
The Ziggurat Model

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What is a ziggurat?

- A multi-storied temple tower from ancient Mesopotamia built by the Sumerians, Babylonians and Assyrians for local religions
- The word ziggurat is Akkadian for “to build on a raised area”

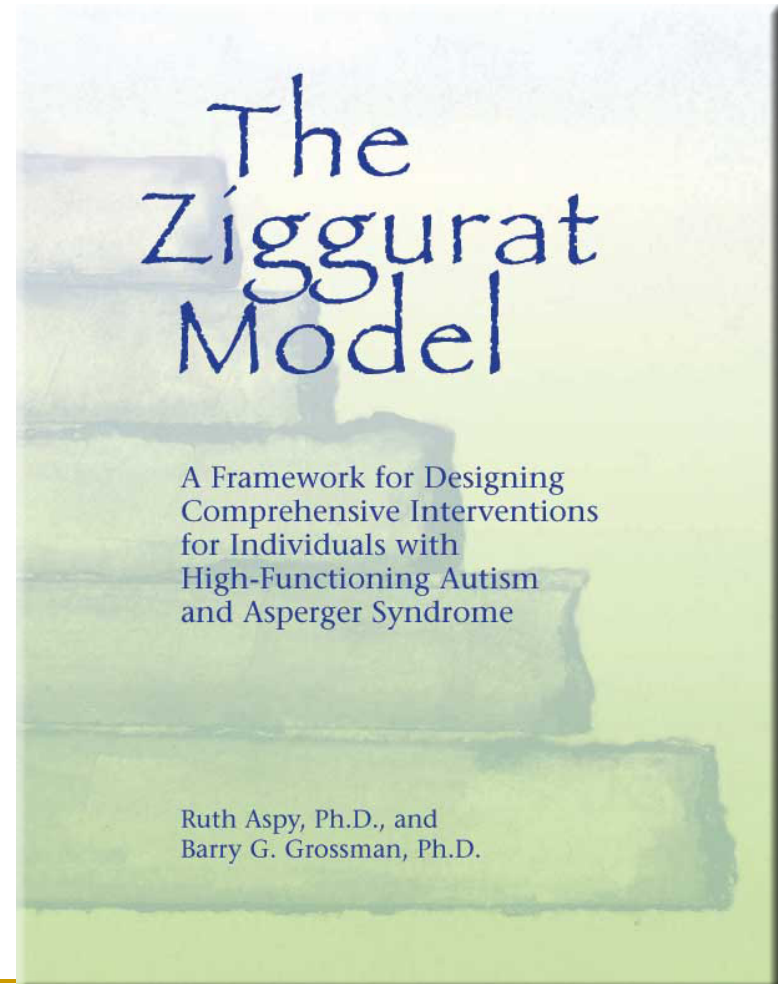


Image from <http://aristasia.files.wordpress.com/2007/04/ziggurat.jpg>

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What is the Ziggurat Model?

- Provides a process and framework for designing individualized, comprehensive intervention plans for individuals with ASD of all ages (Aspy & Grossman, 2008)



Why use the Ziggurat Model?

- Researched-based program
- Developed to address the true needs and underlying deficits that result in social, emotional, and behavior concerns
- Gives educators and parents a better background of the student
- Provides a framework for support
- Creates a spreadsheet in which progress can be monitored.

Additional Strengths of the Ziggurat Model

- Designed to simplify a complex process
 - Incorporates and compatible with recent trends in special education law (NCLB, RTI and PBIS)
 - Can be used alone or in combination with another model – the Comprehensive Autism Planning System (CAPS; Henry & Myles, 2007)
 - Evidence-based interventions on each of the 5 levels
 - ABC-I tool incorporates an FBA that facilitates development of individualized intervention
 - Pro-active, positive approach through use of reinforcement and antecedent-based interventions.
- (Aspy & Grossman, 2008)

Additional Strengths of the Ziggurat Model

- Ongoing process allows for changes to the intervention plan at each level based on progress.
 - Promotes collaboration and communication among IEP team members
 - Assessment tools designed to include perspectives from diverse team members
 - Can be used throughout the eligibility process (e.g., ID of concerns, assessment, development of intervention, monitoring and assessing progress)
 - Can be used to evaluate an existing plan
- (Aspy & Grossman, 2008)

Three Assessment Tools

1. The Underlying Characteristics Checklist (UCC)
2. The Individual Strengths and Skills Inventory (ISSI)
3. ABC-Iceberg (ABC-I)

