

Using What's Already There: Making Natural Environments Work!

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Agenda:

8:30-9:00:	Introduction
	Parent Perspectives
9:00-10:00:	Using Natural Environments
	Convincing others of the benefits
10-10:15:	Break! ☺
10:15-11:15:	Case Examples/Interventions
11:15-11:45:	Outcomes/Progress Monitoring
11:45-12:00:	Wrap up/Questions/Evaluation

Learning Objectives:

- Participants will gain an appreciation for the importance of everyday activities and routines as necessary components and outcomes of contemporary therapy services
- Participants will develop strategies to work effectively with others on the team who do not yet value everyday activities and routines as part of intervention
- Through use of case studies and small group discussion, participants will identify and develop intervention strategies that meet families' immediate needs in their natural environments
- Participants will develop an understanding of how they might document results and monitor progress for interventions that are embedded in everyday activities and routines

TODAY'S FAMILIES

- A majority of young children are being reared in families where both parents work, where income and earning potential are less than what is needed, and time demands undercut traditional supports.
- More young children are being raised in families where fathers have an important role, and where basic child-rearing responsibilities are increasingly shared by both parents.
- The cultural and ethnic diversity of families with young children has increased.
- The prominence of research on brain development has influenced how America thinks about the early years, impacted what it means to be a parent, and influenced how a parent should behave—especially focusing on skill development in young children.

What does this mean for the contemporary therapist?

- We need to listen to parents' immediate needs
- We need to provide supports in natural environments - *time is of the essence!*
- We need to empower parents to be involved in the process
- We need to find ways to involve caregivers and siblings in intervention activities so that there is follow-through after we leave

What do the parents want?

Let's take a moment
to hear from Evan's family
and teacher
about what works for them...

Reactions?

- Do you work families and caregivers who share Evan's family/teacher perspective?
- What about those families who do not share this perspective?
 - What are they expecting from you?
 - How do you respond to their expectation?
 - How do you begin to convince them that using natural environments may work?

What are Natural Environments & Routines?



Definition of Natural Environments

There is a growing body of research and literature directed at defining what is meant by the term "natural environments." Initially, environments were defined as places, but the growing trend is to broaden their scope as follows:

"First, natural learning environments are not places but rather the experiences afforded children in the context of activity settings that make up the fabric of family and community life. Second, defining natural environments as necessitating the joint presence of children with or without disabilities or delays is limited and not consistent with research." (Dunst 2001)

Going to the Grocery Store

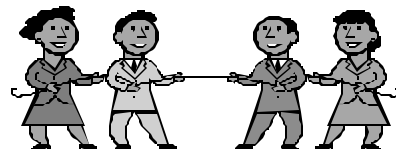
Let's take a trip to the grocery store with Blake, his mother, and his occupational therapist!

http://viral.lycos.co.uk/attachments/1571/Zazoo_Cannes.mpg

Reactions:

- Does this fit into your vision of what therapy should look like?
- Does this fit into the vision of your other team members or families you work with daily?
- What if you have this vision, but others do not?

On the one hand, On the other hand...



Activity time...

Supporters for the use of
Natural Environments

- Discuss your viewpoints of why this is the best way! Why is "traditional therapy" not effective?

Non-Supporters for the use
of Natural Environments

- Discuss your viewpoints of why Natural Environments don't work and "traditional therapy" does work

*Take notes and be prepared to share your group's viewpoints
with the other group
*Select a speaker for your group to "convince" us of your viewpoints

Identifying & Developing Intervention Strategies:

- Where do we get the information about which natural environments are impacted?
- Are there tools that we can use?
- How do we know what to focus on?
- What strategies can we use for interventions?

The answers are simple...

- Listen to and observe the families
- Identify resources that are already available to the family
- Identify what the family is willing to do to make an identified routine better?
- Assessment tools that focus on family routines are helpful...
 - See Appendix A

Let's meet Nolan...

Consider these questions as you watch the video clip...

1. What is the natural routine/environment identified
2. Was this intervention strategy driven by family needs?
3. Was the intervention "tool" something that was available in the child's home?

