

# **Interagency Autism Coordinating Committee (IACC) Services Subcommittee Meeting**

**September 15, 2009  
1:00PM – 4:00PM Eastern**

## **Public Conference Call Information**

- Phone Number: 888-455-2920**
- Access Code: 5697907**

# Meeting Agenda

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**You may access audio using the public conference call line:**

**Phone Number: (888) 455-2920**

**Access Code: 5697907**

- 1:00 PM Welcome and Introductions – Ms. Ellen Blackwell and Mr. Lee Grossman, Co-Chairs
- 1:10 Approval of Minutes – June 16, 2009 Meeting
- 1:15 Presentation on Department of Education Programs – Dr. Gail Houle and Dr. Sam Odom
- 2:15 Discussion
- 2:45 Discussion of Services Town Hall Meeting – July 24, 2009
- 3:15 Discussion of Other Services Subcommittee Activities
- 3:45 Round Robin
- 4:00 Adjournment

# Highlights of OSEP Autism Investments: Individuals with Disabilities Education Act Part D

Gail R. Houle, Ph.D.

Office of Special Education Programs

US Department of Education





# OSEP Mission

- OSEP is dedicated to improving results for infants, toddlers, children, and youth with disabilities ages birth through 21 by providing leadership and financial support to assist states and local districts to provide comprehensive IDEA services

OSEP



# IDEA Part D

## Discretionary Grant Program

- National activities to improve the education of children with disabilities
  - ◆ Personnel Development
  - ◆ State Improvement/Personnel Development
  - ◆ Technical Assistance and Dissemination Centers
  - ◆ Technology and Media Projects
  - ◆ Parent Training and Information



# Personnel Development Projects

- Address the need for highly qualified personnel to work with infants, toddlers, or children with disabilities
  - ◆ Grants to train personnel to work with children with autism
    - ◆ Doctorate: 5 awards
    - ◆ Masters: 29 awards
    - ◆ Certificate: 2 awards



# Personnel Development Projects

- The National Professional Development Center on Autism Spectrum Disorders
  - ◆ Increase the capacity of States to implement evidence-based practices for early identification, intervention, education, professional development, and technical assistance <http://www.fpg.unc.edu/~autismPDC>



# Technology and Media Projects

- Appropriate technology/media developed and demonstrated to improve and implement early intervention, educational, and transitional services and results for children with disabilities and their families
  - ◆ Steppingstone grants
    - ◆ 2 awards that focus on autism





# Parent Training and Information Centers

- Provide training/information to parents of children with disabilities
  - Technical Assistance for Parent Centers  
[www.taalliance.org](http://www.taalliance.org)
  - 70 Parent Training and Information Centers (PTIs)
  - 30 Community Parent Resource Centers (CPRCs)
  - 1 National, 1 Military, 1 Native American, 6 Regional TA Centers



# OSEP Contact Information

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# Supporting the Use of Evidence-Based Practices for Learners with ASD

Samuel L. Odom  
FPG Child Development Institute  
University of North Carolina  
at Chapel Hill



THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON  
AUTISM SPECTRUM DISORDERS



# National Professional Development Center on Autism Spectrum Disorders



**A multi-university  
center to promote  
use of evidence-  
based practice for  
children and  
adolescents with  
autism spectrum  
disorders**



THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON  
**AUTISM SPECTRUM DISORDERS**



Cooperative Agreement H 35G 070004  
U.S. Department of Education  
Office of Special Education Programs

# National Professional Development Center on Autism Spectrum Disorders: Sites

- FPG Child Development Institute, University of North Carolina at Chapel Hill
  - FPG : Sam Odom, Ann Cox
- Waisman Center, University of Wisconsin at Madison
  - Len Abbeduto and Linda Tuchman-Ginsberg
- M.I.N.D. Institute, University of California at Davis Medical School
  - Sally Rogers, Sally Ozonoff



# Need for Professional Development Related to ASD Pushed By

- Rapidly increasing numbers of children identified as having ASD
- Emerging base of evidence about effective practices
- Responsibility of public school system to provide a free and appropriate public education

