

## Autism: Dispelling Myths and Learning Facts

ILCCBD, February 5, 2011  
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## How is Autism defined?

- Per IDEIA, 2004:
  - Developmental disability
  - Affects verbal and nonverbal communication and social interaction
  - Evident before age three
  - Adversely affects a child's educational performance
  - Other characteristics:
    - Engagement in repetitive activities and stereotyped movements
    - Resistance to environmental change or change in daily routines
    - Unusual responses to sensory experiences

## Incidence of Autism

- Per Autism Speaks <http://www.autismspeaks.org/>
  - Incidence is approximately 1 in 110 live births
  - Identification increasing at rate of 10 to 17% annually
  - Not certain if increase is due to actual increase of incidents or ability to identify it
- Has a direct and profound impact on families and education

## Distinction of Empirical and Anecdotal Evidence

- Empirical evidence
  - Randomized
  - Experimental design
  - Rigorous methodology and analysis of data
  - Ability to generalize results
- Anecdotal evidence
  - May lead to empirical study
  - Experience of individual
  - Inability to generalize results

### Little or no Empirical Evidence for...

- Facilitated communication
- Link of incidence with MMR vaccine
- Use of fine arts as means of expression

### Empirical Studies support...

- Antecedent-based interventions
  - Clearly defined times when specific behavior is allowed and when it is not
  - Clear signal for whether behavior is allowed such as cue cards
  - Repetitive and persistent instruction/intervention

- Videotaped self-modeling and –monitoring
  - Videotape student engaging in target behavior and appropriate behavior
  - Use this to teach student what target behavior 'looks' like
- Social Stories
  - Short story written for and including the individual
  - Includes explicit depiction of activity and expected behavior
  - Four types of sentences: descriptive, perspective, affirmative, and directive

- Picture Exchange Communication System (PECS)
  - Point to pictures and/or give picture to instructor to communicate wants/needs
  - Can be generalized across settings and
  - Used to link several pictures to form phrases
  - Training typically 1:1 and gradually expands to include multiple settings and multiple individuals

- Applied Behavior Analysis (ABA)
  - Does not refer to specific intervention but rather interventions in the field of ABA
  - Analysis of behavior using systematic and consistent methods to determine
    - Topography of behavior
    - Purpose/function of behavior
    - Preferred continuum of reinforcers

- Seven dimensions to ABA
  - Applied – socially relevant
  - Behavioral – direct measures of behavior
  - Analytical – experimental designs
  - Technological – replicable
  - Conceptually systematic – contextual framework for explaining human behavior
  - Effective – changes behavior
  - Generality – effect beyond context and parameters of experiment

Most important feature of all of these interventions:

- Collaboration between professionals and parents and families
  - Include siblings
  - Medical professionals
  - Educational professionals
  - Community professionals
- Purpose of benefitting the individual with autism

Questions?