

# Back to the Basics of Autism Supports and Services:

Sensory, Social, and Speech

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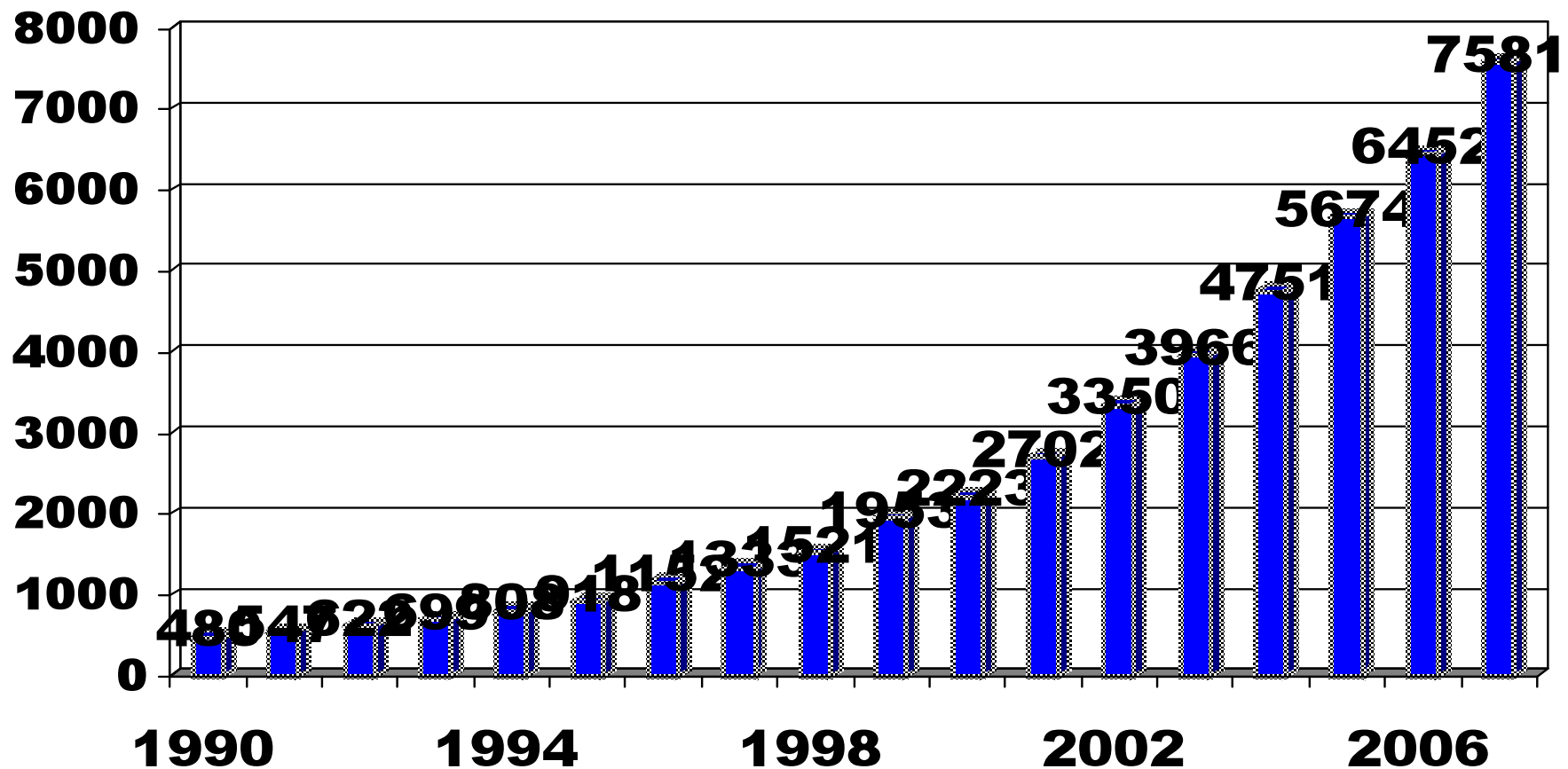
Virginia Autism Resource Center at VCU



