



OCALI

A Comprehensive Framework for Supporting Individuals with Autism

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A PROJECT OF THE
 educational service center
of Central Ohio
Funded by the Ohio Department of Education, Office for Exceptional Children

Core Deficits of Autism Spectrum Disorders

- Social
- Communication
- Repetitive Patterns





Associated Features


- Sensory
- Motor
- Cognitive
- Emotional Vulnerability
- Medical and Biological Factors

Comprehensive Program Planning


- Identifies the behaviors that result from the expression of the core deficits and associated features
- Identifies the individual's strengths and affinities
- Identifies interventions/supports designed to address identified characteristics
- Allows the use of appropriate interventions/supports throughout the individual's day

4 Steps to Designing a Comprehensive Intervention Plan

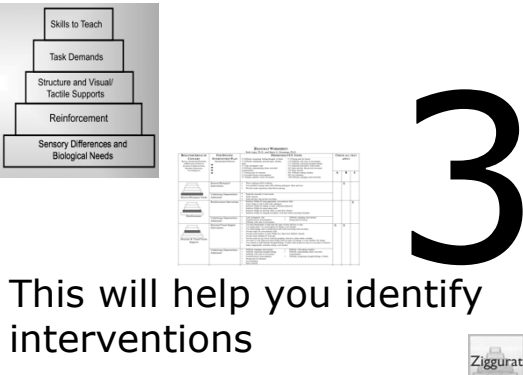
			
1	2	3	4
Characteristics		Design	Implement

 **1**

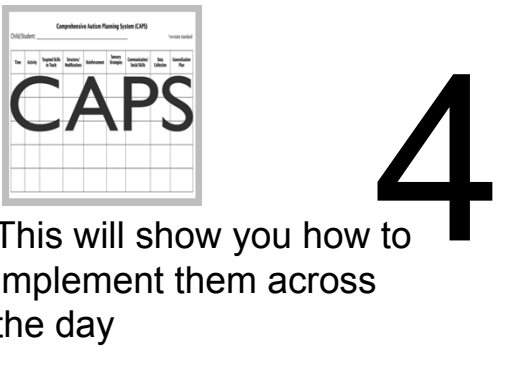
This will help you to see the autism

 **2**

This will show you an individual's strengths and skills



This will help you identify interventions



This will show you how to implement them across the day

A Quick Look at Phillip

- About Phillip
 - Employed part-time at a local factory with minimal support from job coach
 - Struggles socially within the job setting
 - Expects perfection from himself and co-workers
 - Responds well to routine



9

Assessing Characteristics

Underlying Characteristics Checklist (UCC)

... an informal assessment tool designed specifically to identify characteristics across a number of domains associated with ASD for the purpose of intervention. It is not designed for diagnosis.

Aspy, R., & Grossman, B., 2007, p.51

10

Additionally, the UCC...

- Provides a “snapshot” of how autism is expressed for an individual
- Can be completed by multiple respondents
- Provides a tool for assessing progress/change

11

The UCC Domains

- Social
- Restricted Patterns of Behavior, Interests, and Activities
- Communication
- Sensory Differences
- Cognitive Differences
- Motor Differences
- Emotional Vulnerability
- Known Medical or other Biological Factors



12

Prioritizing Items from UCC and ISSI

- What is the vision for the future in the areas of employment and community participation?



18

Prioritizing Items from UCC and ISSI

- What can we do now to work towards that vision?
- Use the UCC and ISSI information...



19

Phillip - Prioritized Areas

- What is the vision for the individual's career and/or employment (long-term plan)?
 - Competitive employment in a business that incorporates special interests and that allows for opportunity of "moving up the job ladder"
- What skills need to be developed NOW to reach that vision?
 - Communication skills, social skills, emotions

20

Phillip - Prioritized Areas

- In what settings will the individual need to be able to function in order to reach this vision?
 - Community and work environments

- Which UCC areas have the greatest impact on the ability to function in the targeted settings?
 - Communication skills, social skills, sensory differences, emotional vulnerability, restricted patterns of interest

21

Phillip - Prioritized Areas

- Which UCC areas would have the greatest impact on increasing independent functioning?
 - Communication skills, social skills, emotional vulnerability

- Which UCC areas would have the greatest impact on his/her sense of satisfaction and success in his/her career?
 - Communication skills, social skills, emotional vulnerability, restricted patterns of interest

22

Phillip's Priorities

- Social
- Restricted patterns of interest
- Communication
- Sensory
- Emotional vulnerability

Global Intervention Plan Instructions
Beth Arny, Ph.D. and Barry G. Greenman, Ph.D.