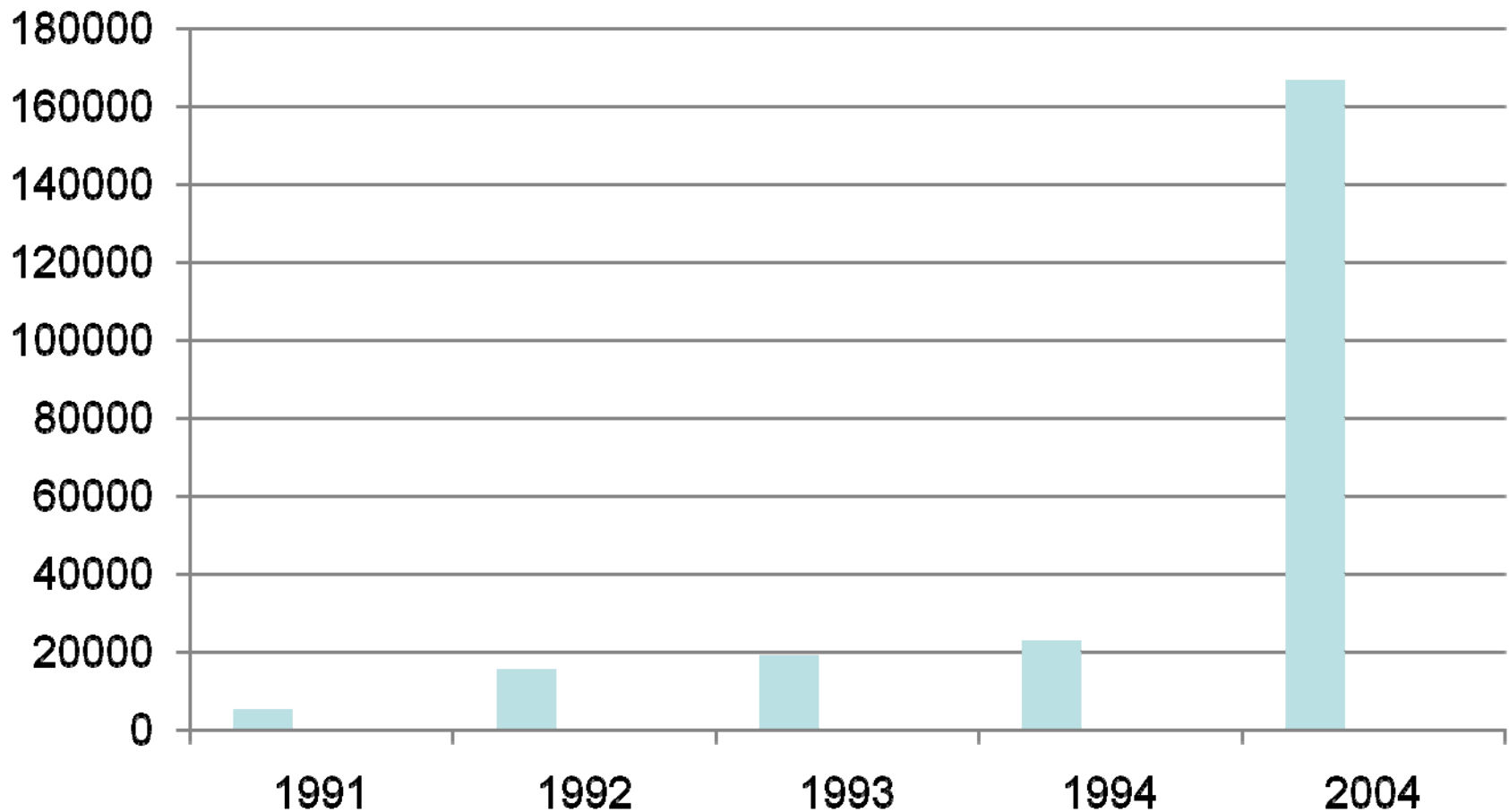


# Need for Professional Development Related to ASD

- Prevalence rates increased from 2/10,000 in 1980s to 1/150 in 2009
- Dramatic increase in numbers of children with ASD in public schools
- Numbers served in 1991
  - 5415 children from 6-22
- Numbers Served in 2004
  - 166,424 children from 6-22
  - 25,929 children from 3-5



# Children with Autism Serviced Under IDEA





# Growing Agreement on Efficacious Practices

- National Academy of Sciences Committee
- National Standards Project
- Range of reviews and syntheses
- Evidence-based education movement



# Challenge of Promoting Teachers Use of Evidence-Based Practice

- Lack of ASD specific training for many teachers
- Introduction of innovation into public school system
- Support and sustainability



