Bringing Evidence-Based Practice to Professional Development

Presentation at 2009 OSEP National Early Childhood Conference
Arlington, VA
December 5-9, 2009

Presenters: Pam Winton, Virginia Buysse, & Beth Rous
(on behalf of CONNECT team)

CONNECT

The Center to Mobilize Early Childhood Knowledge

A partnership between:

UNC | FPG CHILD DEVELOPMENT INSTITUTE

KU THE UNIVERSITY OF KANSAS

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IDEAs that Work

Who are we?

Pam Winton, Virginia Buysse, Maggie Connolly, Chih Ing Lim, Jonathan Green, Christine Lindauer, Heidi Hollingsworth

UNC FPG CHILD DEVELOPMENT INSTITUTE

Beth Rous & Patti Singleton

HDI HumanDevelopment institute
UNIVERSITY CENTER FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES
UNIVERSITY OF KENTUCKY

Ann Turnbull

Making a Significant & Sustainable Difference in Quality of Life
Beach Center on Disability
KU THE UNIVERSITY OF KANSAS

Dawn Ellis
Office of Special Education Programs

IDEAs that Work

CONNECT

Who Are You?

What Brings You to This Session?

Goals of Presentation

- EBP approach to professional development
- Share information about the CONNECT modules
- Answer questions about the modules and project
- Apply EBP approach to PD to you work

Focus on
teacher quality and professional development

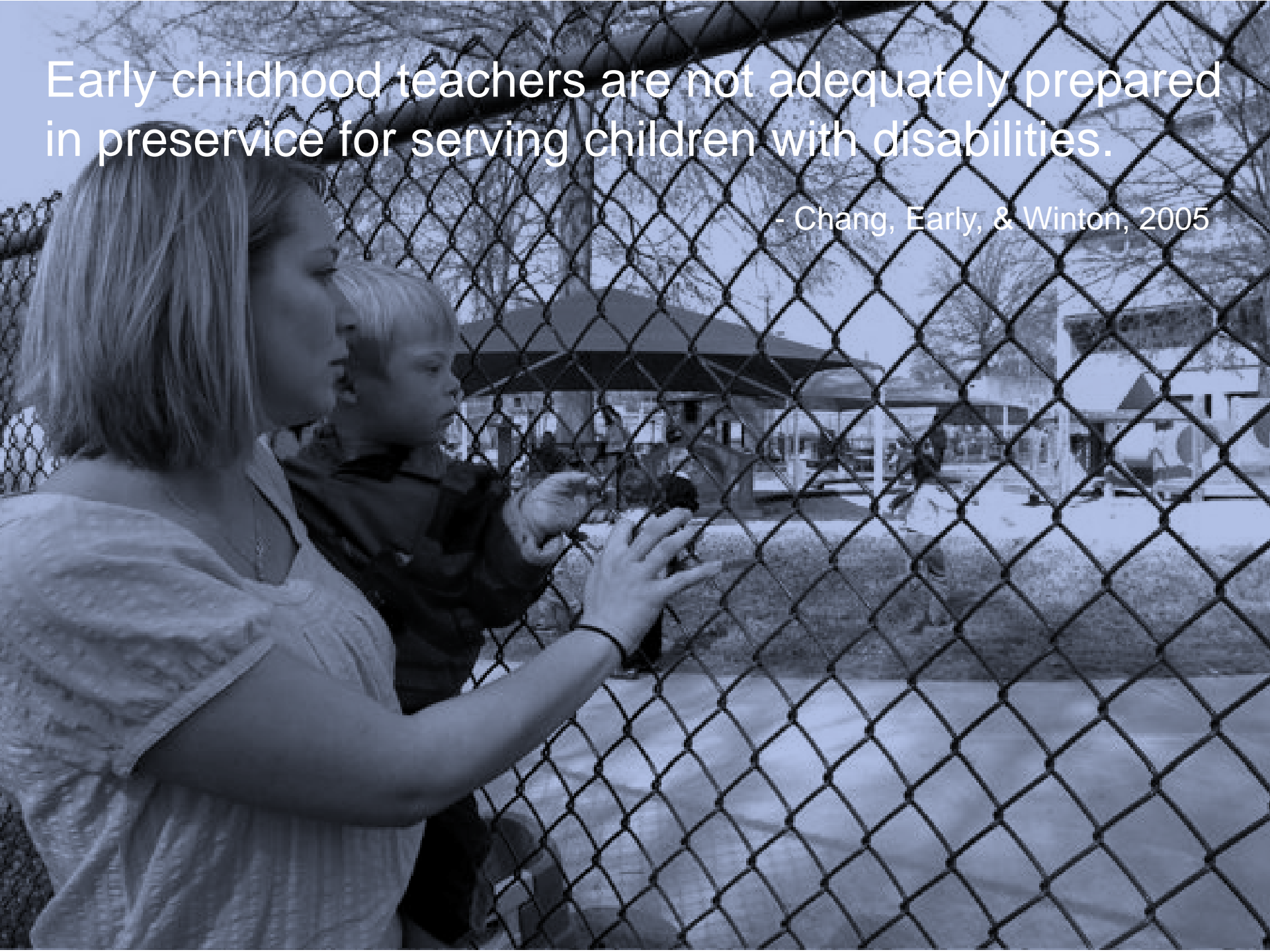Focus on the quality of higher education programs and PD efforts

Faculty & PD providers as "knowledge mediators"

Early childhood teachers are not adequately prepared in preservice for serving children with disabilities.

- Chang, Early, & Winton, 2005

Graduate students in early childhood teacher preparation programs do not get adequate preparation on how to plan and implement professional development

- Maxwell, Lim, & Early, 2006

Challenges faced by faculty and PD providers

Challenges faced by faculty and PD providers

Early Childhood Teacher Preparation Programs	All other departments within Institutes of Higher Education (IHEs)
61.2 Students / FT Faculty	38.7 students / FT Faculty*

