

# Developing a Comprehensive Program for Students with Autism Spectrum Disorders Using Evidence-based Practices.



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Oregon Program Autism Training Sites and Supports Project  
[www.orpats.org](http://www.orpats.org)  
2017

# ASD=Autism Spectrum Disorder

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Impairments in  
**communication**

Impairments in  
**social interaction**

Restricted,  
repetitive **patterns**  
of **behavior** and/or  
interests

Unusual responses  
to **sensory**  
experiences

Difficulties with  
change of **routine**,  
**schedule**

U. S. Federal Education Definition: Section 300.8

# Critical Life Long Goals

(Oregon Regional Programs Autism Working Group)

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To tolerate people and value interactions

To communicate intentionally and effectively

To organize information and learn meanings/purposes

To tolerate change and accept new experiences

To be independent of constant verbal directions

To self-monitor and manage stress

# Building Sustainable Systems of Support Within Local School Districts

## **What:**

- Focus on positive outcomes for:
  - Students, Staff and Parents

## **Why:**

- Research guides us:
  - Effective practices for students
  - Effective staff development

## **How:**

- Empower school districts:
  - Implementation and training sites throughout the state/district
  - Practical solutions for teachers
  - District level coaches for sustainability



# Effective School Programs Should Use.....

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## ✧ Evidence-based Instructional Strategies

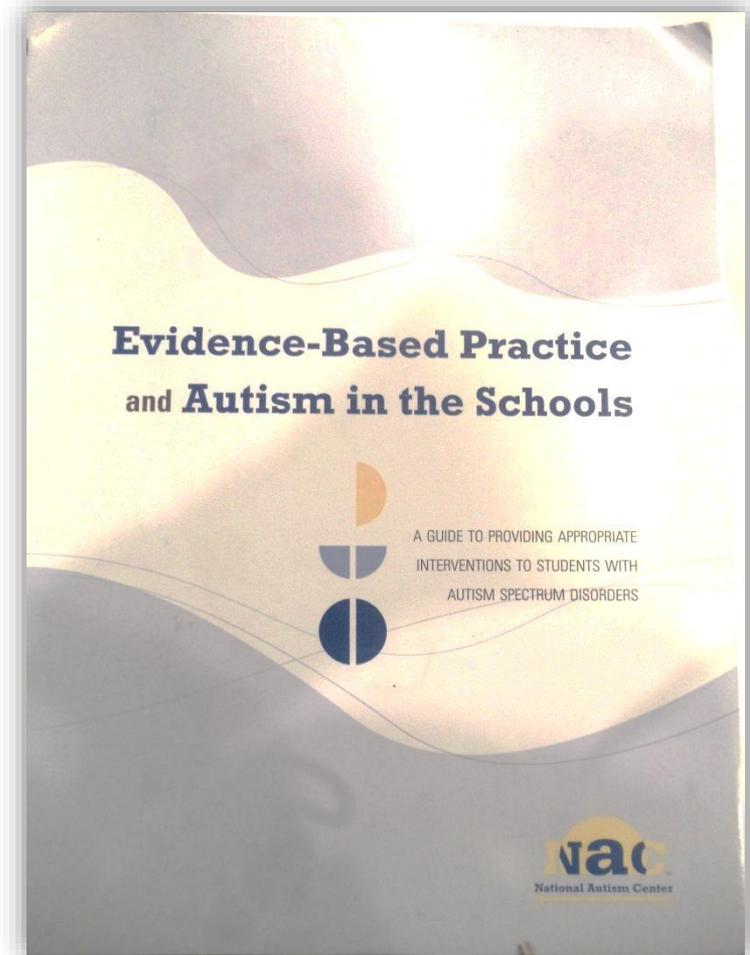
- National Standards Report
- National Professional Development Center Report

AND

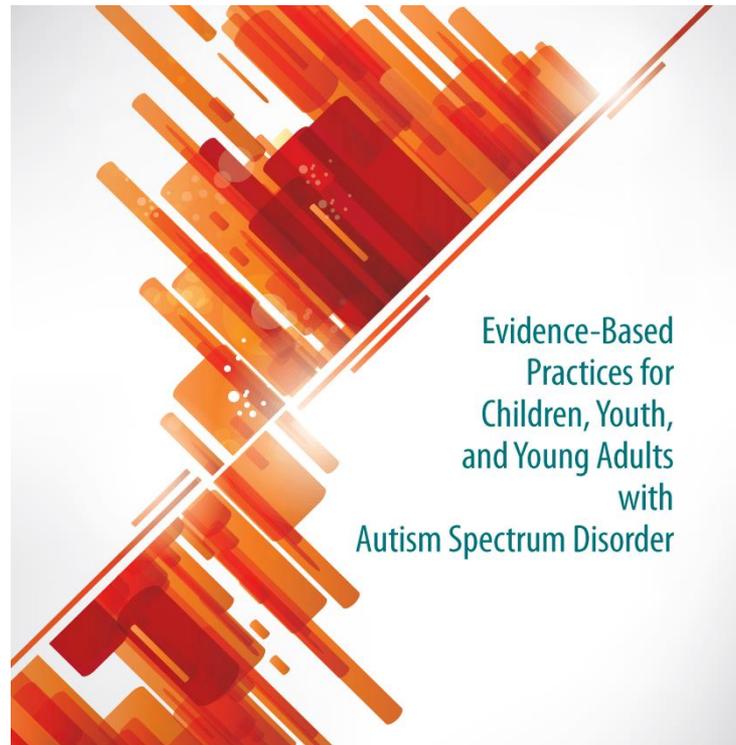
## ✧ Research-based Curricula/Tools

# National Standards Project: Phase I and II 2009 and 2014

- ✧ Evidence-Based Practice and Autism in the Schools (National Autism Center, 2009, 2015).
- ✧ Comprehensive analysis of available evidence about educational treatments for children with autism.
- ✧ Reviewed and analyzed hundreds of research articles.



# National Professional Development Center Report 2014



Connie Wong, Samuel L. Odom,  
Kara Hume, Ann W. Cox, Angel Fettig,  
Suzanne Kucharczyk, Matthew E. Brock,  
Joshua B. Plavnick, Veronica P. Fleury, and Tia R. Schultz

**Autism Evidence-Based Practice Review Group**  
Frank Porter Graham Child Development Institute  
University of North Carolina at Chapel Hill

Overlap Between Evidence-Based Practices Identified by the National Professional Development Center (NPDC) on ASD and the National Standards Project (NSP)

Evidence-Based Practices Identified by the National Professional Development Center (NPDC) on ASD	Established Treatments Identified by the National Standards Project (NSP)										
	Antecedent Package	Behavioral Package	Story-based Intervention Package	Modeling	Naturalistic Teaching Strategies	Peer Training Package	Pivotal Response Treatment	Schedules	Self-Management	Comprehensive Behavioral Treatment for Young Children	Joint Attention Intervention
Prompting	X			X						The NPDC on ASD did not review comprehensive treatment models. Components of The Comprehensive Behavioral Treatment of Young Children overlap with many NPDC-identified practices.	The NPDC on ASD considers joint attention to be an outcome rather than an intervention. Components of joint attention interventions overlap with many NPDC-identified practices.
Antecedent-Based Intervention	X										
Time delay	X										
Reinforcement		X									
Task analysis		X									
Discrete Trial Training		X									
Functional Behavior Analysis		X									
Functional Communication Training		X									
Response Interruption/Redirection		X									
Differential Reinforcement		X									
Social Narratives			X								
Video Modeling				X							
Naturalistic Interventions					X						
Peer Mediated Intervention						X					
Pivotal Response Training							X				
Visual Supports								X			
Structured Work Systems								X			
Self-Management									X		
Parent Implemented Intervention	The NSP did not consider parent-implemented intervention as a category of evidence-based practice. However, 24 of the studies reviewed by the NSP under other intervention categories involve parents implementing the intervention.										
Social Skills Training Groups	Social Skills Training Groups (Social Skills Package) was identified as an emerging practice by the NSP.										
Speech Generating Devices	Speech Generating Devices (Augmentative and Alternative Communication Device) was identified as an emerging practice by the NSP.										
Computer Aided Instruction	Computer Aided Instruction (Technology-based Treatment) was identified as an emerging practice by the NSP.										
Picture Exchange Communication	Picture Exchange Communication System was identified as an emerging practice by the NSP.										
Extinction	Extinction (Reductive Package) was identified as an emerging practice by the NSP.										

# Evidence-based Practices

## National Standards Report: Phase 1 and 2

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Pattern of findings suggest that treatments from the behavioral literature have the strongest research support at this time.

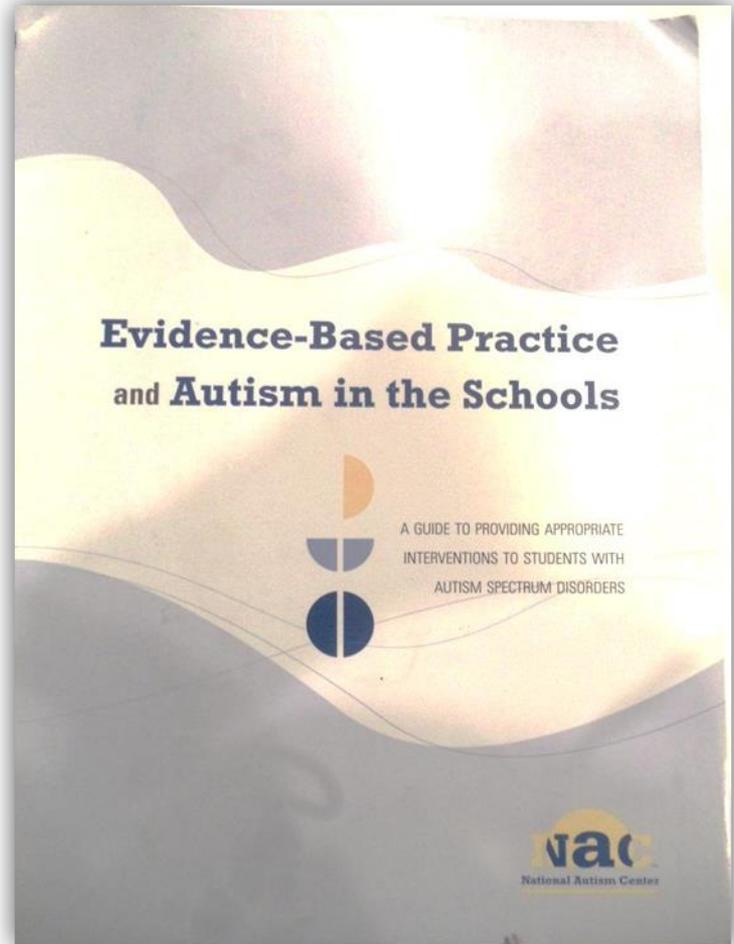
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Identified 14 Established Treatments

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Comprehensive behavioral packages have the most evidence.

