

COLLEGE OF REHABILITATION SCIENCES

# Data Driven Decision Making

## Key Points for Application to Practice

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# Data Driven Decision Making

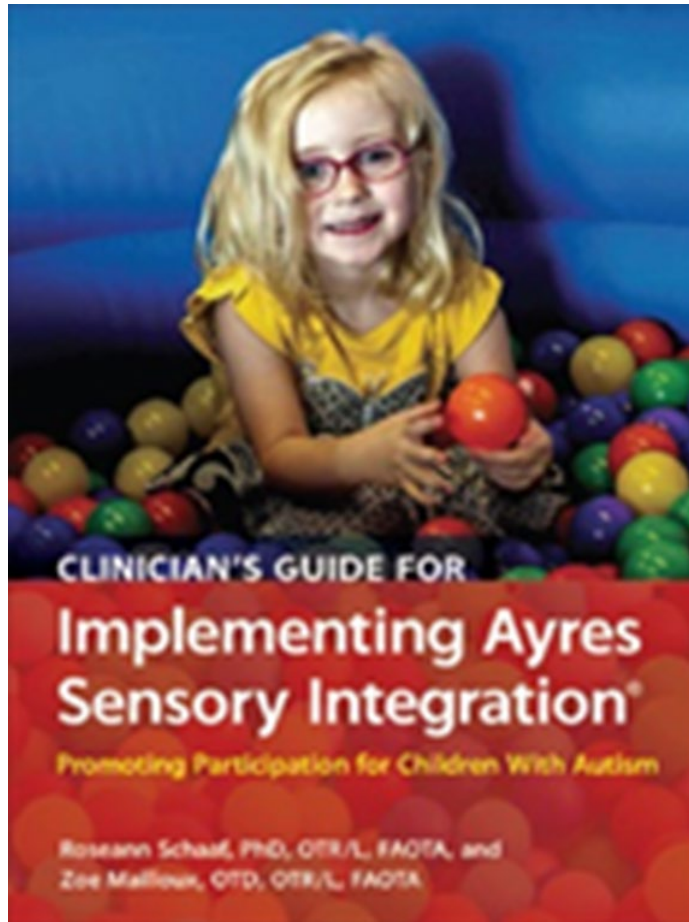


# Step 1: Identify Participation Strengths and Challenges

- What does the child enjoy?
- What activities and tasks does the child have strength in?
- Family routines
- What are the child's challenges participating in everyday activities, tasks and occupations?
- Obtained via Occupational Profile and discussion with parent and/or teacher



# Schaaf & Mailloux (2015)



- Occupational Profile
- Medical and Developmental History
- Daily routines
- Family situation
- Interests

# Occupational Profile (Schaaf & Mailloux, 2015)

## Background Information and Occupational History Family Information

Child's Name:		Today's Date:	
Birth Date:		Age:	
Diagnosis:	Diagnosed by whom?		Date:
Allergies (food, drug, other)			
Address:			
Mother's Name:		DOB:	Occupation:
Office/Cell phone:	Email:	Home phone:	
Father's Name:		DOB:	Occupation:
Office/Cell phone:	Email:	Home phone:	

### About your child:

Favorite toys/activities:

Favorite toys/activities:
Movie/TV characters:
Movie/TV shows:
Does your child like active/physical play or quiet/sit down play?
Does your child prefer playing in large groups or with 1-2 children?
Does your child enjoy imaginary play? If so, what does he/she like to play?

Reason for referral:	
When did you first have those concerns?	
What do you see as your child's strengths?	
In one sentence, how would you describe your child?	
Do you have any additional information that will help to better understand your child?	
What are your primary goals regarding this evaluation?	

# History and Occupational Profile (AOTA, 2023)

OCCUPATIONAL PROFILE		
Client Report	Reason the client is seeking service and concerns related to engagement in occupations (p. 16)	Why is the client seeking services, and what are the client's current concerns relative to engaging in occupations and in daily life activities? (This may include the client's general health status.)
	Occupations in which the client is successful and barriers impacting success (p. 16)	In what occupations does the client feel successful, and what barriers are affecting their success in desired occupations?
	Occupational history (p. 16)	What is the client's occupational history (i.e., life experiences)?
	Personal interests and values (p. 16)	What are the client's values and interests?
Contexts		What aspects of their contexts (environmental and personal factors) does the client see as supporting engagement in desired occupations, and what aspects are inhibiting engagement?
	Environment (p. 36) (e.g., natural environment and human-made changes, products and technology, support and relationships, attitudes, services, systems and policies, etc.)	Supporting Engagement Inhibiting Engagement
	Personal (p. 40) (e.g., age, sexual orientation, gender identity, race and ethnicity, cultural identification, social background, upbringing, psychological assets, education, lifestyle, etc.)	Supporting Engagement Inhibiting Engagement