Case Example 1:

Isaiah is just about to turn 3 years old. He loves to watch videos, look at this Viewmaster Projection System, and spin the wheels on his toy cars. These activities often monopolize his time and his parents are concerned about his limited play repertoire. He enjoys music and rough play, but does not like unexpected touch or movement. Following adult directives and accepting change in his routine are challenging for him. He has two other brothers who are diagnosed with autism. Family is hoping to find out what they can do at home to help increase his attention to task, interactions with others, and play skills.

Case Example 2:

Jordan is a 30 month old boy who is described as "constantly" on the go. His mother stays at home with him, but cannot let him out of her sight due to his tendency to "get into things", "climb the cabinets and walls", and his tendency to have little concept of safety awareness. Mom would like help with increasing Jordan's understanding of boundaries so that she can get some things done at home and take him out into the community.

Here's what you got...



So...What did you come up with?

- What is your intervention?
- How are you using the natural environment?
- How will you "sell" the idea to your parent or other teammates?

How do you know if it works???

Outcome Measurements
and
Progress Monitoring!!

How can we do this?

- Write *functional* goals that are related to natural environments and routines
- Make sure that the goals are *measurable*!
- Develop a technique for gathering and keeping track of data
- Use parent report and observation

Resources for Progress Monitoring:

- <http://www.parsons.lsi.ku.edu/facets/pdf/MonitoringProgress.pdf>
- <http://tactics.fsu.edu/Family.html>
- <http://www.circleofinclusion.org/english/formsa rticles/forms/8eval.data.monit/form8index.html>
- <http://www.familyvillage.wisc.edu/education/ei.html>

Questions???

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Appendix A

List of SELECTED Assessment Tools

1. Functional Intervention Planning: The Routines-Based Interview
R.A. McWilliam, Project INTEGRATE, Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill, 2001, www.fpg.unc.edu
2. Hopes and Dreams Exercise
Connecticut Birth to Three System, August 1997
3. Family Mapping
Adapted by Portage Project Birth to Three Program, Portage, Wisconsin
4. Eco-Map
Project INTEGRATE, Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill, 1999, www.fpg.unc.edu
5. Parent Assessment of Needs
American Printing House for the Blind, Louisville, Kentucky
6. Conversation Starters
Portage Project Growing Birth to Three, Portage, Wisconsin, revised 1999
7. Child Portfolios - Coaching In Natural Environments:
<http://www.coachinginearlychildhood.org/portfolios.php>
8. Identifying Family Activities and Routines - Conversation Starters
FACETS - Kansas University Affiliated Program and Florida State University, 1999
9. Family Interest Survey
Juliann Cripe & Diane Bricker, Center on Human Development, University of Oregon, 1990
10. Parent Needs' Survey
Seligman, M. & Benjamin Darling, R. (1989) *Ordinary families, special children: As systems approach to childhood disability*. New York: Guilford Press.

Developed for: Conversations in the kitchen: Strategies and Tools for Ongoing Discovery With Families, January 3, 2003. Wisconsin Personnel Development Project/RESource, funded by Wisconsin Department of Health and Family Services, Birth to 3 Program.



10 Step Program to Decrease Toy Bag Dependence

1. **Functional Assessment:**

Identify materials and toys already available and likely to be engaging while visiting. Plan ahead to incorporate those materials/routines into next visit.

2. **Using Existing Social and Daily Routines:**

Join careprovider and child in activities occurring throughout the household/center when you arrive.

3. **Futures Planning:**

Plan activities/routines for your next visit before leaving. Joint identification supports problem solving, partnerships, and allows selective choice of any necessary materials.

4. **Community Based Training:**

Plan a special activity with careprovider - a trip to the park, a walk around the block, gardening, making pudding.

5. **Peer Mediation:**

Organize a play date with other children and careproviders.

6. **Milieu Strategies:**

With permission of family, ask the child to show or get toys or preferred objects in bedroom, toy room, or another area of the house where child's things are and routines occur. Follow child's lead and move into other areas.

7. **Fading Strategy:**

Decrease the size of bag. Choose 1 to 2 toys that support acquisition or generalization of specific outcomes to include in the bag for the visit.