Assessment tools used to aid in identification of underlying needs and characteristics related to autism

(Aspy & Grossman, 2008)

Step 1: Complete the Underlying Characteristics Checklist (UCC)

- This provides a “snapshot” of how autism is expressed in an individual.
- Should be completed by all members of the IEP team There are two versions of the UCC
 - One for individuals who are high functioning, including Asperger Syndrome (UCC-HF)
 - One for individuals with a more classic presentation (UCC-CL) in cognition and speech-language skills

Underlying Characteristics Checklist

- The UCC is comprised of 8 areas

1. Social
2. Restricted patterns of behavior, interests and activities
3. Communication
4. Sensory differences
5. Cognitive differences
6. Motor differences
7. Emotional vulnerability
8. Known medical and other biological factors

(Aspy & Grossman, 2008)



More on the Underlying Characteristics Checklist (UCC)

- Notes column used to help bring clarity to the picture
- Info in notes column might include specific examples of behaviors, frequency of behavior, common antecedents or triggers, etc.
- A snapshot of the “autism in an individual”
- Provides a basis for comparison during follow up

(Aspy & Grossman, 2008)

Step 2: Completes the Individual Strengths and Skills Inventory (ISSI)

- Purpose of the ISSI is to help identify strengths to use when designing a comprehensive intervention plan
- The ISSI is an assessment tool that parallels the UCC.



Step 3: Specific Intervention Plan

Instructions

- Complete this worksheet if a specific behavior must be addressed in the IEP.
- This helps to identify a behavior that is of greatest concern (e.g., impedes a student's performance academically or socially)
- Be specific

Step 4: Complete the ABC-I

- Transfer notes from the specific intervention plan instructions to the ABC-I
- Synthesize with areas identified in your UCC
- Iceberg analogy – we can only see what is on the surface

ABC Framework

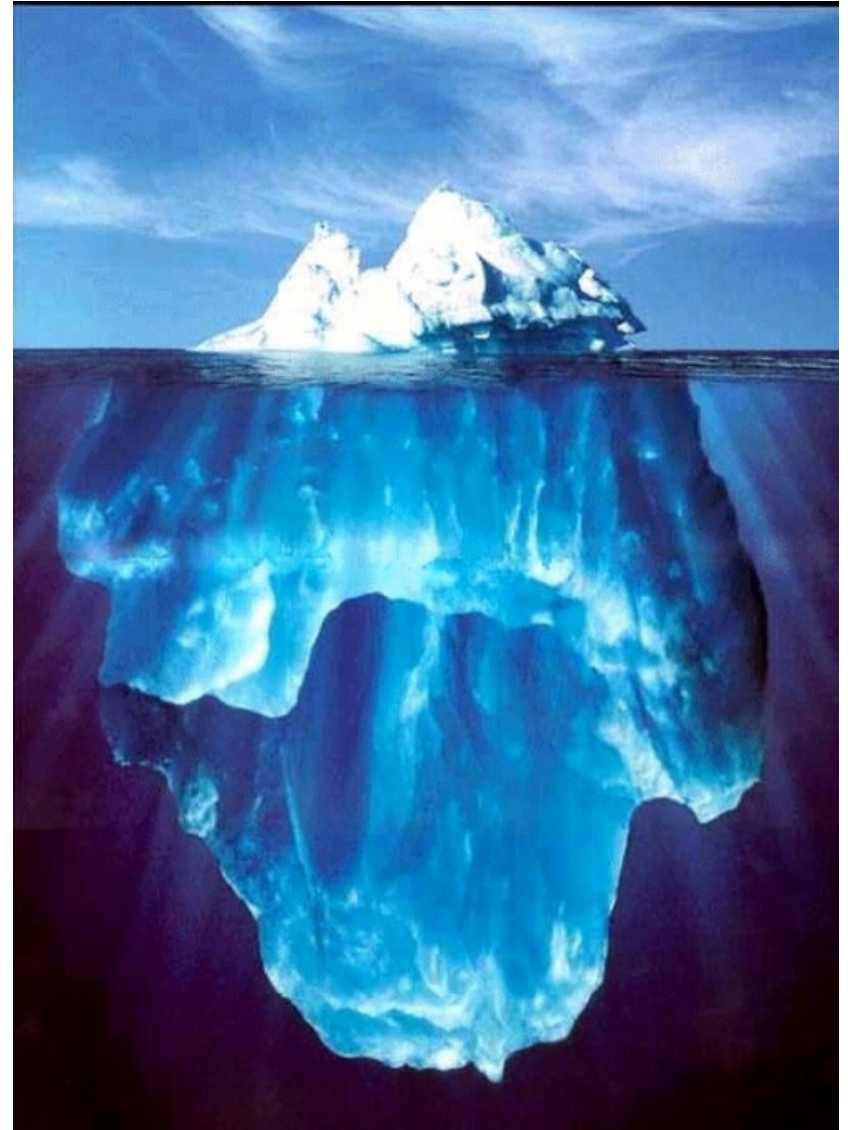
- Understanding the antecedents (A), behaviors (B), and consequences (C) provides three points of intervention
 - Antecedent interventions (preventive)
 - Behavior interventions (teaching a skill)
 - Consequence interventions (reinforcement of new skill)
- (Aspy & Grossman, 2008)