# 21<sup>st</sup> Century Thinking

- The professional development of the 20<sup>th</sup> Century not sufficient to meet the problem
- To affect systemic change requires blending
  - Techniques from Implementation Science
  - Enlightened professional development

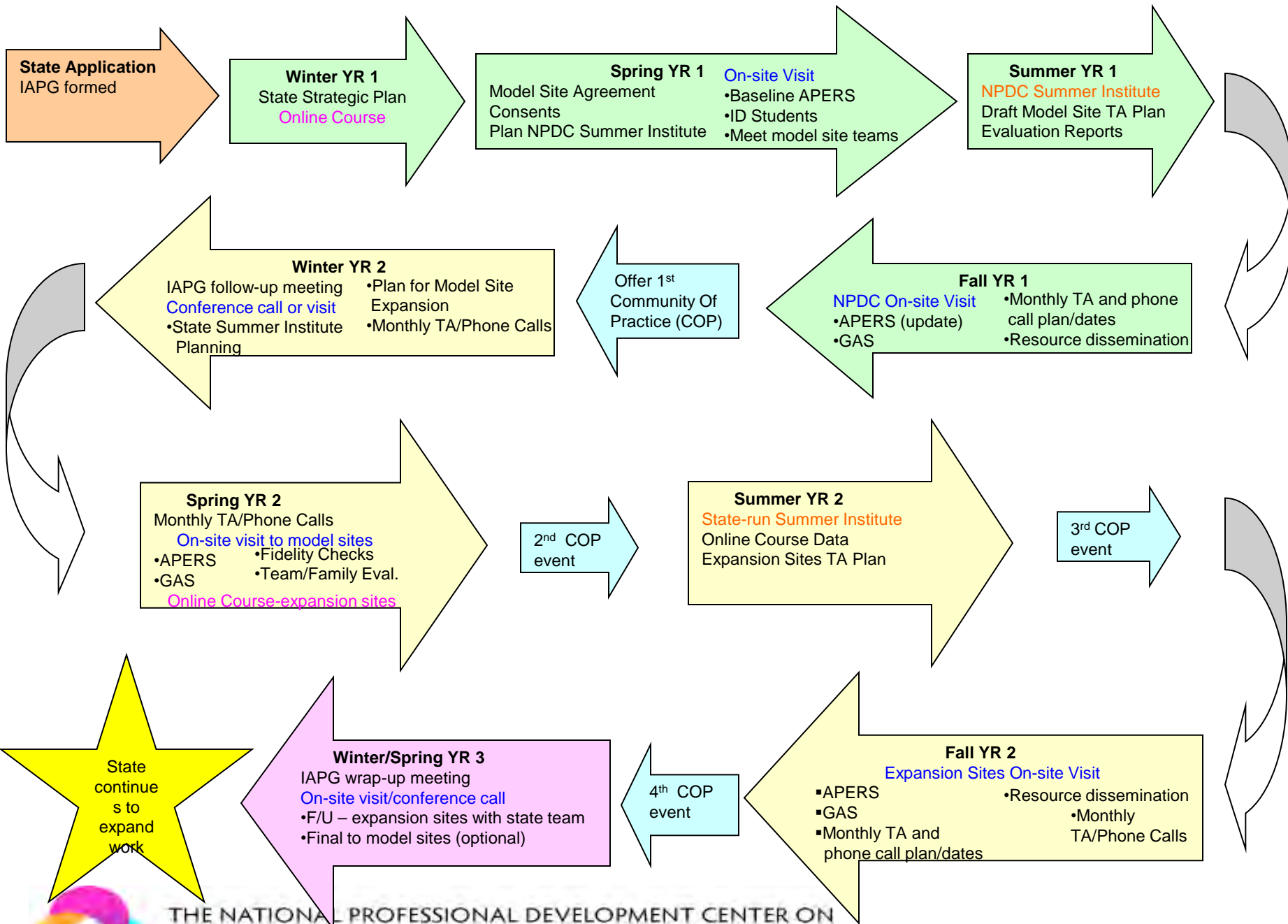


# 21<sup>st</sup> Century Implementation Science/Professional Development

Addressing the problem at the systems level

Multilevel Influences on Successful Implementation





# Stages of Implementation

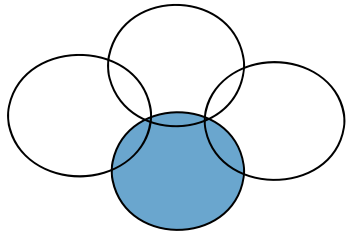
## NIRN

1. Exploration
2. Installation
3. Initial Implementation
4. Full Implementation
5. Innovation
6. Sustainability

## NPDC

1. Application Process
2. Online course/summer institutes/modules
3. First year implementation at sites
4. Second year implementation at sites
5. Elaboration within demonstration sites
6. 3<sup>rd</sup> Year Use



