



# *Enhancing Services in Natural Environments*

Presenter:

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*Part of a Web-based Conference Call Series Sponsored  
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# Purpose of the Series

## Enhancing Services in Natural Environments

- To better understand the various models of serving children in natural environments and the training and technical assistance available.

# Assumption...

- Listeners on the calls want programs and practitioners to **adopt** state-of-the-art practices in serving young children and their families as quickly as possible.

# Focus of this call is on the adoption process

## What is adoption?

- The decision to make full use of an innovation as the best course of action available (Rogers, 1983).

## Why focus on adoption?

- The study of how people adopt new things helps us to understand the nature of innovations and how to encourage others to use them.

# Diffusion of Innovations

The model that we'll use throughout this discussion to help us understand how the field adopts innovations related to early intervention supports and services comes from:

Rogers, Everett M. (2003). *Diffusion of Innovations, Fifth Edition*. New York: The Free Press.

“All models are wrong,  
but some are useful.”

W. Edwards Deming

# Diffusion of Innovations

**Diffusion** is the process by which an innovation is communicated through certain channels over time among the members of a social system.

# Four Main Elements in the Diffusion Process

A. Innovation

B. Communicated through certain channels

C. Over time

D. Social system

# A. Innovation

# Innovation and Technology

**Innovation:** An idea, practice, or object that is perceived as new by an individual or other unit of adoption.

**Technology:** A design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome.

# There are usually two components to innovations

## Components

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## Example

**Software aspect**  
consisting of the  
information base

Knowledge of the importance of  
gathering functional assessment  
information

**Hardware aspect**  
consisting of the  
tool that embodies the  
technology as material  
or physical objects

Interview guides, observation guides,  
inventories, scales, etc.

# Hardware:

## Tools Referred To During the Calls

- Activity Setting Intervention (Bruder)
- Activity Setting Recording Form (Bruder)
- Asset-Based Context Matrix (Wilson, Mott, & Batman)
- Being a Parent (Johnston & Nash)
- Needs Satisfaction Inventory (Shelton)
- Blended Child Goals and Daily Activities (Woodruff)
- Child Goals and Daily Routines & Activities (Woodruff)
- Early Childhood Intervention Practices Checklist (Dunst)
- Families In Natural Environments Scale of Service Evaluation (FINESSE) (McWilliam)
- Family Goals/Strategies in Goal Attainment Scaling Format (Woodruff)
- Family Resource Scale (Dunst & Trivette)
- Inventory of Social Support (Dunst & Trivette)
- My Family Characteristics (Simeonson)
- RBI Report Form (McWilliam)
- Scale for Assessment of Family Enjoyment within Routines (SAFER) (Scott & McWilliam)

## *Rate of adoption*

- The relative speed with which an innovation is adopted by members of a social system.

## *Characteristics of Innovations*

- Research indicates that there are five characteristics of innovations that are the most important in explaining the rate of adoption.

# Characteristics of Innovations

**Relative Advantage:** The degree to which an innovation is perceived as better than the idea it supersedes.

**Compatibility:** The degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters.

**Complexity:** The degree to which an innovation is perceived as difficult to understand and use.

**Trialability:** The degree to which an innovation may be experimented with on a limited basis.

**Observability:** The degree to which the results of an innovation are visible to others.

Key word

**Perceived**

# Why is it important to understand the characteristics of innovations?

The concept of **positioning** views at least some of an innovations' perceived characteristics as changeable.

# 1. Relative Advantage

The degree to which an innovation is perceived as better than the idea it supersedes.

The higher the relative advantage,  
the higher the rate of adoption.




# Relative Advantage

## Potential Adopters might wonder or ask:

- How is this new approach better than what I have been doing? After all, I have had a good deal of success in my work.
- But families prefer more clinical, hands on treatment approaches!

## 2. Compatibility

The degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters.

The higher the compatibility, the higher the rate of adoption. 

# Compatibility

Potential Adopters might wonder or ask:

Values

I am not going to give up my discipline!

Past Experience


The PSP approach will not work with the kinds of kids and families who I see!

Needs

How can we develop more functional, contextualized IFSP outcomes, when funders demand different kinds of treatment goals to justify payment for service?

# 3. Complexity

The degree to which an innovation is perceived as difficult to understand and use.

