



Practicing Evidence-Based
Early Intervention



Early Steps State Meeting

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The header features a light green background with a repeating pattern of small, white, line-art icons related to baby care, such as a baby carriage, a teddy bear, a pacifier, a bottle, and a baby's face.

Overview

In our hour together today:

- Shared understanding about definition for evidence-based early intervention
- Awareness of available evidence supporting components and practices associated with primary service provider (PSP) and response to support and intervention (RSI) approaches
- Knowledge about resources related to locating and synthesizing best-available evidence to help inform practice of evidence-based early intervention

Evidence-Based Early Intervention

Best-available
research
evidence

Family
wisdom and
values



Practitioner
wisdom and
values

Practicing Evidence-Based Early Intervention

Decision-making process that integrates the best-available research evidence with family & practitioner wisdom & values

Considers characteristics, preferences, strengths, and needs of child and family



Practicing **evidence-based** early intervention

Decision-making process that integrates the best-available research evidence with family & practitioner wisdom & values

Considers characteristics, preferences, strengths, and needs of child and family

-Buyse & Wesley (2006)
-Snyder (2006)

Practicing **eminence-based** early intervention

Using tradition, folklore, and loose bodies of knowledge to inform practice decisions

Making the same mistakes [decisions] with increasing confidence over an impressive number of years

—O'Donnell, 1997, *A Skeptic's Medical Dictionary*

Recommended Practices

- Systematically promulgated lists of practices or treatment protocols designed to help practitioners and consumers make informed decisions under specific circumstances
- Other terms: Clinical practice standards, clinical practice guidelines
- Offer general guidance
- Must always consider individual child and family circumstances
- So, recommended practices are important and necessary but not sufficient for informing evidence-based early intervention

Example Recommended Practices in Early Intervention

- DEC (Division for Early Childhood)
Recommended Practices

www.dec-sped.org

Workgroup on Principles and Practices in Natural Environments

<http://www.nectac.org/topics/families/families.asp>

- NAEYC Developmentally Appropriate Practices

www.naeyc.org

Recommended Practices

Key Components of PSP Approach

| | | |
|---|--|---|
| IFSP DEVELOPMENT COMPONENTS | <i>Component 1: Functional Assessment</i> | |
| | <ul style="list-style-type: none"> • Focus on child functioning in context. • Child and family strengths reflected in IFSP. | Bennett et al., 1998;Dunst et al., 2001; Jung & Baird, 2003; Jung & Grisham-Brown, 2006; Jung & McWilliam, 2000; 2005; McBride et al., 1993; McWilliam et al., 1998; Zhang & Bennett, 2003. |
| | <i>Component 2: Functional Goal Planning</i> | |
| <ul style="list-style-type: none"> • Intervention priorities based on child/family functioning. • Goals align with family priorities, beliefs, and values. • IFSPs understandable to families. • Goals written in active voice. • Goals address functional skills. | Boone et al., 1998; Gallagher & Desimone, 1995; Hanft & Pilkington, 2000; Jung & Baird, 2003; McBride et al., 1993; McGonigel, et al., 1991; McWilliam et al.,1998; Notari-Syverson & Shuster, 1995; Perry et al., 2001; Rosenkoetter & Squires, 2000; Summers et al., 1990; Trivette & Dunst, 2000. | |
| <i>Component 3: Linking Functional Goals to Service Decisions</i> | | |
| <ul style="list-style-type: none"> • Variety of supports and resources used to achieve outcomes. • Supports chosen are known to be helpful. • Least intrusive strategies are used. • Services added based on specific need. | Bailey et al., 1988; Bennett et al., 1998; Boone et al., 1998; Hanft & Pilkington, 2000; 2003; Jung & Grisham-Brown, 2006; McBride et al., 1993; McGonigel et al., 1991; McWilliam & Scott, 2001; McWilliam et al., 1998; McWilliam, 2000;2005; Notari-Syverson & Shuster, 1995. | |

From:
TEIDS Plus
(McWilliam, Snyder, Ridgley, & Davis, 2008)

