Social Skills Training for Vocational Rehabilitation Using The Ziggurat Model

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The Ziggurat Model

Ziggurat n:
(ziggu•rat) from Assyrian ziqqurat, height, pinnacle

1. a temple having the form of a terraced pyramid of successively receding stories, erected by the ancient Assyrians and Babylonians

2. a framework for designing comprehensive interventions for individuals with autism spectrum disorders
Three Areas of Expertise for Effective Intervention Planning

- Characteristics of ASD
- Range of effective interventions
- Comprehensive planning process

Question

Which of the following is a characteristic of many adults with ASD?

- Mindblindness
- Weak central coherence
- Poor organizational skills
- Tendency to fatigue easily
- All of the above

Taking a Break

A mistake is to commit a misunderstanding

- Bob Dylan
Why was the Ziggurat Model Developed?

- Difficulty “Seeing the Autism”
- Tendency to apply one strategy to address all needs
- Tendency to ignore critical areas when designing an intervention
Intervention Ziggurat

Skills to Teach
Task Demands
Structure and Visual/Tactile Supports
Reinforcement
Sensory Differences and Biological Needs

Characteristics
- Social
- Communication
- Repetitive Patterns
Associated Features
- Sensory
- Motor
- Cognitive
- Emotional Vulnerability
- Medical and Biological Factors

Interventions
- Sensory Differences and Biological Needs
- Structure and Visual/Tactile Supports
- Reinforcement
- Task Demands
- Skills to Teach

The Ziggurat Model
- Sensory and Biological Needs
- Reinforcement
- Structure and Visual/Tactile Supports
- Task Demands
- Skills to Teach
### Why Comprehensive Planning With The Ziggurat and CAPS Models?
- Provides the necessary evaluation for understanding the needs of a person with ASD in a work setting
- Faster IPE development
- Better IPEs
- Fewer “behavior” problems
- More instructional/work time
- More positive/collaborative relationship with team members

### 3 Keys to Comprehensive Intervention Planning

#### Design
- A quality plan is DESIGNED to target the Autism comprehensively
- Avoid “band-aid” plans that only partially address needs

#### Characteristics
- A quality plan addresses the Autism - not just behavior
- You must KNOW what the ASD looks like in an individual to design a plan

#### Design
- A quality plan is IMPLEMENTED
- No matter how well an intervention is planned, it is useless if it is not well-implemented
5 Steps to Designing a Comprehensive Intervention Plan

1. Underlying Characteristics Checklist (UCC)
   - This will help you to see the autism

2. Individual Strengths and Skills Inventory (ISSI)
   - This will show you an individual’s strengths and skills

3. Global Plan Guide
   - This will help you to identify meaningful priorities

4. Ziggurat

5. CAPS

Steps to designing and implementing a comprehensive intervention plan

1. Underlying Characteristics Checklist (UCC)
This will show you how to design interventions using evidenced-based strategies.

5 Steps to Designing a Comprehensive Intervention Plan

1. Characteristics
2. Design
3. Implantation

Comprehensive Autism Planning System (CAPS)

This will show you how to implement interventions throughout the day.
**Underlying Characteristics Checklist**

- Helps you to “see” the autism
- Provides a “snapshot” of how autism is expressed for an individual
- A descriptive instrument
- May be completed by a team
- Provides a tool for assessing progress/change

**UCC-HF for HFA and AS**

**UCC-CL for Autistic Disorder**

**1 The UCC Areas**

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

**UNDERLYING CHARACTERISTICS CHECKLIST: HIGH FUNCTIONING**

<table>
<thead>
<tr>
<th>Area</th>
<th>Item</th>
<th>Notes</th>
<th>Follow-Up</th>
</tr>
</thead>
</table>
| 1.   | Has difficulty recognizing other emotions/interpersonal
      |        |           |           |
|      | 1.  |       |           |           |

**UNDERLYING CHARACTERISTICS CHECKLIST: CLASSIC**

<table>
<thead>
<tr>
<th>Area</th>
<th>Item</th>
<th>Notes</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Has difficulty recognizing the feelings and thoughts of others (callousness)</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>
Individual Strengths and Skills Inventory

- Social
- Behavior, Interests, and Activities
- Communication
- Sensory
- Cognitive
- Motor
- Emotional
- Biological