Performance Patterns	Performance patterns (p. 41) (e.g., habits, routines, roles, rituals)	What are the client's patterns of engagement in occupations, and how have they changed over time? What are the client's daily life roles? (Patterns can support or hinder occupational performance.)	
		What client factors does the client see as supporting engagement in desired occupations, and what aspects are inhibiting engagement (e.g., pain, active symptoms)?	
Client Factors	Values, beliefs, spirituality (p. 51)	Supporting Engagement	Inhibiting Engagement
	Body functions (p. 51) (e.g., mental, sensory, neuromusculoskeletal and movement related, cardiovascular functions, etc.)	Supporting Engagement	Inhibiting Engagement
	Body structures (p. 54) (e.g., structures of the nervous system, eyes and ears, related to movement, etc.)	Supporting Engagement	Inhibiting Engagement
Client Goals	Client's priorities and desired targeted outcomes (p. 65)	What are the client's priorities and desired targeted outcomes related to the items below?	
		Occupational Performance	
		Prevention	
		Health and Wellness	
		Quality of Life	
		Participation	
		Role Competence	
		Well-Being	
Occupational Justice			

# Identification of Child's Participation Challenges

- Begin by focusing on *participation*
- What are some key areas of participation that challenge the child?
- What are the areas of need identified by parents, teachers or others?



# Example: Difficulty Participating in Mealtime



# Describe Current Performance – SPECIFICALLY!

- Examples:
  - Will sit at table for 30 seconds then gets up and wanders
  - Able to sit for meal for 5 minutes but will only eat preferred foods (list them)
  - Able to sit for meals but requires verbal prompts to remain seated (approximately 10 prompts in a 15 min meal time)

# Activity

- Choose a client on your caseload
- Identify one strength or interest
- Identify one participation challenges
  - Describe current level including what they do, the context/setting, the amount of support they need (prompts, environmental set up or support)

# 1: Identify Strengths and a Participant Challenge

**Strengths/Interests:**

**ONE Participation Challenge:**

**Describe current performance (in detail to include context, prompts or supports, ie: (Level of assistance, # of prompts, % or minutes)**

# Step 2: Choose a Theoretical Perspective

## Identify a Theory

- After understanding a child's strengths and participation challenges – consider theories
- What theory is best match for child's needs and context?

Informs next step of DDDM: "Identify a Theory"

Provides a framework for assessment and intervention

# Common Pediatric Theories

- Reflect on child, context, strengths and participation challenge
- What theory is most relevant to the child's needs and the context for intervention?



# Class Activity: Match the Theory

Use when:

- 
- A) PEO (Person Environment Occupation) → 1) Volition, habituation, performance impacting participation
- B) Model of Human Occupation → 2) Match of child's ability and environmental context
- C) Biomechanical → 3) Child's participation challenges are due to sensory reactivity, perception, integration
- D) Ayres Sensory Integration → 4) Motor limitations impact participation
- E) Motor Learning Theory → 5) Motor execution is flawed

# Ayres Sensory Integration® (ASI)

- Includes the theory and intervention framework
- Posits that adequate sensory integration is an important foundation for adaptive behavior
- Intervention: Focuses on the sensory motor foundations of adaptive behavior and participation in tasks and activities



# ASI Active Ingredients

- “Active, individually-tailored, sensory-motor activities contextualized in play at the just right challenge that target adaptive responses for participation in activities and tasks”
- Child Directed/Therapist supported



# Step 3: Assessment

- Provides a clear understanding of the child
- Provides a foundation for treatment
- Provides baseline data (upon which to measure change)
- Important step in evidence-based practice

# Assessments

- Standardized/Non-Standardized
- Parent Report/Performance Based
- Clinical Observation
  - Systematic
  - General in context (eg: play, activities, tasks, etc)
- Environmental Assessments: Supports and Barriers

# What are common assessment areas?

- Participation in Daily Living Skills
  - Dressing, feeding/mealtime
- Participation in routines and tasks
  - Sleep, transitions
- Participation in occupations
  - School
  - Play/socialization
  - Home activities and chores

# Assess Underlying Factors Impacting Participation

- Sensory and motor factors
  - If not you, then who???