The higher the complexity,  
the lower the rate of adoption. 

# Complexity

A trainer wonders:

Why don't they get it?

A learner wonders:

What is the difference between this approach and that approach?

Rogers:

In general, new ideas that are simpler to understand will be adopted more rapidly than innovations that are difficult to understand.

# Complexity:

## A Variety of Approaches to Thinking about Services in Natural Environments

- Contextually Mediated Practices TM 1) Intervention; 2) Therapy
- Family-Centered Home-Based Service Approach
- Family-guided routines based intervention
- Home-Based Integrated Services
- Natural Learning Opportunities
- Primary Coach Approach
- Primary Service Provider Model
- Routines-Based Interview
- Support-Based Home Visits
- Transdisciplinary Service Delivery
- Transformation Family Centered Transagency Team Model

# Complexity:

Lots of Differently Labeled Lists of Ideas  
are Used to Describe Ways of Thinking

Approach	Key Terms
Beliefs	Misassumptions
Characteristics	Model
Components	Paradigms
Constructs	Protocol
Guiding Questions	Quality Indicators
Key Elements	Roles
Key Indicators	Strategies
Key Ingredients	Techniques
Key Practices	Touch Points

# Complexity

## Don't Forget...

- IDEA Legislation
- Federal Rules and Regulations
- State Rules and Regulations
- Program Policy

# A Conundrum

How are practitioners to know what standards to use in determining which practices are evidence-based when funders, professional associations, and researchers do not necessarily agree on an operational definition for the term “evidence-based?”

- Evidence-based practices
- Research based practices
- Research foundations
- Supporting evidence
- Supporting research

# Complexity: Terminology

Activity Setting  
Asset-Based Context  
Capacity-Building Models  
Classroom-Based Integrated Services  
Coaching  
Collaborative Consultation  
Consultation  
Consultative Model Adapted for Diverse Adult Learners  
Context  
Deficit-based Models  
Development-Enhancing Learning Opportunities  
Dyadic Interaction/Triadic Exchange  
Ecomap  
Embedded Intervention  
Everyday Learning Opportunities  
Everyday Natural Learning Opportunities  
Expertise Models  
Family Centered  
Family/Child Supports & Services  
Family-Centered Home-based Service Approach  
Family-Centered Models  
Family-Guided  
Family-Guided Routine Based Intervention  
Focused Assessment  
Functional Evaluation/Assessment  
Functional Goals  
Functional Outcomes  
Home-Based Integrated Services

Initial Planning Conversation  
Integrated Specialized Services  
Interventions  
Learning Opportunity  
Natural Environment  
Natural Learning Environment  
Outcome Functionality  
Peer Coaching  
Planning Conversation  
Primary Coach  
Primary Service Provider  
Professionally-Centered Models Promotion Models  
Rationale  
Resource-Based Models  
Routine  
Routine Based  
Routines-Based Assessment  
Routines-Based Interview  
Service-Based Models  
Services  
Strengths-Based Models  
Supports  
Support-Based Home Visits  
Transdisciplinary  
Treatment Models  
Triadic Support Hierarchy  
Typical Natural Learning Environment Settings

“I think we get so bogged down in what something is called and "saying it the right way" that that becomes more important than the content. How you say it or how you label it becomes more important than what you are doing or what you are actually talking about. Trying to communicate in this kind of atmosphere is challenging because assumptions are made based on the words that are used. I guess where I land on this is that within a state/group/organization/whatever, it is necessary to develop a shared meaning of terms and definitions in order to avoid confusion, wasted energy, miscommunication, and worse.”

State Agency Part C Staff Person and TA Provider

There are some significant differences among various approaches presented.

There also seems to be some common themes.

These common themes might be viewed as a **technology cluster**,  
a number of distinguishable elements  
of a technology that are perceived  
as being closely interrelated.

# Common Themes

- Individualized approach
- Family-centered supports and services
- Participation in families' everyday routines, activities, places, and relationships
- Children's learning in the context of families' natural learning opportunities
- Integrated supports and services

Everything should be made as simple as possible, but not simpler.

Albert Einstein

# Individualized approach

- Assumption that supports and services need to be tailored to meet the unique needs and characteristics of every child and family.
- Thoughtful gathering of information from families.
- Thoughtful consideration for working with a wide diversity of families (culture, ethnicity, religion, socio-economic, linguistic).