UCC to IPE

<table>
<thead>
<tr>
<th>UCC Item</th>
<th>IPE Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems with transition and change</td>
<td>Given a reinforcer, utilize individualized daily schedule by checking of each activity as completed 95% of the time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UCC Item</th>
<th>IPE Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacks tact or appears rude</td>
<td>Given a visual support, accept feedback without arguing during meetings with supervisor or job coach 8 out of 10 times</td>
</tr>
</tbody>
</table>
UCC to IPE

<table>
<thead>
<tr>
<th>UCC Item</th>
<th>IPE Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has difficulty maintaining personal space, physically intrudes on others</td>
<td>Will interact with female co-workers without physical contact during break times and daily greetings 100% of the time.</td>
</tr>
</tbody>
</table>

Skills to Teach

Task Demands

Structure and Visual / Tactile Supports

Reinforcement

Sensory Differences and Biological Needs

Bernie Boy is the Best

Bernie UCC and ISSI
Excerpt from Bernie’s UCC

[13] Has difficulty waiting
[14] Chooses or prefers solitary activities
[16] Appears to be unresponsive to others

[35] Makes sounds or states words or phrases repeatedly
[38] Asks repetitive questions
[43] Fails to initiate or respond to greetings
[47] Has difficulty asking for help

Excerpts from Bernie’s ISSI

- Enjoys sharing about topics of interest
- Incredible memory for dates and sports scores
- Learns quickly
- Works very hard
- Punctual
- Time-centric
- Comfortable being around others
- Independent
- Motivated by completion of work

Question

Which is true?

a. Most adults with ASD have some area of sensory functioning (e.g., hearing, vision, smell, movement) that is over and/or under sensitive
b. Most adults with ASD also experience significant symptoms of depression or anxiety
c. Both are true
d. None are true

Intervention Ziggurat

“The last thing one knows in constructing a work is what to put first”

-Blaise Pascal

Sensory Differences and Biological Needs
Sensory Differences and Biological Needs

- Provide a sensory diet
- Monitor and address environmental stressors:
  - Sound, light, proximity/personal space, textures
  - Movement needs
- Monitor and address:
  - Appetite/hunger
  - Arousal/activity level (e.g., fatigue, hyper)
  - Posture and movement
  - Medical needs

Bernie: Sensory/Biological Interventions

- Established and maintained a daily routine

Intervention Ziggurat

“If there is no reinforcer, there is no Intervention”

- Aspy & Grossman, 2007

Reinforcement Reminders

Reinforcement increases the likelihood of a behavior

“The way positive reinforcement is carried out is more important than the amount”

- B.F. Skinner
### Bernie: Reinforcement Interventions

- Give tasks in amount that can be completed in a day – Bernie is reinforced by completing tasks
- Verbal praise
- Gets to change all calendars
- Opportunities to talk about football scores

### Bernie: Structure and Visual/Tactile Support Interventions

- Show photograph of new employee on calendar and place on date that he/she is going to start
- Prepare for change in routine
- Establish lunch routine that includes Bernie – transitioning to/from cafeteria; sitting together; initiating conversations that he can participate

### Intervention Ziggurat

- **Structure & Visual/Tactile Supports**
- Give tasks that involve structure and order
  - Dates
  - Numerical order
  - Flag for deficiency
"We don’t fix things that aren’t broken, we remove obstacles for kids with infinite potential"
- Eric Blackwell

"I’m in the obstacle removal business"
- Eric Blackwell

Task Demands and Skills to Teach

Too Demanding

Demands

Skills to Teach

Ability

Demand

Skills

Ability

Intervention Ziggurat

Task Demands

Intervention Ziggurat

Task Demands
Bernie: Task Demand Interventions

- Place Bernie with team that is nurturing
- Teach co-workers topics of interest to Bernie and ask them to initiate conversations on his preferred topics
- Teach co-workers not to use abstract language
- Teach co-workers the format in which Bernie asks questions
- Prepare Bernie for new co-workers (e.g., explain their role) before they start. Schedule an introduction time on calendar.

Bernie: Task Demand Interventions

- Provide coaching until Bernie displays mastery of skills
- Use visual supports for computer shortcuts used frequently
- Prepare Bernie for changes in schedule or routine (e.g., copy machine broken)
- Give Bernie brief tasks to complete at the start or end of team meetings in order for him to be a part of the team.