# Considerations when Choosing Assessment

- Context
- Resources (time and other)
- Ethnic and cultural factors
- Culture
- Child's needs
- Child's current level of functioning

# Assessment Versus Outcome Measurement

- Outcome measure is sensitive to change!
- Has been tested and shown to be responsive to change

# Evaluation of Ayres Sensory Integration

- Measure core sensory integration functions impacting participation
- Ages 3-12
- A set of 20 tests
- International normative data
- Translated into 15 languages
- Standard (Z) scores



# Sensory Processing Measure 2



- Evaluates sensory reactivity, praxis, socialization and
- Ages 4 months to 87 years
- Rating scales completed by parents, teachers or others
- Raw scores, standard (T) scores, percentile scores and DIF scores



# Interpretation of Assessment Data

## Ayres Sensory Integration Assessment® Interpretation Tool®

Problems in Vestibular Bilateral Integration		Problems in Somatopraxis		Problems in Visuopraxis	
Problems in Sensory Perception					
Vestibular Processing		Proprioception		Tactile Perception	
<ul style="list-style-type: none"> <li>Processing of rotary motion (e.g., SIPT Postrotary Nystagmus; SPM Balance and Motion; SP Body Position and Movement)</li> <li>Perception of head position and changes in center of gravity</li> </ul>	<ul style="list-style-type: none"> <li>Body position awareness (e.g., SIPT KIN; SPM Body Awareness; SP Body Position and Move)</li> <li>Grading of force</li> </ul>	<ul style="list-style-type: none"> <li>Touch perception scores (e.g., SIPT Manual Form Perception, Finger ID, Graphesthesia, Localization of Tactile Stimuli)</li> <li>Able to find or manipulate objects without vision</li> </ul>	<ul style="list-style-type: none"> <li>Visual perception (e.g., SIPT Space Visualization, Finger-Ground Perception; MVPT-3, -DTVP-3, TVP-3, SPM and SP visual items related to perception)</li> </ul>	<b>Problems in Sensory Reactivity</b>	
<ul style="list-style-type: none"> <li>Balance (e.g., SIPT Standing &amp; Walking Balance, BOT-2 Balance)</li> <li>Ocular tracking or SIPT Motor Accuracy</li> <li>Extensor tone</li> <li>Righting or equilibrium reactions</li> </ul>		<ul style="list-style-type: none"> <li>Proximal joint stability</li> <li>Balance (e.g., SIPT Standing and Walking Balance, BOT-2 Balance, SP Endurance and Tone)</li> <li>Proximal joint stability, weight shifting, ability to move segmentally</li> </ul>	<ul style="list-style-type: none"> <li>Ability to plan novel actions with face and body (e.g., SIPT Postural Praxis, Oral Praxis, Praxis on Verbal Command, Sequencing Praxis, Bilateral Motor Coordination; SPM Planning and Ideas)</li> <li>Ability to learn new skills</li> <li>Seeming coordinated or clumsy in actions</li> </ul>	<ul style="list-style-type: none"> <li>Visual-motor or visual praxis ability (e.g., SIPT Motor Accuracy, Design Copying, Constructional Praxis; VMI; BOT-2 copying items)</li> <li>Able to plan and learn visual-motor tasks (e.g., writing, drawing, building)</li> </ul>	
<b>Bilateral Integration</b> <ul style="list-style-type: none"> <li>Items that measure ability to coordinate both sides of the body (e.g., SIPT Bilateral Motor Coordination, Sequencing Praxis, Oral Praxis, Graphesthesia, Manual Form Perception)</li> <li>Bilateral finger to nose, finger touching</li> <li>Jumping jacks and skipping</li> </ul>					
<b>Common Behavioral Signs</b>					
<ul style="list-style-type: none"> <li>Appears to crave movement/lack signs of dizziness</li> <li>Appears to have good praxis skills in contrast to struggles with bilateral skills</li> </ul>	<ul style="list-style-type: none"> <li>Appears to seek heavy work, joint traction or compression activities</li> <li>Has low awareness of body position</li> </ul>	<ul style="list-style-type: none"> <li>Appears to seek extra touch input or seeming not to use tactile feedback, or both.</li> <li>Uses vision more than usual to guide actions</li> </ul>	<ul style="list-style-type: none"> <li>Misses seeing things</li> <li>Shows confusion in differentiating objects and shapes</li> <li>Appears not to use vision as much as expected</li> </ul>	<ul style="list-style-type: none"> <li>Has high or disorganized activity level</li> <li>Appears to have poor attention or distractibility</li> </ul>	<ul style="list-style-type: none"> <li>Has low or disorganized activity level</li> <li>Appears to have lethargy, apathy, or poor attention</li> </ul>
<b>Notes to Assist in Differentiating Problems and Patterns</b>					
<p>If low scores on tactile perception and praxis are present, then low scores in this area are more likely part of a broader somatodyspraxia pattern vs. vestibular bilateral integration.</p>	<p>Signs of poor proprioception frequently accompany both vestibular bilateral integration problems and somatodyspraxia.</p>	<p>Somatodyspraxia may include problems in vestibular processing and bilateral integration and/or visual dyspraxia.</p>	<p>Signs of both somatopraxis and visuodyspraxia may be present; poor visuopraxis scores without poor visual perception may be part of somatopraxis pattern.</p>	<p>Problems with regulating sensory responses can occur in conjunction with problems in vestibular bilateral integration, somatodyspraxia, or visuodyspraxia.</p>	<p>Signs of overresponsiveness, underresponsiveness, and fluctuating responses may be seen together; poor sensory perception can be confused with sensory hyporeactivity.</p>