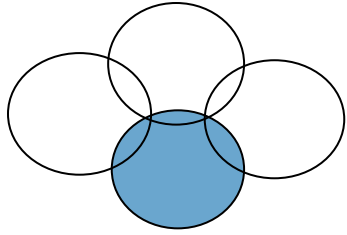


# Content Development

## Foundations of Autism Spectrum Disorders Online Course

- Eight sessions
- Pre- and post-test for each session
- PowerPoint and narrative formats
- Accessed online using *BlackBoard* platform





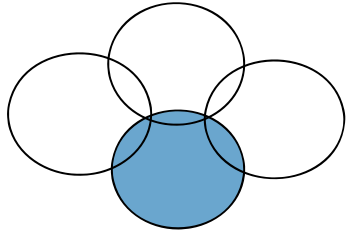
# Content Development

## Products: Online Introductory Course

- Guiding principles/recommended practices
  - Understanding ASD
  - Family-centered practices
  - Use of evidence-based practices
  - Interdisciplinary teaming
  - Data driven decision making
  - Inclusion
  - Providing access
  - Transition planning
  - Systems change approach





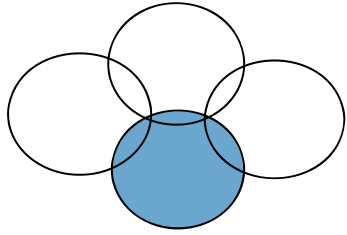


# Content Development

## Products: Online Introductory Course

- Understanding PDD and ASD
- Characteristics of individuals with ASD
- Assessment
- Guiding principles/recommended practices
- Factors affecting learning and development
- Instructional strategies and learning environments
- Foundation of communication and social interventions
- Promoting positive behavior and reducing interfering behaviors





# Content Development

## Foundation of Program Quality



# Program Quality Indicators and Evidence-Based Practice (EBP)

## Program Quality

- Contextual features of the program that represents best practices
- Program quality as the house in which practices are employed

## EBP

- Evidence-based practices as specific tools for specific skills
- EBP as the furniture or appliances designed for specific functions



# General Quality Indicators

# EBP



# Example

## General Quality Indicators

- Structure/Schedule
- Positive Learning Climate
- Assessment

## EBP

- Visual supports
- Peer-mediated intervention
- Discrete trial training



**Interdisciplinary  
Teaming**

**Program Ecology**

**Classroom Environment**

**Structure—Schedule**

**Curriculum**

**Communication**

**Social Relationships**

**Independence**

**Functional Behavior**

**Assessment**

**Family  
Participation**

**Program  
Quality**

**Learner  
Outcomes**



# Purpose of the APERS

- An environmental assessment that focuses on aspects of program quality designed to be used by:
  - an outside observer for program evaluation, program improvement, and/or research and/or
  - teachers, specialist, administrators for self-assessment in programs for learners with ASD.



# APERS Overview

APERS	Domains	Items	Type of Items	Programs
Preschool/ Elementary	11	64	Observation = 35 Interview = 29	<b>SAME</b> scoring & administration instructions for self-contained and inclusive programs
Middle/High	12	69	Observation = 34 Interview = 35	<b>SEPARATE</b> scoring & administration instructions for self-contained and inclusive programs





# APERS Preschool-Elementary

- Classroom Environments
- Class Structure/Schedule
- Positive Classroom Climate
- Assessment
- Curriculum and Instruction
- Communication



# APERS Preschool-Elementary

- Staff/Peer Relationships
- Personal Independence and Competence
- Functional behavior (Challenging and Adaptive)
- Family Involvement
- Teaming