Intervention Ziggurat

Skills to Teach

“The job coach who does not understand that it is necessary to teach person with autism seemingly obvious things will feel impatient and irritated”

-Hans Asperger

Bernie: Skills to Teach

- Teach Bernie the responsibilities of others on the team (who to ask)
- Teach Bernie how to communicate with different team members
- Teach Bernie about things that run out (e.g., toner) and how to get them replaced.
- Teach Bernie his role in team meetings
Question

The suggestion – Don’t just ask, “Is he ready for the job? Ask, “Is the job ready for him?” – describes which level of the intervention Ziggurat?

a. Sensory
b. Reinforcement
c. Structure and Visual/Tactile supports
d. Task Demands
e. Skills to Teach

Question

If you want to increase the likelihood that an employee with ASD understands and follows a new procedure. Your best strategy is to

a. Tell the employee the new procedure several times
b. Teach the strategy very slowly using simple language
c. Provide video, drawings, or photographs of the new strategy
d. Clearly explain the consequence of not following the strategy

Chad

World of Jenks © MTV
Chad UCC and ISSI

Excerpt from Chad’s UCC

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or “sameness”
- [18] Has problems handling transition and change
- [31] Difficulty expressing thoughts and feelings
- [80] Exhibits “meltdowns”
- [89] Difficulty managing stress and/or anxiety

Chad- ISSI

Social - enjoys group activities, shares humor, compliments others, apologizes at appropriate times

Behavior, Interests & Activities - skills in photography, enjoys music, interest in flags, beaches, nationalities

Communication - sometimes able to read facial expressions; verbally indicates need for assistance

Sensory - able to tolerate wearing clothes all day, tolerates range of temperatures, eats range of foods
Chad- ISSI

- **Cognitive** - excellent memory about interests, reads
- **Motor** - able to manipulate game controls; able to dress self with assistance on buttons
- **Emotional** - affectionate towards family members and friends, takes walks to decrease anxiety, generally happy, will try new experiences with support
- **Biological** - Sleeps well when schedule is structured

Designing a Global Intervention Plan

Designing a Global Intervention

3

Chad Video – Job

World of Jenks © MTV

Selected UCC Areas

<table>
<thead>
<tr>
<th>UCC</th>
<th>Selected UCC Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selected UCC Items</td>
</tr>
</tbody>
</table>

Global Plan Guide
Select UCC Areas - Vision

- What is the long and short-term vision for the individual?

Long-term
  - Increased independence
  - Improved coping skills
  - Full time employment
  - Supportive social network

Short-term
  - Accurately identify feelings of self and others
  - Sleep in own room
  - Brush teeth, dress self
  - Part time employment
  - Interview skills

Select UCC Areas

UCC Areas

- Social
- Restricted Patterns
- Communication
- Sensory Differences
- Cognitive Differences
- Motor Differences
- Emotional Vulnerability
- Known Medical/Biological Factors

Chad - Select UCC Areas

Vision

- Which UCC areas would have the greatest impact on achieving this vision?
  - Social
  - Communication
  - Emotional Vulnerability

© Remember to stay on target
Chad- Select UCC Areas

**Settings**
- In what settings does the individual participate?
  - home
  - barber shop
  - girlfriend’s house
  - restaurants
  - park

**Quality of Life**
- What is most important to the individual? What provides a sense of well-being?
  - Routine, predictability
  - Time with friends
  - Preferred activities (video games, collections, photographs)

Chad- Select UCC Areas

**Settings**
- Which UCC areas have the greatest impact on the individual’s ability to function in multiple settings?
  - Social
  - Communication
  - Emotional Vulnerability

**Quality of Life**
- Which UCC areas have the greatest impact on the individual’s quality of life?
  - Social
  - Restricted Patterns
  - Emotional Vulnerability

Remember to stay on target
Chad- Select UCC Areas

Key UCC Areas

Based on your answers to the questions, place a mark next to the key UCC areas.

- Social
- Restricted Patterns
- Communication
- Emotional Vulnerability

Select UCC Items

Selected UCC Areas

Selected UCC Items

Select Key UCC Items from UCC Areas

- Select key UCC items for each of the Selected UCC areas.
- Choose items that are essential (necessary for progress) and developmentally appropriate.
- Emphasize items that are more pivotal (building blocks for additional skills). Avoid selecting redundant items.