# Raul's Assessment Data

Problems in Vestibular Bilateral Integration		Problems in Somatopraxis		Problems in Visuopraxis	
Problems in Sensory Perception					
Problems in Sensory Reactivity		Problems in Sensory Perception		Problems in Sensory Reactivity	
<b>Vestibular Processing</b> <ul style="list-style-type: none"> <li>■ Processing of rotary motion (e.g., SIPT Postrotary Nystagmus; SPM Balance and Motion; SP Body Position and Movement)</li> <li>■ Perception of head position and changes in center of gravity</li> </ul>	<b>Proprioception</b> <ul style="list-style-type: none"> <li>■ Body position awareness (e.g., SIPT KIN; SPM Body Awareness; SP Body Position and Move)</li> <li>■ Grading of force</li> </ul>	<b>Tactile Perception</b> <ul style="list-style-type: none"> <li>■ Touch perception scores (e.g., SIPT Manual Form Perception, Finger Identification, Graphesthesia, Localization of Tactile Stimuli)</li> <li>■ Able to find or manipulate objects without vision</li> </ul>	<b>Visual Perception</b> <ul style="list-style-type: none"> <li>■ Visual perception (e.g., SIPT Space Visualization, Finger-Ground Perception; MVPT-3, DTVP-3, TVPS-3, SPM, and SP visual items related to perception)</li> </ul>	<b>Hyperreactivity</b> <p>Signs of overresponsiveness or heightened responses based on SPM or SP items or observations related to</p> <ul style="list-style-type: none"> <li>• Vestibular input</li> <li>• Tactile input</li> <li>• Visual input</li> <li>• Auditory input</li> <li>• Other sensory input (e.g., temperature, pain, other sensations)</li> </ul>	<b>Hyporeactivity</b> <p>Signs of underresponsiveness or varying responses based on SPM or SP items or observations related to</p> <ul style="list-style-type: none"> <li>• Vestibular input</li> <li>• Tactile input</li> <li>• Visual input</li> <li>• Auditory input</li> <li>• Other sensory input (e.g., temperature, pain, other sensations)</li> </ul>
Problems in Motor-Related Functions					
<b>Postural/Ocular Mechanisms</b> <ul style="list-style-type: none"> <li>■ Balance (e.g., SIPT Standing and Walking Balance, BOT-2 Balance)</li> <li>■ Ocular tracking or SIPT Motor Accuracy</li> <li>■ Extensor tone</li> <li>■ Righting or equilibrium reactions</li> </ul>	<b>Postural Mechanisms</b> <ul style="list-style-type: none"> <li>■ Proximal joint stability</li> <li>■ Balance (e.g., SIPT Standing and Walking Balance, BOT-2 Balance, SP Endurance and Tone)</li> <li>■ Proximal joint stability, weight shifting, ability to move segmentally</li> </ul>	<b>Body-Centered Praxis</b> <ul style="list-style-type: none"> <li>■ Ability to plan novel actions with face and body (e.g., SIPT Postural Praxis, Oral Praxis, Praxis on Verbal Command, Sequencing Praxis, Bilateral Motor Coordination; SPM Planning and Ideas)</li> <li>■ Ability to learn new skills</li> <li>■ Seeming coordinated or clumsy in actions</li> </ul>	<b>Visuopraxis Visual-</b> <ul style="list-style-type: none"> <li>■ motor or visual praxis ability (e.g., SIPT Motor Accuracy, Design Copying, Constructional Praxis; VMI; BOT-2 copying items)</li> <li>■ Able to plan and learn visual-motor tasks (e.g., writing, drawing, building)</li> </ul>		
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# Assessment: Participant Activity