8. **Systematic Desensitization:**

Leave toy bag by the door. Join the child's activities. Use the toy bag only when and if needed. (The next step is to leave the bag outside and then in trunk or under seat in car.)

9. **Hybrid Approaches:**

- **Forgetfulness:**
Walk in empty handed. Ask child, "What's wrong?" Wait.
When child responds, ask, "I forgot. What else should we do? What do we need?"
- **Choice Making:**
Put materials common to household in toy bag. Ask child (careprovider), "Isn't this like yours? Should we use yours or mine? Show me how you do it?"
- **Sabotage:**
If child really likes toy bag approach, take in an empty bag and fill it with child preferred objects of interest/toys.

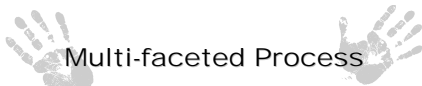
10. **Generalization:**

Demonstrate use of a toy that includes opportunities to practice a skill such as putting objects in small spaces (e.g. putting pieces into Mr. Potato Head). Then look around the home for toys or other materials that could provide additional practice for the same skill.





Monitoring Progress on Family-guided Routines



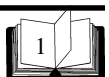
- Family priorities and concerns
- IFSP outcomes
- Services
- Routines, activities, settings
- Child development

FACETS is a joint project of Kansas University Affiliated Program and Valdosta State University

Monitoring progress on family-guided routines is much more than simply collecting child change data on IFSP outcomes in daily activities. It is a multifaceted process that requires dynamic and reflective team involvement. Monitoring progress is important at the IFSP level for child and family outcomes must be reviewed consistently to ensure the priorities continue to reflect child and family concerns. In addition, services delivered by the team must reflect those services "sufficient and appropriate" to meet the child's and family's outcomes within their natural environments. When using a routines based approach routines and activities should be reviewed for continued appropriateness and comfort as well as accomplishment of the target in the routine. The child's progress on targets must also be addressed based on family and team measureable expectations and the developmental appropriateness for the child.

Collecting data on targets embedded in daily routines and play can be challenging. By definition, in routine based intervention trials are dispersed throughout the day and often occur across a variety of locations with different facilitators. Without a specific time and place for instruction, the use of a traditional trial-by-trial data collection procedure or data form is unrealistic. Data collection, most likely, would turn into a game of "hide and seek" to find the form or become a "memory game" when the careprovider tries to recall the responses and record them later. Neither option results in reliable data.

A further data collection challenge is that intervention is embedded into activities that often contain a number of objects and maneuvers that keep the careprovider's hands busy. No one could expect a careprovider to stop in the middle of a diaper change with an active 18 month old to record a correct response on a data sheet! And no one would want a careprovider to interrupt an interactive game of peek-a-boo to put stickers on a behavior chart. It would ruin the game! Nevertheless, despite the difficulties, data collection within routines is critical to the intervention program, and data must be collected to measure the success (or lack of success) of the intervention.



Notes

Data is a Four Letter Word

- **Determined targets**
- **Allocate time and personnel**
- **Take it!**
- **Analyze it!**

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Data collection should be viewed as an opportunity for communication between team members, including the family, and therefore be positive and not a chore. Making sure that everyone is aware of their data collection responsibilities and has time to accomplish them, increases satisfaction with progress monitoring procedures.

While the type and amount of data collected should permit appropriate tracking of progress toward targeted outcomes, it is equally important that the frequency of collection reflects the needs of the child. A child who is just beginning to learn a new skill (e.g., using reciprocal leg movement in creeping) may need more careful monitoring by a team member while another child gaining fluency or mastery of a skill (e.g., walking across rough surfaces) may need less.

Because outcomes and children are different, the data collection methods and schedules are likely to be different. Data collection can be quantitative or qualitative depending upon the target to be monitored and the interests of the careprovider. Careproviders are excellent data collectors when the format is a “good fit” for their time constraints and personal style. Anecdotal data collection provides valuable information for collaborative decision-making, positive team communication, and smooth transitions. Anecdotal reporting also provides supplemental information about the child's targeted and emerging skills. Family member and careprovider examples contribute to showing child progress and enhancing the competence of the facilitator in the routine.