1. Prioritize the UCC areas:	Sensory Differences
2. List the UCC areas that are most important to the individual's success and well-being.	Emotional Vulnerability
3. List the UCC areas that are most important to the individual's success and well-being.	Restricted Patterns of Interest

Consider the following questions:

- What is the vision for the individual's career and/or employment? (long term plan)
To be competitively employed in a business that incorporates special interests and that allows for opportunity of "having up the ladder"?
- What skills need to be developed NOW to reach that vision? (short-term plan)
Communication skills, social skills, emotions
- In what settings will the individual need to function in order to reach this vision?
Community and work environments
- Which UCC areas have the greatest impact on the ability to function in the targeted settings?
Communication skills, social skills, sensory differences, emotional vulnerability, restricted patterns
- Which UCC areas would have the greatest impact on increasing independent functioning?
Communication skills, social skills, emotional vulnerability
- Which UCC areas would have the greatest impact on his/her sense of satisfaction and success in his/her career?
Communication skills, social skills, emotional vulnerability, restricted patterns of interest

List prioritized areas below. Transfer to the **Areas of Concern** section of the Zigzagger if applicable.

Social skills	Sensory Differences
Restricted patterns of interest	Emotional vulnerability
Communication skills	

23

Phillip's Priorities

ZIGURAT WORKSHEET
Ruth Aspy, Ph.D., and Barry G. Grossman, Ph.D.

BEHAVIOR/AREAS OF CONCERN	FOR SPECIFIC INTERVENTION PLAN	PRIORITIZED UCC ITEMS
Social, Attention/Partnership, Actions, Communication, Senses, Executive, Vocabulary	Operational Behavior	#1 Difficulty engaging thoughts/feelings of others #3 Difficulty maintaining personal space, intrude others #5 Lacks reciprocity rule #9 Difficulty understanding others nonverbal communication #12 Strong need for sameness #14 Executive/interne pre-occupations #17 Displays repetitive motor movements

- Move prioritized areas to Ziggurat Worksheet

24

Phillip's Priorities

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- Move prioritized UCC items to Ziggurat Worksheet

25

Characteristics

- Social
- Communication
- Repetitive Patterns

Associated Features

- Sensory
- Motor
- Cognitive
- Emotional Vulnerability
- Medical and Biological Factors