The ABC Iceberg

- Relationship between the underlying characteristics of autism and a given behavior
- Consideration of patterns will lead to better understanding of specific behavioral concerns and their unseen causes

(Aspy & Grossman, 2008)



The Iceberg Analogy

- A universal analogy that discuss how critical aspects of objects or circumstances are not apparent without careful observation.
- TEACCH approach applies this analogy to aid in understanding the behaviors of individuals with autism
- TEACCH emphasizes the importance of identifying underlying strengths and needs related to the disorder itself

(Aspy & Grossman, 2008)

Using the ABC-Iceberg and the UCC

- The ABC portion includes only observable aspects of the situation and may be used to discern how a student's autism may contribute to his behavior
- The UCC highlights the link between the autism and the behavior

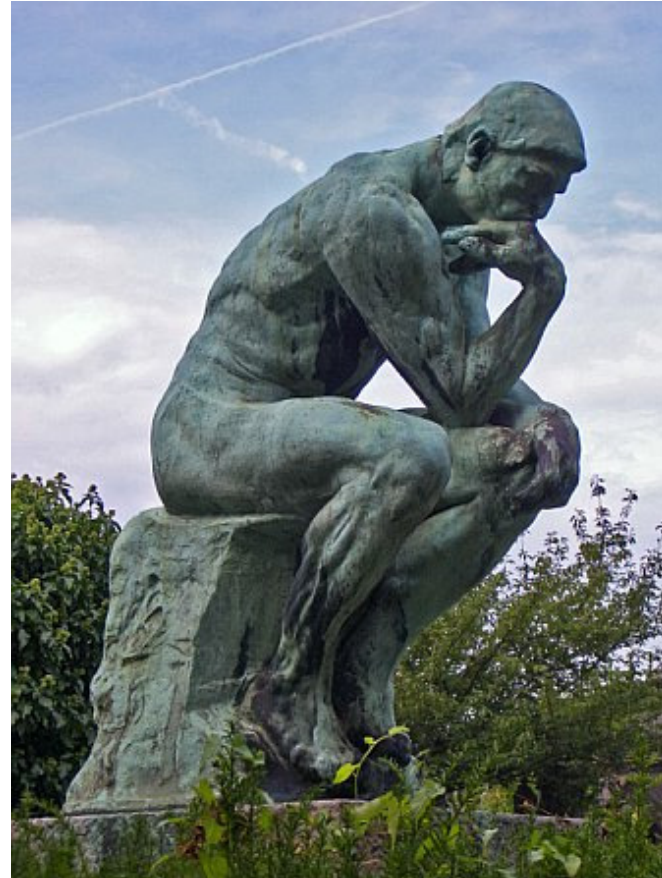
Step 5: Global Invention Plan Instructions

- Best if completed with the IEP team. Point out the three main questions:
 - ❑ Which UCC areas have the greatest impact on the ability to function in multiple settings?
 - ❑ Which UCC areas would have the greatest impact on increasing independent functioning?
 - ❑ Which UCC areas would have the greatest impact on the person's sense of well-being?

Step 6: Back to the UCC



- Keeping the three main questions in your mind, go back to the UCC and narrow down the characteristics that are making the greatest impact on the students educational program.