"Taking" the data is the critical next step. Data should be collected across a variety of daily activities and caregiving routines. If the child is developing skills across domains, it will be helpful for the careprovider to monitor progress on targets in different routines. For example, the child may practice requesting more and using pincer grasp during snack and may practice turn taking and functional use of objects at play time. While it's likely the careprovider would observe turn-taking and functional object use at snack time also, it may be easier to focus data collection on individual targets during specific routines to increase accuracy of the observations. The team should review the data collected and suggest ways careproviders can switch routines for data collection regularly to be sure the skills are being used consistently throughout the day.

Data Analysis

- Look across the child's day to check progress on target outcomes across all settings.
- Look at number of opportunities taken as compared to number given.
- Look at child within groups and alone to check progress with peers and adults.
- Look at the quality of responses as well as quantity.
- Carefully analyze all information including times of day and materials before making data based changes in the child's program.


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Notes



Making Data FUMM

- **Functional**
 - include as part of activity
- **Useful**
 - child responses accomplish routine outcome
- **Meaningful**
 - varied formats to “show” progress
- **Measurable**
 - obvious, quick, countable

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Data collection procedures in routines based intervention should be functional, allowing progress monitoring to be easily incorporated with minimal disruptions to the routine. Data collected should reflect skills used by the child to accomplish the routine outcome. For example, using thumb and finger to pick up a handful of cheerios at breakfast, not 25 trials; walking from the couch to high chair, not 10 feet on 4 out of 5 opportunities. A variety of formats should be explored so that resulting data yields meaningful information for the family and the intervention team. Meaningful data is an integral component in decision making and increases the likelihood of making programmatic choices that are responsive to the child and family. Data should be collected in measurable terms that are relevant to the routine.

If data collection methods are going to be useful to careproviders, they should:

- Be located close to the area where the intervention is most likely to occur. For example, place a tape recorder on the kitchen counter for snack routines; tape the data form to the mirror in the bathroom for bathing or toileting routines; put index card's in the diaper bag.
- Serve as a visual prompt for the data the careprovider is to collect. Add symbols or pictures to illustrate key steps or targets. Too many words to read or complex directions to follow are distracting to the flow of the routine and the interaction between partners.
- Be easy and quick to use. Use a fill-in-the-blank, checklist, or circle-the-response format as often as possible. Leave space for comments or notes. Include the careprovider's input about when and how often the data should be collected. More isn't better, if the data isn't accurate.

Careproviders, especially in childcare settings, find using the schedule matrix an efficient format for data collection. Whatever form or format used must be comfortable and accommodating to the careprovider. Data collection can be more than a form. Some careproviders find it easier to keep the video camera handy and capture snippets of video to monitor progress. Video documentation provides an excellent, up to the minute review for the interventionist and an ongoing record for the family. Careproviders have also used inexpensive tape recorders

Notes

to dictate comments about routines or to identify skills exhibited by the child throughout the day. Photographs of the child using a new skill serves both as data collection and celebration of progress.

Once data is collected, the final and most important step is for the careprovider and team member(s) to discuss the results. The team will want to discuss the number of correct responses and the quality and frequency of the responses. When analyzing the data, it is important to review the same variables (targets, opportunities, facilitators, etc.) used in planning the intervention. Observations of the child in more than one activity are usually necessary prior to making changes in the program. Involvement of careproviders in the analysis facilitates their role as "guides" for the program and helps them make informed decisions about service delivery.

In addition to monitoring progress on specific targets and IFSP outcomes, the team should consider updating curriculum based assessments on a quarterly basis. This update provides a picture of the child across all developmental domains and encourages the team to focus on the "whole child" and not just separate domains or specific targets. This update also supports informed decision making about the frequency and intensity of service delivery and the role different team members play within a dynamic team approach.

Monitoring progress provides opportunities for communication and celebration among team members. Family members report that monitoring progress regularly helps them participate more effectively in assessment and outcome development activities on their child's IFSP. When the team is guided by the family, data becomes a positive experience...not just a four letter word!