# Observation Protocol/Items (16)

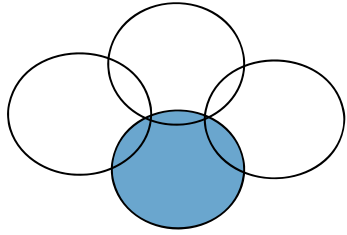
<b>Positive Classroom Climate</b>				
	<b>1</b>	<b>3</b>	<b>5</b>	
12	<input type="checkbox"/> Teacher does not greet learners upon arrival or departure.	<input type="checkbox"/> Teacher greets <b>most</b> learners upon arrival or departure. <input type="checkbox"/> Teacher appears friendly and positive in their greetings to learners.	<input type="checkbox"/> All staff greet all learners upon arrival or departure. <input type="checkbox"/> Greetings are appropriate for learners' age AND are based on learners' developmental level or abilities (e.g., use of picture cards, sign language).	Verbal Interactions
13	<input type="checkbox"/> The vast majority of adult-learner interactions in the classroom are negative in tone. <input type="checkbox"/> Staff are disrespectful of learners' cultural and linguistic diversity (e.g., does not use learners' native language).**	<input type="checkbox"/> <b>Most</b> teacher-learner interactions are positive, respectful, and warm (e.g., show respect for learners' feelings, listen attentively, make eye contact). <input type="checkbox"/> When needed, staff make some accommodations for linguistic and cultural diversity (e.g., use native language, respectful of beliefs).	<input type="checkbox"/> All staff in the classroom/program engage the learners in positive, respectful, and warm interactions. <input type="checkbox"/> <b>Most</b> staff interactions appear respectful of the learner's cultural or linguistic diversity (e.g., Use native language, respectful of beliefs).	Staff Behaviors and Interactions
14	<input type="checkbox"/> Staff do not acknowledge learners' efforts and positive behaviors.	<input type="checkbox"/> Teacher consistently acknowledges learners' efforts. <input type="checkbox"/> Teacher only uses one approach to acknowledge learners' efforts – either informal (e.g., pats on back, high fives) OR formal (e.g., homework pass, soda, rewards, graded materials).	<input type="checkbox"/> All staff acknowledgements are individualized to the learner. <input type="checkbox"/> All staff acknowledge learners' efforts/positive behaviors in both informal (e.g., pats on the back, high fives) AND formal ways (e.g., notes, rewards, graded materials).	
**Do not score if not applicable				



# IES Application for APERS

- Submission of IES Goal 5 application to establish reliability and validity of APERS
- Content validity involving experts in the field
- Use of IRT to examine the structure of the APERS
- Criterion Related and Discriminant Validity
- Expect to involve 400-600 programs for children with ASD





# Content Development

## Evidence-Based Practices



# Selection of Evidence-Based Practices (EBP)

- Intended to use National Standards Project (NSP) literature review as basis for selecting EBP
- NPDC developed criteria for EBP because NSP report was delayed



# Process for Identifying EBP

- Established criteria for selection of research studies
- Established criteria for the level of evidence needed for a practice to be considered evidence-based
- Conducted a thorough literature review
- Selected practices that had sufficient evidence base and practical utility



# Definition of EBP

To be considered an evidence-based practice (EBP) by The National Professional Development Center on ASD, efficacy must be established through peer-reviewed research in scientific journals using:

- ***randomized or quasi-experimental design studies.*** Two high quality experimental or quasi-experimental studies,
- ***single-subject design studies.*** Three different researchers must have conducted five high quality single subject design studies, or
- ***combination of evidence.*** One high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups.





# EBP Criteria

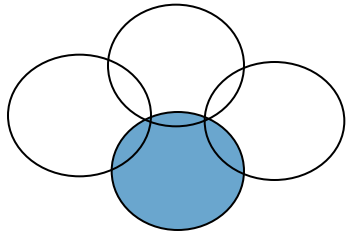
- High-quality randomized or quasi-experimental design studies do not have critical design flaws that create confounds to the studies and have design features that readers/consumers can use to rule out competing hypotheses for study findings.
- High-quality single-subject design studies have no critical design flaws that create confounds and demonstrate experimental control at least three times.



# Basis for EBP Definition and Criteria

- Horner, R., Carr, E., Halle, J., McGee, G., Odom, S., & Wolery M. (2005). The use of single subject research to identify evidence-based practice in special education. *Exceptional Children, 71*, 165-180.
- Nathan, P. & Gorman, J. M. (2002). *A guide to treatments that work*. NY: Oxford University Press.
- Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. D., Thompson, B., Harris, K. (2004). *Quality indicators for research in special education and guidelines for evidence-based practices: Executive summary*. Arlington, VA: Council for Exceptional Children Division for Research.
- Rogers, S.J., & Vismara, L.A. (2008). Evidence based comprehensive treatments for early autism. *Journal of Child Clinical Psychology, 37*(1), 8-38.