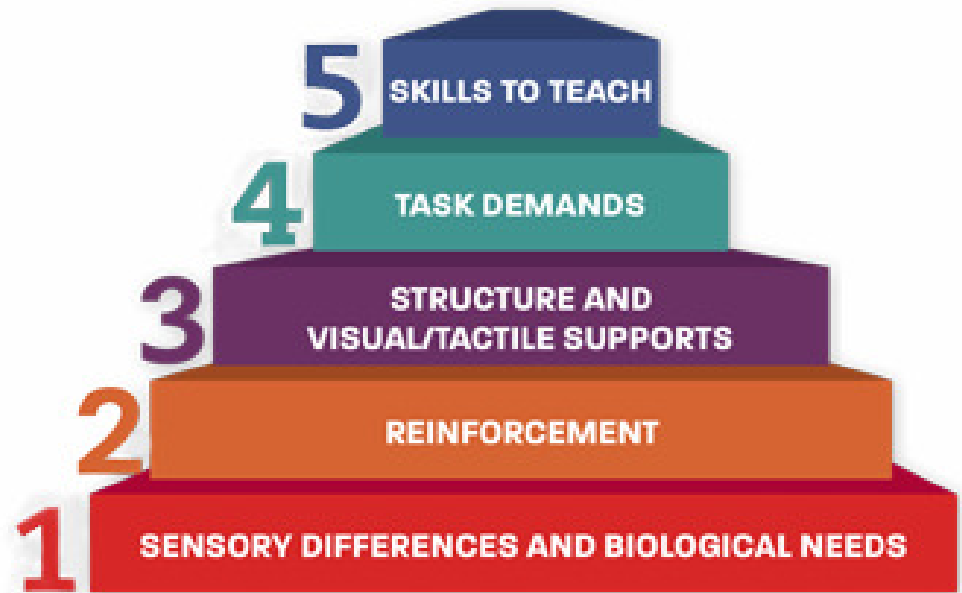
Step 7: Complete the Intervention Design Helper

- Complete this with the IEP team (best practice)
- Brainstorm UCC findings, think about what supports that the student will need to be successful academically and socially (sensory, biological, reinforcement, structure, visual/tactile supports, task demands, skills to teach)



Step 8: Intervention Ziggurat Framework

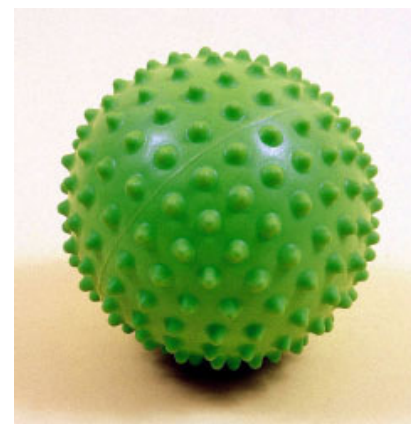
- Centerpiece of the Ziggurat Model
- Highlights five levels
- Each level is designed to address the areas of autism
- Each level contributes to the effectiveness of the other levels
- Can develop interventions to address these needs on any level of the Intervention Ziggurat.
- If needs on each level of the Ziggurat are not addressed, intervention will be ineffective and skills will not develop (Aspy & Grossman, 2008)



Sensory/Biological Needs

- First level of the Intervention Ziggurat
- The basis of all behavior – biology
- Unmet sensory and biological needs will result in changes in behavior

Examples of Sensory and Biological Needs



Reinforcement

- Second level of the Intervention Ziggurat
- All intervention plans target the development or increase of a desired skill or behavior
- If desired skills or behaviors are not reinforced they will not develop
- May need to think creatively about how to reinforce students with autism
- Students will only gain new skills when effective reinforcement systems are in place

Reinforcement and Punishment Grid

	Desired	Dreaded
Apply	<p>Positive Reinforcement</p> <ul style="list-style-type: none">• Attains more time to read favorite book	<p>Punishment</p> <ul style="list-style-type: none">• Failing grades• Note home to parents
Remove	<p>Negative Punishment</p> <ul style="list-style-type: none">• Immersion in books results in a loss of opportunity for peer interaction	<p>Negative Reinforcement</p> <ul style="list-style-type: none">• Decreases social stress by avoiding group work and class participation