Recommended Practices

Key Components of PSP Approach

| | | |
|---|---|---|
| IFSP IMPLEMENTATION COMPONENTS | <i>Component 4: Integrated Service Delivery</i> | |
| | <ul style="list-style-type: none"> • Services provided in natural environments • Shared responsibility between families & professionals. • Use of integrated service delivery model & primary service provider (PSP) model. • All team members participate in implementation. | Dunst et al., 2001; Hanft & Pilkington, 2000; Jung & Baird, 2003; Jung & Grisham-Brown, 2006; McBride et al., 1993; McGonigal et al., 1991; McWilliam & Scott, 2001; McWilliam et al., 1998; McWilliam, 2000; Notari-Syverson & Shuster, 1995; Rosenkoetter & Squires, 2000; Summers et al., 1990 |
| | <i>Component 5: Monitoring Progress and Child/Family Outcomes</i> | |
| | <ul style="list-style-type: none"> • Goals include an evaluation component. • Barriers to goal attainment considered. • Multiple measurement strategies are used to monitor child and family progress. | Bailey et al., 1988; Hebbeler, 2004; Jung & Baird, 2003; Jung & Grisham-Brown, 2006; Jung & McWilliam, 2005; McWilliam, 2000; Notari-Syverson & Shuster, 1995; Rosenkoetter & Squires, 2000 |
| <i>Family Participation and Decision Making: Embedded within each component</i> | | |
| <ul style="list-style-type: none"> • Practices support participation of families. • Practices support family decision making. | Bennett, Zhang, & Hojnar, 1998; Jung & Baird, 2003; Jung & Grisham, Brown, 2006; McBride et al., 1993; McWilliam et al., 1998; Rosenkoetter & Squires, 2000; Summers et al., 1990; Trivette & Dunst, 2000; Zhang & Bennett, 2003 | |

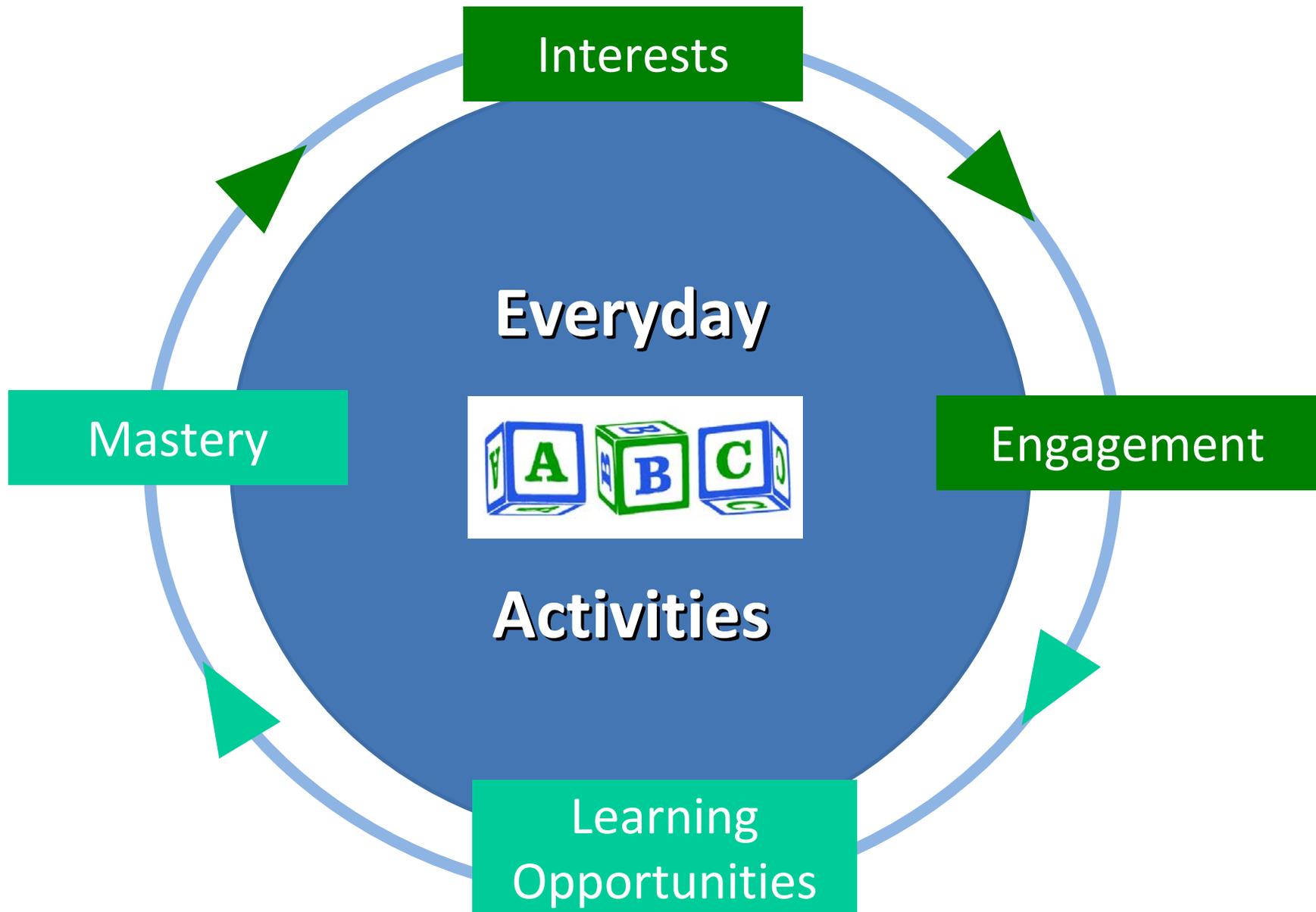
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A Comment on Children's Experiences