Interventions

Skills to Teach

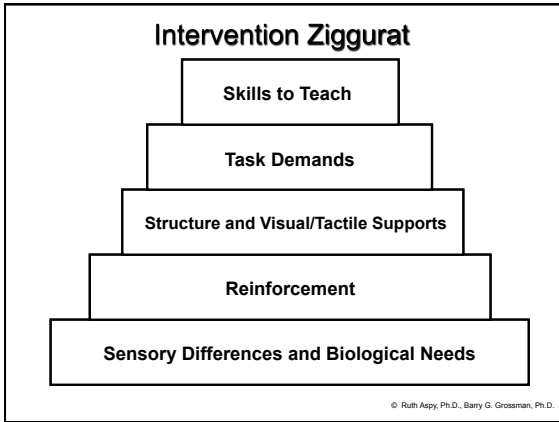
Task Demands

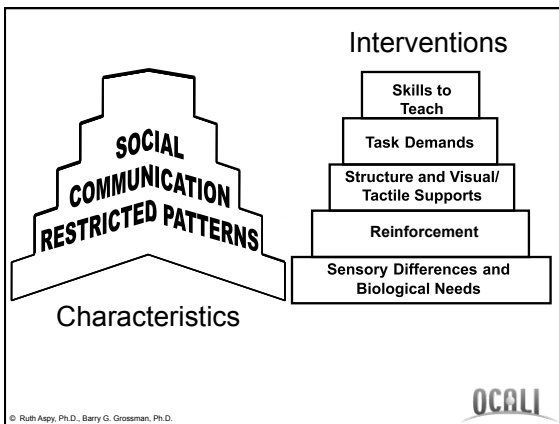
Structure and Visual/
Tactile Supports

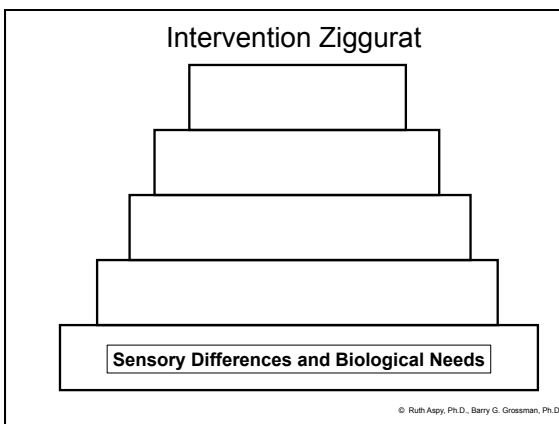
Reinforcement


Sensory Differences and
Biological Needs

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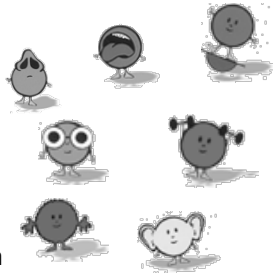







Sensory Issues

- Smell
- Taste
- Touch
- Visual Input
- Auditory
- Vestibular (balance)
- Proprioception (body awareness)




Myke Daily 1998



The Power Senses

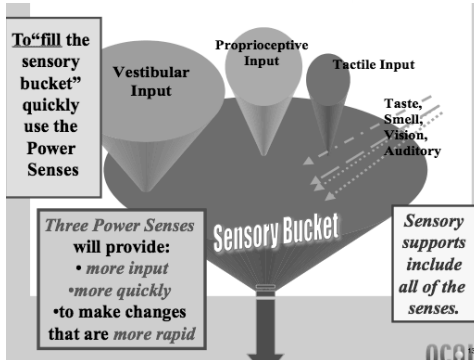
- Tactile
- Vestibular
- Proprioceptive



These systems will provide:
More input
More quickly
To make changes that are more rapid

Filler, 2007

33




To "fill the sensory bucket" quickly use the Power Senses

Three Power Senses will provide:

- more input
- more quickly
- to make changes that are more rapid

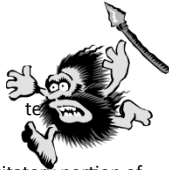
Sensory supports include all of the senses.



Quick Review of Power Senses

Protective System

- Activates "Fight, Fright, or Flight"
- Born with this system- "Primal"
- Stimulated by light touch, pain,
- Processed through the emotional, excitatory portion of the limbic system
- Not a cognitive response




36

Discriminative – Pressure touch

- Deep touch/pressure, and vibration
- Activates Parasympathetic System
- Calms and organizes
- Allows for more cognitive
- Helps us learn and think




37




Proprioceptive System

Muscles, joints, and tendons provide a person with a subconscious awareness body position via the feedback from receptors in the muscles, tendons and joints



38


Proprioceptive System



Motor Planning


Awareness of body in and space without constant monitoring

time visually




39

Vestibular System




The vestibular system refers to structures within the inner ear (the semi-circular canals)

These structures detect movement and changes in the position of the head.




40

• The brain *needs* vestibular input in order to function



• Vestibular input provides the Strongest Sensation



41


Functional Activities/Environmental Accommodations for Sensory Interventions

- Load/unload
- Deliver materials
- Walk/pace
- Carry weighted boxes/bags
- Crush cans
- Rake, shovel, dig, vacuum
- Push shopping carts
- Visual organization
- Natural lighting versus artificial
- Outside seating
- Headphones
- Remove or add fragrances
- Turn down telephone ringer
- White noise

42

Other Biological Factors

- Diet and eating habits
- Sleeping patterns
- Autoimmune deficiencies
- Allergies
- Intestinal difficulties
- Co-occurring conditions
- Medication



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Facts to Remember



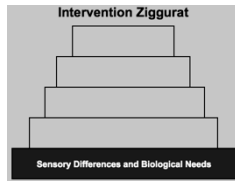
- Categories of sensory dysfunction are not always clear-cut and often overlap.
- The individual may exhibit characteristics of a sensory disorder but may have a different disorder altogether.
- Everyone has some sensory processing difficulties now and then.

The Out of Sync Child: Carol Stock Kranowitz, M.A., Skylight Press, 2005.

44

Designing an Intervention

- Discuss the individual's needs in this area.