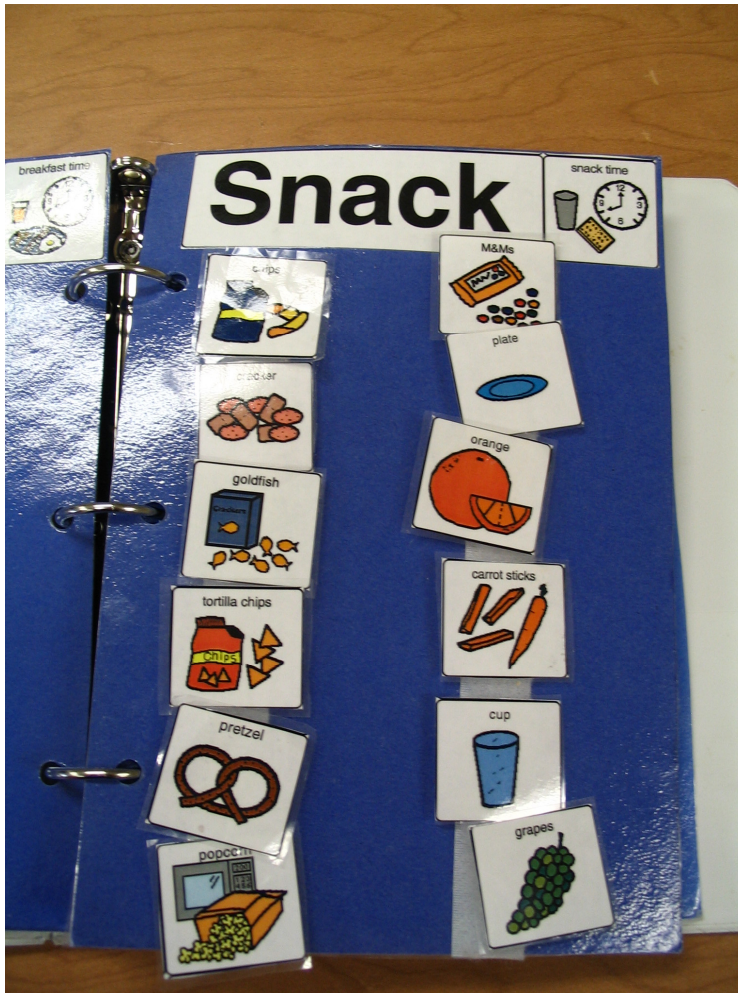
Structure and Visual/Tactile Supports

- Third level of the Intervention Ziggurat
- Direct response to the core characteristics of ASD (students with ASD function best when predictability is established across the school day)
- Visual processing is often a strength for students with ASD (visual should be included in intervention plan)
- Tactile supports are an additional alternative to verbal communication

Example of Structured Setting



Examples of Visual Supports



Task Demands

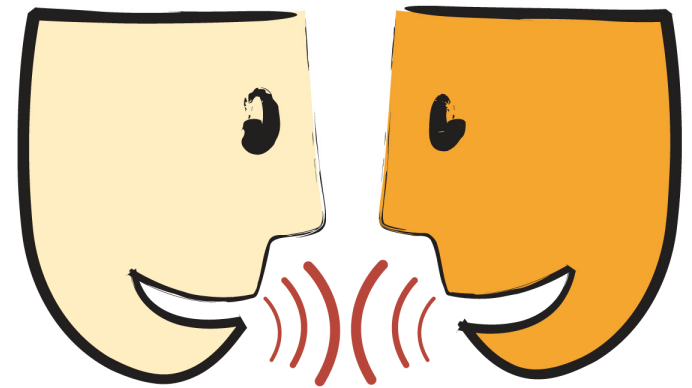
- Fourth level of the Intervention Ziggurat
- Include academic, social, communication, organization, sensory, etc. demands
- Keep expectation reasonable
- Essential to match the demand of a task to the ability of a student
- Student must be capable of succeeding either independently or with assistance
- Known as the zone of proximal development (ZPD; Vygotsky, 1978).

Skills to Teach

- Fifth level of the Intervention Ziggurat
- In the first 4 levels of the Ziggurat it is possible to resolve many behavior concerns without ever teaching a new skill. BUT don't get too comfortable with the gains here and overlook the crucial last level – skills to teach.
- Approaches to teaching new skills: priming, formal social skills groups, pivotal response training

Why aren't communication and social skills levels on the Ziggurat?

- They are collectively referred to as the Intervention Ziggurat. Each level is designed to address the characteristics of autism such as communication and social skills deficits. One may develop interventions to address these needs on any level of the Intervention Ziggurat.



Step 9: The Comprehensive Autism Planning System (CAPS)

- Used to ensure that academic and social needs are being met across the academic day.
- Recognizes that students with ASD have complex needs in multiple areas
- Individualized approach to planning
- Thorough, well-planned by the IEP team

Components of the CAPS

- Time
- Activity
- Targeted Skills to Teach
- Structures/Modifications
- Reinforcement
- Sensory Strategies
- Communication/Social Skills
- Data Collection
- Generalization Plan

References

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