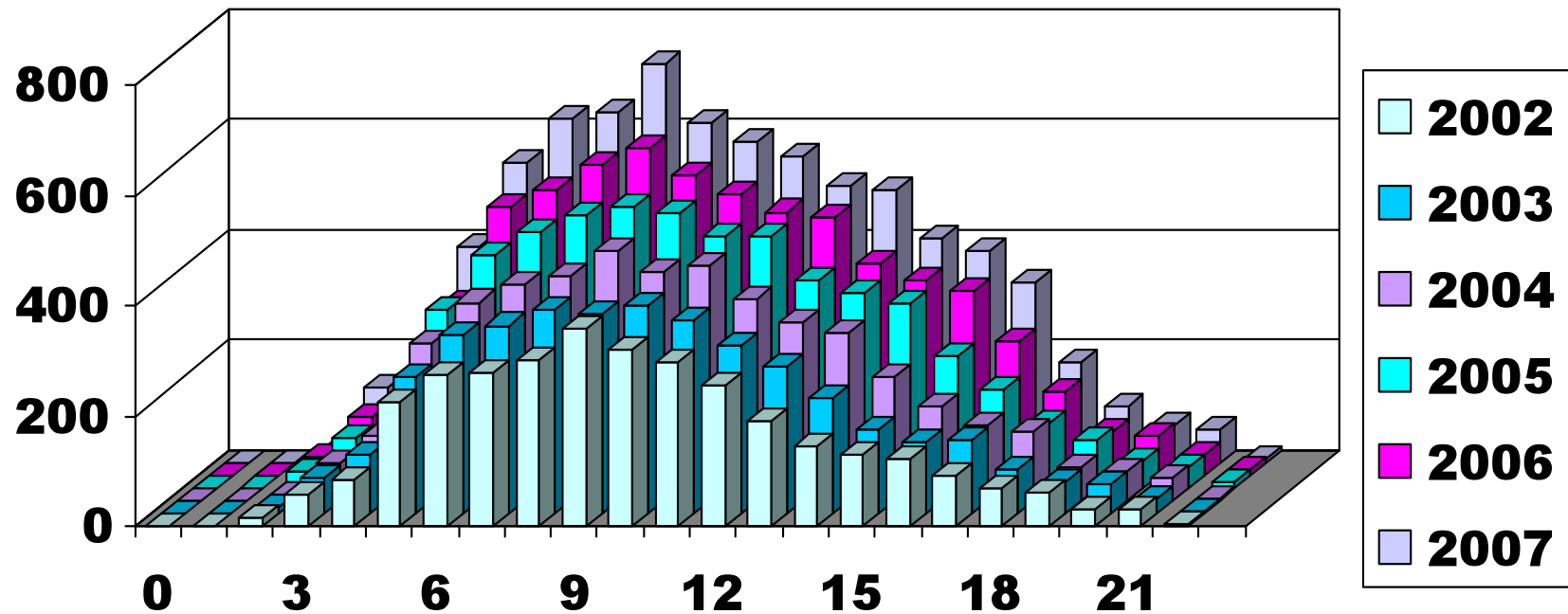
# Autism in Virginia Today

- Like every other state, ASD has increased over the past 18 years by 1579%
- This is based on DOE surveillance
- But in early intervention . . .
  - Still missing a whole lot of kids

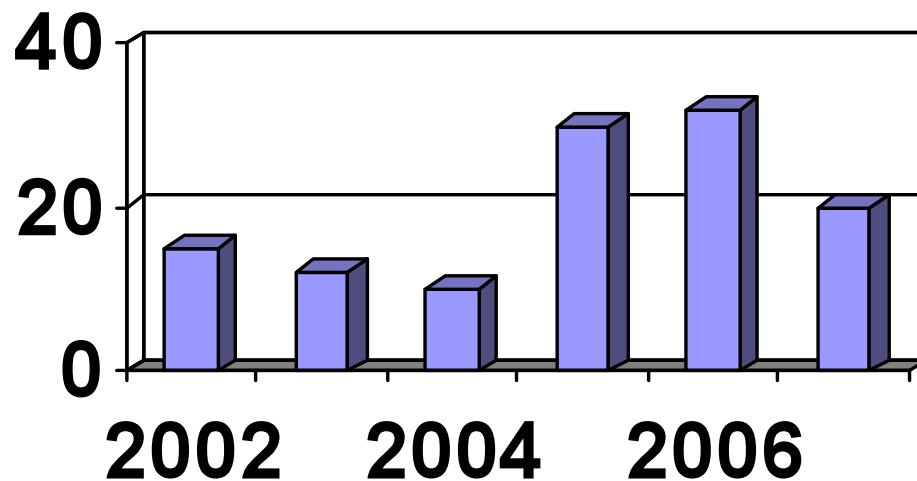
# VA Department of Education Incidence Data



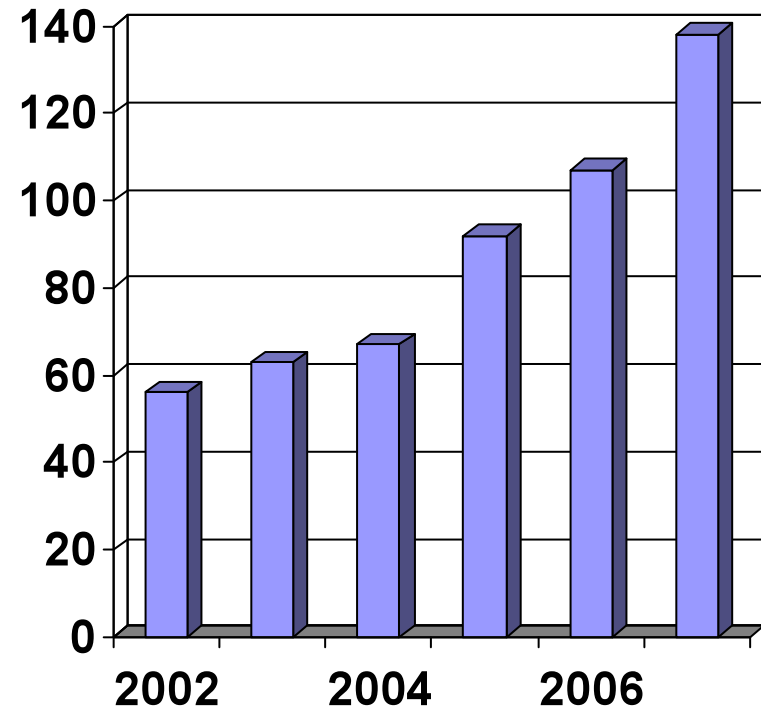
# Number of Students by Age for 1997 to 2004