# Content Development

## Evidence-Based Practice Briefs

- Developed for all 24 EBP
- Provide content to states while modules are still under development
- All briefs contain:
  - Evidence base supporting the effectiveness of the practice
  - Overview describing the practice
  - Steps for implementation
  - Fidelity implementation checklist



Evidence-Based Practice	Descriptor
<b>Behavioral Strategies</b>	
Prompting	Behaviorally based antecedent teaching strategy
Reinforcement	Behaviorally based consequence teaching strategy
Task analysis and chaining	Behaviorally based antecedent teaching strategy that breaks down steps and links them for prompting
Time delay	Behaviorally based antecedent teaching strategy that promotes emotion's learning
Computer-aided instruction	The use of computers for varied instruction
Discrete trial training (DTT)	One-to-one instructional strategy that teaches skills in a planned, controlled, and systematic manner
Naturalistic interventions	A variety of strategies that closely resemble typical interactions and occur in natural settings, routines and activities
Parent-implemented interventions	Strategies that recognize and utilize parents as the most effective teachers of their children
Peer-mediated instruction/intervention (PMII)	Strategies designed to increase social engagement by teaching peers to initiate and maintain interactions
Picture exchange communication system (PECS) <sup>™</sup>	A system for communicating that uses the physical handing over of pictures or symbols to initiate communicative functions
Pivotal response training (PRT)	An approach that teaches the learner to seek out and respond to naturally occurring learning opportunities
<b>Positive Behavioral Support Strategies</b>	
Functional behavior assessment (FBA)	A systematic approach for determining the underlying function or purpose of behavior
Stimulus control/Environmental modification	The modification or manipulation of environmental aspects known to impact a learner's behavior
Response interruption/redirection	The physical prevention or blocking of interfering behavior with redirection to more appropriate behavior
Functional communication training (FCT)	A systematic practice of replacing inappropriate or ineffective behavior with more appropriate or effective behaviors that serve the same function
Extinction	Behaviorally based strategy that withdraws or terminates the reinforcer of an interfering behavior to reduce or eliminate the behavior
Differential reinforcement (DRA/I/O/L)	Behaviorally based strategies that focus reinforcement on alternative, incompatible, other, or lower rates of the interfering behavior in order to replace it with more appropriate behavior
Self-management	A method in which learners are taught to monitor, record data, report on, and reinforce their own behavior
Social narratives	Written narratives that describe specific social situations in some detail and are aimed at helping the individual to adjust to the situation or adapt their behavior
Social skills training groups	Small group instruction with a shared goal or outcome of learned social skills in which participants can learn, practice, and receive feedback
Structured work systems	Visually and physically structured sequences that provide opportunities for learners to practice previously taught skills, concepts, or activities
Video modeling	Utilizes assistive technology as the core component of instruction and allows for pre-rehearsal of the target behavior or skill via observation
Visual supports	Tools that enable a learner to independently track events and activities
VOCA/ Speech Generating Devices (SGD)	Electronic, portable devices used to teach learners communication skills and as a means of communication



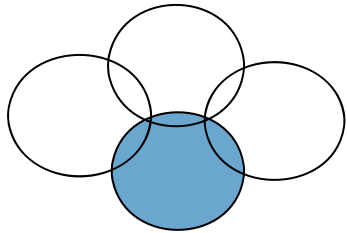
	Academic & Cognition			Behavior			Communication			Play			Social			Transition			
	E C	E L	M H	E C	E L	M H	E C	E L	M H	E C	E L	M H	E C	E L	M H	E C	E L	M H	
<b>Evidence-Based Practices</b>																			
Computer Assisted Instruction																			
Differential Reinforcement																			
Discrete Trial Training																			
Extinction																			
Functional Behavioral Assessment																			
Functional Communication Training																			
Naturalistic Interventions																			
Parent Implemented Interventions																			
Peer Mediated Instruction/Intervention																			
Picture Exchange Com. System																			
Pivotal Response Training																			
Prompting																			
Reinforcement																			
Response Interruption & Redirection																			
Self-Management																			
Social Narratives																			
Social Skills Groups																			
Speech Generating Devices (VOCA)																			
Stimulus Control																			
Structured Work Systems																			
Task analysis																			
Time delay																			
Video Modeling																			
Visual Supports																			