*source: Early and Winton, 2001

- Increasing faculty workload
- Shrinking resources

Practitioners, faculty and PD providers are expected to use evidence-based practice
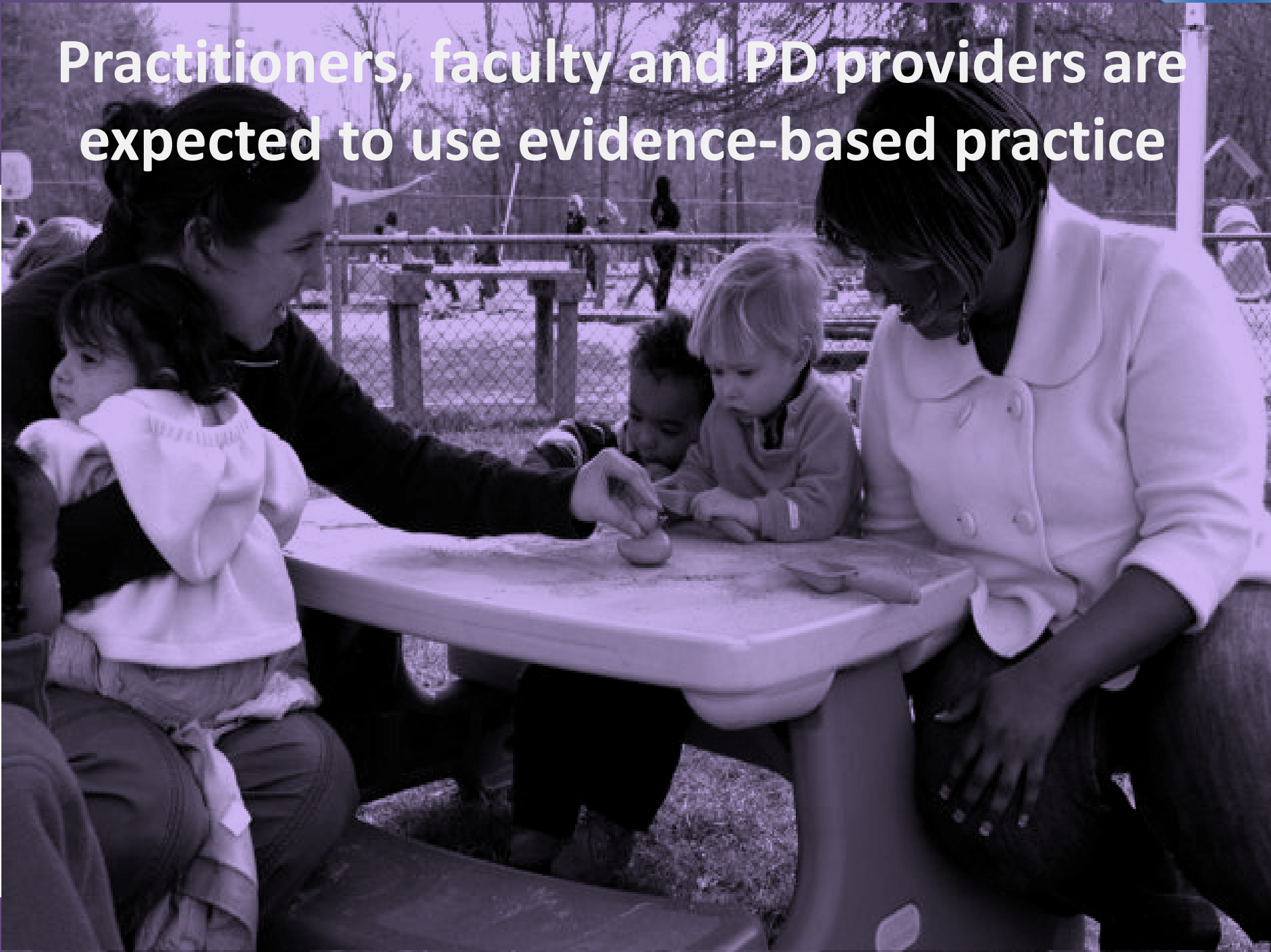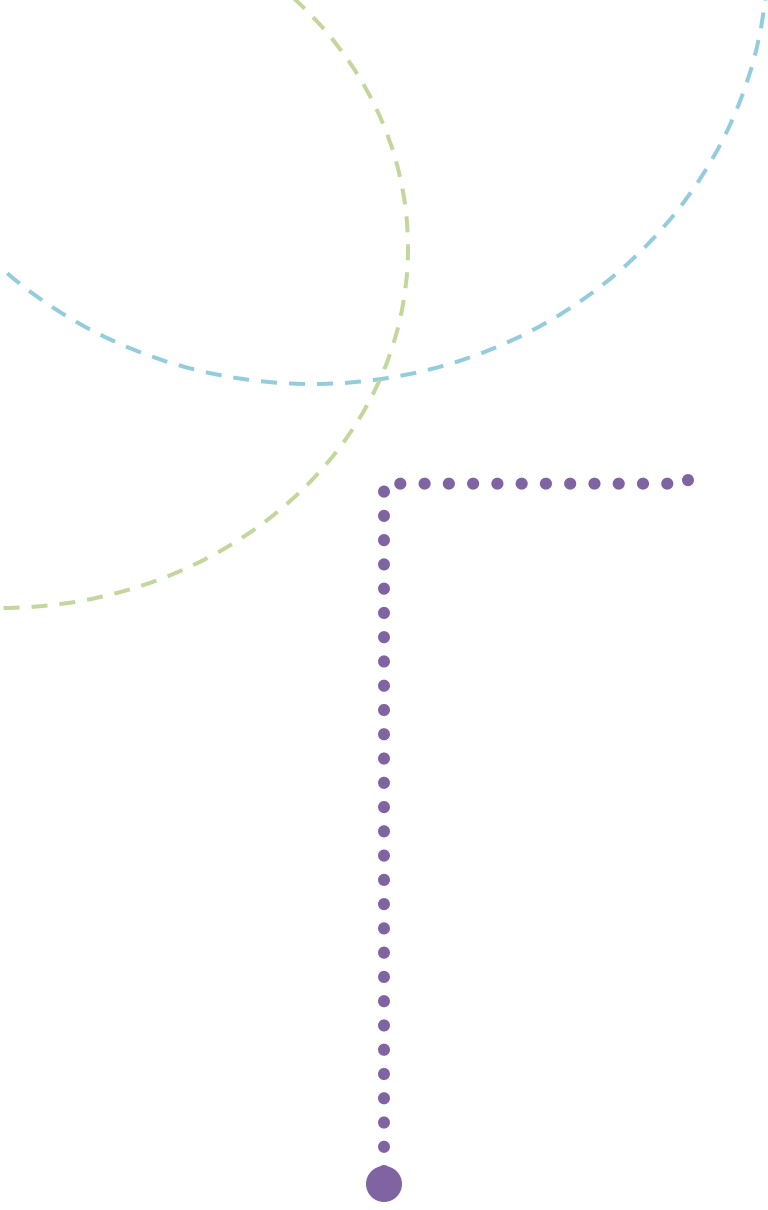
What does evidence-based practice (EBP) mean?

identifying specific research-based practices that have been validated through a rigorous review process

Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005

A decision-making process that integrates the best available research evidence with family & professional wisdom & values

Buysse & Wesley, 2006; Buysse, Wesley, Snyder, & Winton, 2006

Step 1
Dilemma

Step 2
Question

Step 3
Evidence

Research-based practices

Step 4
Decision

Step 5
Evaluation
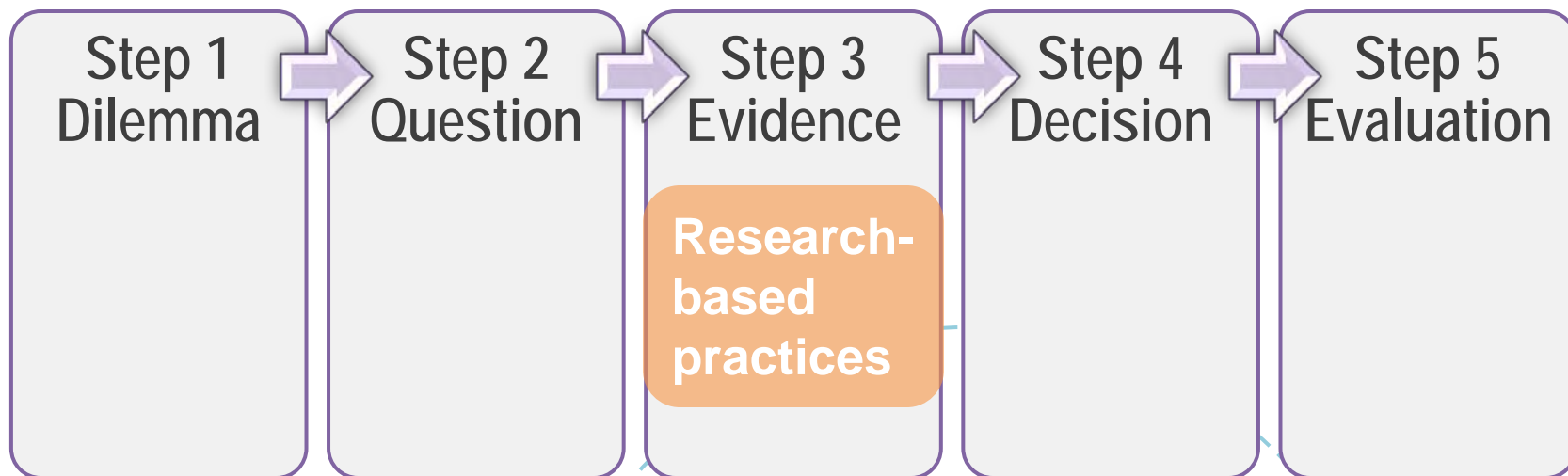
Process for Making Evidence-Based Practice Decisions
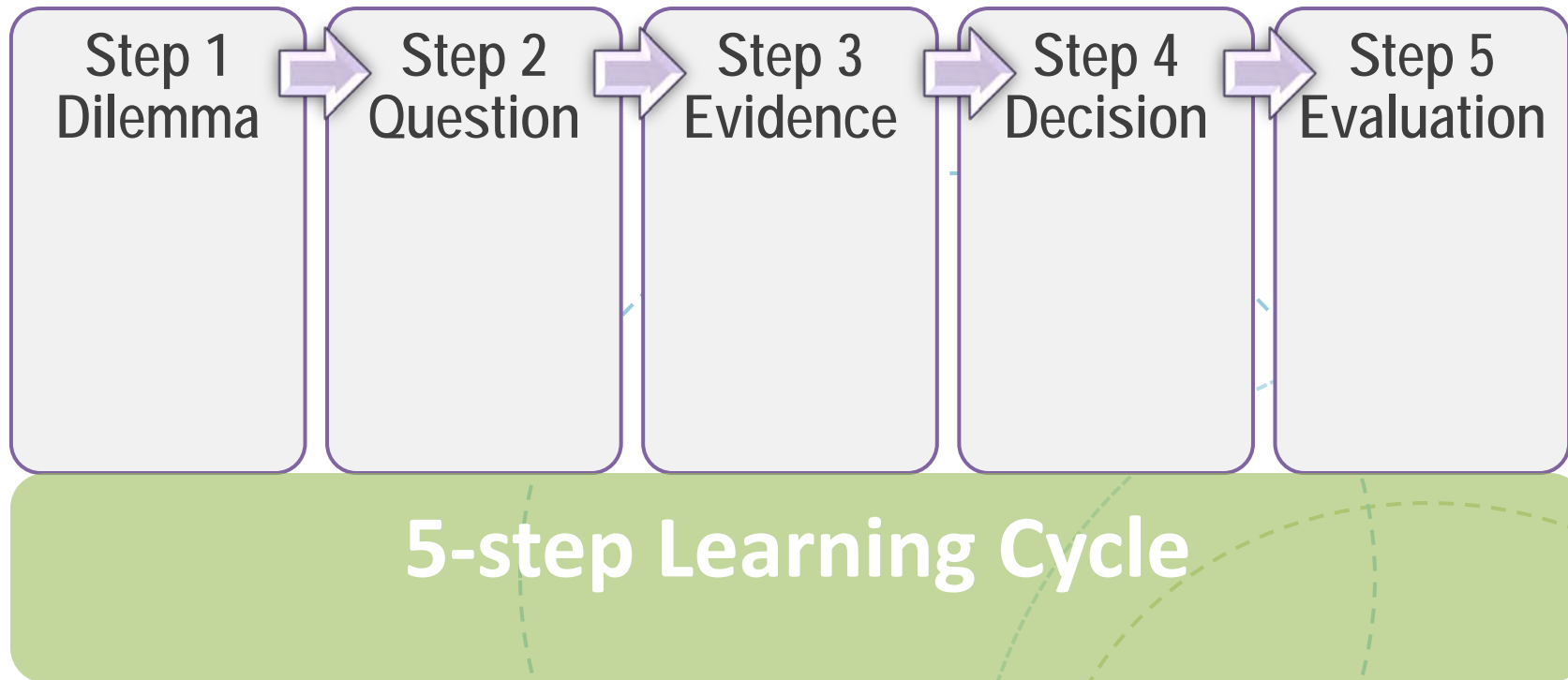
Our Primary Target Audience

