

**Core Challenges and Learning Styles
of Children with Autism Spectrum Disorders:
Practical Intervention Strategies**

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Our Focus

1. Understand the importance of incorporating learning style into the general structure of the classroom or intervention setting
2. Understand how to promote a more balanced learning style profile for the child in the classroom and intervention settings
3. Understand the relationships among core challenges, learning style, emotional regulation and behavior challenges in ASD
4. Provide educational-intervention guidelines and priorities



**“You have to be smart enough
to listen to the kids”**



What is Important Here?

1. Definition of Learning
2. Core Challenges
3. SCERTS Components
4. Learning Style Profile Components
5. Common Sense



How do you define “Learning”?

What is learning?

- A child will have learned a skill when he/she is able to apply the skill across persons, places and circumstances; knowing how and when to use the skill that has been learned
- Independence
- “Who is doing the thinking?”



Core Components of SCERTS

Prizant, Wetherby, Rubin, Laurent & Rydell, 2006

Developmentally sequenced Goals and Objectives:

Social-Communication

Emotional Regulation

Transactional Support



SAP Domains and Components

Social Communication

- Joint Attention
- Symbol Use

Emotional Regulation

- Self Regulation
- Mutual Regulation

Transactional Supports

- Interpersonal
- Learning



**Core Challenges Based on
SCERTS Partner Stages**

SCERTS Model (Prizant, Wetherby, Rubin, Laurent & Rydell, 2006)

Social Partner – pre-symbolic means to communicate (gestures and vocalizations); behavioral (sensory-motor) strategies for emotional regulation

Language Partner – early symbolic means to communicate (speech, pictures/picture symbols, signs); language strategies for emotional regulation

Conversational Partner – sentence and conversational level discourse to communicate; developing metacognitive strategies for emotional regulation



**Learning Style Profile for Children
with Autism Spectrum Disorders**

Rydell, 2012

1. 10 Learning Style components that represent the greatest challenges
2. Incorporates Learning Style into the classroom and intervention
3. Provides a guideline for intervention priorities
4. Provides a direction for goals and objectives
5. Provides strategies for transactional supports



Sound Familiar?

- 1) Does your child pay more attention to objects than people?
- 2) Does your child have difficulty learning the social-communication skills modeled by others?
- 3) Does your child receive social cues from only one person at a time?
- 4) Does your child interact with objects and/or people in a rigid/repetitive/inflexible manner?
- 5) Does your child form his/her own agenda and insist that others follow it?
- 6) Does your child respond to other people, but rarely initiate or maintain social interactions?
- 7) Does your child primarily use scripted or memorized verbal phrases for communication?
- 8) Does your child have difficulty focusing his/her attention to complete a task?
- 9) Does your child respond to others only when they are at a close distance?
- 10) Does your child resist transitions in activities, events, locations, and/or routines?



Relationship Between Emotional Regulation and a Child's Learning Style

1. "My child is not being naughty"
2. Anxiety, nervousness, dysregulation
3. More time spent coping is less time spent learning
4. "Behavior problems" can be explained, at least in part, by a child's learning style challenges



Considerations for Start-Up

1. Conduct developmental/behavioral assessments (e.g., SCERTS Assessment Process; Prizant, Wetherby, Rubin, Laurent, & Rydell, 2006)
2. Conduct LSP (Rydell, 2012) in naturalistic settings
3. Determine educational and intervention priorities for intervention
4. Set up Joint Action Routines



Joint Action Routines

- Joint action routines provide a game plan for learning
- The “glue that sticks us together”
- Always ask: “Learning in relation to what?”
- What are “we” doing?



JAR Components

(Prizant, Wetherby, Rubin, Laurent & Rydell, 2006)

Components:

- Develop a common, unifying theme (e.g., games, snack, construction, etc)
- Interactions support reciprocity (i.e., partners' actions are in response to each other)
- Roles and responsibilities are exchanged – shared control (e.g., following each other's lead)
- Actions are sequenced (i.e., logical plan of action)



JAR Components (cont.)