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)



# National Standards Project: Phase 2

## Established Treatments

- Comprehensive Behavioral Treatment for Young Children (discrete trial)
- Behavioral Interventions (ABA methods)
- Pivotal Response Training
- Schedules (student schedules)
- Language Training (e.g. modeling verbalizations for the student to imitate)
- Self-management (promoting independence)
- Modeling (imitation of target behavior)
- Naturalistic Teaching Strategies (child-directed to teach functional skills)
- Scripting
- Peer Training Package
- Parent training
- Cognitive Behavioral Intervention
- Story-based Intervention Package
- Social Skills Package

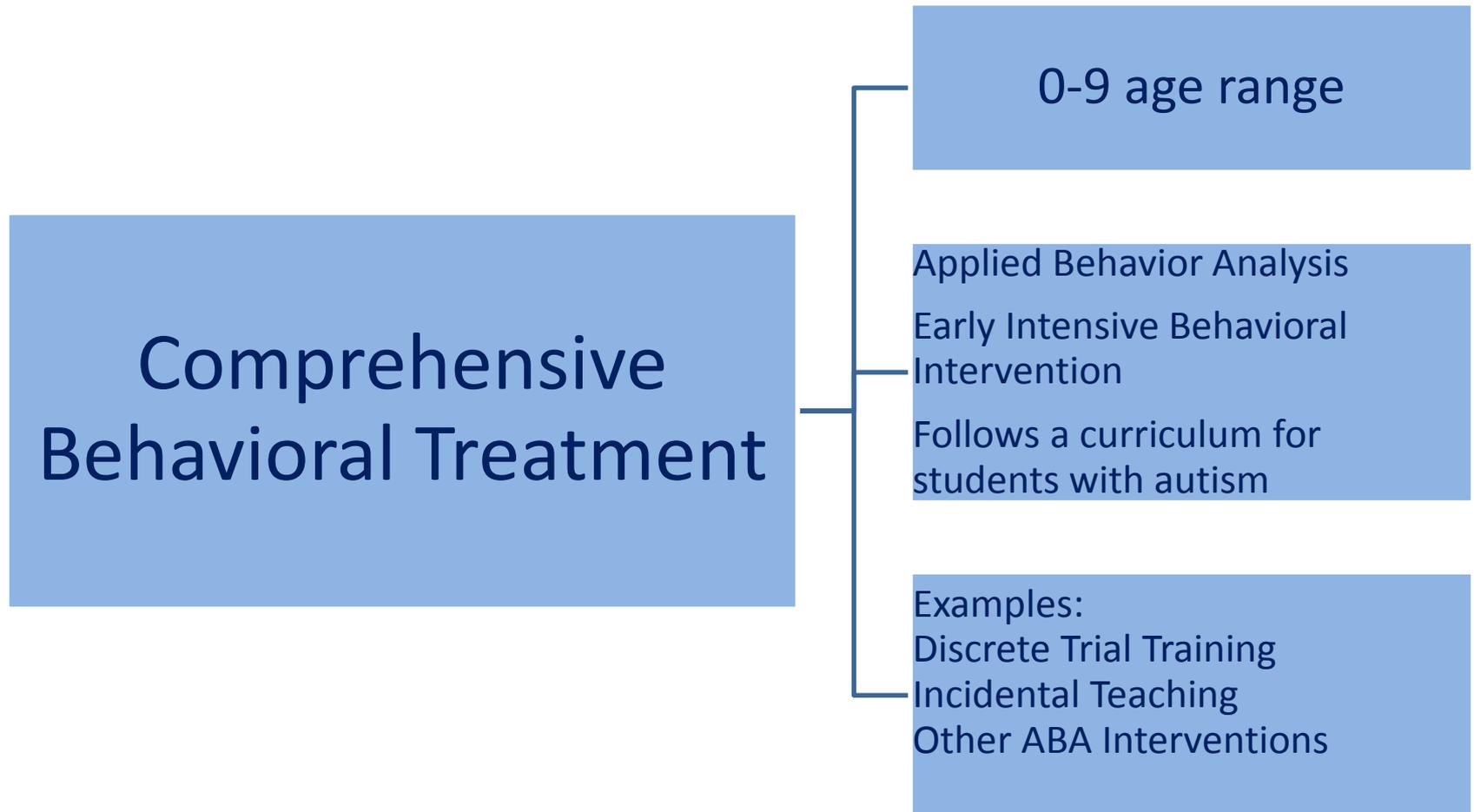
# What is Applied Behavior Analysis (ABA)?

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- ✧ Refers to methods that change behavior in systematic and measurable ways
- ✧ Common Themes of applied behavior analysis interventions:
  - Baseline data is collected and analyzed
  - Assessment through observation of behavior, antecedents and consequence
  - Instruction guided by changing antecedents and consequences
  - Structured learning opportunities in 1:1, small group and natural environment settings
  - Data collection is used to determine progress and address program modifications
- ✧ An effective program uses ABA to teach new skills (within a developmental curriculum) and to address challenging behaviors.