Family faculty

4-year faculty

2-year faculty

n=12,375 (estimated)
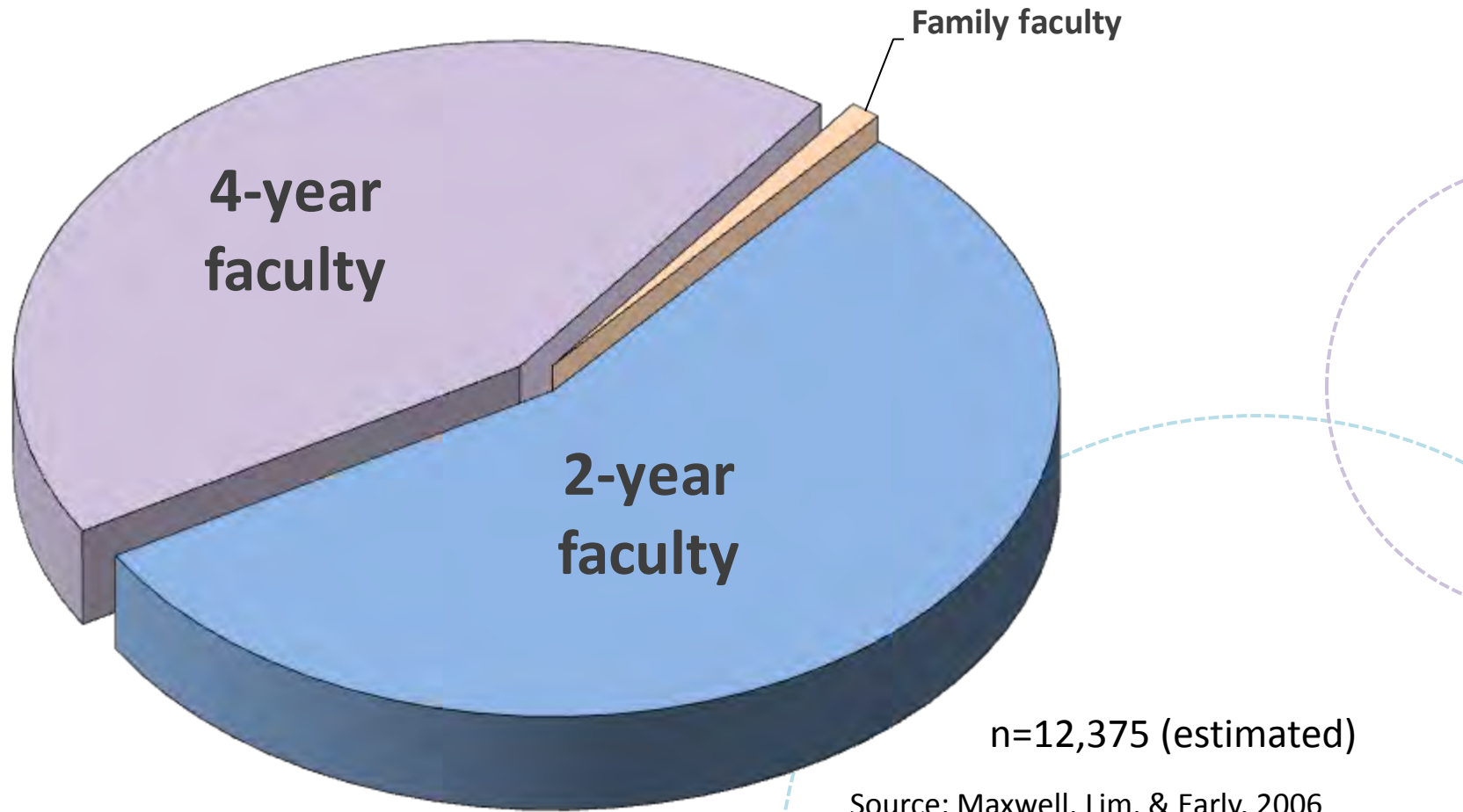
Source: Maxwell, Lim, & Early, 2006

Secondary Audience

- Other professional development providers who reach a variety of learners (e.g., consultants, supervisors, etc.)

What PD Providers want

- FREE
- Flexibility & ease of use
- 24/7 availability
- Activities
- Short video clips that illustrate practice

Overview of CONNECT Modules

CONNECT Modules : An EBP Approach to PD

Learn about practices to solve dilemmas in early childhood settings

Videos, activities and narratives will guide you through a process to learn about serving children with disabilities effectively.

Read More About Connect Modules

RESOURCES >

Library of videos, activities, handouts and supplemental materials

INSTRUCTORS >

Instructor community and guides for module facilitation

LEARNERS >

Web-based modules presented in a 5-step learning cycle

CONNECT Modules

Step 1 Dilemma	Step 2 Question	Step 3 Evidence	Step 4 Decision	Step 5 Evaluation
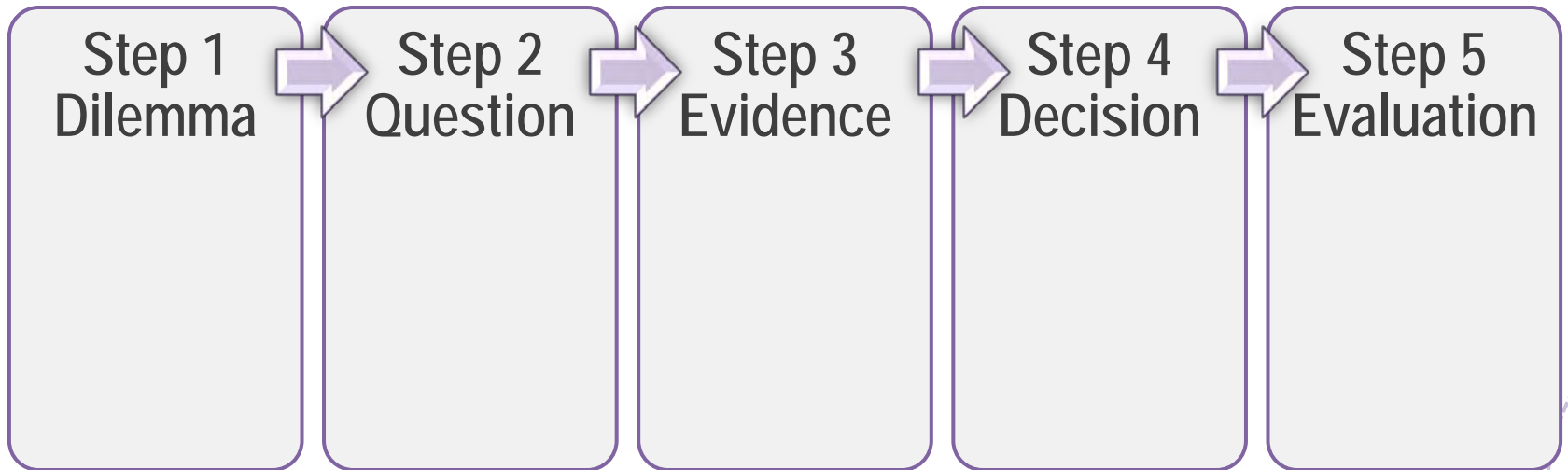
5-step Learning Cycle

- Adapted from evidence-based medicine

Step 1: Dilemma
Luke's Story

Teacher's Perspective (Jackie)

Family's Perspective (Christine)

Step 1: Dilemma	>	Step 2: Question	>	Step 3: Evidence	>	Step 4: Decision	>	Step 5: Evaluation

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Step 2: Question

What interventions are effective in promoting learning in the area of communication development?