# Number of 2 and 3 year olds from 2002 to 2007



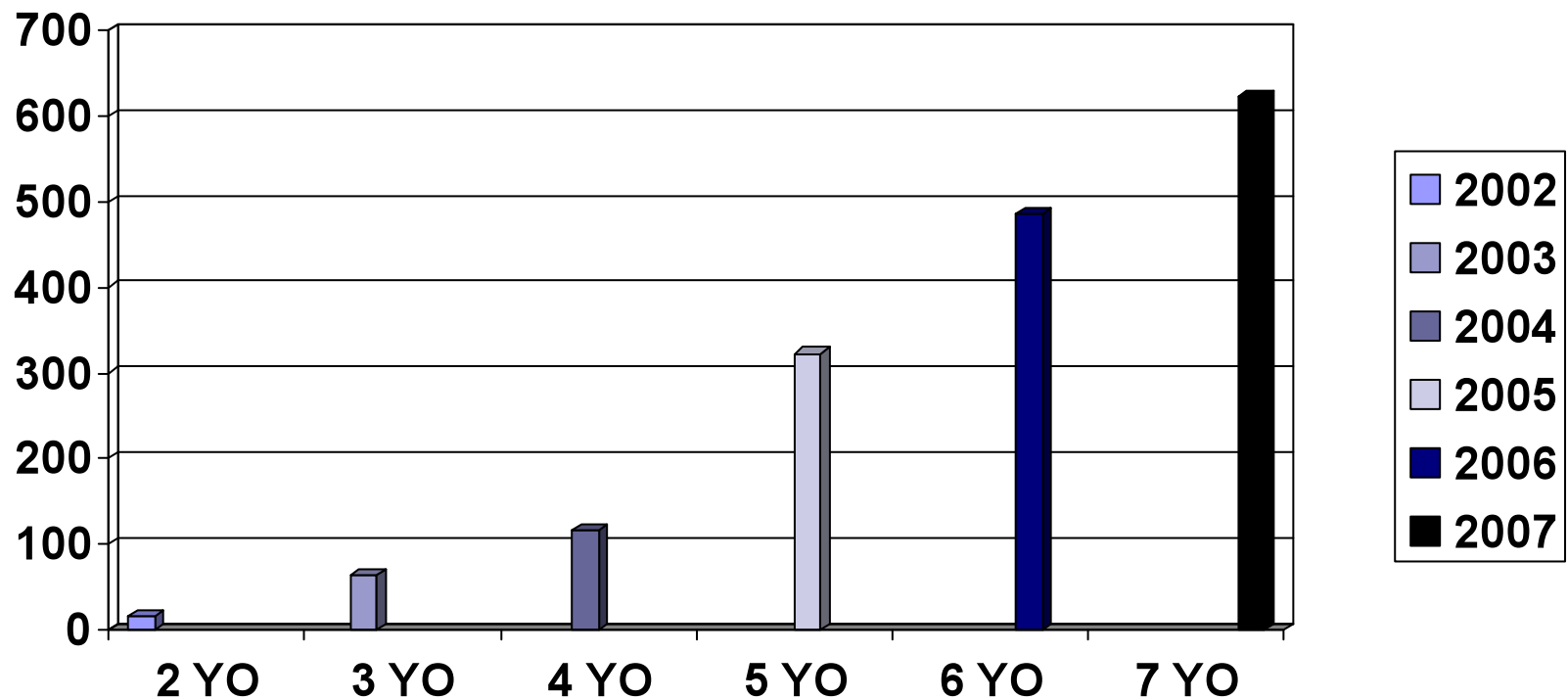
2 Year Olds

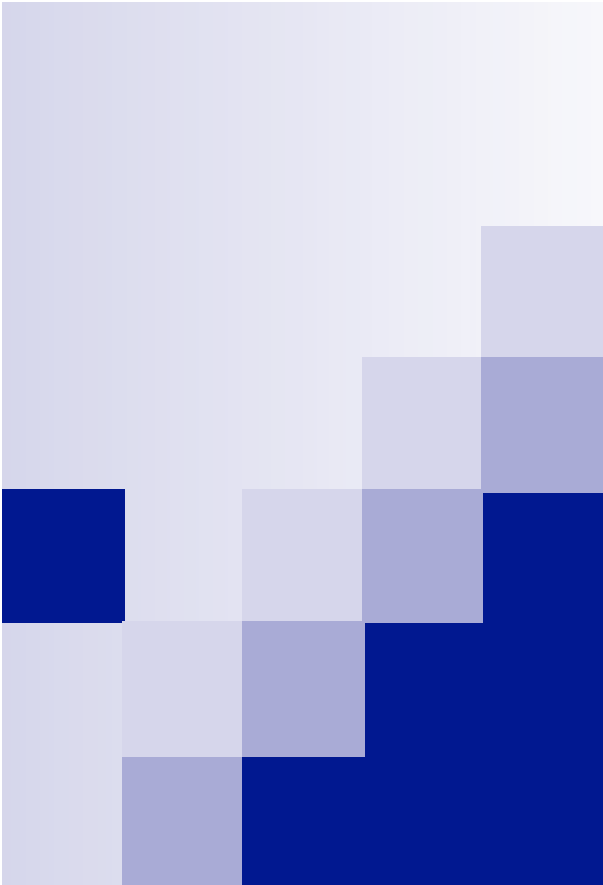


3 Year Olds



# From 2 Year Olds to 7 Year Olds

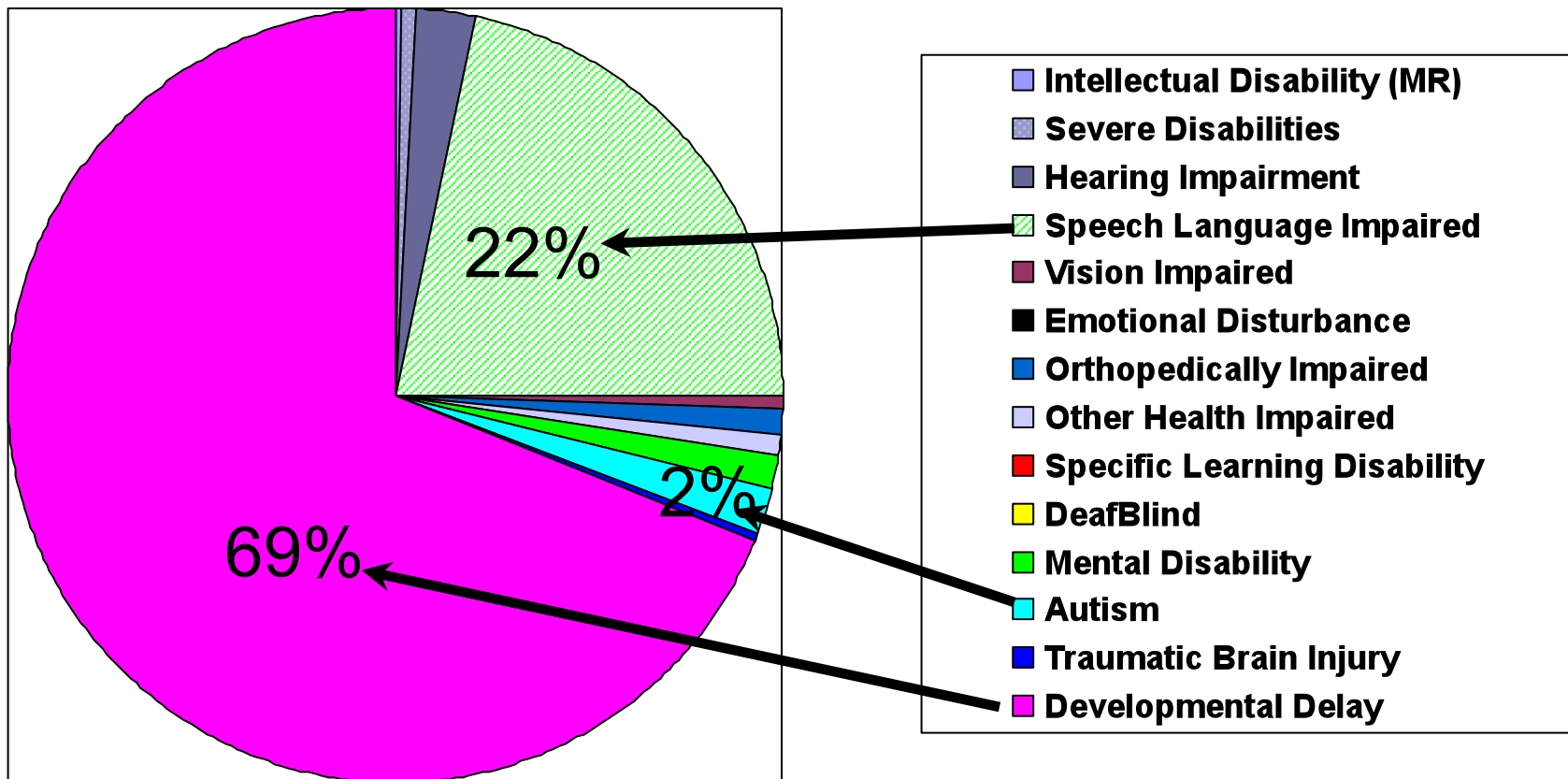




In 2002, only 2% of the children who would later be identified as having ASD were identified

98% of 2 year olds with ASD were missed in 2002

# Number of 2 Year Olds by Disability in 2007 – Total = 971







# What is driving the increase?

- Better Diagnosis
  - More Awareness
- Widening the Spectrum
  - Added Asperger's Syndrome in 1994
- Diagnostic Substitution
  - People are now dx'ed with ASD were previously dx'ed with other disabilities
- More Autism?



# Challenges of Autism in Virginia

- Autism is emerging as the 5th disability when considering those who have cognitive, learning, behavioral, or sensory motor disabilities
- The state workforce of service providers receive scant (if any) training in the unique profile and support needs of youngsters with Autism



# ASD's, CDC, 2007

- Prevalence= 6 per 1,000 with range between 3.3 to 10.6 per 1,000
- 61% to 97% receive special education services
- 33% to 57% have ID or MR
- 51% to 91% have Early Developmental Concerns
- 4 years 1 month to 5 years 6 months mean age range of earliest diagnosis



# Core and Secondary Symptoms

## ■ Core Symptoms

- ☐ Deficits in Communication
- ☐ Deficits in Social Interaction
- ☐ Restricted, Repetitive, and Stereotyped Patterns of Interests and Activities

## ■ Secondary Symptoms

- ☐ Challenging Behavior
- ☐ Mental Health Diagnoses

# Sensory Issues in ASD





# Sensory Challenges with ASD

- People with ASD typically have a varying pattern of high threshold and low threshold responses to everyday sensory stimuli
- People with ASD have difficulty regulating their level of alertness
- People with ASD have difficulty integrating sensation and movement (praxis)



# The Result of Sensory Needs in ASD - Unusual or Difficult Behavior

- Behavior caused by sensory needs are automatically reinforced just by doing the behavior
- Behavior can also be reinforced by socially mediated reinforcement
- Low Threshold = increased rate of fight, flight, or fright responses
- High Threshold = need for increased stimulation to respond