# National Standards Report

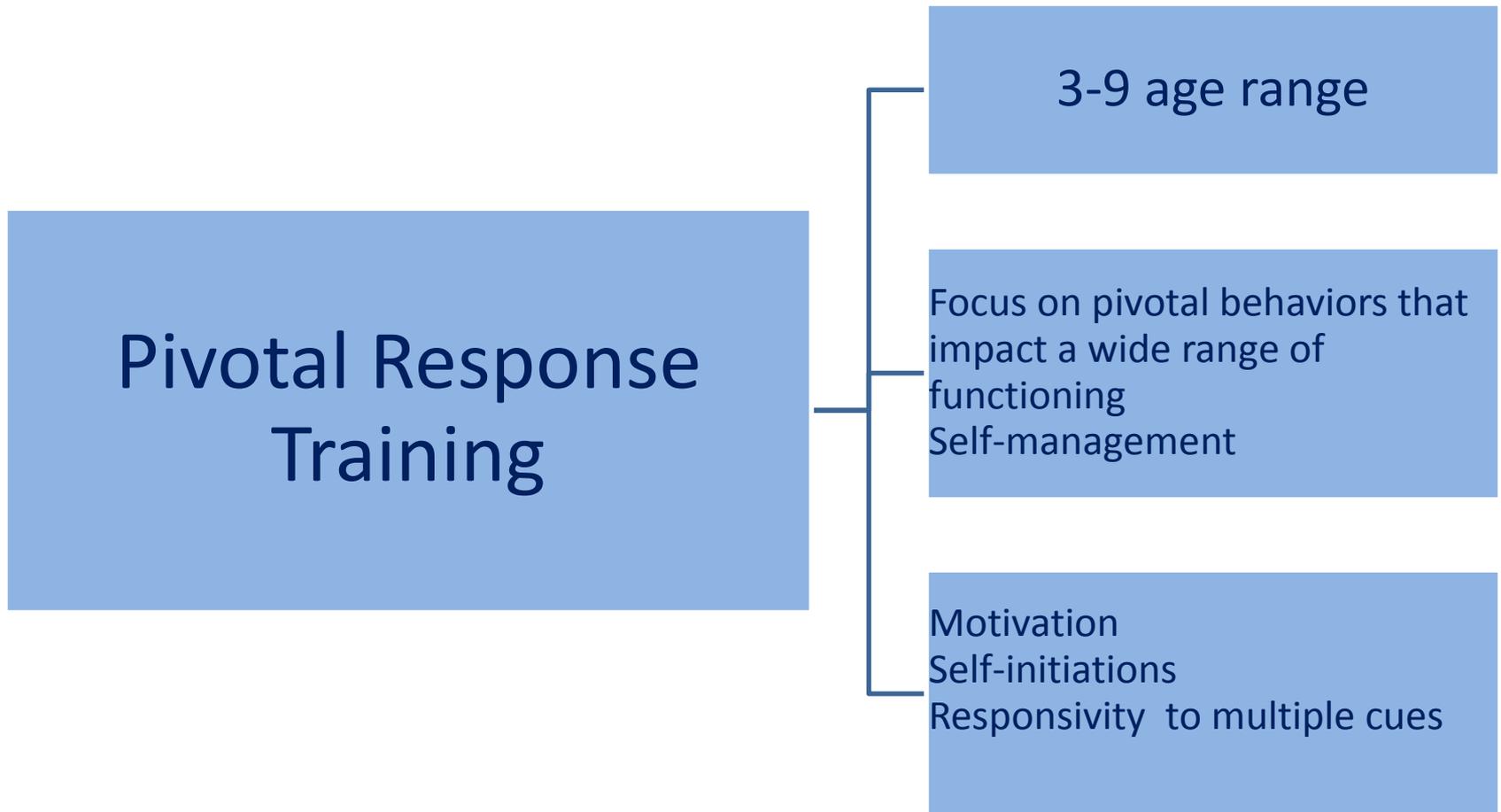
## Established Treatment



# National Standards Report

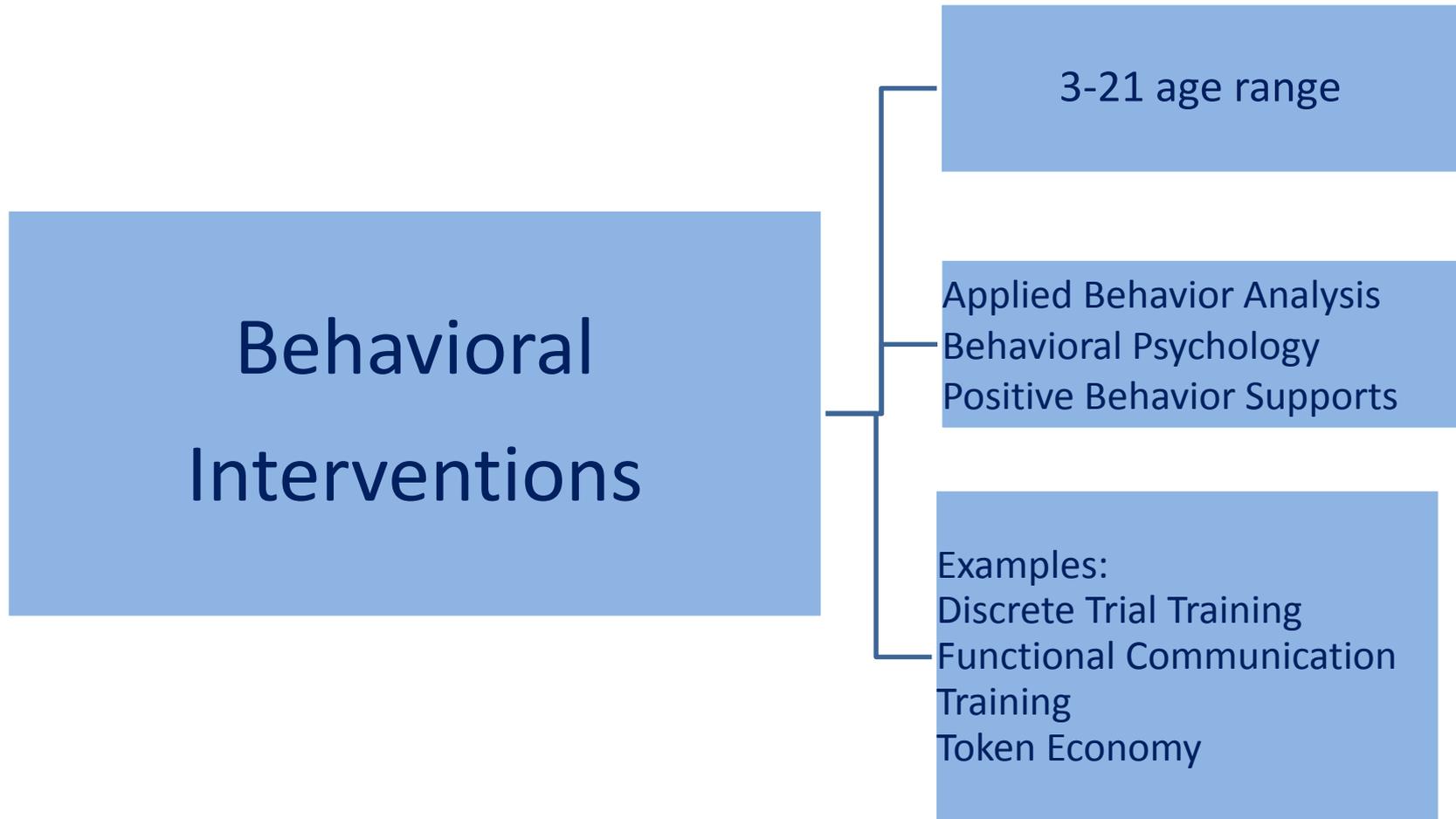
## Established Treatment

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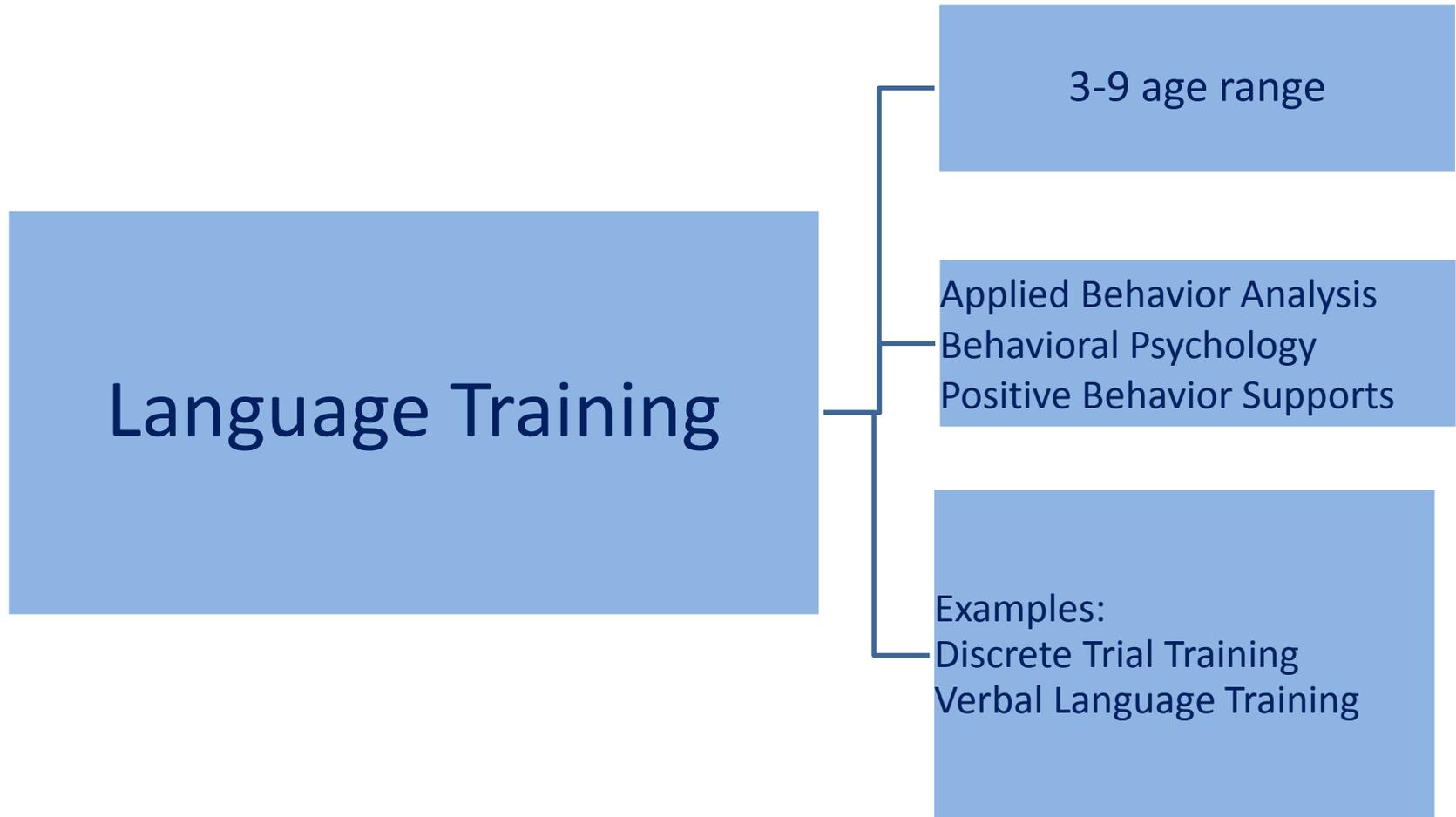
# National Standards Report