45


Designing an Intervention- Phillip

<p>Sensory/Biological Needs</p>	<p>Sensory/Biological Intervention:</p> <ul style="list-style-type: none"> • Wear earplugs while working • Use portable coping cards with calming strategies when anxious • Provide work experience that allows pacing
	<p>Underlying Characteristics Addressed:</p> <ul style="list-style-type: none"> • Responds unusually to loud sounds • Easily stressed • Seeks activities that provide movement

- Design an intervention and write it in the Ziggurat worksheet

46

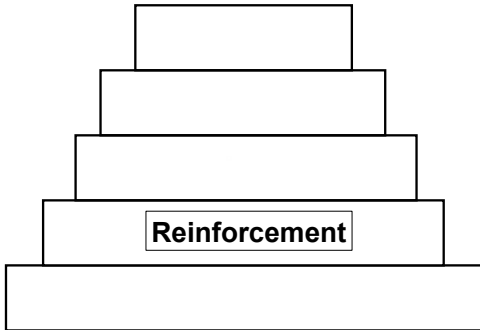
Designing an Intervention- Phillip

 Sensory Biological Needs	Sensory/Biological Intervention:	<ul style="list-style-type: none"> Wear earplugs while working Use portable coping cards with calming strategies when anxious Provide work experience that allows pacing
	Underlying Characteristics Addressed:	<ul style="list-style-type: none"> depends unusually to loud sounds Easily stressed Needs activities that provide movement

- List the underlying characteristics addressed. Choose from your prioritized areas.

47

Intervention Ziggurat

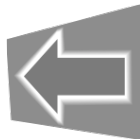


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What is Reinforcement?





- Reinforcement is an item, activity, or event that follows, and is contingent upon, a behavior and which increases the likelihood of that behavior being repeated

- Key words: follows and increases



Types of Reinforcement

- Natural reinforcers
- Social reinforcers
- Activity reinforcers
- Tangible reinforcers
- Token reinforcement

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Incorporate Special Interests

Trains	Airports	Maps	Movies
Trucks	Airplanes	Geography	Computer Games
Subways	Cars	Travel	Video Games
Streetcars	Motor-cycles	Buses	Sitcoms

51

Example

- Scenario: Jennifer is an adult with Asperger Syndrome who works at a local craft store. Her supervisor and job coach would like her to increase her work speed.
- Reinforcement:
 - **Activity reinforcement:** Assist in the art class activities that are offered at the craft store once a week.
 - **Social reinforcement:** Schedule Jennifer's lunch break with the two co-workers who have an interest in famous artists/painters.
 - **Tangible reinforcement:** Jennifer is paid every two weeks and gets an employee discount if she wants to purchase art supplies.
 - **Token reinforcement:** Jennifer receives tally marks for finishing work in required time. With certain number of tally marks, she is able to assist in the art class activities.

52

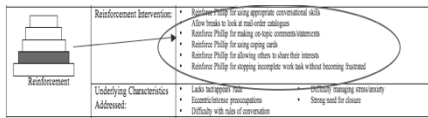
Choosing Reinforcers

- Make sure that the reinforcer is valued, preferred, and tailored to the individual
- Remember, what may be reinforcing to one individual may not be to another



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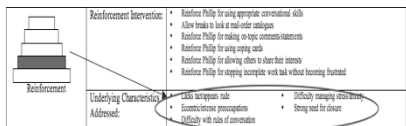
Designing an Intervention- Phillip



- Design an intervention and write it in the Ziggurat worksheet

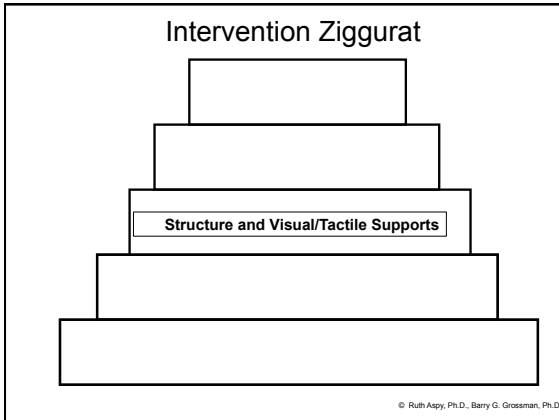
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Designing an Intervention- Phillip



- List the underlying characteristics addressed. Choose from your prioritized areas.