- Multiple repetitions (i.e., multiple opportunities for learning and practicing)
- Active learning style is promoted (i.e., child becomes active problem-solver to know **how and when** to use the skills being taught)
- Turn-taking opportunities provided (i.e., multiple exchanges among partners)
- Intrinsic motivation (i.e., initially based on child's interest)



Learning Style Profile 10 Components

Assists us in determining:

- How does the child learn?
- What does and does not make sense to the child?
- How do we determine goals and priorities?
- Do our teaching strategies and classroom structure incorporate our understanding of core challenges, learning style, emotional regulation and behavior challenges?
- How do we design our interventions based on core challenges and learning styles of children with ASD?



1. Object vs People Oriented

Primary Focus on Objects

Primary Focus on People



Manipulation of objects
Sensory seeking
I see, I want, I get....

Looks up and around
Notices and is aware of others
What are we doing?

(Allen, Rapheal)

1. Establishes joint attention
2. Establishes proximity with others
3. Engages with others



Object vs. People Oriented

Transactional Support

- Present objects primarily during social/reciprocal interactions (Look up and around)
- Interactions require social engagement (What are "we" doing?)
- Establish a social priority (Are we the most important thing in the environment?)
- Objects/tasks rarely given to the child without a social agenda (Learning in relation to people)



2. Learns Through Social Modeling, Demonstration and Rehearsal

Little or no response to:

Responsive to:



Partner's demonstrations
Partner's modeling
Partner's rehearsals of
social/communication

Partner's demonstrations
Partner's modeling
Partner's rehearsals of
social communication

1. Responds to social /situational cues
2. Learns through social imitation
3. Establishes social reciprocity

(Jonathan hoop, Nathan sister)



Learns through Social Modeling, Demonstration and Rehearsal

Transactional Support

- Present social /situational cues through partner's models (watch partner for cues)
- Social imitation is based on models, demonstration, rehearsal (less verbal prompting or adult directive verbal instruction)
- Establish social reciprocity (activities emphasize social engagement and collaboration, not skill imitation)



3. Attaining Social Cues from Multiple Partners

Attains social cues primarily
from one partner in a setting

Attains social cues from
multiple partners in a setting



Watches and learns from
one partner at a time
(e.g., adult directed)

Watches and learns from
multiple partners at one time
(e.g., contextual learning)

1. Responds to social/situational cues from multiple partners
2. Learns through social imitation with multiple partners
3. Establishes social reciprocity with multiple partners

(Twins cars, Jaden)



Attains Social Cues from Multiple Partners

Transactional Support

- Present social/situational cues through multiple adult/peer models (watch *group* for cues)
- Social imitation is presented with multiple social models, demonstrations, rehearsals (less verbal prompting or adult directive verbal instruction)
- Present social reciprocity opportunities with multiple partners (activities emphasize group engagement/collaboration)



4. Level of Flexibility with Objects, Activities and People

Rigid and Repetitive

Flexible and Spontaneous



Ritualistic
Rote learning
Rule-based interactions
Need for sameness

Able to:
Vary
Modify
Adapt to change

(Allen frisbee, Kyle hot wheels
You-Tube)

*Engages and maintains
interaction with a partner(s) in:*
1. New environments
2. Varied agendas/themes
3. Modified circumstances



Level of Flexibility with Objects, Activities and People

Transactional Supports

- Subsequent activities should vary from the original activity by presenting them in/at a different setting, time, place or circumstance (activities should not be presented exactly the same way each time)
- Subsequent activities should vary from the original activity by presenting them with a slightly varied theme, sequence or outcome
- Subsequent activities should be modified from the original activity by presenting them with varied objects, attributes of objects or persons



5. Shared Control

Needs to be in control
of the agenda

Shares control of the agenda



A child will engage and participate in a social activity with a partner only when the child's agenda and expectation is being met

A child will engage and participate in a social activity when the agenda is equally established and shared by the child and partner(s)

1. Engages in an agenda established by a partner
2. Spontaneously follows partner(s) lead and agenda
3. Spontaneously shifts/shares the lead and agenda with a partner(s)

(William, Ben baseball)



Shared Control

Transactional Support

- Present activities with the agenda initially established by the "coach" (child will not go first)
- Present activities in which multiple partners are required to attain social, communication, behavioral cues and expectations based on the coach's model and demonstration (partners follow "coach's" lead)
- Shift the control of the agenda to the child *after* multiple partners have had an opportunity to be "coach" (child will direct the group's agenda based on previous "coaches'" models/demonstrations and not an adult's verbal directives and prompts)



6. Executive Function

Difficulty establishing and maintaining focus in order to complete a plan of action