## Established Treatment



# National Standards Report

## Established Treatment



# Evidence-based Strategies: Video Examples and Progress Video



Pivotal Response Training (PRT): Expressive Language



Discrete Trial Training (DTT): Receptive Language



Self-Management : Functional Routines

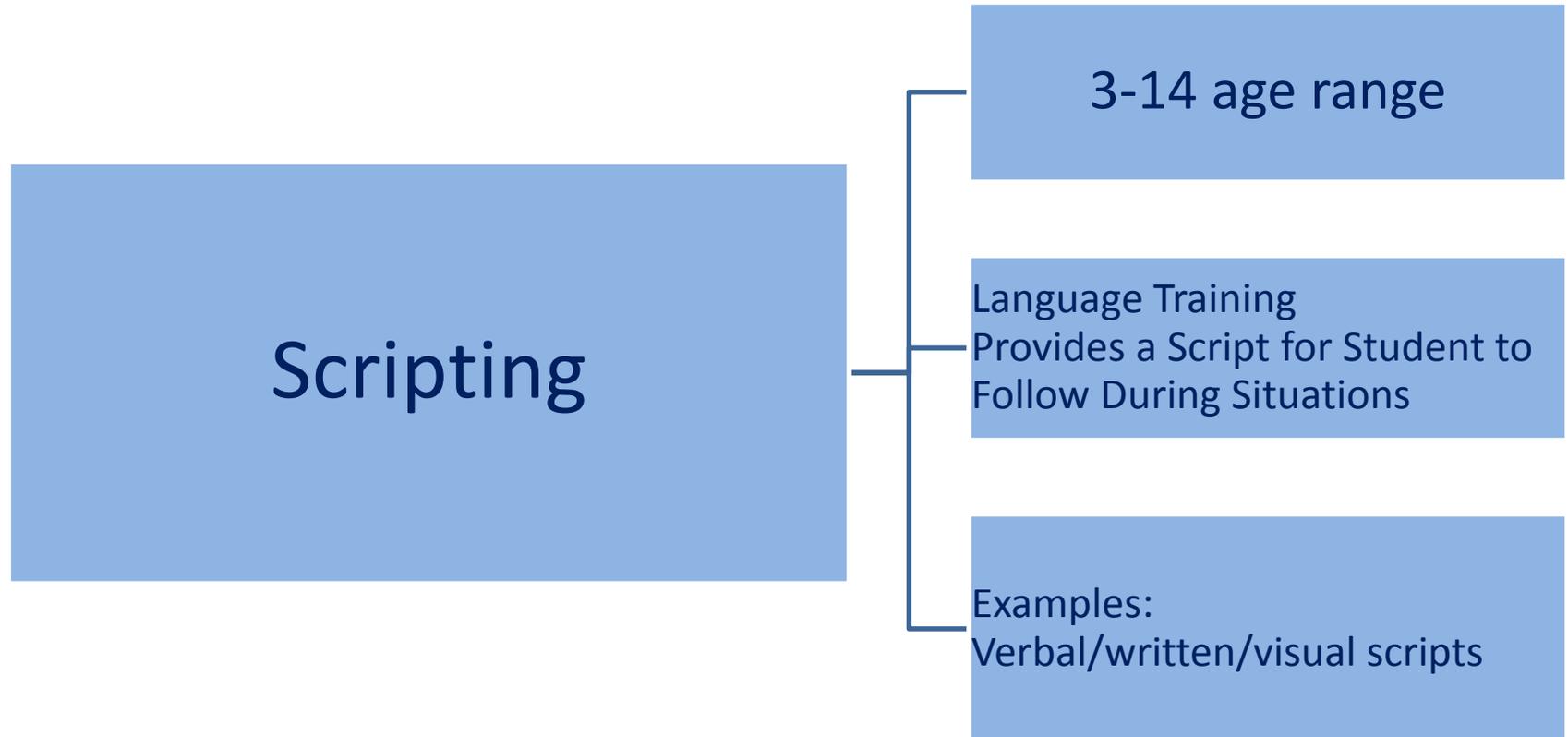


Progress: Two Years Later

# National Standards Report

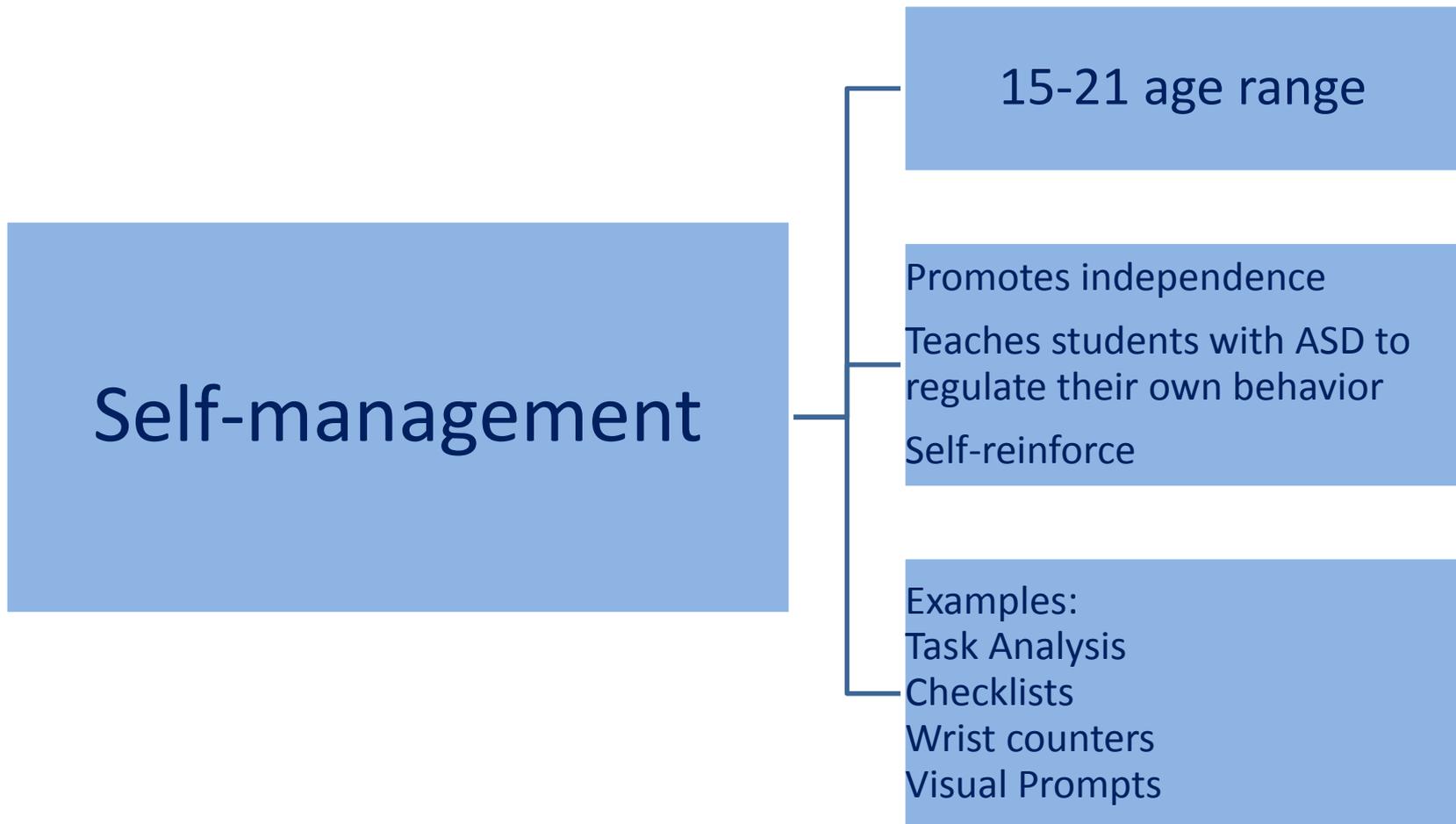
## Established Treatment

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# National Standards Report

## Established Treatment

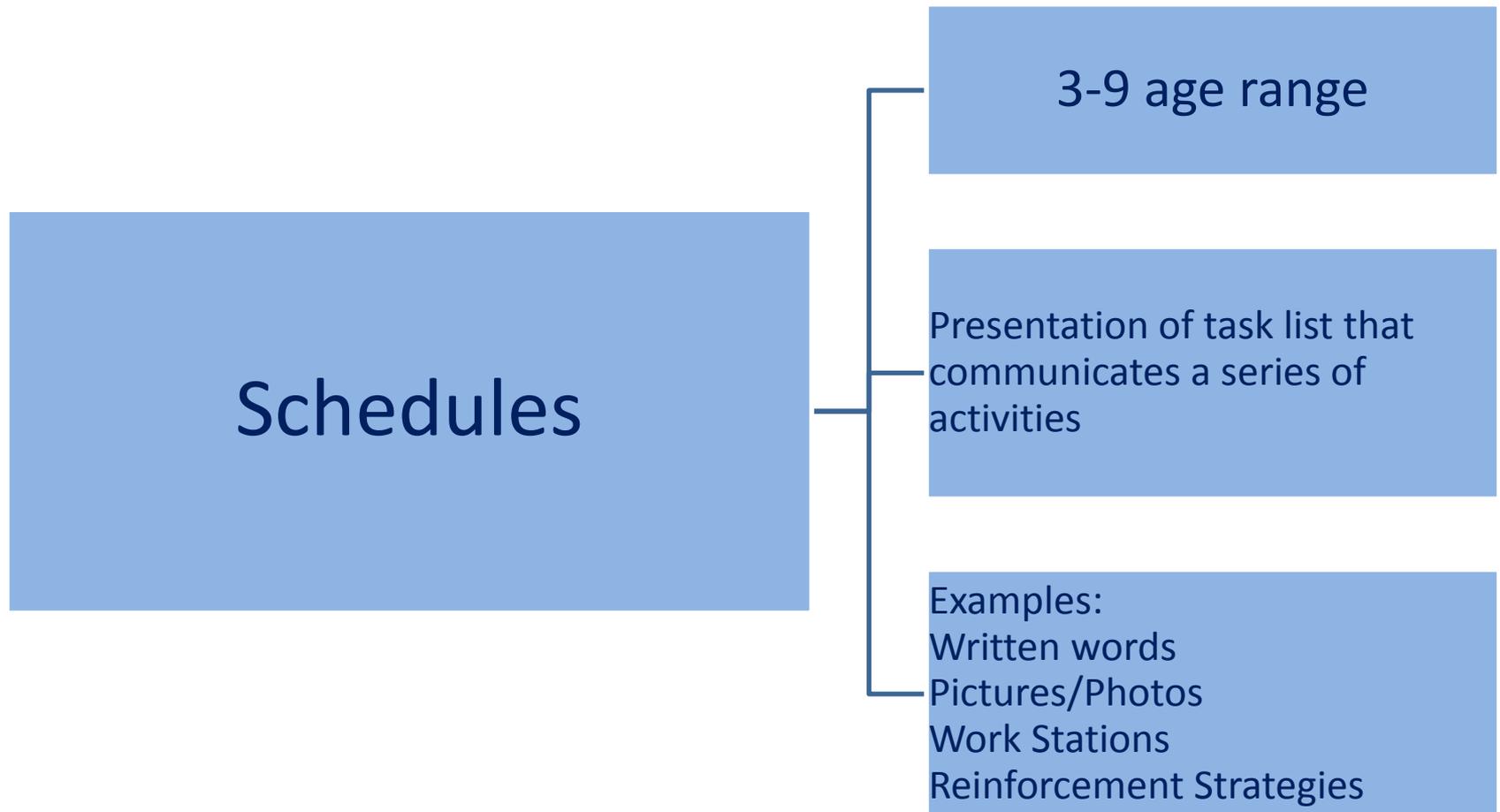


# Using Scripting and Modeling: Example

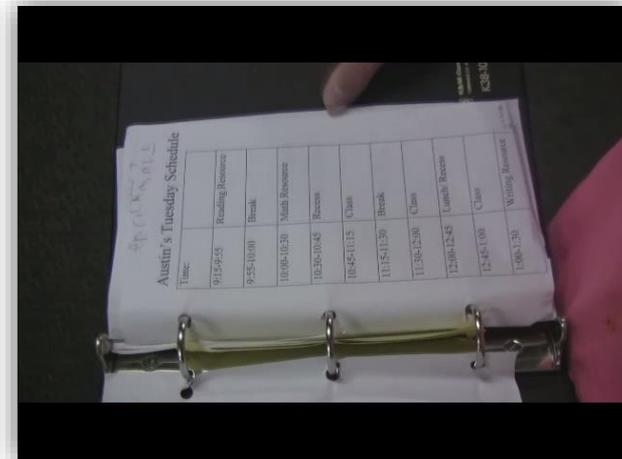


# National Standards Report

## Established Treatment



# Student Schedules: Examples



# National Standards Report

## Established Treatment

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### Peer Training Packages

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graph LR; A[Peer Training Packages] --- B[3-14 age range]; A --- C[Teaching students without disabilities strategies for facilitating play and social interactions]; A --- D[Examples: Peer Networks, Circle of friends, Peer-mediated social interactions];
```

3-14 age range

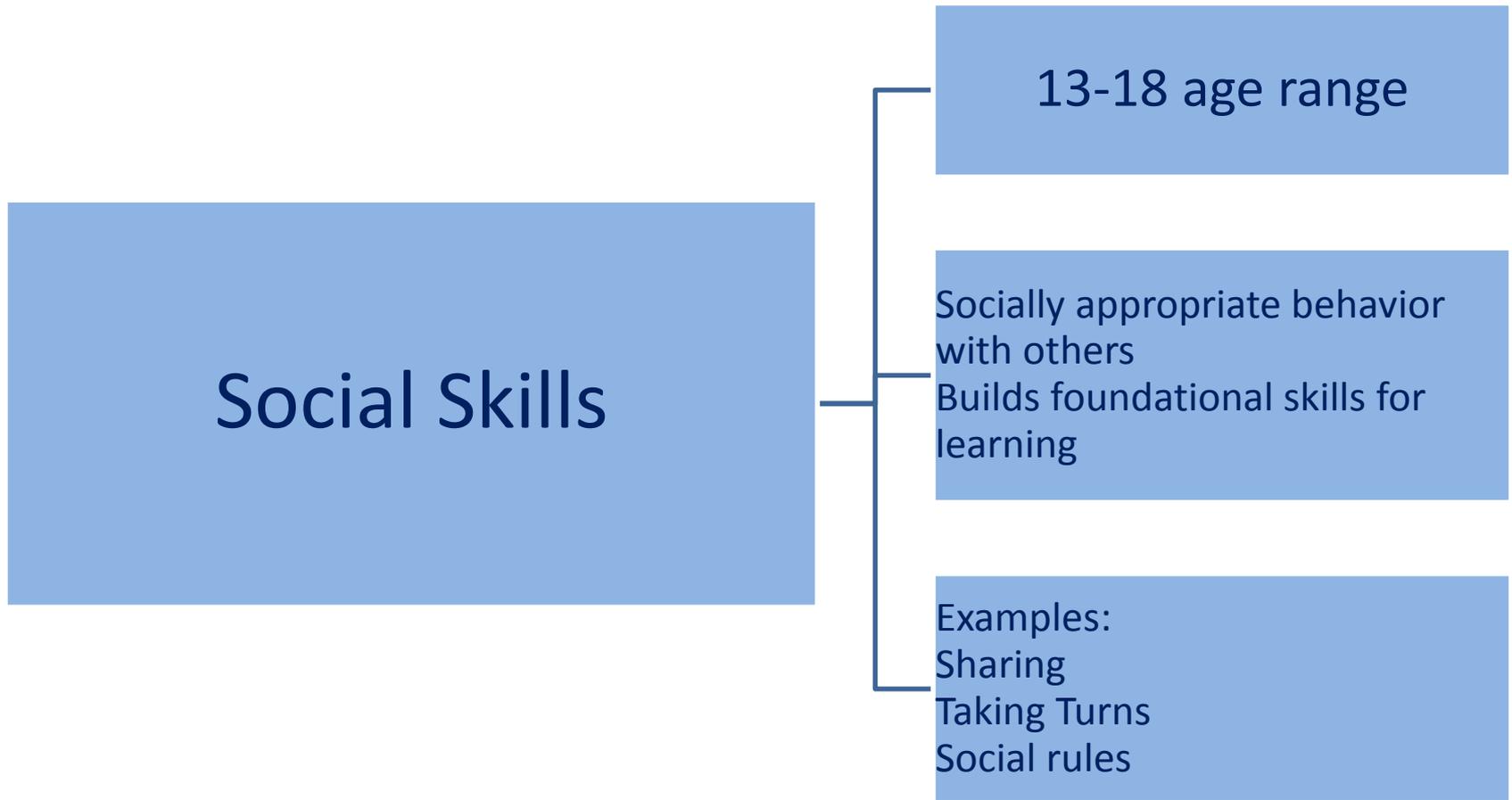
Teaching students without disabilities strategies for facilitating play and social interactions

Examples:  
Peer Networks  
Circle of friends  
Peer-mediated social interactions

# National Standards Report

## Established Treatment

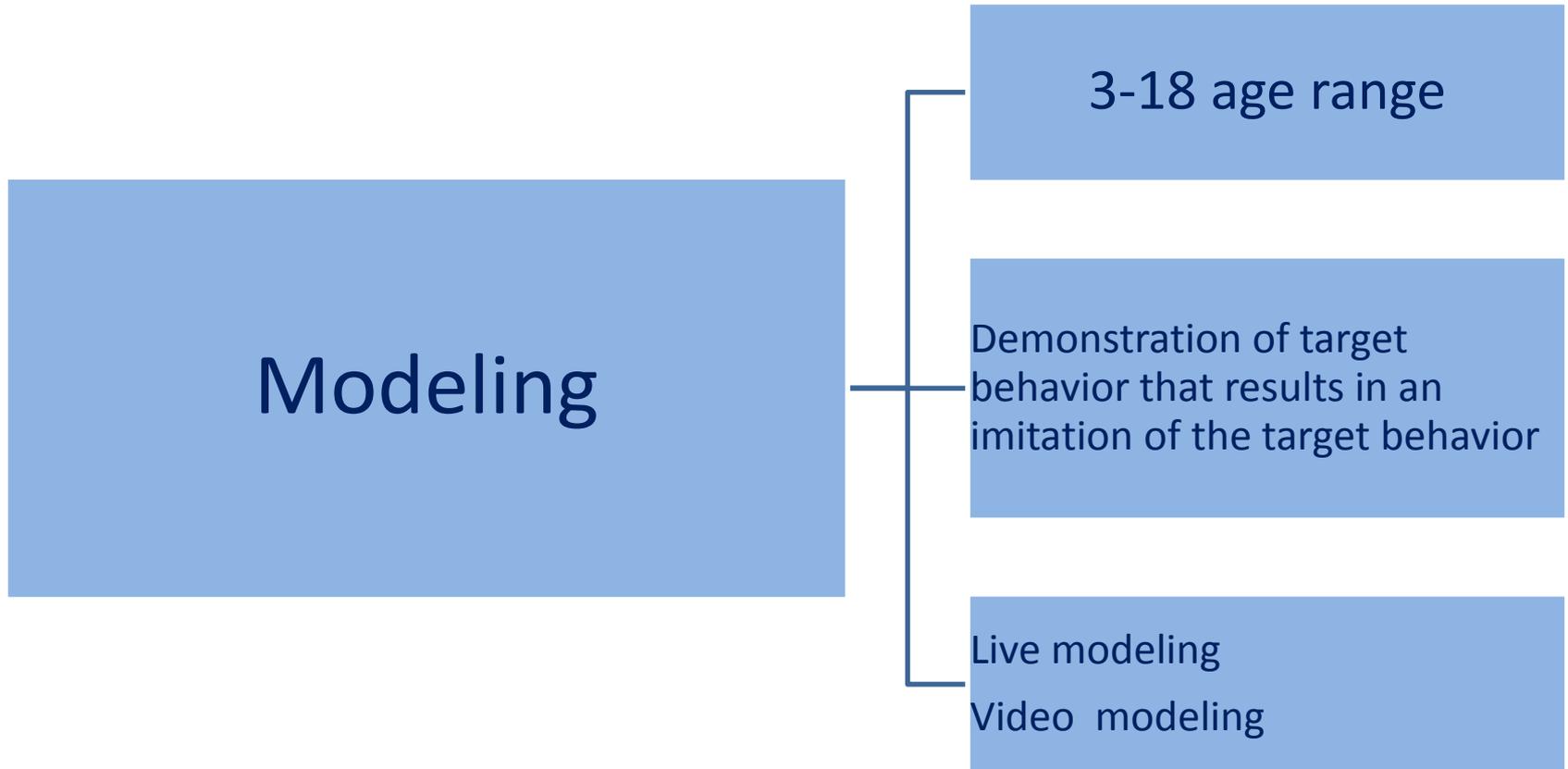
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# National Standards Report

## Established Treatment

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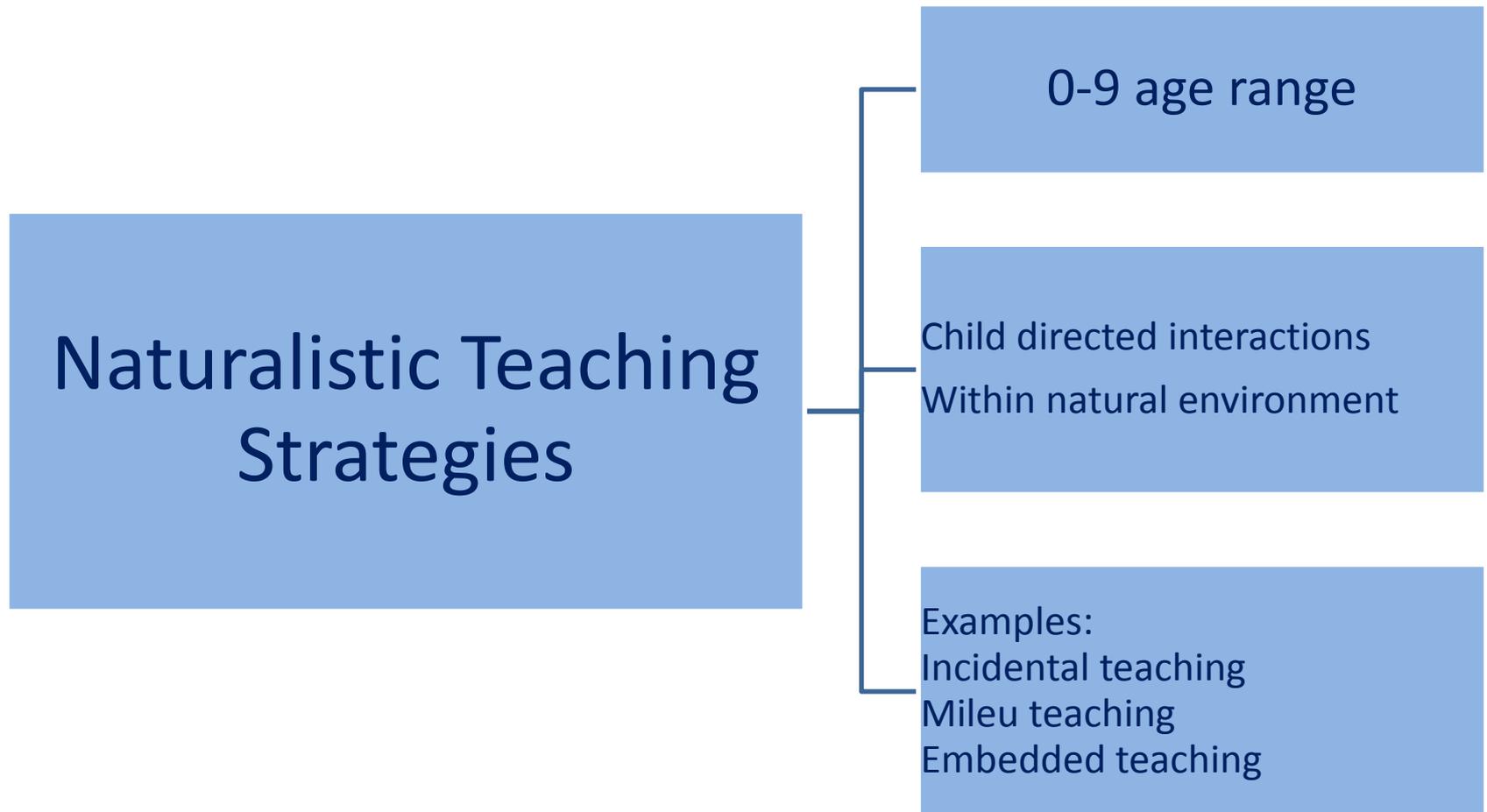


# Peer Tutoring, Social Skills, Modeling: Examples During Small Activities Out of the Bag and Science



# National Standards Report

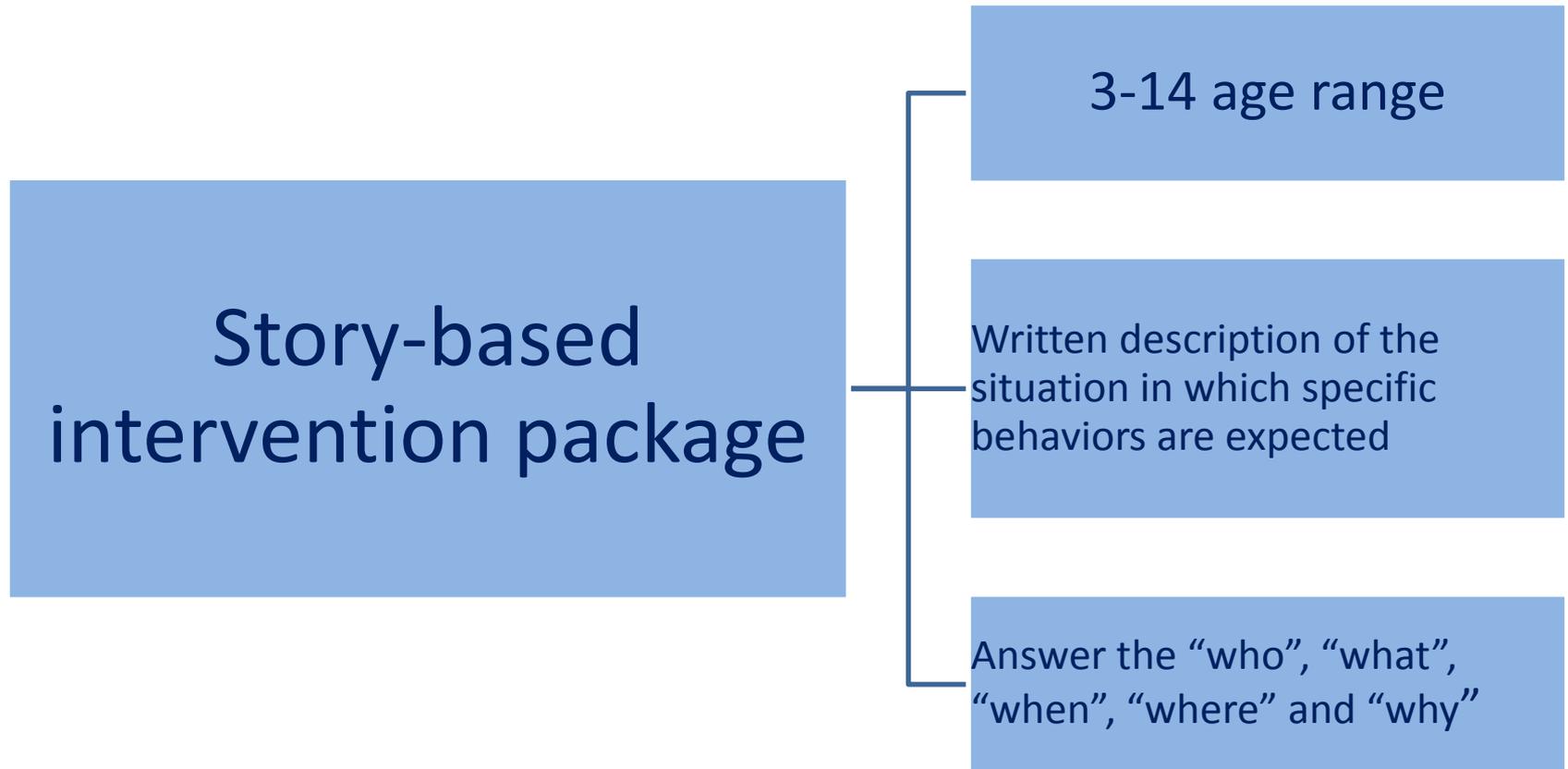
## Established Treatment



# National Standards Report

## Established Treatment

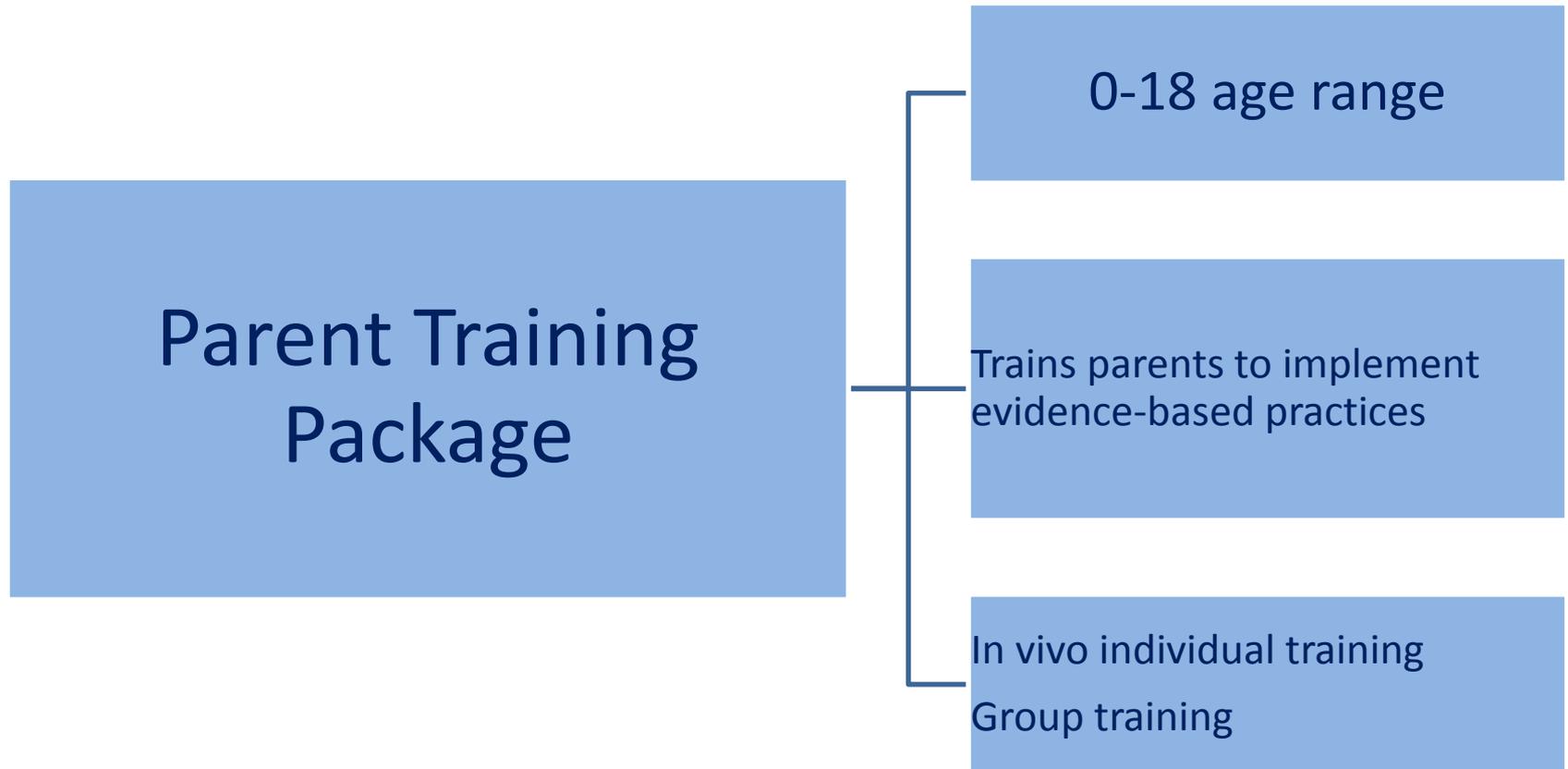
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# National Standards Report

## Established Treatment

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# National Standards Report

## Established Treatment

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### Cognitive Behavioral Intervention

6-14 age range

Focuses on interpersonal skills  
and personal responsibility  
Emotional Regulation

Manualized Cognitive Behavioral  
Programs

# National Standards Report Summary

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## 14 Established Treatments

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**Comprehensive behavioral packages  
have the most evidence**

*[www.nationalautismcenter.org](http://www.nationalautismcenter.org)*

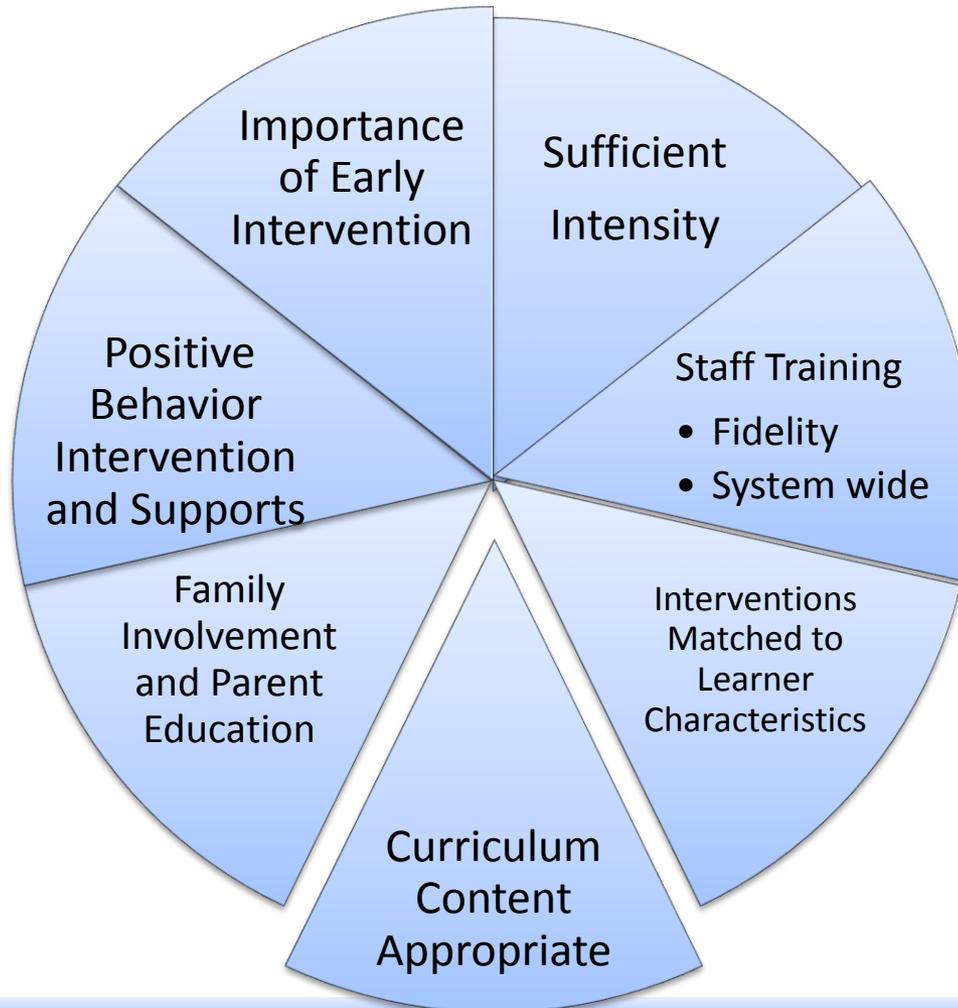
# Evidence-Based Strategies

## *Ideas for School Programs*



# Consistent Themes from the Research

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# Curriculum Should

## Address:

- ✧ Receptive Language Concepts
- ✧ Expressive Language Concepts
- ✧ Spontaneous Language Concepts
- ✧ Academic Skills
- ✧ Social Interaction Skills

## Be Generalized Thru:

### ✧ **Functional Routines**

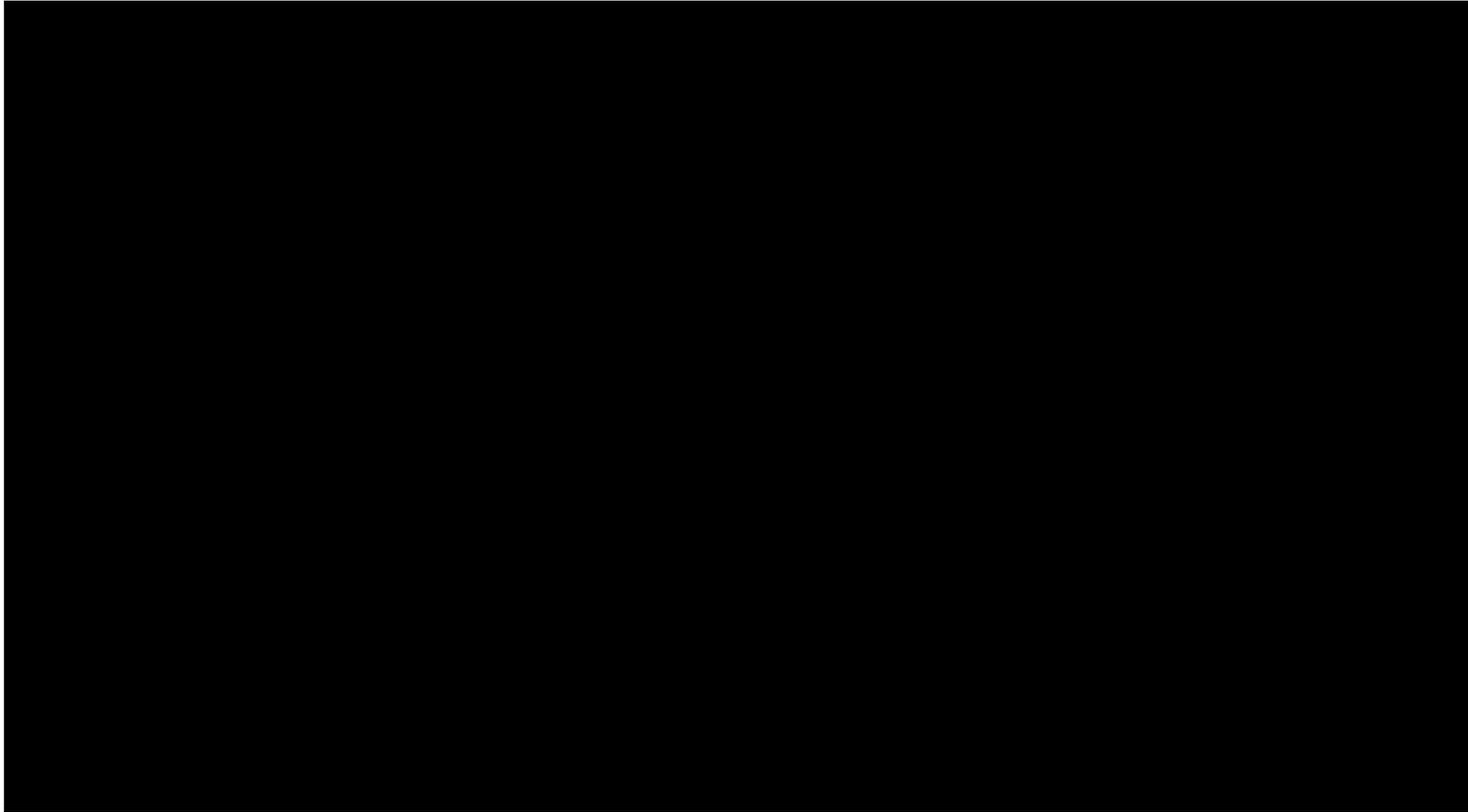
- Preschool Routines
  - Snack, circle, centers
  - Transition
- Elementary School Routines
  - Large group instruction,
  - Transition between classes