55






Common Misperceptions


- If an individual can read then she does not need pictures or symbols
- Because he's an adult, he does not need an individualized schedule
- I can stop using a visual schedule with an individual once the routine is learned
- If an individual has not looked at her schedule in three weeks she does not need it anymore

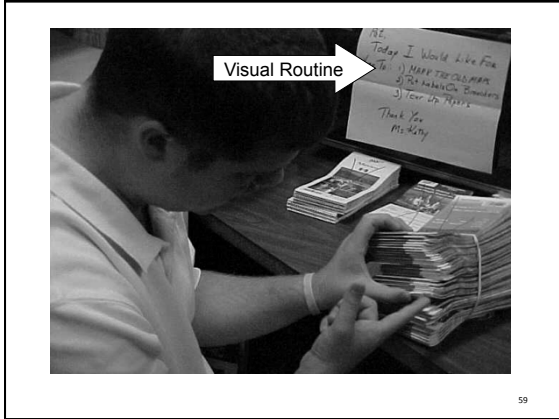




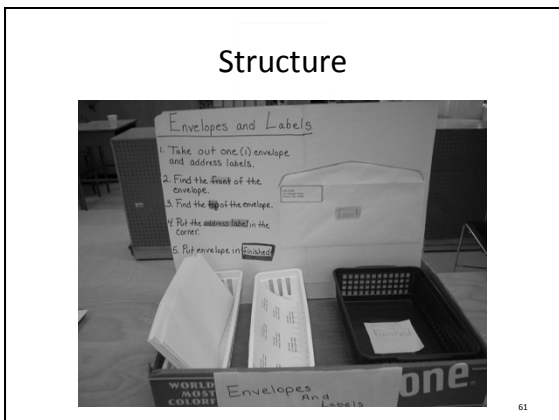
Visual Supports

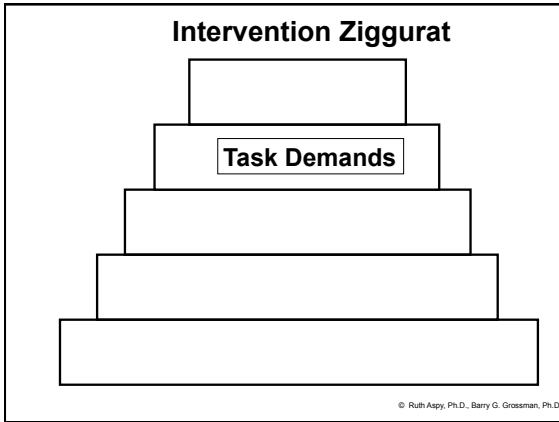
- Visual schedules are effective in decreasing
 - Off-task behaviors
 - Disruptive behavior
 - Noncompliance
 - Aggression
 - Outbursts
 - Property destruction















Task Demands – Three Questions


- Are you asking for performance of a skill that is too hard?
- Are you asking for performance of a skill that has not been taught?
- Are you asking for a task to be accomplished without the necessary supports?


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Social Strategies

- Rule cards
- Social scripts
- Thought bubbles

People DO NOT Like to be Tickled
People DO LIKE to get:

High Fives 

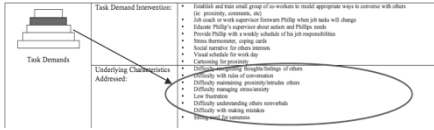
Hand Shakes 

Words I can use
on the Job

- No thank you
- Excuse me
- Is it OK to take a break now?

67

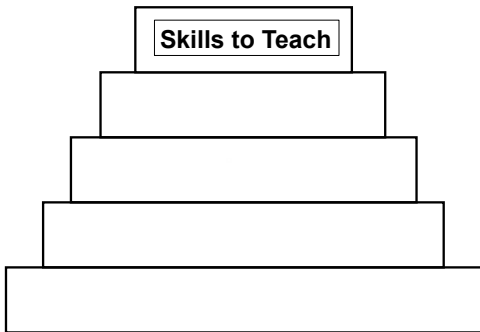
Designing an Intervention- Phillip



- List the underlying characteristics addressed. Choose from your prioritized areas.

71

Intervention Ziggurat



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Skills to Teach



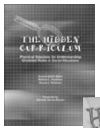

Questions to ask:

- What is it about the situation that comes naturally to everyone else but is missing for this person?
- What pre-requisite skills might be lacking to complete the task at hand?
- What is it that has not occurred to me to teach?

73




The Hidden Curriculum





Break room rules

- If there are people in line to use the vending machine, do not cut. Wait your turn!
- It is not appropriate to take others' snacks or drinks.
- When someone sits down next to you at the break table, say hello.



