

**Effective Programs for Young  
Children with Autism:  
Common Characteristics and  
Active Ingredients**

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**Autism is a collection of  
overlapping groups of  
symptoms that vary from child  
to child**

Siegel, 1996, p.301

**There is no one right way to  
treat/educate children with  
autism**

**We know that early  
intervention works...  
What exactly do we know?**

- We know that Early Intensive Behavioral Intervention (EIBI) can be very effective for many students
- We know that student receiving other intensive, coordinated, high quality interventions can also make significant progress

- We have a number of replications that EIBI does work
- We do not have replications of the promise of "recovery"
- We know that not all children respond the same way to intervention
- We are not sure what the most important characteristics of the intervention are (e.g., dosage, length of tx)

### What issues affect intervention?

- Culture
- Class
- Other risk factors
- Match with child and family
- Pretreatment variables (e.g, IQ, social motivation, biological variables)

### What variables may predict best outcomes?

- Social motivation
- Joint attention
- Speed of learning
- Consistency in care giving and programming
- Lack of social avoidance

### Comprehensive Treatment Models (CTM) (Odom et al.)

- Description of the model must be published
- Must be a guide or manual describing the practices
- Must have a clear theoretical or conceptual model

## CTM (continued)

- Model must address multiple developmental and behavioral domains
- Model must be intensive (e.g., at least 25 hours a week, for the length of a school year)
- Must be implemented in the US
- (some people have referred to these as "brand name models, e.g., Lovaas, Denver, TEACCH, LEAP)

## CTM -- Results

- 30 different CTMs identified, 5 types
- ABA -- Clinic or home based
- ABA -- Classroom based
- ABA -- Inclusive
- Development and Relationship Based
- Idiosyncratic

## What does this mean for practice?

- There is still a huge lack of evidence of the effectiveness of "brand name" programs
- The research to collect this evidence is extremely expensive
- There is a dilemma ... should be be paying for research or services? What evidence should we require?

## Programs should include (Dawson & Osterling, 1997):

- Curriculum content in:
  - attending
  - imitation
  - communication
  - play
  - social interaction
- Supportive teaching and generalization environments
- Predictability and routine
- Functional approach to problem behaviors
- Transition support
- Family involvement

## Critical Features

National Research Council 2001

- Entry to program asap
- Program 5 days a week, 25 hours a week, full year
- 1:1 and small group
- Family involvement
- Low student-teacher ratio
- On-going evaluation and assessment

## 6 types of intervention should have priority

- Functional, spontaneous communication
- Embedded social instruction
- Play skills with peers
- Embedded cognitive instruction
- Positive behavior support
- Functional academics

## Building Appropriate Interventions

Rogers & Vismara, 2008

- Using PBS to treat challenging or unacceptable behaviors
- Building spontaneous functional communication
- Engagement in meaningful, age appropriate learning activities

- Early intervention in settings that are ecologically valid, use ongoing progress monitoring, and have a coherent set of teaching strategies and curriculum
- Frequent access to typically developing peers
- Programming for generalization
- Family involvement

In addition, someone should be worrying about...

- Monitoring progress
- Coordinating care
- Supporting the family with the IEP process
- Monitoring the overall situation

## Project DATA: Developmentally Appropriate Treatment for Autism

Our goal is to blend approaches to meet the individual needs of young children with ASD and their families  
We provide school-based early intervention services  
We use evidence-based practices and data-based decision making in all aspects of the program

## Services offered, ages served

- There are 5 components to the program
- Integrated early childhood experience
- Extended hours of intensive instruction
- Family education and support
- Collaboration and coordination across services
- Transition planning and support

## Project DATA

Technical and  
Social Support  
for Families

Extended,  
Intensive  
Instruction

Integrated  
Early  
Childhood  
Experience

Collaboration  
and  
Coordination

Transition  
Planning and  
Support

## Project DATA Components

- Toddlers
- 3 hours/week integrated play group
- 6 hours/week intensive instruction
- Weekly home visit
- Monthly parent education classes
- 5 hours a week of parent implemented intervention
- Preschoolers
- 12 hours/week integrated preschool
- 12 hours/week intensive instruction
- Monthly home visit
- Monthly parent education classes
- 5 hours a week of parent implemented intervention

## Appropriate Curriculum Content

- Age appropriate and developmentally appropriate
- Important to family
- Addresses strengths and weaknesses
- Considers general education curriculum
- Scope and sequence across domains

## Supportive teaching environments

- Uses evidence-based instructional practices
- Uses data-based decision making
- Staff have appropriate training
- Staff had adequate support and consultation
- Instruction is explicit
- Generalization is planned for facilitated

## Predictability and Routine

- Uses schedules to help students be more independent
- Teach students how to deal with changes to schedules and routine
- Be careful not to make students more rigid
- Use visual supports to teach and facilitate independence
- Use technology as appropriate

## Functional Approach to Behavior Problems

- PBS
- FBA
- Teach alternatives
- Prevention is the best solution
- Need to understand what is motivating and maintaining the inappropriate behavior
- Remember to consider context

## Transition Support

- Sending programs
- Receiving programs
- Family
- Student

## Family Involvement

- Information
- Communication
- Support
- Share the data

## What have we learned?

- The model is effective with most students
- People like it
- It can be implemented outside of the model setting
- Effects maintain with most students

### People like it

- WE have over 100 teams visiting every year
- Replicated in many districts in WA and in many states
- Completely funded with local school district money

### It can be implemented outside of model setting

- The LEA considers it the “standard of care” in our state for toddlers
- Used in many districts in our states and has maintained for many years

### Effects maintain

- 101 graduates
- 77 returned recent survey
- 51/77 in inclusive settings (67%)
- 33% in segregated settings, including 1 in residential care

### What questions should we consider?

- What is FAPE for children with autism? Can we ever know how much is enough?
- How do we talk about evidence other than RCT (randomized clinical trials)?
- What does PBS mean for students with ASD? Where do they fit in the triangle?

### Traditional Definition

- "Evidence-based practice is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients"

### Problems with that definition

- Interventions tested at molar rather than molecular level
- Treatment fidelity measures not obtained
- Research designs used to make these assessments are exclusively RCT (randomized clinical trials)

### CEC Definition

- "Researchers cannot just address a simple question about whether a practice in special education is effective; they must specify clearly for whom the practice is effective and in what context"  
Odom et al, 2005

### Evidence-Based Strategies

- Well established
  - Adult directed interventions
  - DRO
- Emerging and Effective
  - Peer mediated intervention
  - Visual supports
  - Self monitoring
  - Involving families

## Evidence-Based Strategies

- Probably Efficacious
  - PBS
  - Videotaped modeling
  - Moderating characteristics of tasks

## Active Ingredients

- Intensity
- Data-based decision making
- Fidelity of Implementation
- Training and Ongoing Support
- Articulation of Services
- Funding
- Access to and Success with Typical Children

## Issues to think about

- Who should be implementing these programs? Publicly funded programs vs. private providers
- Do all children with autism need the same level of service?
- How does a district determine what program to use?
- Do we know how to match the best program to an individual child and family?

## Potential Research Agenda

- Scaling up effective programs
- Determining how to match children with the most effective intervention for them
- Educating consumers about autism and potential interventions
- Potential side effects (positive and negative) of different interventions