"We start with the assumption that each day, that every hour in every day, is of great importance to a child, and that when an hour is neglected, allowed to pass without reason and intent, teaching and learning go on nonetheless and the child may be the loser."
(Hobbs, 1967, Am. Psych., p. 1109)

**Children will learn...
but maybe not what they need to learn**

Understanding How Children Learn



Adapted from Dunst (2000, 2001)

Support for Learning in Everyday Activities and Routines

Bath time is so much fun!



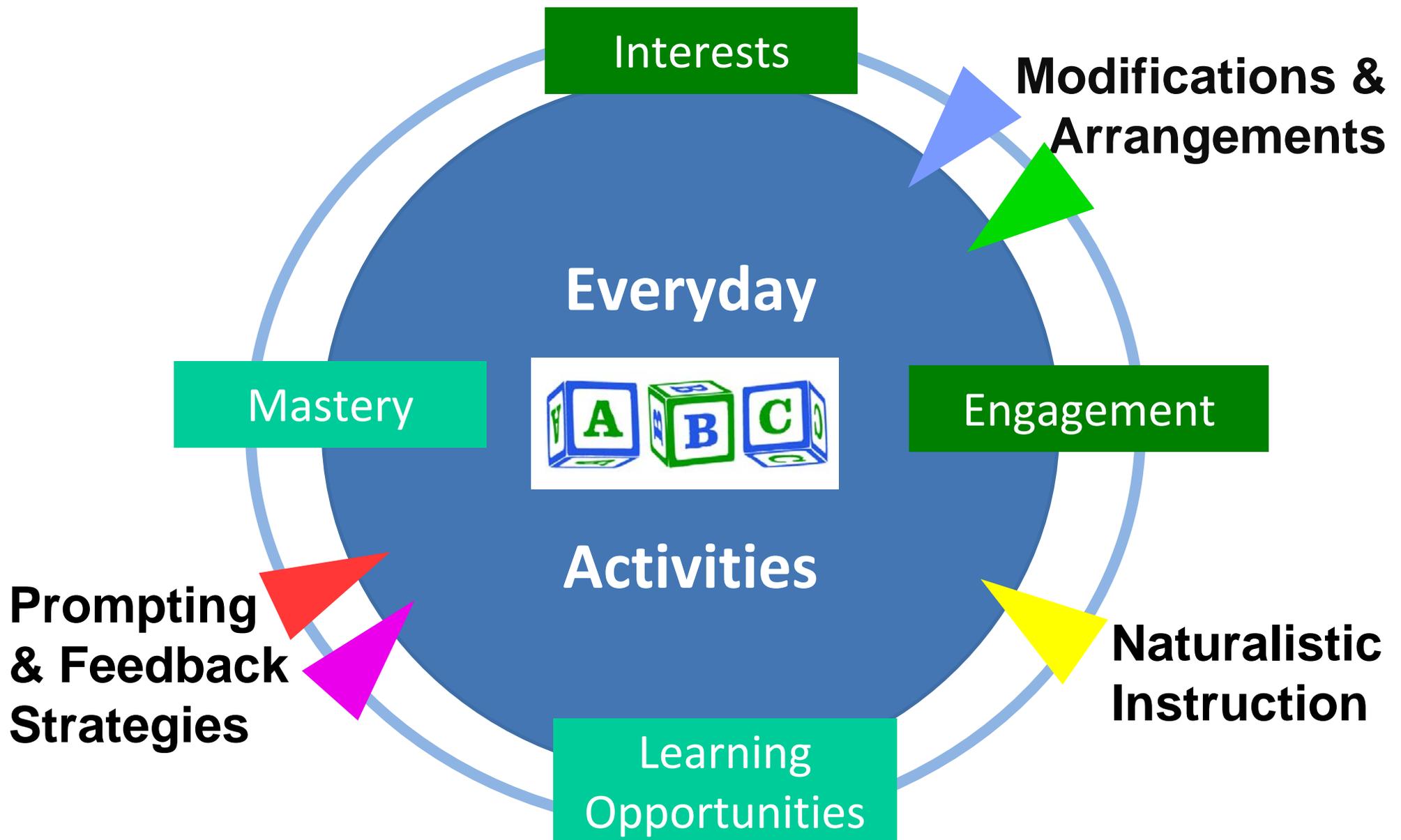
Look at what Granny got me for my birthday.