# Family-centered supports & services

- Being responsive to family directed priorities.
- Recognizing and supporting the family's role in making decisions in all aspects of the early intervention process.
- Building on the recognition that the family is the primary influence on the child and has the greatest impact on young children's learning and developmental.
- Recognizing and supporting child and family strengths.
- Supporting the family's competence and confidence in enhancing the child's learning and development.
- Providing informational, emotional, and material support to families.
- Acknowledging and supporting the cultures, values, and traditions of families.

# Participation in families' everyday routines, activities, places, and relationships

- Providing supports and services within the context of families' lives.
- Supporting child and family participation in everyday life.
- Creating functional rather than developmental outcomes.
- Supporting that which happens between visits.
- Being guided by the context of a child and family's everyday life and the families' goals for their child's participation, independence, and learning.

# Natural learning opportunities

- Basing strategies on how all children learn.
- Having a sound understanding of typical infant and toddler development.
- Recognizing that young children learn throughout the course of everyday life, at home and in the community.
- Focusing on naturally occurring learning opportunities, rather than contrived, specialized instruction.
- Supporting primary caregivers to provide children with learning experiences and opportunities that strengthen and promote a child's competence and development.
- Supporting learning that occurs in context of the things that have high levels of interest and engagement for children and their families.

# Integrated supports and services

- Basing intervention on functional, integrated goals.
- Avoiding a discipline-specific or domain-specific focus.
- Team-based approaches (e.g. transdisciplinary, primary service provider).
- Collaborative efforts.

## Infuse Key Practices in Each Step of the IFSP Process

	Family-centered supports & services	Participation in everyday routines activities, places, & relationships	Context of families' natural learning opportunities	Integrated supports & services
Public Awareness				
Initial Contact				
Evaluation & Assessment Planning				
Evaluation & Assessment				
Development of Individualized Plan				
Implementation of Plan				
Review and Evaluation of the Plan				
Development of Transition Plans				

# Now...Back to the Characteristics of Innovations that Influence the Rate of Adoption

## 4. Trialability

The degree to which an innovation may be experimented with on a limited basis.

The higher the trialability,  
the higher the rate of adoption. ↑

# Trialability

## Potential Adopters might wonder or ask:

- Can I try out this new approach a bit to see how it goes before I fully commit to it?

## Rogers:


- An innovation that is trialable represents less uncertainty to the individual who is considering it for adoption; they can learn by doing.

## Example:

- Pilot projects

# 5. Observability

The degree to which the results of an innovation are visible to others.

The higher the observability,  
the higher the rate of adoption. 

# Observability

Potential Adopters might wonder or ask:

- Can I actually see the use of an approach in action, and see the benefits myself, rather than relying solely on the testimony of others?

## B. Communicated through certain channels

# Communication

- The process by which participants create and share information with one another in order to reach a mutual understanding.
- The essence of the diffusion process is information exchange.