- Middle/HS Routines
  - School and Community

# Importance of Functional Routines

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- Links skill acquisition to a functional outcome (Common Core State Standards)
- Focuses on access to the general education curriculum
- Teaches independence

# Grant High School Video



# Teachers Need Tools

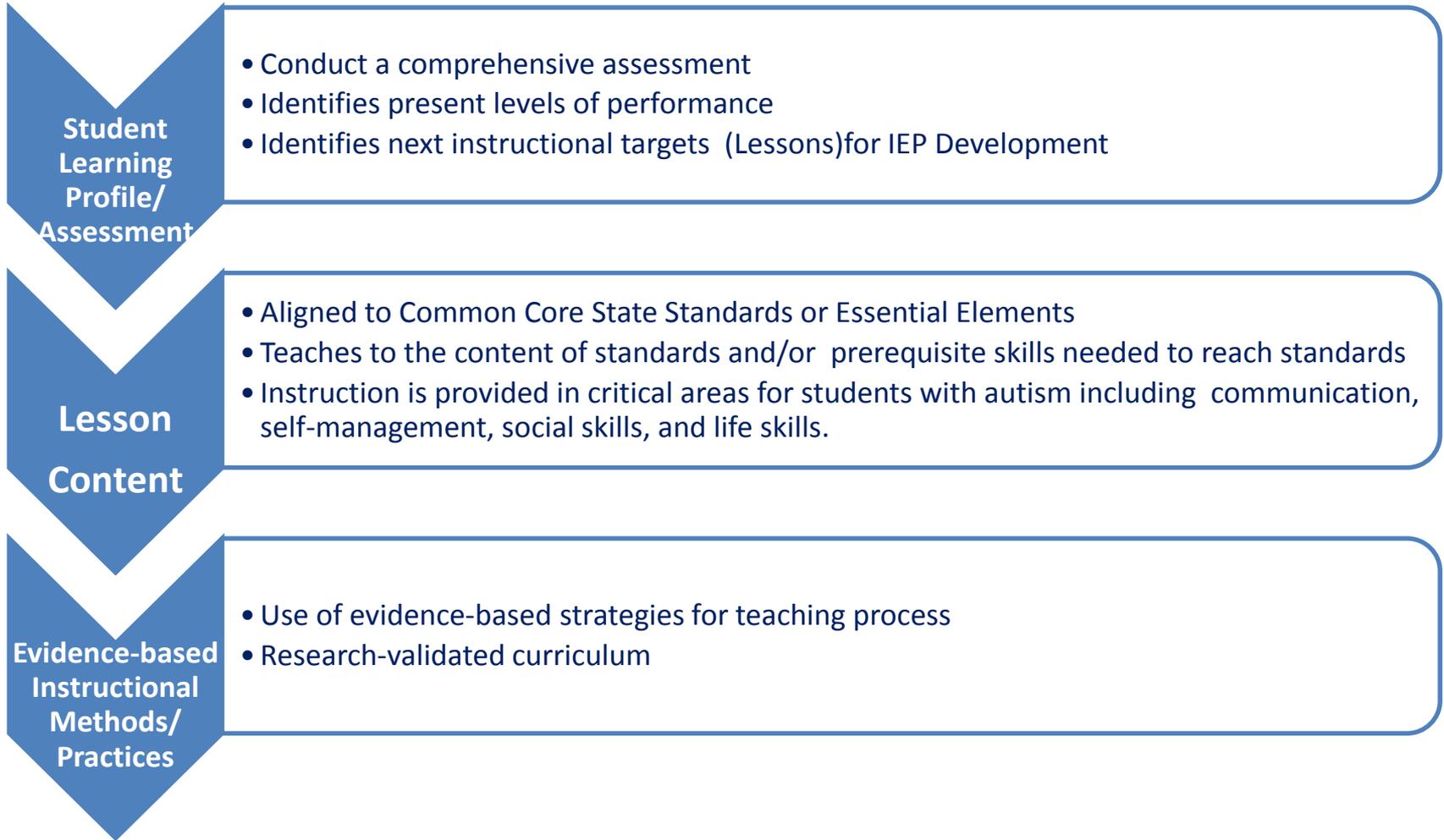
- ✓ Comprehensive Curricula for students with ASD
- ✓ Visual Supports
- ✓ Progress Monitoring
- ✓ IEP Goals
- ✓ Training for General Educators
- ✓ Self-Assessment on Quality Program Indicators
- ✓ Augmentative Communication Systems



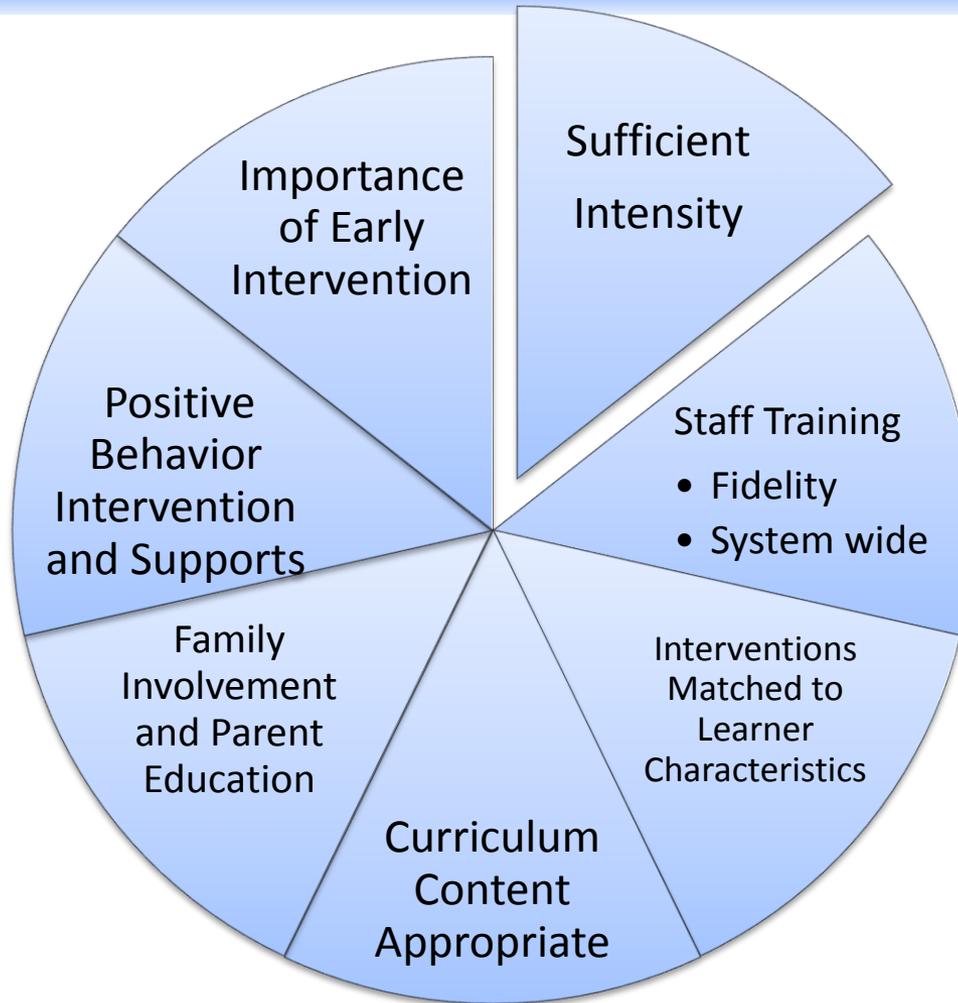
**TEACHER TOOLS**  
General Education Tools for Students  
with Autism Spectrum Disorder

- ✓ Fidelity of Implementation Checklists
- ✓ Lesson Plans
- ✓ Technology
- ✓ Guides to the Common Core
- ✓ Transition Planning Across Grade Levels
- ✓ Post-secondary

# Curriculum, IEP Goals, State Standards, Evidence-based Practices, Instructional Content should work together.....



# Consistent Themes from the Research



# Intensity of Instructional Time

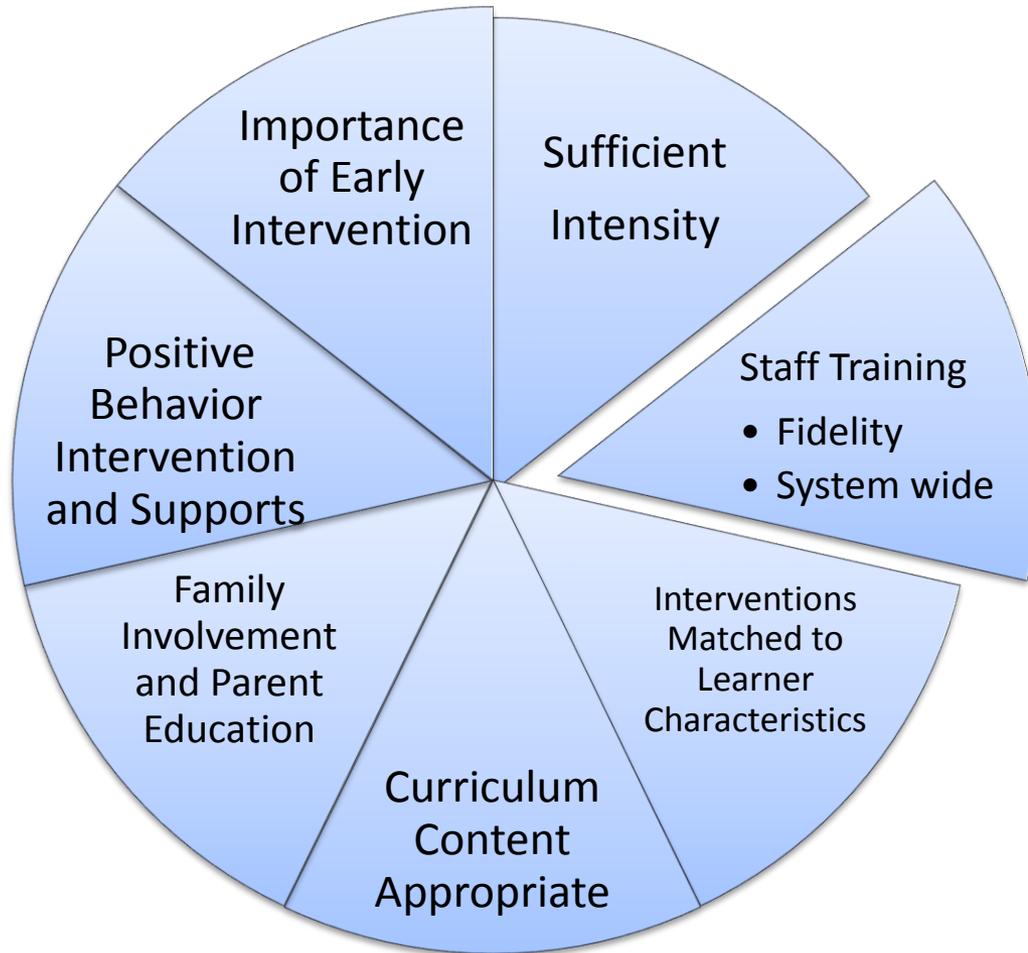
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## Considerations:

- Time of 1:1 instruction is an individual student decision.
- Instruction on routines should be conducted throughout the typical school day to generalize skills learned during the 1:1 direct instruction
- ABA principles can be integrated throughout the student's day.

# Consistent Themes from the Research

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# Research on Professional Development

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- ❑ Content Focus
- ❑ Active Learning
- ❑ Coaching

- To achieve **fidelity of implementation** of behaviorally based curricula, it requires a system-wide response at the local level via in-service training that provides for on-going support (National Autism Center, 2009).
- Research has documented that when teachers are **engaged in active learning** (observation, practice and collaboration with professionals) they are more likely to improve their practice (Lieberman, 1996; Louks-Horsley, Hewson, Love, & Stiles, 1998).
- The best staff training includes **demonstration, coaching and follow-up training**. Bolton & Mayer (2008)

# STAFF Training

- ✧ Fidelity of implementation
- ✧ System-wide
- ✧ On-going support
- ✧ Training should include:
  - Demonstration
  - Coaching
  - Follow-up training





Oregon Program Autism Training Sites and Support



# OrPATS: Oregon Program Autism Training Sites and Support

## Current OrPATS STAFF:

- Joel Arick, PhD
- Darby Lasley, M.S.
- Brenda Nakada, M.Ed.
- Alicia Schneider, M.S.
- Karen Shepherd, M.S.
- Jenny Workman, M.S.
- Kara Magee-Arick, M.S. BCBA
- Jennie Willis, M.S.
- Katherine Procter M.S.

## Parent Training Project:

- Brenda Nakada

## General Education-HFA Project

- Lauren Loos, M.S and Sheila Magee, M.S.

## Oregon Department of Education

- Lisa Darnold

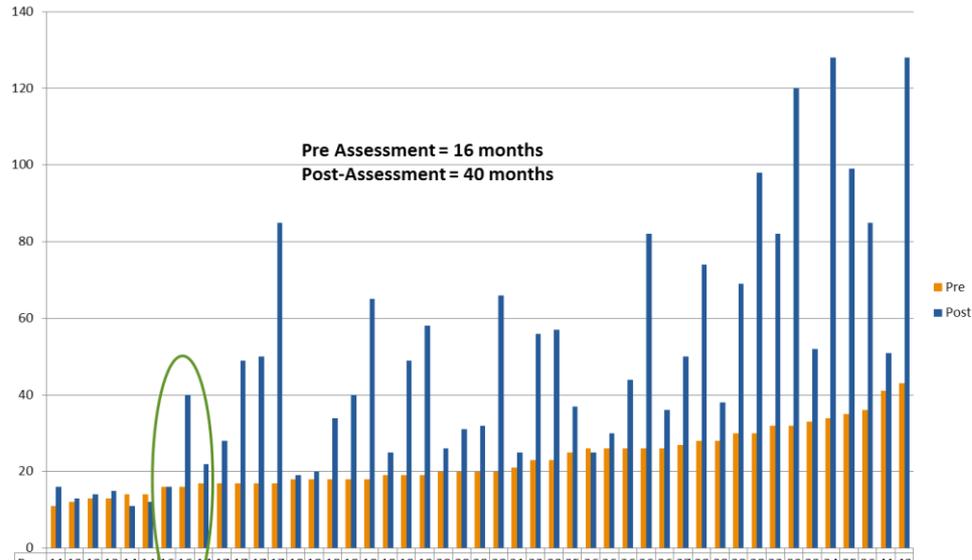
STAR Autism Support, Northwest Regional ESD, Oregon Regional Programs, EI/ECSE Programs and the Oregon Department of Education Collaborate to administrate this project.

# ORPATs: Statewide Training Network

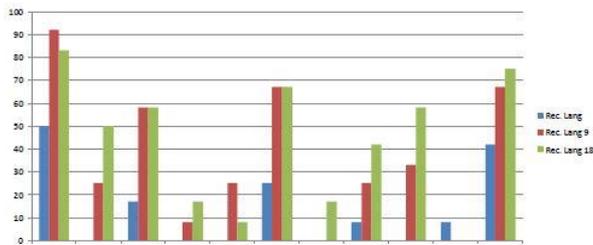
*Established 42 School District Training Sites modeling research-based methods and established a cadre of school district coaches*