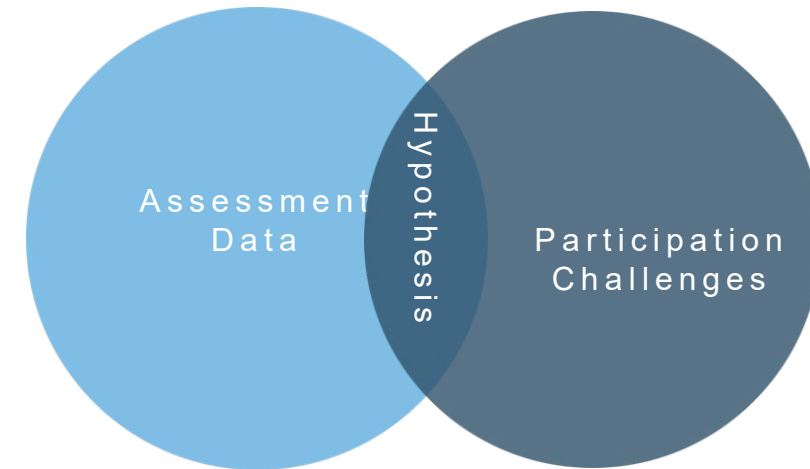
- Identify one assessment and list the following:
  - What key aspects does this assessment evaluate
  - Is it performance-based or parent/teacher report?
  - What type of data/information is yielded?
  - What do the scores mean?
  - What are the psychometric properties (validity and reliability)?
  - Is it also validated as an outcome measure?
  - What is your rationale for choosing this assessment?
  - Complete DDDM template

# Step 4: Generating Hypotheses

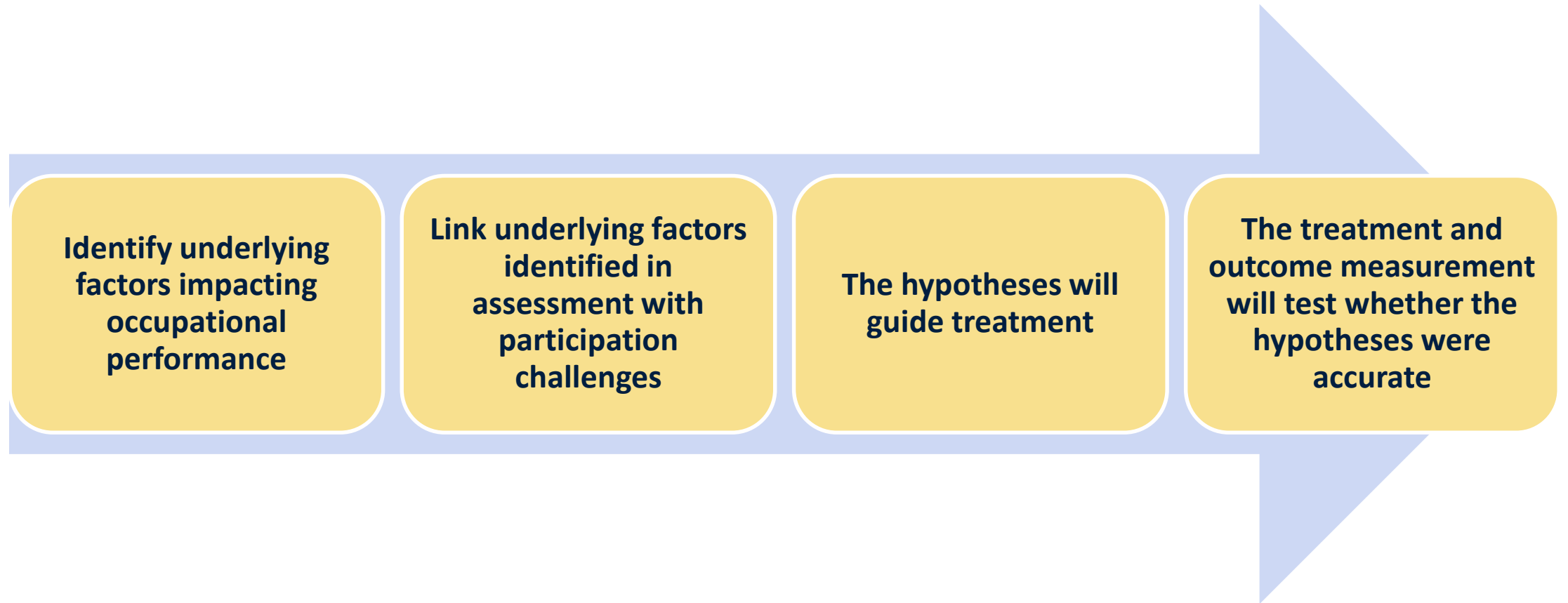


## Generate Hypothesis

- Links assessment data to participation challenges
- Predictive statements linking underlying factors to participation challenges
- Based on interpretation of assessment data
- Allows for hypotheses testing
  - Data from outcome measurement used to “test” the hypotheses



# Hypothesis Process



# Hypothesis Generation Examples

<b>Participation Challenge</b>	<b>Assessment Data</b>	<b>Hypothesis</b>
Unable to sit still for participation in classroom learning activities	Decrease vestibular functioning (from PRN & BOT-2)	Poor vestibular perception and balance make it difficult to maintain upright position for sitting during learning activities