References:

Bricker, D., & Cripe, J. W. (1992). An activity-based approach to early intervention. Baltimore, MD: Paul H. Brookes.

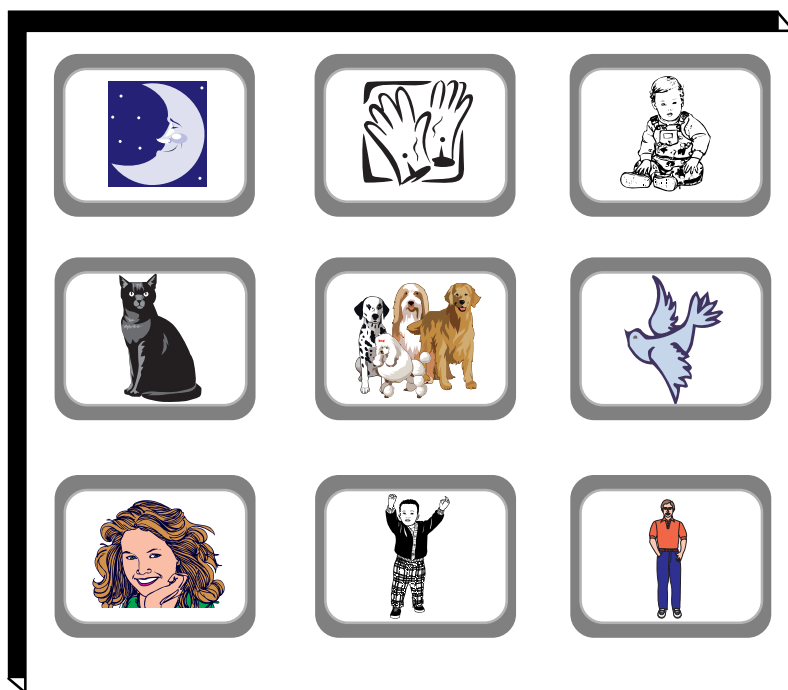
Cripe, J. W. & Venn, M. L. (1997). Family-guided routines for early intervention services. Young Exceptional Children, 18-26.

Wolery, M. (1994). Instructional strategies for teaching young children with special needs. In M. Wolery & J., Wilbers (Eds.) Including children with special needs in early childhood programs (pp. 119-140). Washington, DC: National Association for the Education of Young Children.

Examples of "FUMM" Data Collection

Marvin's and Michael's Puzzle Play



How Many?







NOTE: Marvin and his brother, Michael (age 6), played with his push button puzzle to increase his coordinated placement of objects in defined spaces. Michael, who was learning to write numbers in kindergarten, wrote down the number of pieces Marvin placed without help each day as they played after school. This was a **FUNCTIONAL** play activity for both Marvin and Michael.

Anthony's Good and Bad Hair Days

Did Anthony...

request?  

use the brush?  

put the brush away?  

Note: This data form was roughly the size of an index card and was kept in the pocket of Anthony's diaper bag along with his hairbrush. Progress on multiple targets across domains (i.e., requesting to continue interaction, functional use of objects, placing objects in a defined space) was collected quickly upon completion of hair brushing. This data collection system is **USEFUL** because it documents Anthony's participation in completing the outcomes of the routine.

Fun - O - Meter

Careprovider: _____

Child: _____

Week of: _____

Circle the amount of fun occurring within careprovider/child routine.

Monday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

Tuesday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

Wednesday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

Thursday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

Friday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

Saturday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

Sunday

Hilarious
Amusing
Chuckles
Neutral
The Pits
Routine: _____

NOTE: This data form provided **MEANINGFUL** information about the intervention plan. The purpose was not to measure child skill but rather to monitor whether the intervention plan remained responsive to the child and family and promoted positive interaction.