Outcome data on student progress collected

(Anick, Young, Poko, Loo, Krug, Gensert and Johnson, 2009)

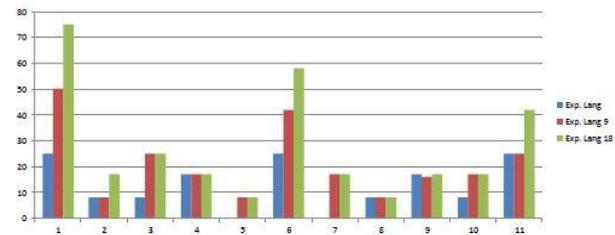


## Educational Assessment Receptive Language



- Following 1 and 2 step commands
- 91% of students made progress from initial assessment to 17 month assessment

## Expressive Language



- Using words to answer questions
- 73% made progress

# Training Process

- ✧ Workshops
- ✧ Training in assessment and program development
- ✧ Classroom consultation
- ✧ Fidelity of implementation checklists



# Individual Student Supports and Planning



***Team members work together to develop student programs and schedules***

# Variety of Research-based Tools Provided



# Example Fidelity Checklists: Preschool/Elem

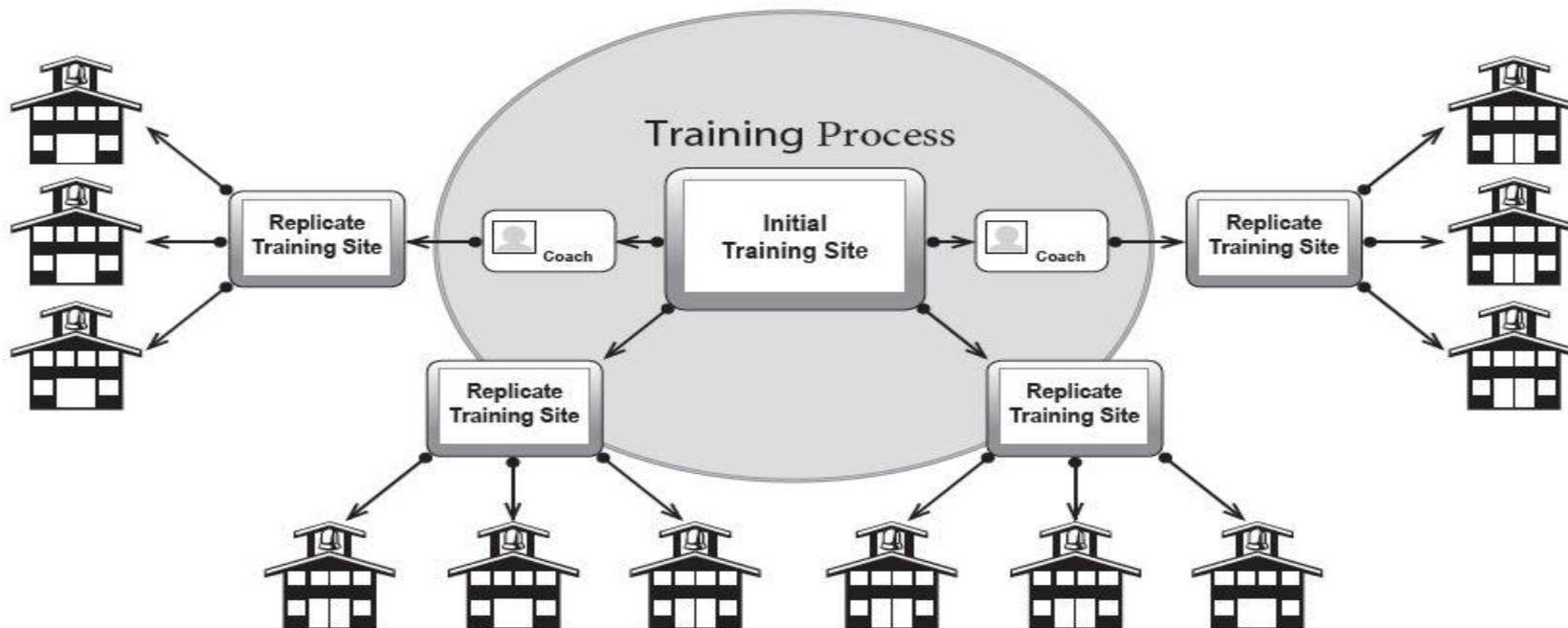
Electronic Checklists now available to easily store and track information for sites.

ORPATS Implementation Checklist												
Staff Standards	Teacher			At least one Instructional Assistant			At least one Specialist			Comments If you need additional space, please use back of this form		
	1	2	3	1	2	3	1	2	3			
<b>ABA Program Planning and Implementation</b>												
Can demonstrate the three behavioral methods (DT, PRT, FR).			X			X			X			
Can manage student behavior using the basic behavioral principles.			X			X			X			
Can manage student behavior using appropriate consequences.			X			X			X			
Can observe antecedents in order to change behavior.			X			X			X			
Can use data to modify DT/PRT/FR programs and report progress.			X			X			X			
Can get child's attention and provide an appropriate cue			X			X			X			
Can describe the use of a functional assessment, behavior plans, and data collection for making decisions to change behavior.			X						X			
Can complete the student learning profile and explain it to parents and others.			X						X			
Can select appropriate DT/PRT/FR programs for each student based on the student learning profile or other curriculum based assessments.			X						X			
Reinforces child at appropriate times to increase appropriate behavior			X						X			
Can teach parents to help their child learn to generalize skills at home.			X						X			
Can modify his/her behavior in order to accommodate the student's behavioral needs (e.g., makes tasks easier when needed, provides needed reinforcers to prevent behavior issues, varies programs as needed).			X						X			
Using ABA programs, can teach 1) receptive language, 2) expressive language, 3) spontaneous language, 4) social interaction and play, 5) functional routines, and 6) preacademic skills. <i>NOTE: if help is needed to teach any of these 6 skill areas, please list the skill where teaching help is needed in the comments section.</i>			X			X			X			
<b>Discrete Trial (DT)</b>												
Can demonstrate DT basic teaching strategies (e.g., cue/response/consequence, correction procedures, and data collection).			X			X			X			
Can demonstrate DT introduction procedures for introducing new target skills during instruction.			X			X			X			
Can demonstrate DT advanced strategies (e.g., programming, generalizing skills, fading)			X			X			X			
Can demonstrate how to implement DT initial level programs (e.g., object imitation, matching, receptive labels)			X			X			X			
Can demonstrate how to implement DT mid level programs (e.g., accelerated labels, identifying people, emotions)			X			X			X			