# What should we do?

## ■ Create Structured Environment

- ☐ Clear areas and boundaries for play, eating, calming down, attending, sleeping
- ☐ May involve assisting parent in changing environment

## ■ Use Visual Supports

- ☐ Yes . . . Schedule for the Home
- ☐ Provide Input and support for transitions
- ☐ Coach Parent on how to use and implement





# What should we do?

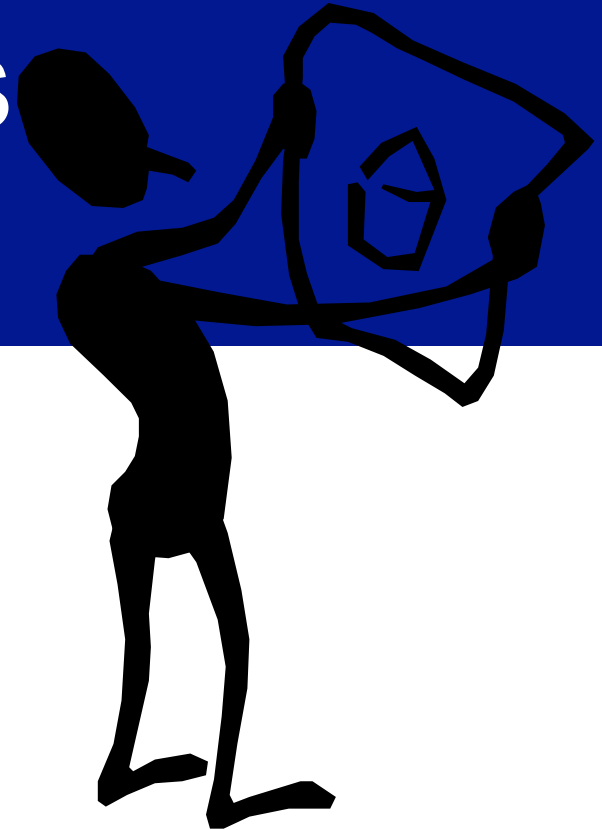
- Provide regular sensory experiences
  - ☐ To increase alerting when needed
  - ☐ To provide calming experiences and decrease fight, flight, or fright
  - ☐ To address meltdowns and keep family members safe



# What should we do?

- Coach Parents through implementation
  - Matching strategy to right place and time
  - Follow-through on transition supports
  - Living through Meltdowns
  - Addressing functions of sensory behavior