# Communication channels

**Mass media channels:** transmitting messages through a mass medium such as video, books, DVD, web sites

**Interpersonal channels:** face-to-face exchanges between two or more individuals

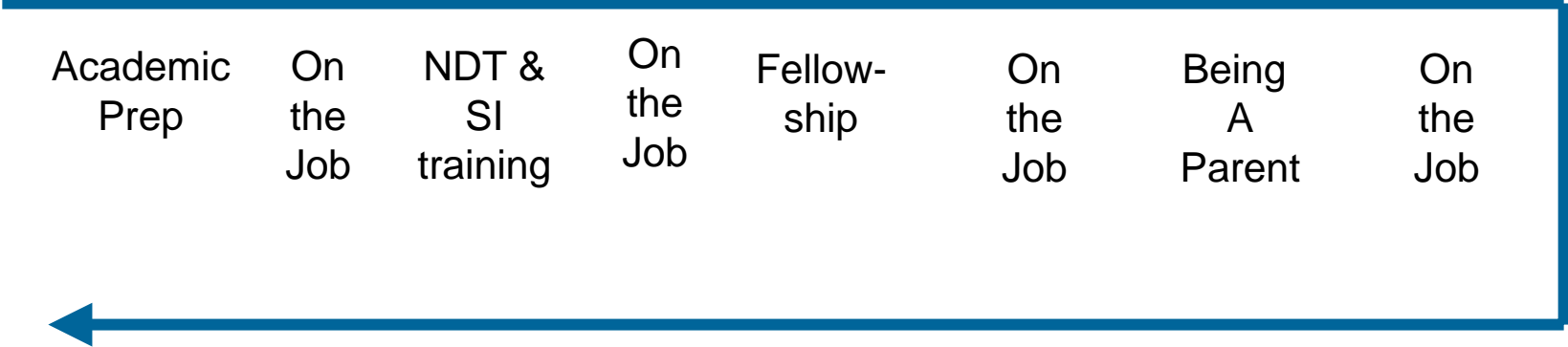
# Patty, Recent PT Graduate

“I learned more in 3 weeks of being in families homes than in all my years of schooling.”



# Rachel, Veteran OT, ECSE

“Formal in-service training is valuable only so much as we have a chance to practice it right away and have a mentor.”