My first experience pouring water – what fun!



Embedded Instruction Promotes Learning





My name is Brandon.
My family and I
participate in early
intervention.

Mom and dad have
identified walking as
an important priority.

What supports might
I need to help me
walk?



What does the
research evidence
say about motor
intervention for
young children?



Old Way Versus New Way

Support for Activity-Focused and Integrated Service Delivery in Natural Environments

Old Way:

Neurofacilitation

- Work on *prerequisites* (e.g., strength, endurance, and flexibility) before ready to work on functional skills
- *Hands-on intervention* (mass practice, discrete trial) most effective
- Elicited postural reactions (e.g., on a therapy ball) will *carry over* to functional skills (e.g., sitting on a chair)

New Way:

Dynamic Systems/Motor Learning

- *Practicing functional activities* will assist development of strength, endurance, and flexibility; children may learn a task in spite of limitations
- Hands-on intervention may help with skill acquisition, but hands-off intervention is required for *generalization and maintenance*
- Postural responses *organized to achieve a goal* (e.g., sitting on a chair) and are not the same as elicited postural reactions; carryover cannot be assumed during functional activities; responses often need to be predictive, not reactive

Neurofacilitation

- *Normal movement facilitated* through specific sensory stimulation; by experiencing normal movement, more normal movement will be “learned”
- During therapy, any activity can be used as long as it promotes desired movements
- Most therapy should take place in an environment that has a good supply of *therapeutic equipment*
- *Normal movement experiences* are the most important

Dynamic Systems/Motor Learning

- Facilitating normal movement is easy; getting it to *carry over* to independent movement and functional activities is difficult
- *Activities are critical*, movement is organized to accomplish specific tasks
- Most therapy should take place in *natural environments*
- *Appropriate practice and feedback* are most important



Look at me...I am practicing walking and having so much fun!

Empirical evidence supporting PSP
and RSI approaches is growing

Where can Early Steps practitioners
and families find best-available
evidence syntheses?