# Examples



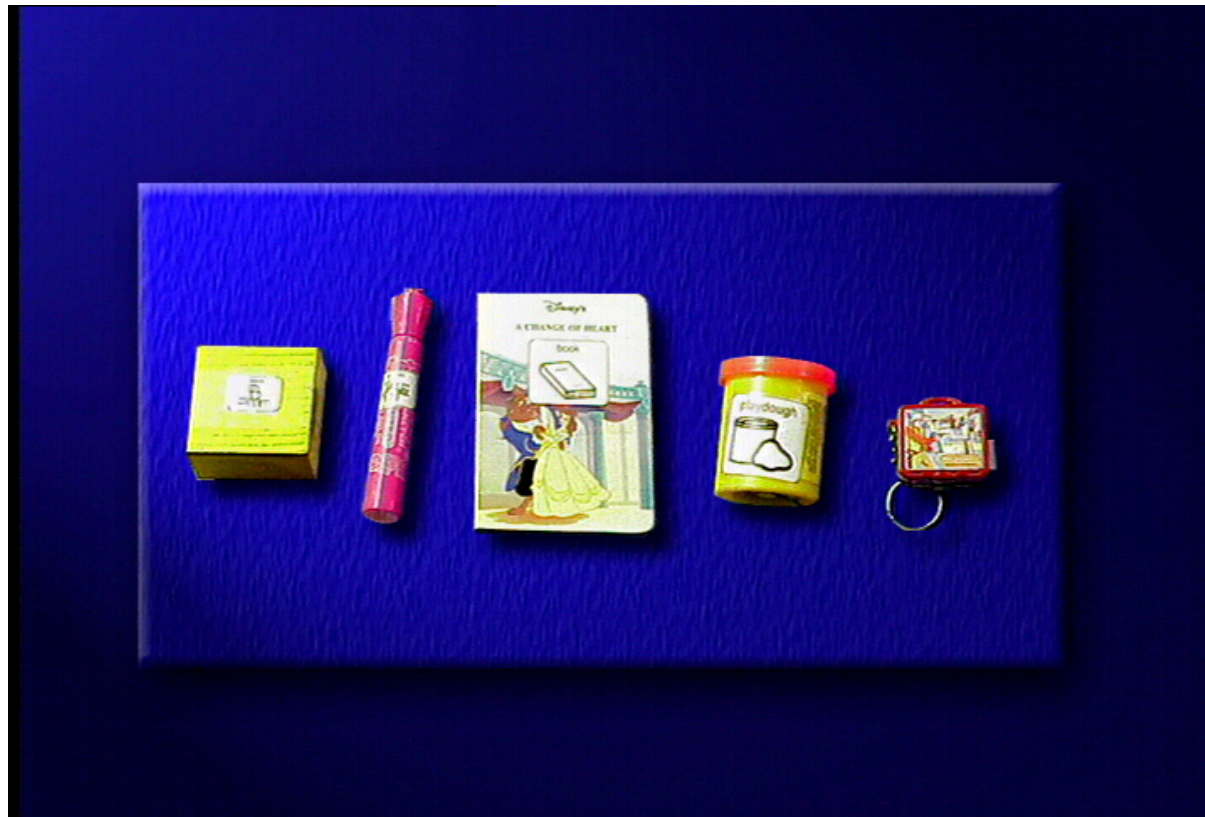
# Structure the Environment



# Structure the Environment -- A Place to Take a Break



# Visual Supports -- Object Schedule



# Visual Supports -- True Object Based Icon Schedule





# Visual Supports – Picture Schedule





# Visual Supports -- Sample Icon for Items



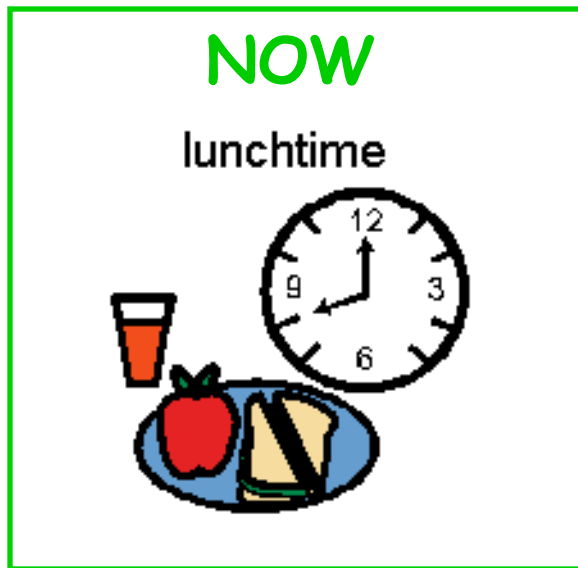
# Visual Supports -- Choice Menu



# Visual Supports -- First - Then

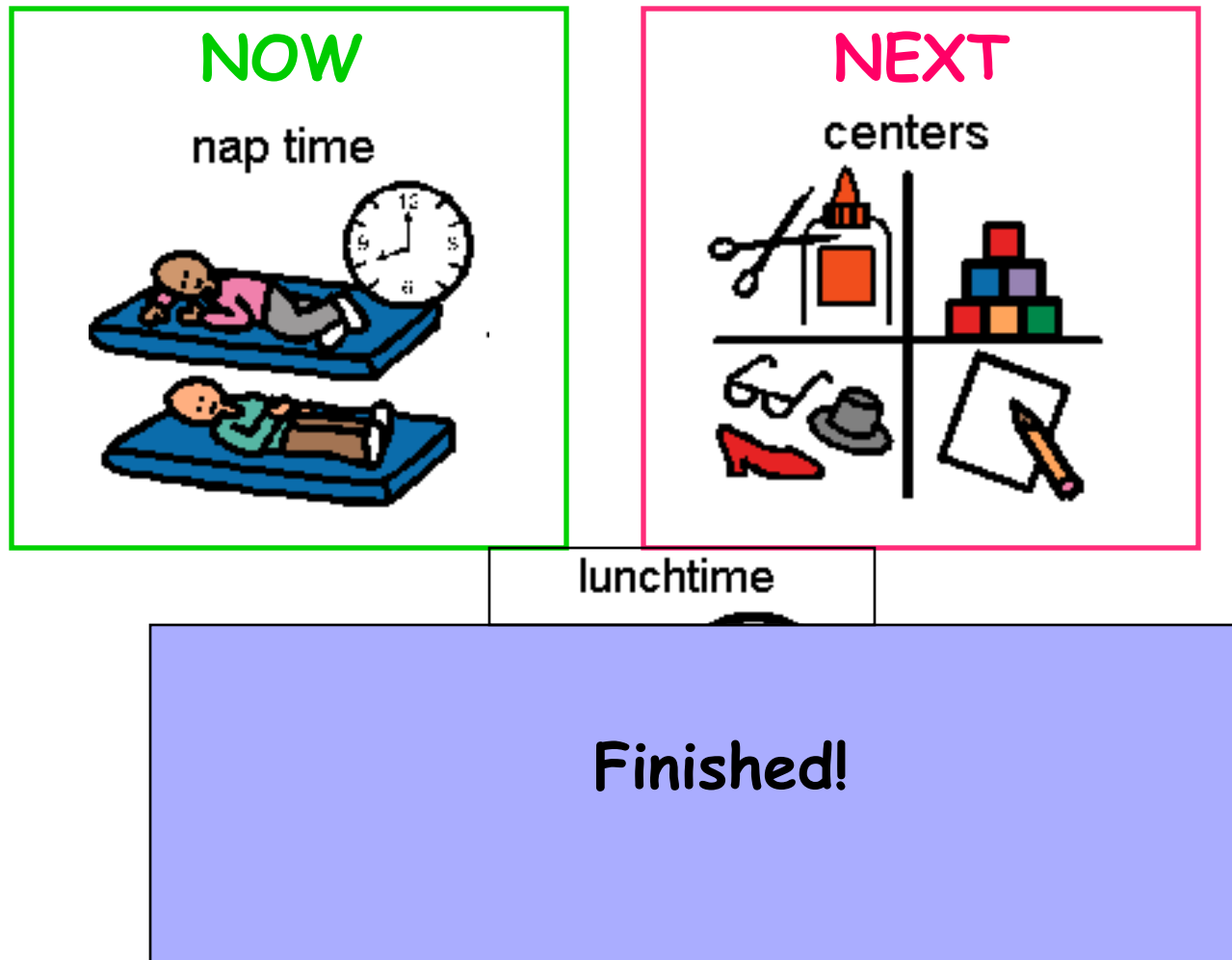


# Visual Supports – Now > Next

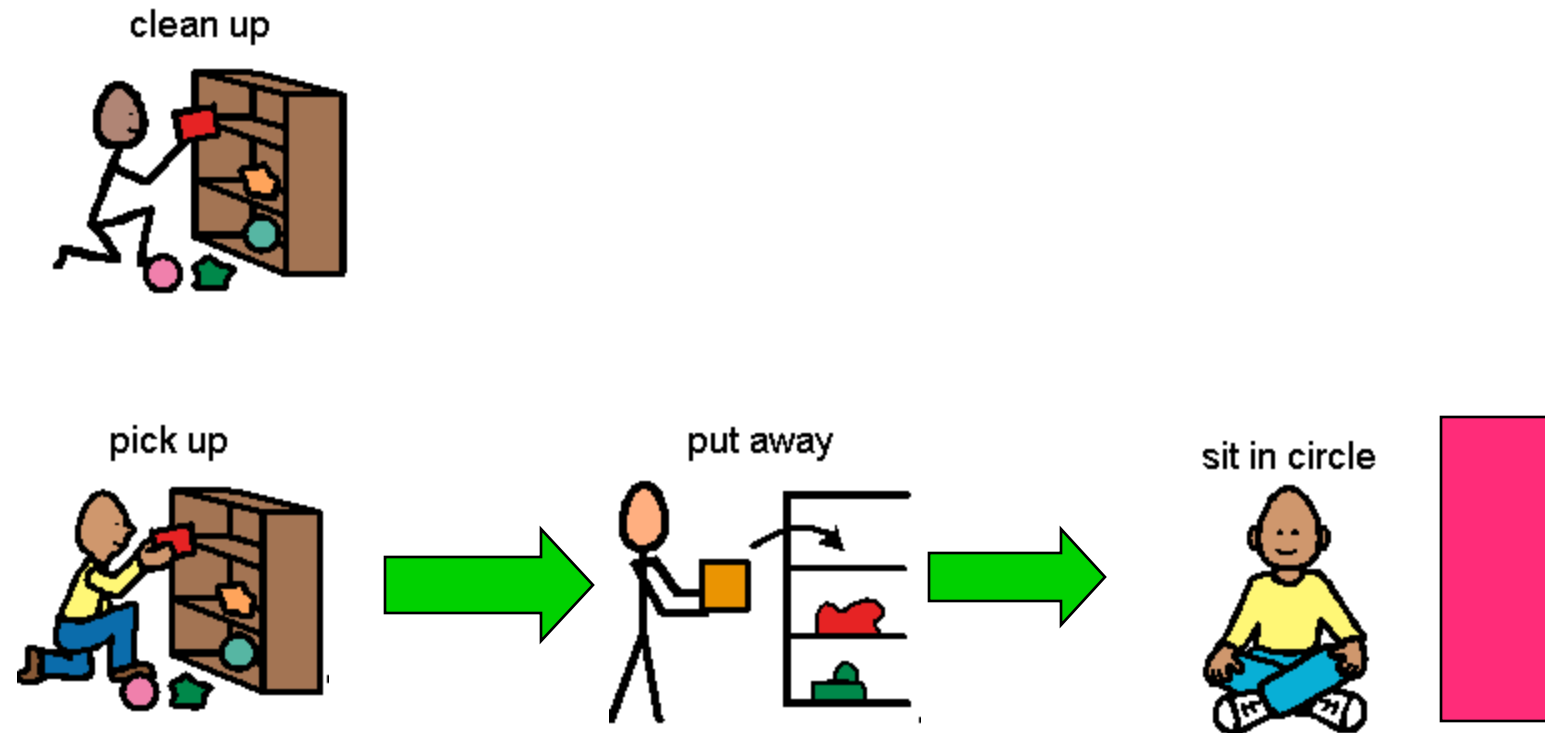


**Finished!**

# Visual Supports – Now > Next



# Visual Supports -- Routines





# Addressing Social and Speech Issues



Intensity and  
Consistency in the  
Context of Life



# These activities are based on Pivotal Response Treatments

Developed by Dr.'s Robert  
and Lynn Koegel at UCSB






Koegel, Robert, & Koegel Lynn. (2006). Pivotal Response Treatments for Autism: Communication, Social and Academic Development. Baltimore: Paul H. Brookes. ISBN: 1-55766-819-1



# These Activities Capitalize on ABA

## ■ 3 Steps

- ☐ Provide Stimulus
- ☐ Prompt Response
- ☐ Reinforce desired response
- ☐ Place undesired response on extinction



4 activities per hour about 10 to 15 minutes each

- Establish Play routines and then violate them while shaping language
- Practice discrete naming
- Practice following receptive commands
- Teach daily living skills and functional routines



# Play routines for shaping language

- Establish a repetitive play routine –
  - ☐ Pushing on the swing
  - ☐ Blowing bubbles
  - ☐ Coloring with crayons one at a time
  - ☐ Tickle Tickle Games
  - ☐ Eating favorite food
  - ☐ Rolling ball back and forth
  - ☐ Etc.



# Play routines for shaping language

- Before engaging in each turn, have the parent make a consistent motion or sound and say a simple word to describe the act
  - E.g.: Just before blowing the bubbles, have the parent lift bubble wand to their mouth, breath in and say “BLOW!”