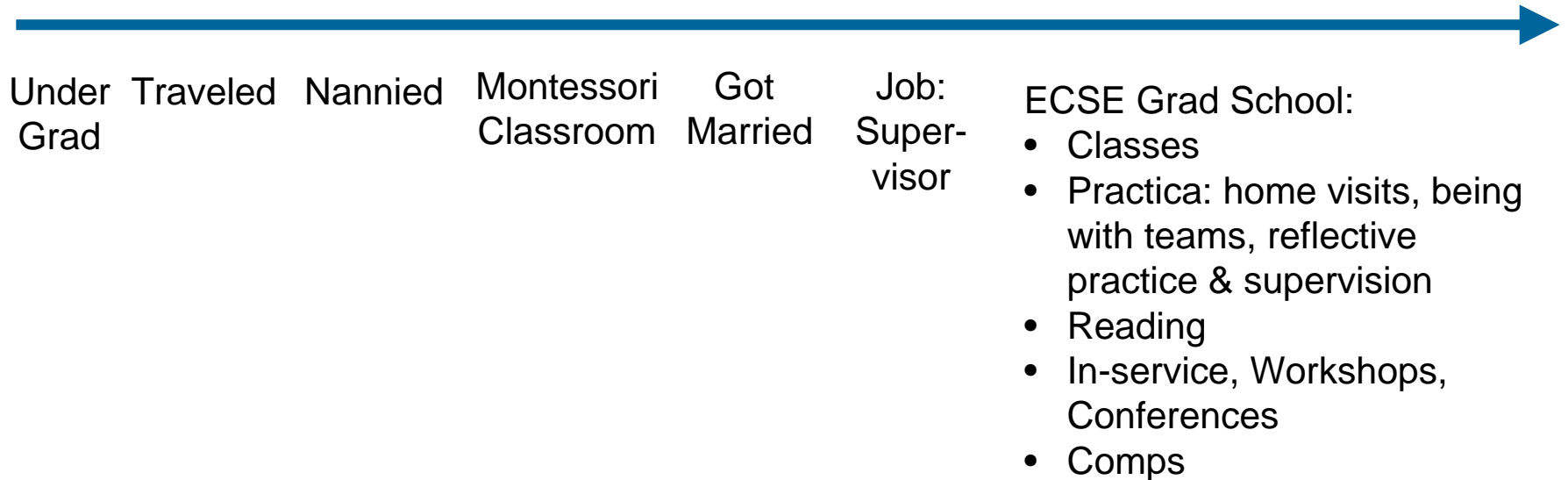


Academic Prep	On the Job	NDT & SI training	On the Job	Fellow- ship	On the Job	Being A Parent	On the Job
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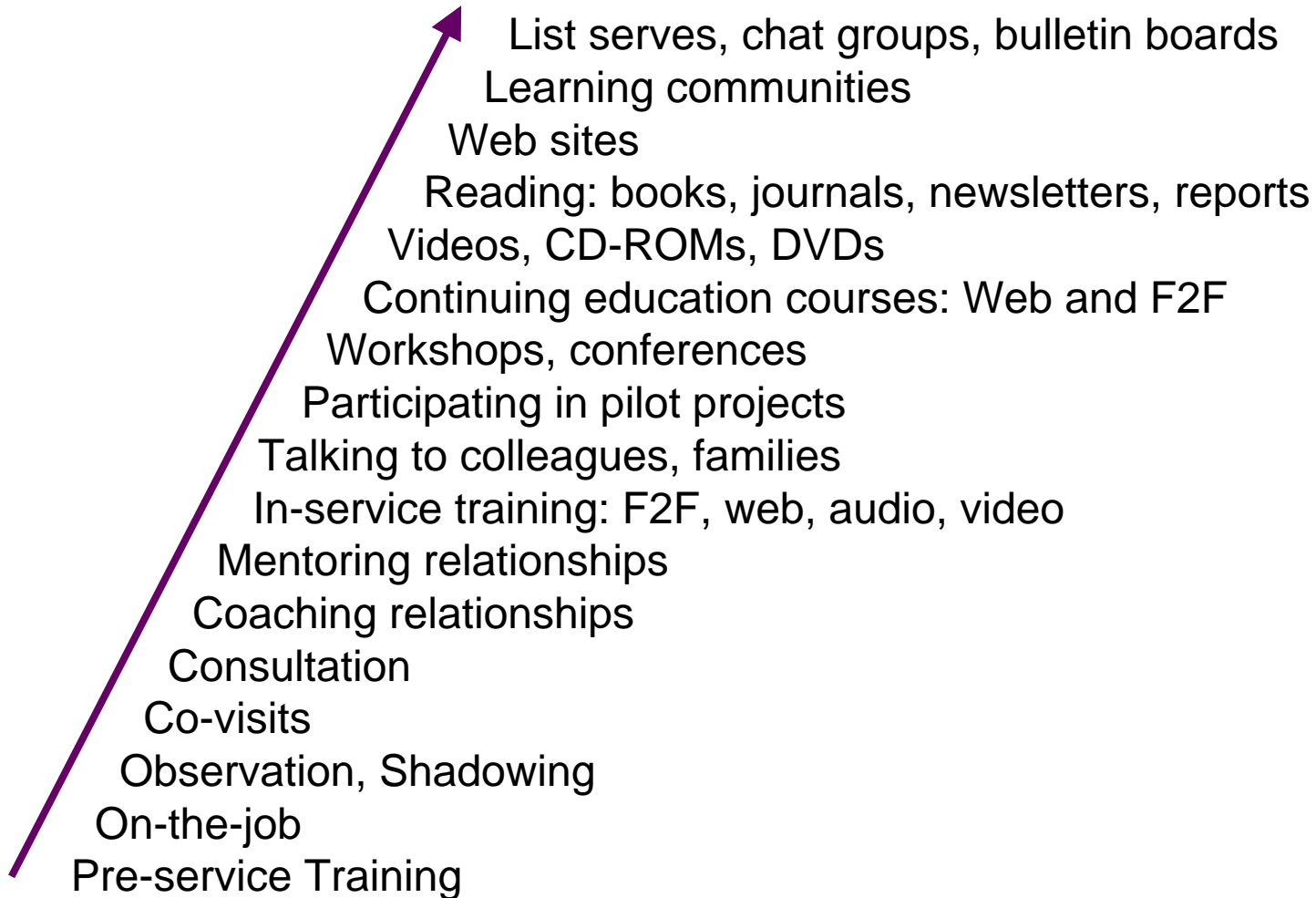
On the Job	Intensive Training	Talking about PSP Model	On the Job	In-service, Workshops, Conferences
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# Casey, current ECSE student

“When I shadowed home visits I realized how much I didn’t know. I wonder if I got a job next week how I’d be on my first home visit. What has been missing in my formal training is strategies; what do I actually do to help?”



# Lots of ways to learn



# 3. Over time

# The innovation-decision process

The process through which an individual (or other decision-making unit) passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of the decision.

# The innovation-decision process

- Knowledge** the individual is exposed to the innovation's existence and gains some understanding of how it functions.
- Persuasion** the individual forms a favorable or unfavorable attitude.
- Decision** the individual engages in activities that lead to a choice to adopt or reject.
- Implementation** the individual puts the innovation into use.
- Confirmation** the individual seeks reinforcement for an innovation-decision already made, but may reverse the decision if exposed to conflicting messages.

Individuals seek different kinds of information at different stages of the innovation-decision process.