Designing an Intervention- Phillip




Skills to Teach	Skill Intervention:	<ul style="list-style-type: none"> • Teach Phillip to identify when he or she has made a mistake • Teach Phillip how to appropriately respond when he or someone else makes a mistake • Teach Phillip how to respond to feelings through words when he becomes anxious or upset • Teach Phillip what an "in-joke" statement and what an "out-joke" statement • Teach Phillip how to participate in conversations with coworkers by role playing • Teach Phillip how to appropriately respond to what he doesn't know when to do or when overwhelmed • Conduct a social analysis in order to understand what goes wrong with interactions among coworkers
	Underlying Characteristics Addressed:	<ul style="list-style-type: none"> • Difficulty recognizing feelings/feelings of others • Difficulty understanding others nonverbal communication • Low frustration • Difficulty with rules of communication • Early retreatal • Difficulty managing stress and anxiety

- Design an intervention and write it in the Zigurat worksheet

75

Designing an Intervention- Phillip



Skills to Teach	Skill Intervention:	<ul style="list-style-type: none"> • Teach Phillip to identify when he or she has made a mistake • Teach Phillip how to appropriately respond when he or someone else makes a mistake • Teach Phillip how to respond to feelings through words when he becomes anxious or upset • Teach Phillip what an "in-joke" statement and what an "out-joke" statement • Teach Phillip how to participate in conversations with coworkers by role playing • Teach Phillip how to appropriately respond to what he doesn't know when to do or when overwhelmed • Conduct a social analysis in order to understand what goes wrong with interactions among coworkers
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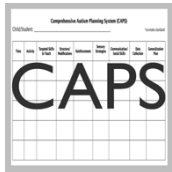
76

Ensure that Intervention is Complete

- Review worksheet
 - Addresses all five levels of the Ziggurat
 - Several core underlying areas are addressed
 - Intervenes at all three points A-B-C

Behavioral Level of Ziggurat	Intervention Strategies	Core Underlying Areas
1. Self-Management		
2. Self-Regulation		
3. Self-Advocacy		
4. Self-Determination		
5. Self-Direction		

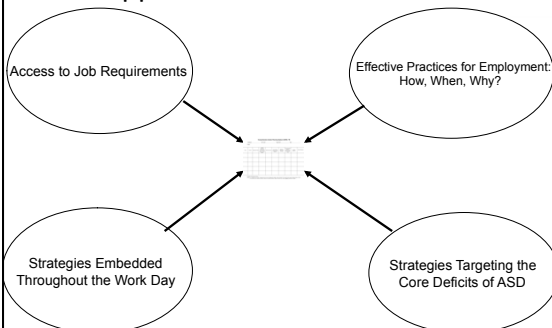
77



4

This will show you how to implement them across the school day

Organizational Matrix: Building Supports for Individuals with ASD



Comprehensive Autism Planning System (CAPS)- TR

Employee: _____ Job Coach: _____ Supervisor: _____ Date: _____



Notes:

Time	Activity	Required Tasks	Special Employee Training (NA only if training has been completed)	Reinforcement	Social Skills/ Communication Supports	Sensory/ Biological Strategies	Environmental Supports, Modifications, Accommodations	Natural Supports	Data Collection

Modified with permission from:
Henry, S. A., & Miles, B. S. (2007). *Integrating best practices throughout the student's daily schedule: The Comprehensive Autism Planning System (CAPS) for individuals with cognitive disabilities, autism and related disabilities*. Spencer Education, KS: Autism Advantage Publishing Company.

Why was CAPS developed?

- Initially for the teams of school-age students to improve communication and transition of successful supports and strategies.
- The same challenges exist in the adult world.
- CAPS is flexible enough to accommodate all ages and environments.

Comprehensive Autism Planning System (CAPS)- TR


Employee: _____ Job Coach: _____ Supervisor: _____ Date: _____

Notes:

Time	Activity	Required Tasks	Special Employee Training (NA only if training has been completed)	Reinforcement	Social Skills/ Communication Supports	Sensory/ Biological Strategies	Environmental Supports, Modifications, Accommodations	Natural Supports	Data Collection

CAPS-TR is the framework for tying the daily schedule to the underlying characteristics identified in the UCC and the interventions outlined in the Ziggurat.

CAPS




■ “Putting the pieces together through collaboration”

References

- Aspy, R., & Grossman, B.G. (2006). *The Ziggurat Model: A framework for designing comprehensive interventions for individuals with high functioning autism and Asperger Syndrome*. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Henry, S.A., & Myles, B.S. (2007). *The Comprehensive Autism Planning System for individuals with Asperger Syndrome, autism and related disabilities*. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Ziontz, L. T., Shellady, S. M., & Ziontz, P. (2006). Teachers' perceptions of professional standards: Their importance and ease of implementation. *Preventing School Failure, 50(3), 5-13*.

THANKS FOR LEARNING WITH



Please visit our website for resources on
ASD, AT and low incidence disabilities:
<http://www.ocali.org>