Step 1: Dilemma	>	Step 2: Question	>	Step 3: Evidence	>	Step 4: Decision	>	Step 5: Evaluation

Putting the details into a chart may be helpful for you to identify the question:

PICO	P Person (child or family of focus) or Program issue	I Interventions or practice(s) being considered	C Comparison to alternate Interventions (if applicable)	O Outcomes desired
Responses	Young children (2-3 yrs of age) Developmental delays in language & social skills	Embedded interventions	NA	Luke will communicate his wants and needs to adults and peers; and he will participate in learning activities with peers

| Step 1: Dilemma | > | Step 2: Question | > | Step 3: Evidence | > | Step 4: Decision | > | Step 5: Evaluation |
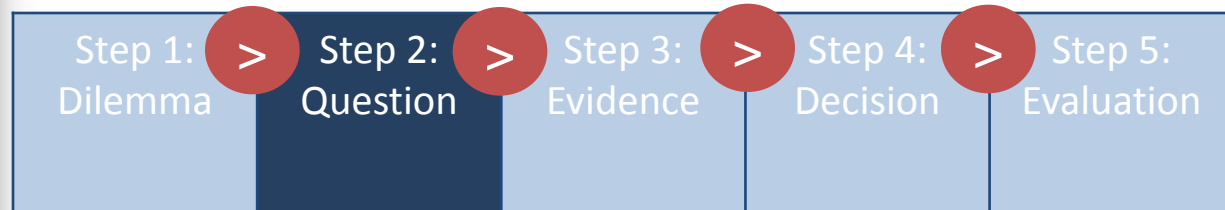
Step 3: Evidence

- Best available research
- Related laws, policies & consensus statements
- Families' experience-based knowledge

| Step 1: Dilemma | > | Step 2: Question | > | Step 3: Evidence | > | Step 4: Decision | > | Step 5: Evaluation |
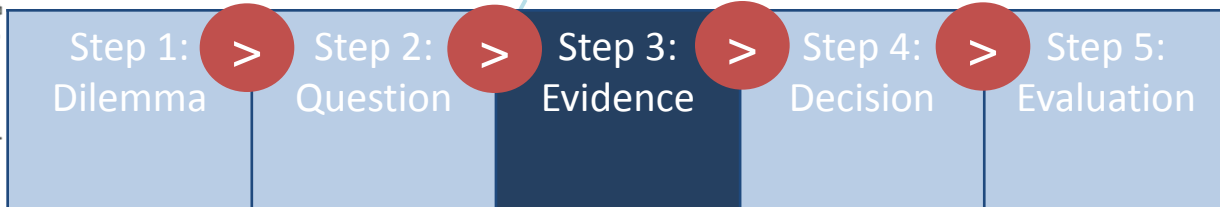
Video Example of Practice

Step 1: Dilemma > Step 2: Question > Step 3: Evidence > Step 4: Decision > Step 5: Evaluation

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Policy Advisory
The Law on Inclusive Education

INCLUSION is the principle that supports the education of children with disabilities alongside their non-disabled peers rather than separately. Both the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act (Sec. 504) require schools and agencies to provide equal educational opportunities for children with disabilities. Ever since Brown v. Board of Education held that separate was not equal, inclusion has been part of this requirement to provide equal educational opportunities. But the primary source for the inclusion requirement is the Individuals with Disabilities Education Act or IDEA. IDEA not only supports equal educational opportunities, it specifically requires schools to support inclusion of children with disabilities through the least restrictive and natural environment mandates. For preschool and school age children (ages 3-21), IDEA requires that children with disabilities be educated in the "least restrictive environment" (§1412(a)(5) and §1413(a)(1)). For infants and toddlers (ages 0-3) with disabilities, IDEA promotes the use of "natural environments" for early intervention services (§1432(4)(G)).

Why does federal law support inclusion in schools and services?

While inclusion is justified as part of equal educational opportunities, in enacting IDEA (and in each subsequent revision of the law) Congress has also recognized the benefits of inclusion. Section §1400(5) of IDEA states:

"Almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by . . . ensuring their access to the general education curriculum in the regular classroom, to the maximum extent possible."

In addition to the academic benefits of inclusion, courts have long recognized that there are non-educational benefits to inclusion that are important to the quality of life of children with disabilities—such as the opportunity to make friends and increase acceptance among their peers (Daniel R.R. v. State Bd. of Educ., 1989; Sacramento City Sch. Dist. v. [...] 1994). Federal law thus recognizes and [...] educational, and social benefits that inclusion provides to children with disabilities.

How does federal law define inclusion and what does it involve?

Inclusion is not specifically defined in the law, but is supported through the equal opportunity, least restrictive and natural environment mandates. Together these requirements support inclusion in three areas: placement of the child with children who do not have disabilities, access to the standard educational or developmental curriculum, and participation in typical non-academic activities.

The Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC) have developed a joint position statement on early childhood inclusion. For more information on that definition and specifics on access, participation and supports for inclusion, visit http://community.fpg.unc.edu

Step 1: Dilemma > Step 2: Question > Step 3: Evidence > Step 4: Decision > Step 5: Evaluation

Research Summary
on Embedded Interventions

RESEARCHERS at the University of Florida analyzed 36 research studies on embedded interventions. They wanted to find out the following:

- how the practice was defined across different studies,
- who implemented the practice and in what type of settings,
- what the characteristics of the children were and
- whether the practice was beneficial for young children.

Here is what the researchers learned.

How was the practice of embedding interventions defined?

Embedded interventions are teaching strategies that address a specific learning goal within the context of everyday activities, routines, and transitions at home, at school, or in the community. Terms such as routines-based interventions, embedded instruction, or embedded learning are used to mean the same thing.

Who implemented embedded interventions and in what type of settings?

Almost half of the people implementing embedded interventions were pre-kindergarten teachers. Others were assistant teachers and graduate students. The interventions were implemented in a variety of early childhood settings including preschool classrooms, early childhood special education classrooms, community-based child care programs, and Head Start.

What were the characteristics of the children who participated in the research?

About two-thirds of the children were boys. The children ranged in age from 2-7 years of age. About one-half of the children had some type of developmental delay. The remaining children had speech-language delays, Autism, or Down syndrome.

Step 1: Dilemma	>	Step 2: Question	>	Step 3: Evidence	>	Step 4: Decision	>	Step 5: Evaluation

Parents Speak Out
Partnering with Families on Embedded Interventions

In a conversation with Christine, a mother of a child with developmental delays, family leaders from across the nation provide their views on embedded interventions and building partnerships.

Perceptions of Teachers That Some Parents Are Extremely Demanding

"Most of the [community college] students that I work with share the feeling of the teacher [Jackie] in this module. They have limited experience and education with working with children with special needs. They come to [my community college] class with many questions. They describe some of the parents to be extremely demanding with concerns for their children."

—Lisa Stein, parent & community college faculty

Families' Perceptions About How to Get Their Idea Across

"After reading Lisa Stein's comments on her [community college] students talking about the 'extremely demanding' parents, it brought back concerns I had initially after my son was enrolled in his program. I immediately felt push-back from his teachers when I encouraged certain embedded interventions to be used in the classroom, or trying to explain that my son was ready to be challenged in new ways. I didn't want to be perceived as the demanding parent, and I wanted to develop a good relationship with his teachers.

"But it seemed like the expectations that I had for Luke and what the teachers had just didn't line up. They talked about things like what is 'developmentally appropriate,' while I talked about what Luke was actually doing and showing an interest in at home.

"I must confess that I haven't done anything to change the situation. If I get push back on ideas now, I generally nod my head, and then work on that skill with my son at home. For example, most recently, I shared that my son was expressing interest in the alphabet. I thought that encouraging letter recognition could help engage my son in a variety of activities, like reading, making verbal sounds, etc. I was told that it was too early to introduce letters, and that they'll do that next semester. So I worked on it at home. One month later my son knew all his letters. Daily we engage in verbal play attempting to make letter sounds. I can introduce new books easily (which was always a challenge before) by pointing out the letters and sounding out words."

—Christine Lindauer

the National Association for the Education of Young Children (leading professional ... letters). NAEYC is rethinking 'developmentally appropriate.' The ... of what is not possible. In just one month,

—Cherie Takemoto

Step 1: Dilemma > Step 2: Question > Step 3: Evidence > Step 4: Decision > Step 5: Evaluation

Evidence-Based Practice Decision-Making Tool

Evidence
- Research
- Consensus statements & policies
- Experience-based knowledge

Unique Perspectives & Contexts of the Dilemma

Integrate →

Decision

| Step 1: Dilemma | > | Step 2: Reflection | > | Step 3: Content | > | Step 4: Decision | > | Step 5: Evaluation |

Step 5: Evaluation

- What information would you gather to evaluate whether the practice was implemented as designed?

- What information would you gather to evaluate the results of the intervention?

- How will that information be used to make adjustments and identify next steps?

| Step 1: Dilemma | > | Step 2: Reflection | > | Step 3: Content | > | Step 4: Decision | > | Step 5: Evaluation |

Module 1: Embedded Interventions

Learning Objectives

1. Explain what is meant by embedded interventions to promote participation in inclusive settings.
2. Use a decision-making process to help a child participate more fully in an inclusive setting through embedded interventions.