Able to make and execute a logical plan of action in logical, sequenced steps to its completion



Impulsive actions or comments
Rapid loss or change of focus
Unrelated comments
Tangential behavior

Actions are based on plan of action
Plan of action is maintained
Actions/comments are relevant
Actions are logical and sequenced

1. Participates in rule-based interactions
2. Independently follows established plan of action
3. Completes plan of action in a timely manner

(Allen bowling, Joshua 5 questions)



Executive Function

Transactional Support

- Present and model activities that consist of clear visual cues, organization and guidance
- Present activities with very little verbal direction or cueing so that the child understands the plan, sequence and outcome based on the presented visual structure (e.g., 5 questions of structure)
- For subsequent turns, shift the execution of the logical plan to the child without verbally cueing or prompting each sequential step or outcome (so that the "child is doing the thinking")



7. Distal Learning

Are we the most important thing in the child's environment only at close range?

Are we still the most important thing in the child's environment even at a distance?



Acts on and responds to a partner or situational cues only at close distances

Acts on and responds to a partner or situational cues at gradually increasing distances

(Joshua distal, Twins walking)

1. Establishes joint attention at a distance
2. Engages with a partner (s) at a distance
3. Processes information at a distance



Distance Learning

Transactional Support

- Present activities, tasks or objects at systematically increased distances from the child
- Present social partners and models at systematically increased distances (partners still need to be the most important thing in the child's environment at increased distances)
- Present verbal directions, visual cues, examples, etc. at systematically increased distances



8. Interaction Style

Initiating	Maintaining	Responding
↔ ↔		
Requesting Directing Greeting Showing Giving	Social Commenting Exclaiming Labeling Turn-taking Reciprocal interactions	Answering questions Responding Contingent commenting Following directions Receiving
(Matthew gym; Matthew prompt) <i>Engages and maintains a balanced interaction profile to:</i> 1. Initiate interactions 2. Maintain interactions 3. Respond to a partner		



Interaction Style

Transactional Support

- Present activities that facilitate opportunities for the child to initiate social-communication interactions (including social-pragmatics) based on multiple partners' models and demonstrations (not as the result of verbal direction nor cueing)
- Present activities that facilitate opportunities for the child to initiate social-communication interactions (including social-pragmatics) based on multiple partners' models and demonstrations (not as the result of verbal direction nor cueing)
- Present activities that facilitate opportunities for the child to initiate social-communication interactions (including social-pragmatics) based on multiple partners' models and demonstrations (not as the result of verbal direction nor cueing)



9. Verbal/Symbolic Communication

Rigid and scripted	Flexible and Spontaneous
↔	
Ritualistic Inflexible Rotely learned Cued by partner	Generative Flexible Talk about what you know Cued by social partner/context
(Teddy bball; Geoffrey trains) 1. Generates multiple word utterances 2. Systematically varies utterances based on social cues and context 3. Independently communicates with a partner(s) based on social models, cues and context (knowing how and when to communicate)	



Verbal/Symbolic Communication Style

Transactional Support

- Generate and present activities that include and represent a variety of people, action, object, location and attribute (concepts) semantic components
- Systematically vary the components such that the child is attending to, and focused primarily on the variations of components being presented (minimal language modeled or taught at this time)
- *Once the child is familiar* with the various components of the activity, the partners *now* verbally model the component labels (words) and systematic variations (generative word combinations) which represent people, action, object, location and attribute combinations represented in the activity (verbal models symbolize what the child already knows)



10. Transitions

Difficult

Child blocks/ignores partner's attempts to change activity, event, or location

Difficulty shifting attention from current to upcoming activity, event or location

(Cindy transition); Joey helicopters)

Fluid

Shifts to a new activity, event or location in a cooperative, fluid manner

Anticipates and shifts attention to both preferred and less preferred activities

1. Establishes awareness of partner(s) shifting attention
2. Anticipates shifting to new circumstances
3. Follows social/situational cues for transitions independently



Transitions

Transactional Supports

- Establish a clear signal that a transition is imminent (e.g., object, visual cue, verbal, etc)
- Provide a period of time for the child to shift attention and establish distal joint attention to the situational cues of the partner models and social context
- Provide a transition procedure in which multiple partners (social models) systematically transition prior to the child in order to establish a social group expectation ("What are we doing?")



Thank you!

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