Can demonstrate how to implement DT advanced level programs (e.g., functions of objects, opposites, academics)			X			X			X			-not often needing this level but would be fine if they did

# Empower School Districts

## Administration, Instructional Staff, Parents, Students

### Training Site Development Process



#### Training Site

Organized to model evidence-based practices, train staff, and serve students. These training sites model the use of effective practices throughout the student's instructional day.



#### Coach

A coach is available to assist with the training of others and replication of the program at other locations.



#### Classroom

Classroom staff attend workshops, visit training sites and collaborate with coaches as necessary.

# Additional Components of a District Wide Model

## ❖ ASD Program Self-Assessment

Obtain further information on the Self-Assessment at: [sa.orpats.org](http://sa.orpats.org)

## ❖ General Education Training

❖ An On-line resource to train General Educators

# ASD Program Self-Assessment and Action Plan

*Developed by the Oregon Commission on  
Autism Spectrum Disorders*

***Implementation Collaboration:***

- Oregon Department of Education
- Oregon Program Autism Training Sites and Supports (OrPATS)
- Oregon Regional Programs

A copy of the Self-Assessment and Action Plan and Oregon Guidelines are available at [www.sa.orpats.org](http://www.sa.orpats.org)



Oregon Commission on ASD



Oregon Program Autism Training Sites and Support



OREGON

Department for  
**Education**

# On-line Self-Assessment and Action Plan:

<http://sa.orpats.org/home>

Oregon ASD Program Self-Assessment and Action Plan

On-line Data Entry and Reporting System

 [Sign in](#)



## Sign In

User Name

Password

[Forgot password?](#)

Sign in

## The Oregon ASD Program Self-Assessment and Action Plan

This Assessment was developed by the Oregon ASD Commission to assist school districts with the following:

- Analysis and review of current delivery of services and practices;
- Determine the level of implementation of critical evidence-based practices;
- Develop an action plan for system improvements.

This project is a collaboration between the Oregon Department of Education, Oregon Autism Spectrum Disorders Commission and Oregon Program Autism Training Sites and Supports.,



Oregon Commission on ASD



Oregon Program Autism Training Sites and Support



Department for  
**Education**

# On-line ASD Program Self-Assessment and Action Plan

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- ✧ Conduct a Program Self-Assessment to help identify training/resource needs
  - Assesses level of implementation
  - Identifies priority training/resource needs
  - Team develops an Action Plan
  - On-line system provides assessment reports
- ✧ A copy of the Self-Assessment protocol is available at [sa.orpats.org](http://sa.orpats.org) (click “About Us”)
- ✧ Logins for the Online Assessment are available by e-mailing [information@orpats.org](mailto:information@orpats.org)
- ✧ Demonstration of the System



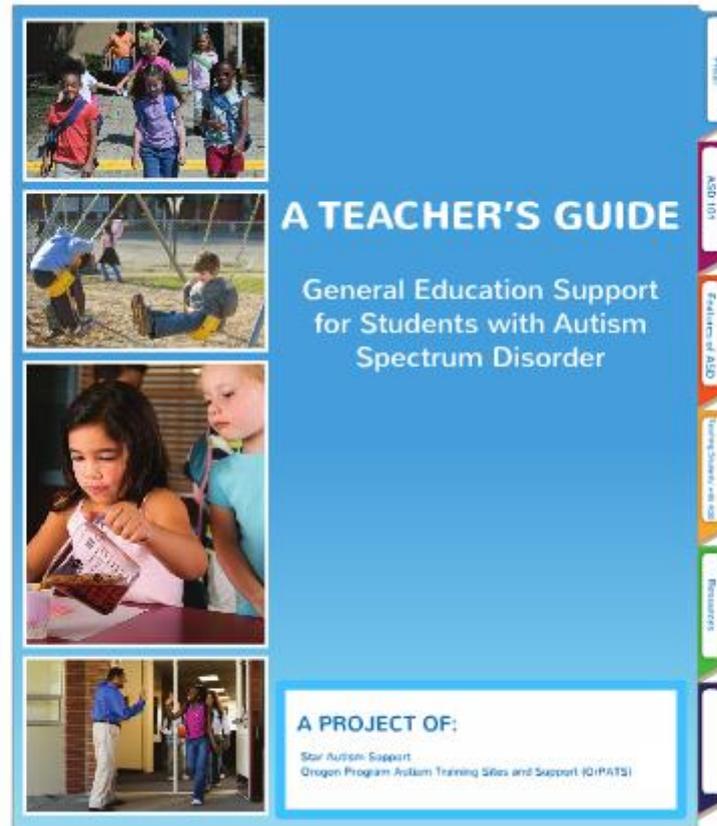
Oregon Program Autism Training Sites and Support

# *Supporting Educators Serving Students with Autism Spectrum Disorders in General Education Settings*

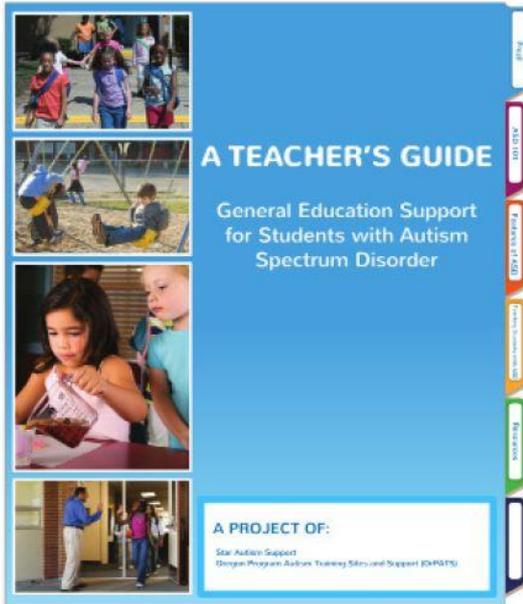


[www.orpats.org](http://www.orpats.org)

# On Line Training for Teachers



# The Training Modules



## Module 1

Characteristics of ASD and how these characteristics affect learning