# Hypothesis Generation Examples

<b>Participation Challenge</b>	<b>Assessment Data</b>	<b>Hypothesis</b>
Unable to sit still for participation in classroom learning activities	Decreased attention	Poor attentional skills make it difficult for child to maintain attention during seated learning activities

# Hypothesis Generation Examples

<b>Participation Challenge</b>	<b>Assessment Data</b>	<b>Hypothesis</b>
Unable to sit still for participation in classroom learning activities	Poor postural and motor control	Weak muscles and poor antigravity posture make it difficult to maintain sitting for learning

# Hypothesis Generation: Activity

Choose a participation challenge for a child on your caseload for whom you have assessment data, develop hypothesis

<b>Participation Challenge</b>	<b>Assessment Data</b>	<b>Hypothesis</b>

# Hypothesis Generation Worksheet

**Goal:**

<b>Strengths &amp; Challenges</b>	<b>Assessment Data Summary</b>	<b>Hypothesis</b>
<b>Strengths:</b>		
<b>Participation Challenge:</b>		

# Creating Goals

That are specific, measurable, attainable, relevant and time-based

# Create Goals

- Identification of Goals
  - Based on parent (or teacher) identified areas
  - Be sure goals are occupation-based
    - Activities of daily living, play, social, learning.
    - Relevant to context – school, home, community
  - Include clear description of current level
    - What does the child do now in this area? Supports or prompts needed.

# How are Goals determined?

- Child, parent or teacher are included when possible
- Goal areas are usually identified through interview, questionnaires and other means of including the patient and family in defining what will be considered important and relevant progress

# How are goals determined and written?

- Specific daily life challenges are identified
- Development of goal areas (areas of occupation)
- Write goal so that it is **SMART**

# S

**SPECIFIC**



Make goals clear and **specific**.

# M

**MEASURABLE**



Define **measurable** assets.

# A

**ATTAINABLE**



Confirm your goals are **attainable**.

# R

**RELEVANT**



Verify your goals are **relevant**.

# T

**TIME-BASED**



Set up a **time-based** plan.

# GOALS

Remember-

- Goals are different from interventions.
- Interventions are the treatment approaches in which the client and therapist will participate to improve function.
- Goals reflect a change in function, participation and/or occupation

# GOAL Attainment Scaling

Methodology for measuring change in goal performance

Includes writing goal, identifying current level of function, estimating expected outcome, scaling goal and then measuring function at specific interval during intervention.

See Goal Attainment Scaling Learning Module

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# Outcome Measurement

Contributions by Rachel Dumont, MS, OTR/L,



**Jefferson**  
Thomas Jefferson University

# What is Outcome Measurement?

- Measurement of change that is attributable to an intervention
- In DDDM outcomes are measured at the proximal (factor) and distal (participation-based goals) levels

To learn more about outcome measurement

<https://www.healthcatalyst.com/insights/top-7-healthcare-outcome-measures>

# Why Outcome Measurement?

- Monitor Progress
  - Is intervention working?
  - Are there improvements in goals, daily life routines and activities?
  - Are concerns persistent?
- Validate Hypothesis/Treatment Approach
  - Are identified proximal factors changing?
  - Do distal outcomes results reflect meaningful change?
- Refine Clinical Reasoning
  - Does theory, hypothesis or outcome measurement require adjustment?
  - Are proximal factors impacting function and participation?

# Outcome Measurement: Proximal and Distal

- Proximal outcome identification allows for measurement of change that targets specific factors addressed in intervention
  - These are called **proximal factors**
  - Proximal outcomes are the “factors” identified in the assessment that are hypothesized to be impacting goals
  - **Sensory, motor, behavioral**

- Distal outcomes measure effectiveness of intervention
  - participation or occupation-based areas identified during assessment and goal identification



# Outcome Measurement Creates Evidence Through Practice

- **Measurement**
  - **Allows evaluation of impact of chosen interventions**
- **Proximal Outcomes**
  - **Proximal outcomes allow therapist to validate hypothesis**
- **Distal Outcomes**
  - **Distal outcomes measure progress made in participation in daily activities**

# Identify Outcome Measures

- Measurement of change that is attributable to an intervention
- In DDDM outcomes are measured at proximal (factor) and distal (occupation-based) levels.
- Use validated outcome measures when available
- Example of Distal Outcome Measures
  - PEDI
  - Goal Attainment Scaling
  - AMP/ESI
  - Others
  - Supplement with qualitative, narrative data
- Example Proximal Outcome Measure (most not validated as outcome measure and used for therapists knowledge only)
  - Sensory
    - EASI
    - SPM
    - SP
  - Motor
    - Mfun, BOT2, Peabody