**Collaboration with OCALI and  
Partners for Module Development  
<http://www.autisminternetmodules.org/>**



THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON  
**AUTISM SPECTRUM DISORDERS**

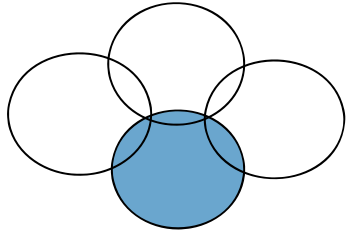


# Content Development

## Web-Based Module Content

- Pre-Test/Post-Test
- Contextual Information
- Step-by-Step Instructions
- Case Examples
- Video Examples
- Implementation Checklist
- Summary of Evidence Base
- Resources





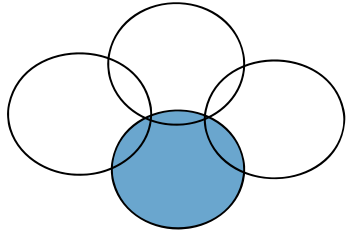
# Content Development

## Evidence-Based Practice Inventory

- Self-report checklist for members of state autism training teams to rate their familiarity with and use of EBP
- State participants complete the inventory before they begin the online course and after their participation in the project





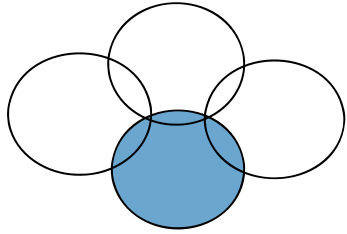


# Content Development

## Fidelity Implementation Checklists

- Individualized for each EBP
- Developed as part of online modules and EBP briefs
- Used to measure how well practitioners implement practices
- Collected at pre- and post-test on those EBP state TA providers and practitioners identified for each student





# Content Development

## Goal Attainment Scale

- Process for measuring attainment of IFSP/IEP goals
- State TA providers, model site practitioners, parents, and NPDC staff identify 3 priority goals for each target student
- Attainment of goals is recorded at pre- and post-test



# Description of GAS

- Establish a five point range of performances for students
  - Much less than expected (-2)
  - Somewhat less than expected (-1)
  - Expected level of outcome (0)
  - Somewhat more than expected (1)
  - Much more than expected (2)



## **XX will independently use words to make requests during routines in the day.**

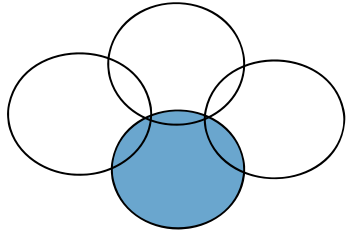
- -2 Cries until someone attends to needs
- -1 Uses gestures to indicate requests
- 0 Uses one word utterances to make request during at least two routines in the class schedule
- +1 Uses one word utterances to make request during at least two routines at home
- +2 Uses multi-word utterances to make request during routines at school and at home



# Goal Attainment Scaling Form

Level of Attainment	Goal 1: Identify need to reduce anxiety in classroom settings	Goal 2: Follow schedules of leisure activities independently	Goal 3: Initiate verbal interaction with peers to join an activity
Much less than expected -2	UU always requires visual teacher prompts to leave the area when anxious and to use a visual story to regain composure.	UU engages in internet use for every leisure break, ignoring a schedule of daily leisure activity choices.	UU exhibits anxious behavior when near a peer, joining only when visually prompted in 5 of 10 opportunities.
Somewhat less than expected -1	UU independently goes to appropriate area in the classroom when anxious and uses a visual story to regain composure 50% of the time during a two-week interval.	UU complies with allowed internet use on the leisure activity schedule on 4 of 10 days and chooses other leisure activities from his schedule.	When visually prompted, UU will always join peer in desired activity.
Expected level of outcome 0	UU independently goes to an appropriate area at school when anxious and uses a visual story to regain composure 90% of the time during a two-week interval	UU complies with allowed internet use on the leisure activity schedule on 8 of 10 days and chooses other leisure activities from his schedule.	UU, verbally, will initiate interaction with peers to join an activity in 4 of 10 opportunities without prompting.
Somewhat more than expected +1	UU verbally states "I need a break" when anxious without prompts and takes a walk to look at his visual story, returning to scheduled activity without disruption 3 times a week for 2 months.	UU complies with allowed internet use at home on 5 of 10 days.	UU, verbally, will initiate interaction with peers to join an activity in 8 of 10 opportunities without prompting.
Much more than expected +2	UU uses strategies (stress ball or fidget) to reduce anxiety in the classroom and stay focused on scheduled activity 3 times a week for 2 months.	UU creates and follows a weekly internet use schedule at school and at home with 80% fidelity for 2 months.	UU will invite a peer to play a computer game during computer time at school without prompts in 2 of 4 opportunities..