## Module 2

Information about effective teaching strategies

### Environmental Structure

- Supports for Transitions
  - Picture Schedule
  - Simple Written Schedule
  - Written Schedule by Time
  - Written Schedule Template
- Work Tasks
  - How to do my work
  - School Project
- Organizational Systems
  - Personal space
  - Clean Desk
- Task Completion
  - Stoplight

### Reinforcement Strategies

- Token Systems
  - Token Board
- Choice Boards
  - Choice Wheel

### Social Skills

- Social Supports
  - Hello Game
  - Turn Taking
- Rule Reminders
  - CircleRules
  - prez\_i\_d1-FirstThen

## Downloadable Forms

# Orpats Website and Virtual Resources

## www.orpats.org



Oregon Program Autism Training Sites and Support

- HOME
- ABOUT ORPATS ▾
- HISTORY ▾
- TRAINING ▾
- CONTACT ▾
-  VIRTUAL RESOURCES

## OrPATS Virtual Resources

### Webinars, Multimedia and Downloads

Participating in our training sessions allows you access to specific online training tools. If you received a login for either our Teacher Training Prezi portal or our Webinars, enter them below to access our virtual training tools. If you have attended a workshop and did not receive credentials please contact [misten.daniels@starautismsupport.com](mailto:misten.daniels@starautismsupport.com) for details.

Login

User Name

Password

**Submit**

### Multimedia and Downloads

OrPATS (Oregon Program Autism Training Sites & Supports) has created an online professional



**A TEACHER'S GUIDE**  
General Education Supports for Students With Autism Spectrum Disorder

**About this Workbook**  
This online workbook was constructed for organizing relevant material (using downloadable forms) available on this website.

# Fall OrPATS Workshops

<http://www.orpats.org/training/get-training/scheduled-workshops/>

- ✧ The following workshops for instructional staff are being offered in collaboration with each of the eight Oregon Regional Programs:
  - Implementing evidence-based strategies for pre-school/elementary students
  - Implementing evidence-based strategies for secondary/post-secondary students
  - Implementing a parent training program for early childhood students
  - New Autism Specialist/Consultant Training
- ✧ Workshop dates/times/locations are being posted to the Orpats.org website and most regional program websites.
- ✧ Release time reimbursement funds are available through OrPATS to attend these workshops

# New Training and Support Now Available

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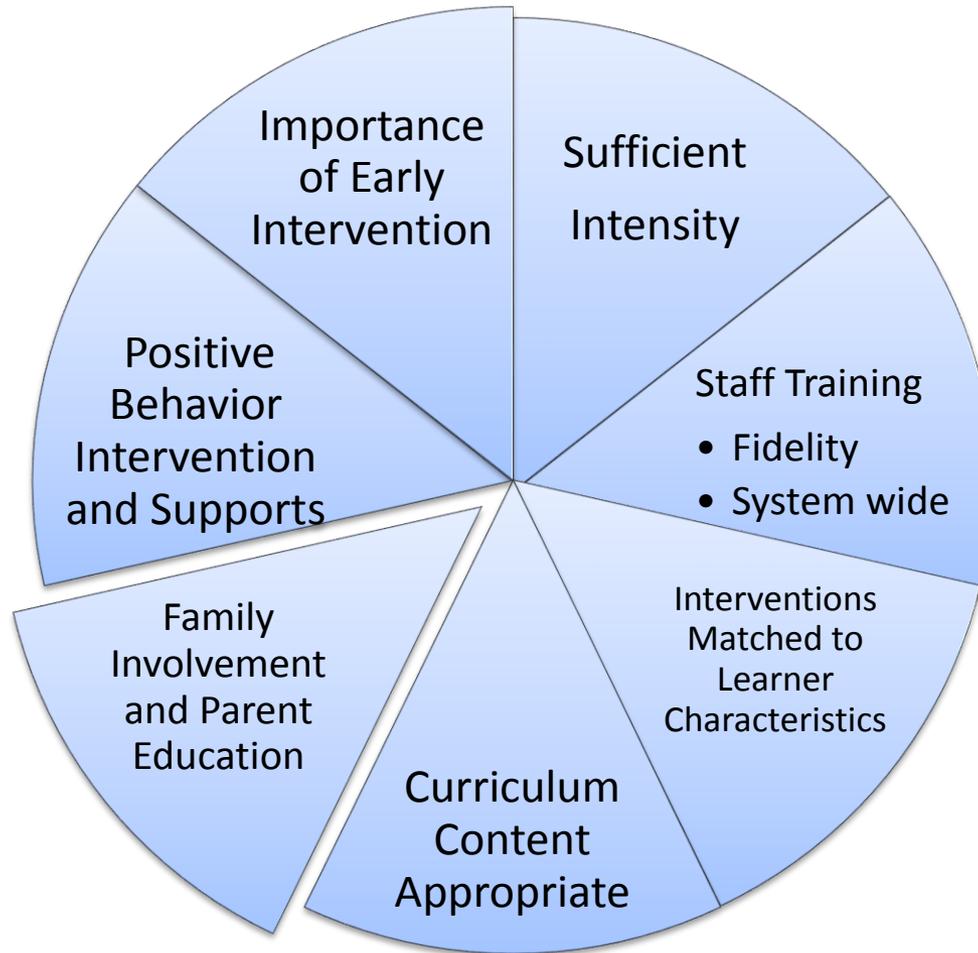
- Autism Teams Project
  - 1 Team from each Region
- New Autism Specialist/Consultant Training

For further information contact the OrPATS Autism Specialist for your region listed on the OrPATS website

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# Consistent Themes from the Research

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# Parent Involvement

## National Autism Center (2009):

*“The values and preferences of parents, care providers, and the individual with ASD should be considered.”*

## National Research Council (2004):

*Characteristics of effective interventions include “inclusion of a family component, including parent training.”*



# References

- Arick, Young, Falco, Loos, Krug, Gense and Johnson (2003). Designing an Outcome Study to Monitor Progress of Students with Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 18 (2), 75-87.
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