# Goal Attainment Scaling as an Outcome Measure

**Goal: Improve participation in teeth brushing**

**Estimate expected outcome**

**Choose variable of change**

**Scale according to best knowledge of child**

**Sample: Goal Attainment Scale**

**Current Level: 20 minutes with constant verbal prompting**

**Expected Outcome: With verbal prompts will brush in 9-12 minutes**

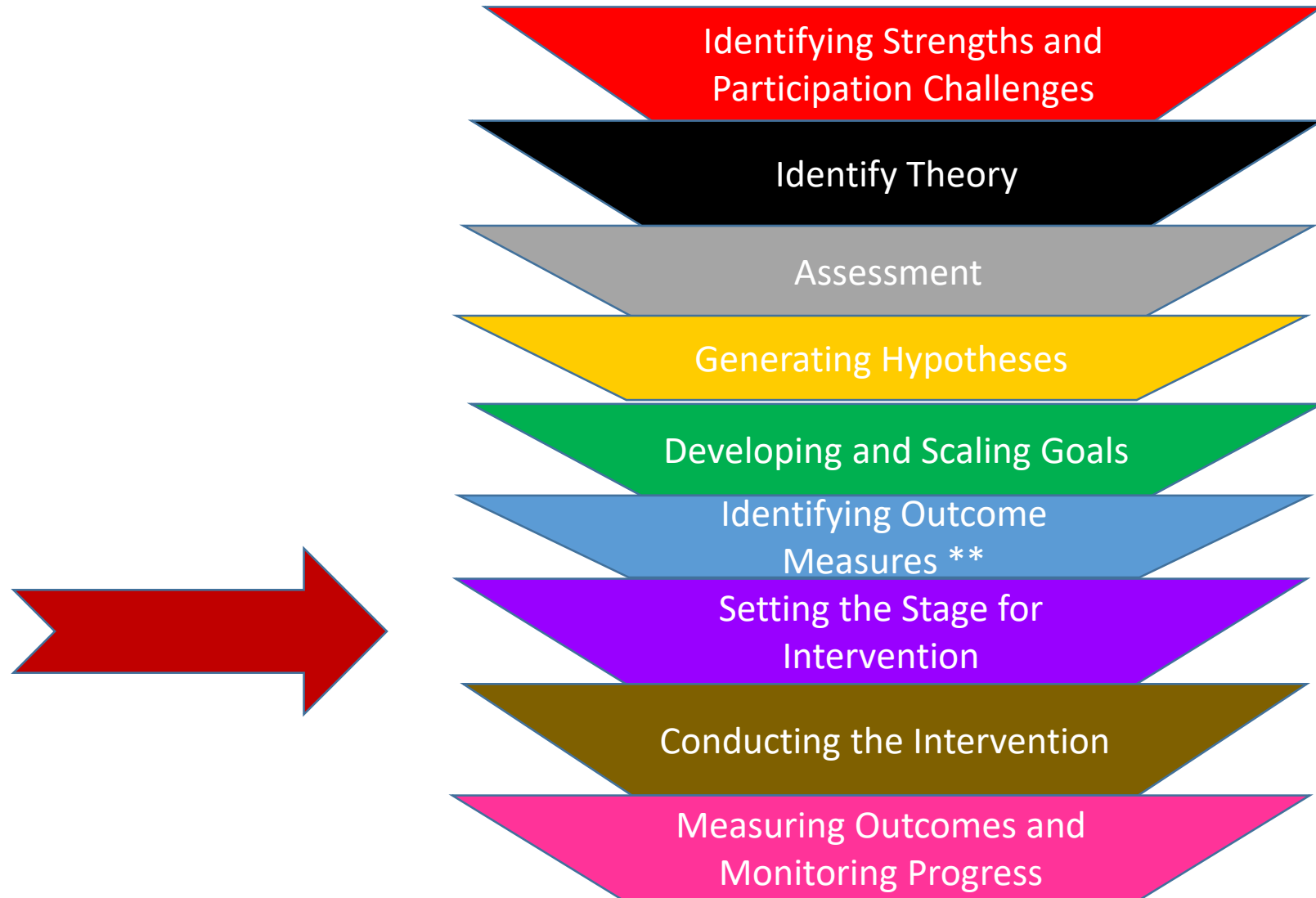
Goal Attainment Scale				
-2 (Much less than expected)	-1 (Less than expected)	0 (expected)	+1 (More than expected)	+2 (Much more than expected)
Brush within 17-20 minutes	Brush within 13-16 minutes	Brush within 9-12 minutes	Brush within 8-5 minutes	Brush within 4-1 minutes