Introduction >
(start here)

Module 1 Dashboard

Five-Step Learning Cycle

Step 1 Dilemma >	Step 2 Question >	Step 3 Evidence >	Step 4 Decision >	Step 5 Evaluation >
⊞ Description	⊞ Description	⊞ Description	⊞ Description	⊞ Description

Module 1 Resources

- Glossary
- ⊞ Activities
- ⊞ Audio
- ⊞ Handouts
- ⊞ Videos

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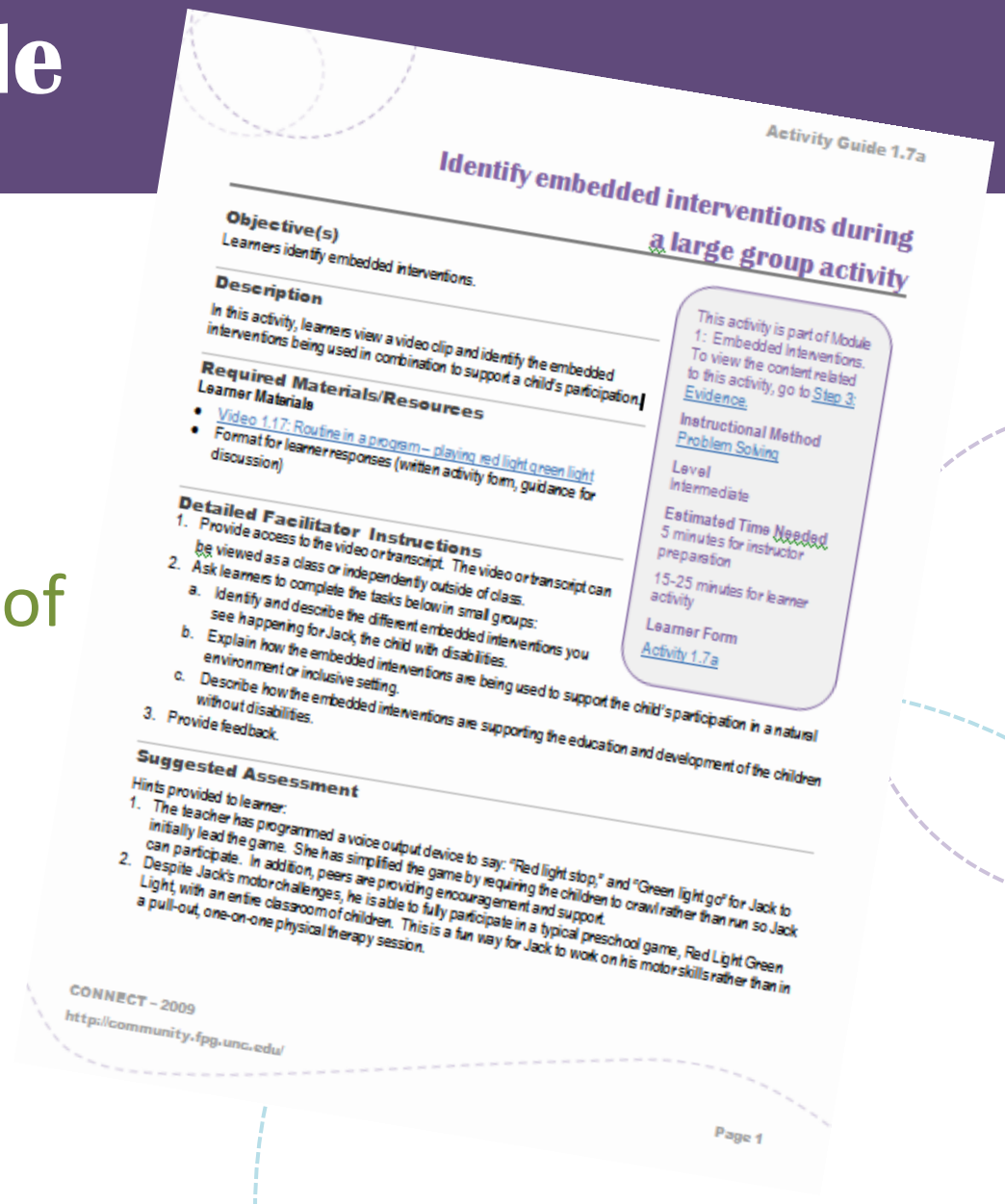# Best Available Research on Adult Learning

- Focus on realistic problems
- Relevance & quality of content
- Emphasis on a decision-making process
- Learner feedback & evaluation

(Dunst & Trivette, 2009; Trivette 2005; Wei, Darling-Hammond et al, 2009)

Instructors' Guide

- Alignment with national personnel standards (CEC/DEC and NAEYC)
- Alignment with US Dept of ED OSEP Annual Performance Report
- Facilitation tips
- Strategies for assessing learners

Activity Guide 1.7a

Identify embedded interventions during a large group activity

Objective(s)
Learners identify embedded interventions.

Description
In this activity, learners view a video clip and identify the embedded interventions being used in combination to support a child's participation.

Required Materials/Resources
Learner Materials
- Video 1.17: Routine in a program – playing red light green light
- Format for learner responses (written activity form, guidance for discussion)

Detailed Facilitator Instructions
1. Provide access to the video or transcript. The video or transcript can be viewed as a class or independently outside of class.
2. Ask learners to complete the tasks below in small groups:
   a. Identify and describe the different embedded interventions you see happening for Jack, the child with disabilities.
   b. Explain how the embedded interventions are being used to support the child's participation in a natural environment or inclusive setting.
   c. Describe how the embedded interventions are supporting the education and development of the children without disabilities.
3. Provide feedback.

Suggested Assessment
Hints provided to learner:
1. The teacher has programmed a voice output device to say: "Red light stop," and "Green light go" for Jack to initially lead the game. She has simplified the game by requiring the children to crawl rather than run so Jack can participate. In addition, peers are providing encouragement and support.
2. Despite Jack's motor challenges, he is able to fully participate in a typical preschool game, Red Light Green Light, with an entire classroom of children. This is a fun way for Jack to work on his motor skills rather than in a pull-out, one-on-one physical therapy session.

This activity is part of Module 1: Embedded Interventions. To view the content related to this activity, go to Step 3: Evidence.

Instructional Method
Problem Solving

Level
Intermediate

Estimated Time Needed
5 minutes for instructor preparation

15-25 minutes for learner activity

Learner Form
Activity 1.7a

CONNECT – 2009
http://community.fpg.unc.edu/

Page 1

Design Features: "Faculty Lounge"

💬 Comment on additional guideline

Posted by Johnna Darragh at Feb 05, 2009

Thanks for the opportunity to review--I found the guidelines very comprehensive and well-developed. The only add on suggestion that I had pertained to demonstrating diversity in professional roles…there is a broad range of target audiences listed, and an overt inclusion of this as a guideline could ensure that the modules "speak to" the broad array of professionals who could benefit from the materials.

⫶ Reply   ⫶ Remove

💬 Comment on additional guideline

Posted by Pam Winton at Feb 06, 2009

So true Johnna…we are striving to incorporate ways to engage a variety of learners at different levels (and we hope you all can help with this) and guidelines need to make that explicit. Thanks

⫶ Reply   ⫶ Remove

💬 Feedback

Posted by Christine Myers at Feb 06, 2009

I think this is very comprehensive, I just had a couple comments. First, under E-learning/Accessibility, you might add "at a vareity of font sizes" to "Materials and module components are readable on the screen". I have had this be an issue when I teach online. Also, I see learner reflection mentioned in Family-Centered practices and collaboration, but not under Instructional Design. Perhaps you could be a little more specific and add something about "Opportunities for learners to relect on application of the practice" instead of just addressing feedback. This may help to close the loop for practitioners. Christine