Locating Best-Available Evidence: Example Sites

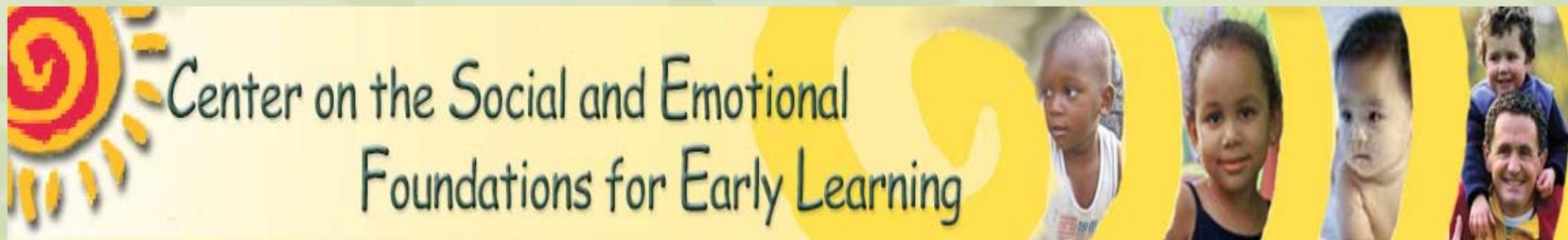


- Research and Training Center on Early Childhood Development

www.researchtopractice.info



- Center on the Social and Emotional Foundations for Early Learning
 - <http://www.vanderbilt.edu/csefel/index.html>



Locating Best-Available Evidence: Example Sites

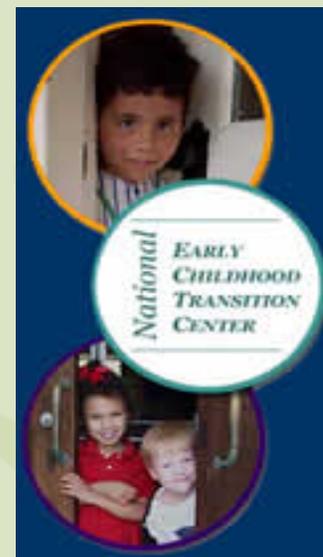
- Technical Assistance Center on Social Emotional Intervention for Young Children

<http://challengingbehavior.fmhi.usf.edu/>



- National Early Childhood Transition Center

<http://www.ihdi.uky.edu/nectc/>



Locating Best-Available Evidence: Example Sites



- Center for Early Literacy Learning
<http://www.earlyliteracylearning.org>



- What Works Clearinghouse
(preschool focus primarily at this point)
<http://ies.ed.gov/ncee/wwc/>
- Cochran Collaboration
<http://www.cochrane.org/reviews/>

Locating Information About Family Wisdom and Wisdom-Based Action

- Beach Center on Disability
 - http://www.beachcenter.org/wisdom_based_action/welcome.aspx



Questions to Consider When Appraising Internet Sites



Who (agency or organization) sponsors the site?

Is there information about funder, mission, activities, board of directors? Reputation known?

Author's credentials and relevant experience? Is a vita available?

What processes or framework was used to create the synthesis? Are complete citations for primary sources available?

Are dates provided (e.g., when material was posted, dates of inclusion for studies reviewed)?

Is the review process transparent?

Are syntheses validated by experts in the field?

Seven Key Principles Evidence-Based Early Intervention



- Infants and toddlers learn best through every day experiences and interactions with familiar people in familiar contexts
- All families, with the necessary supports and resources, can enhance their children's learning and development
- The primary role of the service provider in early intervention is to work with and support family members and caregivers in a child's life
- The early intervention process, from initial contacts through transition, must be dynamic and individualized to reflect the child's and family members' preferences, learning styles, and cultural beliefs
- IFSP outcomes must be functional and based on children's and families' needs and priorities
- The family's priorities, needs, and interests are addressed most appropriately by a primary provider who represents and receives team and community support*
- Interventions with young children and family members must be based on explicit principles, validated practices, best-available research, and relevant laws and regulations*

Source: Workgroup on Principles and Practices in Natural Environments (2008, February).
Seven key principles: Looks like/doesn't look like. OSEP TA Community of Practice – Part C
Settings. <http://www.nectac.org/topic/families/families.asp>



Bridging the gap between what we know and what we do for the benefit of children and families