’s foot). (*Teaching*)

and put on each article of clothing. (*Duration*)

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