⫶ Reply   ⫶ Remove

Variety of PD Contexts

- Coursework
- Practice
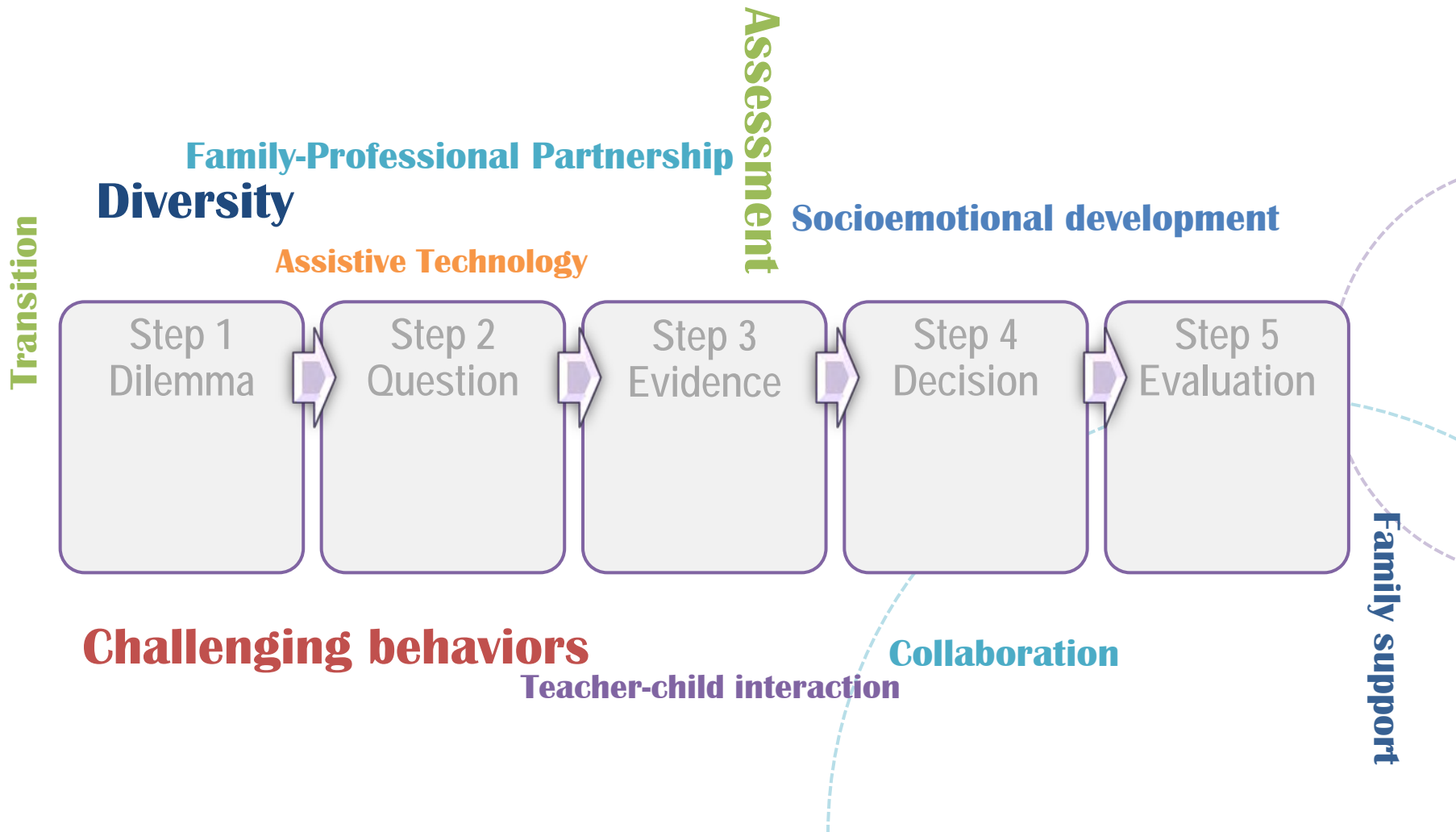- Seminars
- Workshops
- Consultation
- Supervision

http://www.flickr.com/photos/barrettelementary/

http://www.flickr.com/photos/barrett elementary/3267137302

Ways Faculty, PD Providers and Learners Might Access the Modules

- Online

- Face to face

- Hybrid

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Evidence-Based Practice Decision-Making

Transition

Family-Professional Partnership

Diversity

Assistive Technology

Assessment

Socioemotional development

Step 1 Dilemma	Step 2 Question	Step 3 Evidence	Step 4 Decision	Step 5 Evaluation

Challenging behaviors

Teacher-child interaction

Collaboration

Family support

Next Modules

▪ Family-Professional Partnerships

▪ Transition

Ann Turnbull

Making a Significant & Sustainable Difference in Quality of Life
Beach Center on Disability

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Photo Credit: http://www.flickr.com/photos/kirk_thorsteinson/238943503/11

Module Development Timeline 2009-2010

2009

2010

| Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

Module 1 Usability Test

Phased roll-out of Module 1

Module 1 Pilot Study

Revision of Module 1

Spanish translation of key Module 1 resources

Release Module 1 ver.1.1

Module 2: *Family-Professional Partnerships*

Module 3: *Transitions*

Mod 2-3 Usability Test

Release Modules 2 & 3

Module 4 :

Identify topics for Modules 5-7 & Approval by OSEP

Module 5

Mod 4-5 Usability Test

Release Modules 4-5

Module 6

Module 7

Ongoing web monitoring and random survey of users

Practical, Creative, Strategic, Informative & Reflective - CONNECT

Posted by Erin Speer Smith at Oct 27, 2009 | Permalink

What do you think about CONNECT's Module 1?

If you haven't had a chance to view the recently released preview of CONNECT's Module 1, you've got to check it out! I was very excited to have the opportunity to preview it and was really excited about the design of the module. CONNECT's five steps lead adults through the process of making informed, evidence-based decisions. The situations (dilemmas) were realistic to what practitioners face each day when working with children with differing abilities and their families. The modules take the learner beyond just the situation at hand and into figuring out how to form a question and providing specific resources that relate to this question and situation that can help lead to a decision. Everything from research, to policies, to the personal stories of children and their families, the learner is able to review and synthesize this information to help formulate an informed decision. Most importantly, in my mind at least, is the opportunity to reflect and assess the process and decision. Video clips, summaries, and activities make CONNECT modules easy and practical to use in a variety of professional development situations and appropriate for all sorts of different learning types.

I am fortunate to have the opportunity to work with the 58 Community Colleges in North Carolina, all of which have Early Childhood Education Associate of Applied Science (AAS) degrees. I certainly will be getting the word out to my fellow Early Educator faculty colleagues across the state about this resource so that they might consider embedding some of the CONNECT resources and modules within their coursework. They will likely all appreciate the CONNECT instructor guide to assist them when using these materials too!

Community Question

Erin Speer Smith, Program Coordinator for Early Childhood/ Public Service Technologies North Carolina Community College System

ONLINE MODULE PREVIEW NOW AVAILABLE

CONNECT – The Center to Mobilize Early Childhood Knowledge is developing modules to build practitioners' abilities to make evidence-based practice decisions. Come learn more about CONNECT's evidence-based practice approach to professional development and preview Module 1 on Embedded Intervention. View Preview

http://community.fpg.unc.edu

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Pilot Study- Spring Semester 2010

- **2-year and 4-year faculty teaching undergraduate course in Spring 2010**
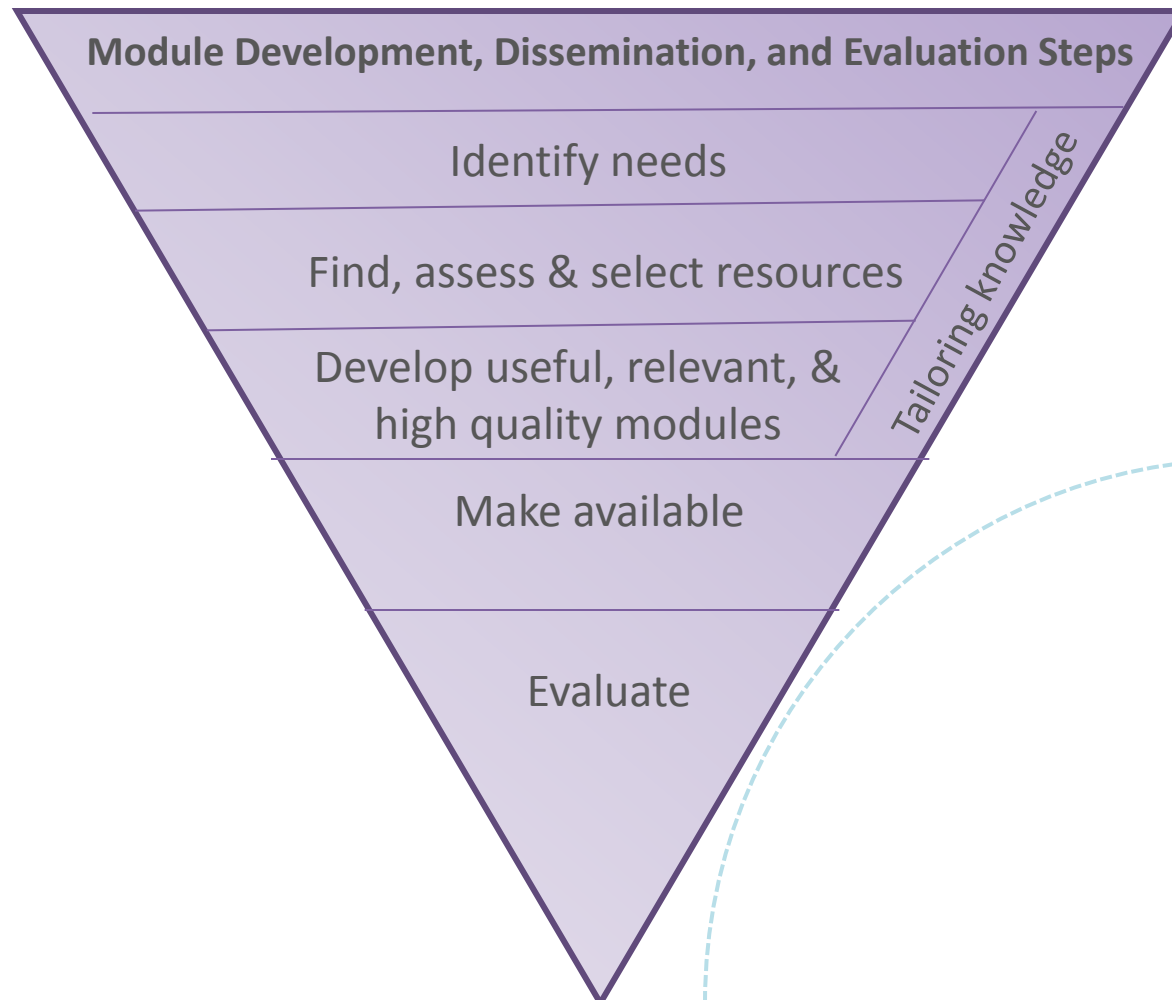- **Can embed Module 1 in coursework**