# Content Development

## Family Program Questionnaire

- Self-report measure for families of children with ASD that documents perceptions of services and supports
- Collected at pre- and post-test



# State Involvement

- Year 1, Cohort 1: Master content and process in collaboration with NPDC staff (IN, NM, WI)
- Years 2-4: States complete competitive application
  - Year 2, Cohort 2: KY, MN, MI
  - Year 3, Cohort 3: VA, TX, CA
  - Year 4, Cohort 4: ???
- Total number of states served: 12



# Key Activities with States

- Assemble a planning team consisting of key stakeholders and policymakers in the state
- Establish model demonstration sites
- Create a technical assistance team
- Prepare a strategic plan that describes goals and timelines for the state's involvement
- Participate in summer institute
- Conduct ongoing technical assistance
- States take the lead in professional development activities in Year 2





# State Application Process

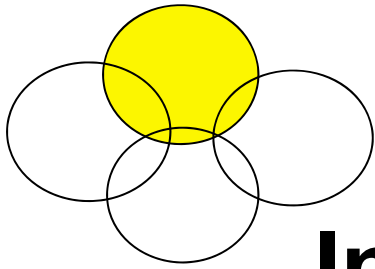
- First year: Selected states based on interest and willingness to participate
- Application process established in Year 1 for remaining years
  - States submit application online (<http://www.fpg.unc.edu/~autismPDC/training/state-partners.cf>)
  - Applications reviewed by 3 independent reviewers
  - Cohort 3 applications were due June 1, 2009



# State Planning Teams

- Establish a state planning team in spring of first year of involvement
- Develop a strategic plan for professional development and technical assistance
- Identify technical assistance support teams, model demonstration sites, and service providers

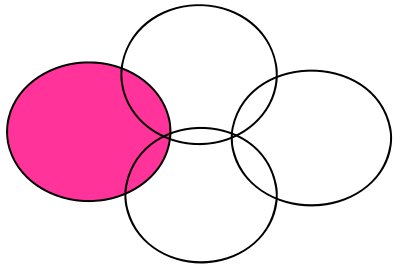




# Professional Development Intensive Summer Institute

1. Increase knowledge of EBP
2. Identify elements of high-quality programs
3. Build networking, collaboration, and skills of members of state autism training team, including model site personnel
4. Develop plans for model sites, technical assistance, and for dissemination across state

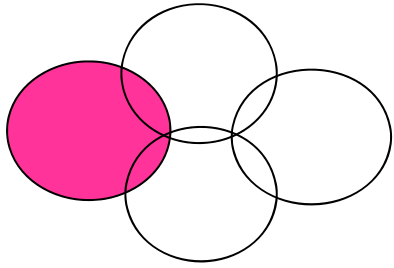




# Technical Assistance

1. Development of state strategic plan
2. Development of model sites
3. Use of goal attainment scaling
4. Development of community of practice
5. Onsite coaching/mentoring
  - Development/evaluation of high-quality programs
  - Use of EBP
  - Progress monitoring of target students

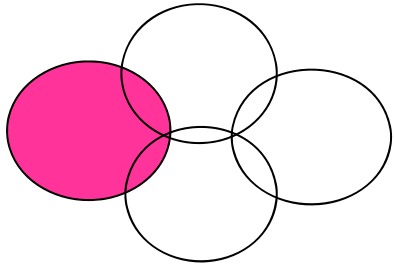




# Follow-Up Technical Assistance

- NPDC staff, state TA providers, and model site team members develop a plan for incorporating EBP into their programs
- NPDC staff and state TA providers meet with model site team members
- State TA providers and model site team members establish a schedule for TA





# States' Year 2 Involvement

- State personnel take the lead in providing professional development and TA to a new set of model sites
- NPDC collaborate with state staff in administering online course, planning and delivering summer institute, and collecting evaluation data



# Conclusion

- Purpose was to establish a sustainable system of professional development that states employ to support
  - Development of high quality programs
  - Use of evidence-based practice
- Nine states involved currently
- Intend to work with three new states by the end of the grant three years from now



# Meeting Agenda

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