Dusty's Signs During Routines

MEAL TIME	
eat <input type="checkbox"/>	cracker <input type="checkbox"/>
drink <input type="checkbox"/>	hungry <input type="checkbox"/>
more <input type="checkbox"/>	thirsty <input type="checkbox"/>
hot <input type="checkbox"/>	all done <input type="checkbox"/>
cookie <input type="checkbox"/>	spoon <input type="checkbox"/>
fork <input type="checkbox"/>	

DIAPER CHANGE	
diaper <input type="checkbox"/>	dirty <input type="checkbox"/>
clean <input type="checkbox"/>	stinky <input type="checkbox"/>
throw away <input type="checkbox"/>	stand up <input type="checkbox"/>
all done <input type="checkbox"/>	lay down <input type="checkbox"/>
body parts <input type="checkbox"/>	wait <input type="checkbox"/>
peek-a-boo <input type="checkbox"/>	

BATH TIME	
water <input type="checkbox"/>	all done <input type="checkbox"/>
wet <input type="checkbox"/>	in <input type="checkbox"/>
hot <input type="checkbox"/>	out <input type="checkbox"/>
cold <input type="checkbox"/>	toys <input type="checkbox"/>
on <input type="checkbox"/>	hair <input type="checkbox"/>
off <input type="checkbox"/>	soap <input type="checkbox"/>
body parts <input type="checkbox"/>	

NIGHT TIME	
good night <input type="checkbox"/>	sleep <input type="checkbox"/>
quiet time <input type="checkbox"/>	book <input type="checkbox"/>
close eyes <input type="checkbox"/>	read <input type="checkbox"/>
blanket <input type="checkbox"/>	P.J. <input type="checkbox"/>
pillow <input type="checkbox"/>	bed <input type="checkbox"/>
song <input type="checkbox"/>	

NOTE: This form provided Dusty's careproviders a method of recording the signs he used in targeted routines throughout his day. The signs listed are those most frequently used in a number of routines, and space to record additional signs was provided. This checklist provided an obvious, quick, and **MEASUREABLE** way to monitor progress.

References

- Blose, D. & Smith, L. (1995). *Thrifty nifty stuff for little kids: Developmental play using home resources*. Austin, TX: PRO-ED.
- Dunst, C., et al., Characteristics and Consequences of Everyday Natural Learning Opportunities. *Topics in Early Childhood Education*, Summer, 21:2 (2001): 68-92.
- Edelman, L. (2001). *Just being kids: Supports and services for infants and toddlers and their families in everyday routines, activities, & places*. Denver: Western Media Products.
- Seitzinger-Hepburn, K. (2004). *Families as primary partners in their child's development and school readiness*. Georgetown University Center for Child and Human Development. Retrieved from:
http://www.aecf.org/publications/data/families_sr.pdf
- Sher, B. (1998). *Extraordinary play with ordinary things: Recycling everyday materials to build motor skills*. San Antonio, TX: The Psychological Corporation.

Websites/Resources

- Community connections: Helping facilitate the participation of children with disabilities in community settings;
<http://www.communityconnections.umd.edu>
- Connecting with parents in the early years;
<http://ceep.crc.uiuc.edu/pubs.html>
- Early Intervention Technical Assistance; www.pattan.k12.pa.us
- FACETS (Family Guided Approaches to Early Intervention Training and Services); www.parsons.lsi.ku.edu/facets

Family centered services: Guiding principles and practices for delivery of family centered services;

<http://www.state.ia.us/educate/ecese/cfcs/ea/doc/fcs.pdf>

Natural Environments: Service and Advocacy for Children Who Are Visually Impaired or Deaf/blind;

<http://www.perkins.org/downloads/NatEnvirMonograph.pdf#search='definition%20of%20natural%20routines'>

Power of the Ordinary; www.poweroftheordinary.org

Resource Guide: Selected Early Childhood/Early Intervention Training Materials; <http://www.fpg.unc.edu/~scpp/pdfs/rguide.pdf>

Selected Assessment Tools for family-centered practice within the child's natural environment;

<http://www.waisman.wisc.edu/birthto3/selectedtools.pdf#search='family%20routines%20assessment%20tools'>

Therapists as Collaborative Team Members for Infant/Toddler Community Services (TACTICS); www.tactics.fsu.edu