Preview module & sign up to participate in the pilot:
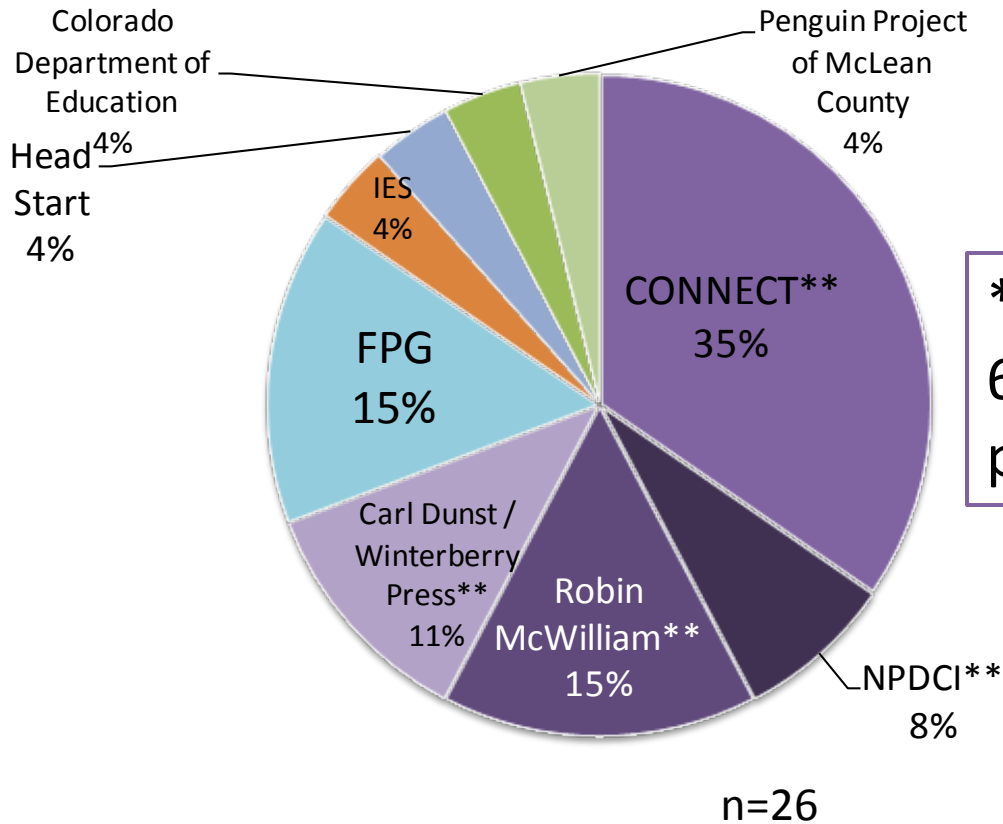**http://community.fpg.unc.edu/connect-modules/preview**

Discussion

- How could you use the modules?

- How might you use an EBP approach to PD?

- How would you use an EBP approach to developing PD curricula?

# Module Development, Dissemination, and Evaluation Steps

Module Development, Dissemination, and Evaluation Steps

Identify needs

Find, assess & select resources

Develop useful, relevant, & high quality modules

Make available

Evaluate

Tailoring knowledge

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Resources used in Module 1*

**OSEP-funded projects: 69% (34% excluding those produced by CONNECT)

n=26

*The above resources include video clips, documents, and research syntheses but not photos.

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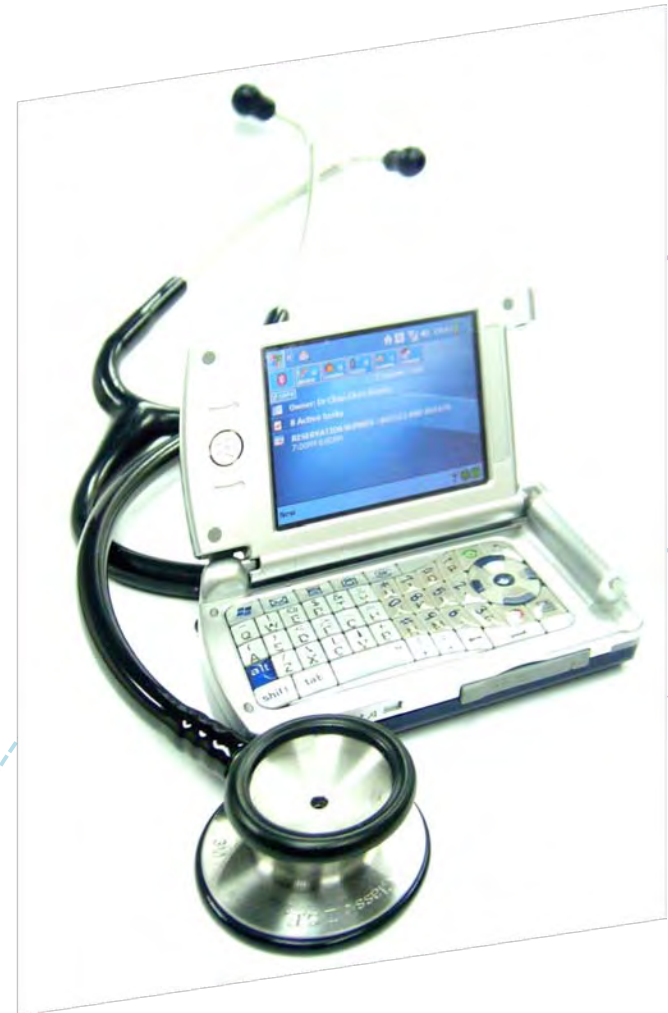# Continuous Improvement and Quality Assurance

- **CONNECT Rubrics**

  - Content
  - Process / Design
  - Evidence-based Practice
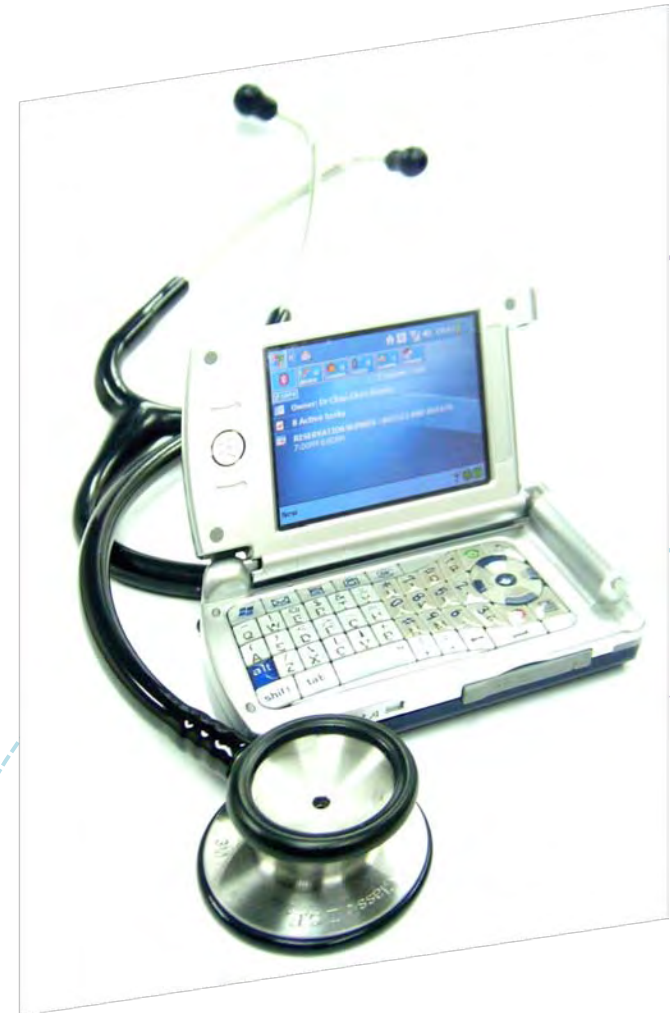 - Mirror OSEP Program Evaluation Guidelines
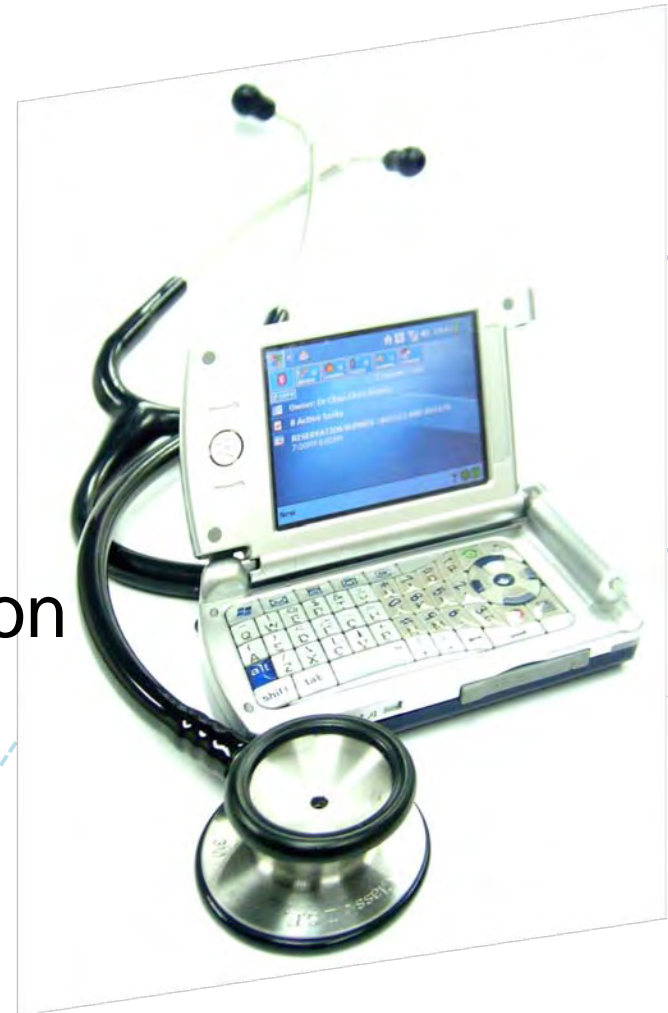
Continuous Improvement and Quality Assurance