Stage	Typical Questions	What information will you give? How will you deliver it?
Knowledge	What is it? What does it look like? How does it work? What's up with THAT?	
Persuasion	Why is it better than what it replaces? What are the advantages/disadvantages? How will it work in MY situation? Can I try it a bit before committing to it?	
Decision	Where do I get it? How do I use it?	
Implementation	How do I solve problems I encounter? What strategies can I use? How can I adapt it?	
Confirmation	Is it working? Is it worth it?	

# Re-invention

- The degree to which an innovation is changed or modified by a user in the process of its adoption and implementation.

# 4. Social system

# Elements that may Influence a State's Decisions to Adopt or Reject Certain EI Service Models or Practices

- State economy
- Existing policies
- Political climate
- Department in which lead agency is located
- Centralized vs. locally driven system
- State leadership
- State agency staff beliefs and values
- Funding mechanisms
- Current infrastructure of early childhood system
- Collaboration among agencies, e.g. early childhood, health, education, mental health, disabilities, family support, child care, etc.
- Institutions of higher education programs, curriculum, and participation
- Personnel resources
- Licensure/certification requirements
- Statewide interpretation of IDEA
- Current system approaches to IFSP process, service coordination, intervention
- Geography
- Population base
- History

There are significant variations in systems' elements from:

State to state

County to county

City to city

Agency to agency

Program to program

In summary...what to do?

# Ideas to consider

- In light of the complexity and variety of approaches at hand, be sure to achieve your own clear understanding of the innovations that you are promoting.
- Be thoughtful (cautious!) if adapting, re-inventing, and piecing together various approaches.
- Think systemically when adopting and promoting new service models.
- Infuse key practices in ALL of the steps of the early intervention and IFSP processes.
- Articulate clear guidance to the field.
- Remember that training is essential, but not sufficient.
- Support practitioners' by offering a variety of accessible learning opportunities beyond classroom-based training.
- Consider implementing pilot projects.
- Build your state's capacity to provide training, technical assistance, mentoring, and coaching.

# *References for this call*

*Rogers, Everett M. (2003). Diffusion of Innovations, Fifth Edition. New York: The Free Press.*

Handouts and PowerPoint Slides from the *Enhancing Services in Natural Environments Conference Call Series*, sponsored by the OSEP Part C Settings Community of Practice. Materials were developed by Mary Beth Bruder; Juliann Woods; Geneva Woodruff; M'Lisa Shelden and Dathan Rush; Barbara Hanft; Carl Dunst; and Robin McWilliam. To view these materials, visit:  
<http://www.nectac.org/~calls/2004/partcsettings/partcsettings.asp>

# Training and TA Materials from Colorado

## ***Just Being Kids***

Each of the six stories on this 50 minute video demonstrates recommended practices as therapists and early childhood specialists work collaboratively with families to achieve meaningful goals for their children in context of everyday routines, activities, places, and relationships. Developed for use in both pre-service and in-service training programs with therapists, early childhood specialists, and service coordinators, the video is also useful for showing families examples of this approach to early intervention supports and services. The 55-page *Facilitator's Guide* offers background information on the stories, handouts, and suggestions for leading discussion groups and training activities. Produced by Larry Edelman, JFK Partners, Project ENRICH, and the Colorado Department of Education. Cost for non-profit and government groups: \$75.00

To order this and other early childhood videos visit: <http://www.media-products.com/ecm.php>

## ***Resources and Connections, Enhancing the Quality of Early Learning and Early Intervention for Infants, Toddlers, & Their Families***

*Resources and Connections* is a free, quarterly e-newsletter published for practitioners in Colorado interested in supporting quality practices in early learning and early intervention. Each issue includes an article on a key early childhood practice or issue, a one-page abstract of a journal article, and an annotated list of useful web resources. Published by Early Childhood Connections at the Colorado Department of Education and JFK Partners, University of Colorado Health Sciences Center. Back issues can be viewed and downloaded at: <http://www.cde.state.co.us/earlychildhoodconnections/Technical.htm>

## ***Early Childhood Connections Web Site***

Early Childhood Connections (ECC) in the Colorado Department of Education is Colorado's Lead Agency for Part C. The ECC web site has a variety of useful resources included TA materials on natural environments, Colorado's Service Coordination Core Training Curriculum, and much more. It's always useful to see what other states are doing. Browse around at: <http://www.cde.state.co.us/earlychildhoodconnections/>