# Play routines for shaping language

- Repeat this act 3 to 5 times with child engaged
- After the first 3 to 5 times, have parent stop, say the 'prompt word' in a question and wait – if the child makes any sound that is not a cry or a whine, repeat the initiation word and deliver the activity
  - E.g.: Parent says “Blow?” with bubble wand at mouth and waits, child says ‘Bo?’ Parent says “BLOW!” and blows bubbles



# Play routines for shaping language

- Continue for as many turns as the child will participate or switch activities to a new engaging activity
- Repeat every hour for about 10 minutes per hour
- Work on many different such interactions simultaneously.



# Shaping Language

- Once child consistently makes same sound, (Bo for Blow) then expand to more complex sounds
  - ☐ Blow
  - ☐ Blow Bubbub
  - ☐ Blow Bubbles
  - ☐ Blow bubbles please
  - ☐ More bubbles
  - ☐ Play bubbles please
  - ☐ Etc.



# Video Examples



Supernanny and Dr. Lynn  
Koegel to the Rescue!



# A word of Caution about Words

- Avoid anaphors

- From [thefreedictionary.com](http://thefreedictionary.com)

- **anaphor** - a word (such as a pronoun) used to avoid repetition; the referent of an anaphor is determined by its antecedent

- Example – “more” with out a referant, or “it”

- Name actions and/or objects, but don't use the same word for many different actions/objects

- Example – “more” with out the referant, or “it”



# Engage Peers in Play Routines

- Have peers participate in games
- Have peers help prompt language
- Use peers with shared interests



# Practice Discrete Naming

- Engage in a child friendly activity
  - ☐ Looking at book
  - ☐ Playing with blocks
  - ☐ Playing with cars
  - ☐ Playing with pots and pans
  - ☐ Setting table
  - ☐ Counting crackers at snack
  - ☐ Naming the colors of the rainbow with skittles
  - ☐ Etc.



# Practice Discrete Naming

- Play game or engage in activity
  - ☐ Block access to item
  - ☐ Parent holds item and says name of item (verbal prompt)
  - ☐ Child repeats reasonable approximation of word
  - ☐ Parent delivers item



# Practice Discrete Naming

- Over time, fade the prompt
  - ☐ Parents says word
  - ☐ Parent says first part of word
  - ☐ Parent forms first part of word with mouth, but does not say it.
  - ☐ Parent waits for child to say word



# Practice Discrete Naming – Expand to Phrases

- Noun plus descriptor
- Noun plus action
- Noun plus two actions
- Noun plus two descriptors
- Noun plus action and descriptor



# Engage Peers in Play and Naming Routines

- Have peers participate in games
- Have peers help prompt language
- Use peers with shared interests





# Practice Following Receptive Commands

- Select two to three important commands
  - ☐ Respond to name
  - ☐ Stop
  - ☐ Come Here
  - ☐ Hold hand
  - ☐ Pick up
  - ☐ Put away
  - ☐ Wait
  - ☐ Etc.



# Practice Following Receptive Commands

- Work on two to three at a time
- If one is mastered, place it on 'maintenance' and begin working on another one
- Practice everywhere!
- Practice with everyone!



# Practice Following Receptive Commands

- Begin with child near enough for parent to provide manual prompting, or have another parent or sibling near by
- Tell the other person that you want to practice command and ask them to help



# Practice Following Receptive Commands

- Parent is within arms reach or has another sibling or caretaker near the child
- Parent alerts sibling or caretaker that it is time to practice
- Parent gives command and provides full manual prompt to complete command
- Parent provides praise and positive reinforcement for child engaging in command (even with full manual prompt!)



# Practice Following Receptive Commands – Fading the Prompt

## ■ Type of Prompt

- ☐ Full manual prompt with hand signal
- ☐ Partial manual prompt with hand signal
- ☐ Hand signal only
- ☐ No Prompt at all

## ■ Distance from Person Delivering Command

- ☐ Within arms reach
- ☐ 5 feet away – within sight
- ☐ More than 5 feet away with in sight
- ☐ Out of sight



# Teach Daily Living Skills and Functional Routines

- Set Table
- Clean Up
- Shoes/socks on and off
- Coat/sweater on and off
- Use bathroom
- Wash hands
- Get dressed
- Put Clothes in Laundry
- Brush Teeth
- Wash Face
- Take Bath
- Etc.



# Teach Daily Living Skills and Functional Routines

- Select 3 to 4 skills
- As one is mastered, place on 'maintenance' and add next
- Develop the steps to complete the task



# Teach Daily Living Skills and Functional Routines

- Provide manual prompting while naming each step
- Provide positive reinforcement for success
- Assure that others are consistent in order of steps
- Decrease manual prompting over time (see previous protocol for following commands)





# Engage Peers in Daily Living and Functional Routines

- Have peers participate in routines
- Have peers help prompt language



# What Else Can We Do?

- Provide regular play group – 1 to 2 other children – 2 to 3 times weekly
- Address problem behavior through FBA and teaching replacement communication
- Refer to specialists for unique problems – eating, severe sleep disturbance, apparent seizures



# What Else Can We Do?

- Give parent information
- Coach parent and other caretakers
  - It is ok if your child cries
  - Everyone can survive a tantrum
  - The people in Walmart don't matter, your child does!
- Address safety needs
  - Tracking device on ankle
  - Awareness for first responders
  - Building respite care services

# Take Home Messages

- Coach parents to develop consistency
- Use behavioral methods in natural environments
- TEACH!