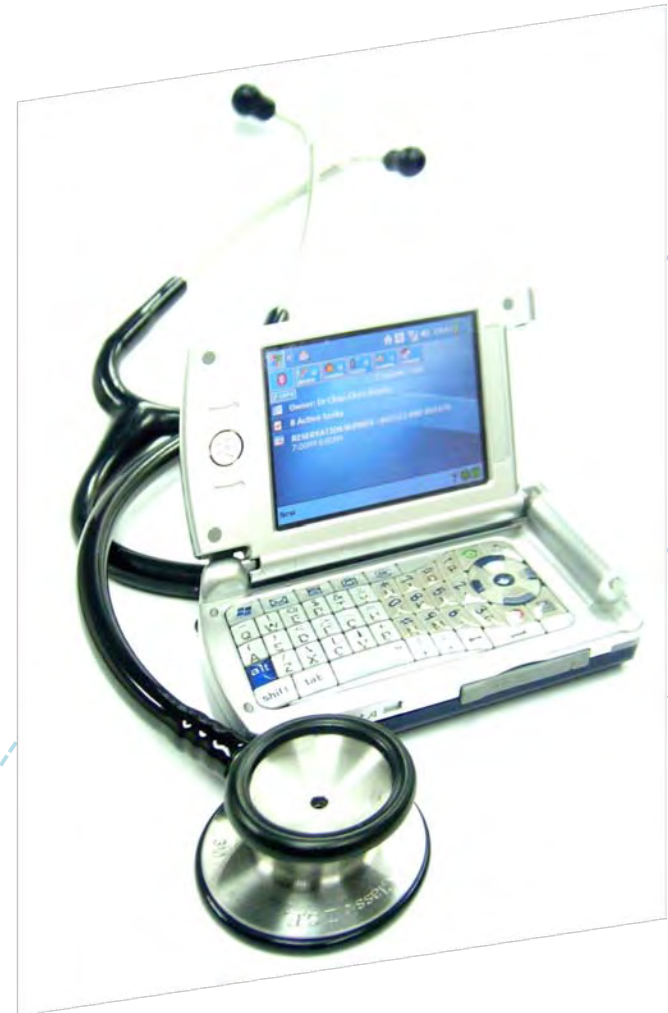- CONNECT Rubrics
- Panels of key stakeholders

Continuous Improvement and Quality Assurance

- CONNECT Rubrics
- Panels of key stakeholders
- Usability Studies

Continuous Improvement and Quality Assurance

- **CONNECT Rubrics**
- **Panels of key stakeholders**
- **Usability Studies**
- **WE NEED YOU**:
  - **Faculty lounge & other activities**

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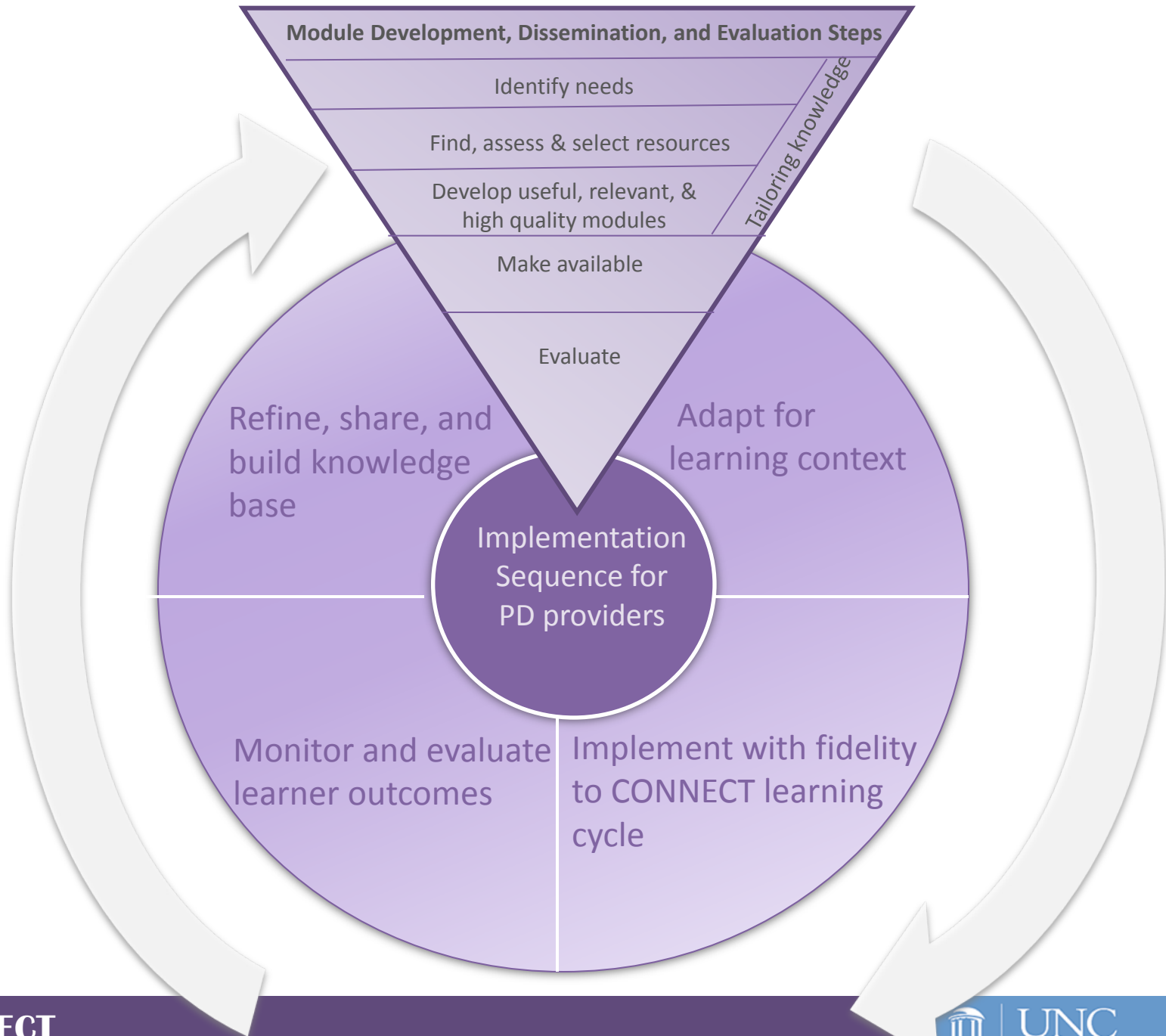
Module Enhancement Panel

Graduate Faculty :

- Faculty teaching a graduate level course in Spring 2010

PD Providers:

- Non-faculty who are providing PD in Spring 2010

Preview module & sign up to be part of the Module Enhancement Panel:
http://community.fpg.unc.edu/connect-modules/preview

Module Development, Dissemination, and Evaluation Steps

Identify needs

Find, assess & select resources

Develop useful, relevant, & high quality modules

Make available

Evaluate

Tailoring knowledge

Refine, share, and build knowledge base

Adapt for learning context

Implementation Sequence for PD providers

Monitor and evaluate learner outcomes

Implement with fidelity to CONNECT learning cycle

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HELP NEEDED

Can you help share information about the modules?

Q & A

http://community.fpg.unc.edu/connect-modules
Contact us at : connect@unc.edu

Thank You from all of us at CONNECT