Chad- Selected UCC Items

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or "sameness"
- [18] Has problems handling transition and change
- [31] Difficulty expressing thoughts and feelings
- [80] Exhibits "meltdowns"
- [89] Difficulty managing stress and/or anxiety
Sensory Differences and Biological Needs

- Provide a sensory diet
- Monitor and address environmental stressors:
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- Movement needs
- Monitor and address:
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  - Posture and movement
  - Medical needs

Intervention Ziggurat

"The last thing one knows in constructing a work is what to put first”

- Blaise Pascal

Sensory and Biological Needs

World of Jenks © MTV
Sensory and Biological Strategies for the Work Setting

- Provide a sensory diet
- Select work environments that allow for time that is quiet
- Allow Chad to wear ear plugs when not working directly with others
- Identify aversive smells, select environments where Chad can avoid those smells or teach skills to cope with them
- Provide activities in daily schedule that help Chad to increase his physical strength and stamina

Create a five point scale to illustrate levels of distress and category of emotion (mad, sad, embarrassed) work with Chad to define those levels for him. Then identify coping skills for each level

Sensory and Biological

Chad - Selected UCC Items

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or "sameness"
- [18] Has problems handling transition and change
- [31] Difficulty expressing thoughts and feelings
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- [89] Difficulty managing stress and/or anxiety
Use a mini schedule for work tasks. Ask Chad to take photographs of each step. Incorporate them on the visual schedule (task strip).

Use photos to describe details and subtleties.

- Develop a list of things that Chad wants to buy.
- Make a chart that shows Chad how much he earned each day.
Chad - Selected UCC Items

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or “sameness”
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Reinforcement Reminders

“You may not have to look any further than ... special interests to find the perfect reward”

-Sakai, 2005, p. 52

Intervention Ziggurat

Structure & Visual/Tactile Supports

Daily Schedule

- Greet co-workers
- Clock in
- Wash hands
- Put on apron
- Make bread knots
- Make pizza boxes
- Fill napkins
- Wrap utensils
Getting to Know My Co-Workers

<table>
<thead>
<tr>
<th>NAME</th>
<th>IMPORTANT FACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>Owns restaurant, speaks Italian, likes Italy</td>
</tr>
<tr>
<td>Paul</td>
<td>Has a bad tooth, likes rock music, has 2 sons</td>
</tr>
<tr>
<td>Mary</td>
<td>Married to Al. Likes superhero movies and gardening</td>
</tr>
</tbody>
</table>

Remember: People like to talk about their favorite things. They like it when you ask about them.

List of Things that Change at Work

Mark changes on visual schedule the day before.

Task Strip

Chad - Selected UCC Items

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or “sameness”
- [18] Has problems handling transition and change
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Chad – Task Demand Interventions

- Job coaching
- Priming
- Visual schedule
- Sensory interventions
- Narrating
- Peer support

Chad- Selected UCC Items

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or “sameness”
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Chad - Skills to Teach

- Teach Chad how to complete steps on schedule
- Teach what customers expect him to say when they come into and leave the restaurant
- Teach the roles of supervisor and boss and worker
- Teach what language is appropriate in the work setting

Chad - Selected UCC Items

- [1] Mindblindness
- [4] Lacks tact or appears rude
- [12] Expresses strong need for routine or "sameness"
- [18] Has problems handling transition and change
- [31] Difficulty expressing thoughts and feelings
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Question

- What does "mindblindness" mean?
- What is "meltdowns"?
Question

Prior to the next office social event. The job coach could assist the “dog with ASD” by

a. Teaching him the seemingly obvious rules about what is appropriate to discuss at work
b. Practicing some conversation starters that are appropriate in the job setting
c. Referring him to a good vet
d. All of the above

Vocational CAPS

Making the Plan a Reality

COMPREHENSIVE AUTISM PLANNING SYSTEMS (CAPS)
(Henry and Bryes, 2007)

CAPS is the framework tying the daily schedule to the underlying characteristics identified in the UCC and the interventions outlined in the Ziggurat Worksheet.
Strengths of the Ziggurat and CAPS Models

1. Provides a process and framework for designing an intervention plan

"Make everything as simple as possible but not simpler"
- Albert Einstein

2. Addresses underlying characteristics of ASD by utilizing strengths and building skills

3. Emphasizes and enhances evidence-based strategies
Strengths of the Ziggurat and CAPS Models

4. Facilitates comprehensive intervention design and implementation

5. Facilitates use of proactive interventions

6. Facilitates interdisciplinary interventions

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