# Setting the Stage for Intervention

Conducting the Intervention

Measuring Outcomes

# Data Driven Decision Making Approach



# Setting the Stage for Intervention

- **Systematic**
- **Theory Driven**
- **Evidence-based**
- **Replicable**
- **Chose intervention approach based on clients needs**
- **Describe your intervention so it can be replicated**



# Context for Intervention

- Setting (Where)
- Intervention approach (one-on-one, group, consultation/coaching)
- Equipment
- Training of interventionists
- Follow any evidence-based procedures
  - e.g., ASI Fidelity Measure Structural and Process Elements

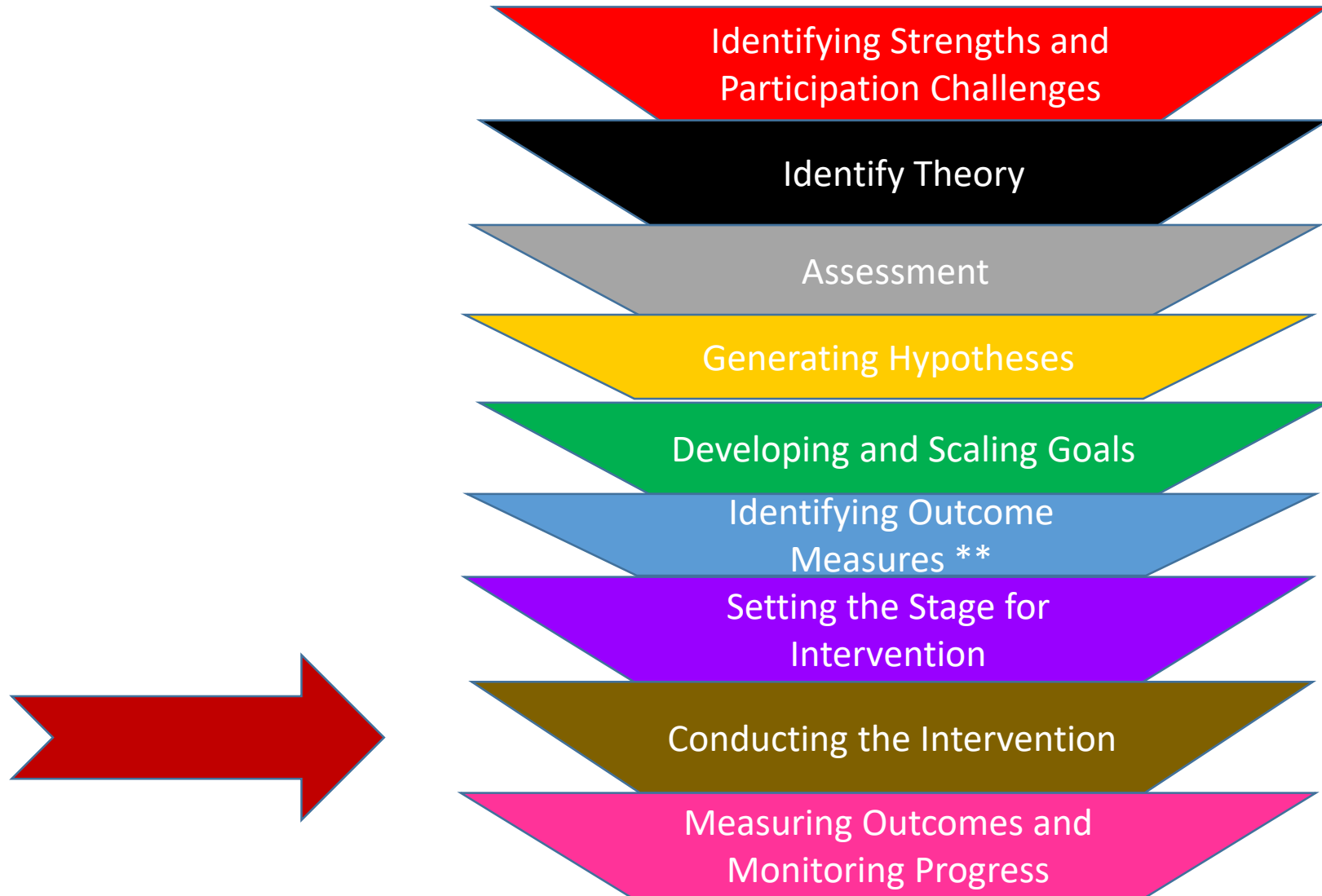
# Identify Dosage, Setting, Approach

- **Dosage – use data and evidence**
  - **Length, duration and intensity**
    - **E.g.: 10 weeks, 3 hours per week**
  - **Sometimes based on funder (Insurance agencies, school districts, etc.)**
  - **Not much guidance in literature on dosage**
- **Setting**
  - **School, home, community**
- **Approach**
  - **Home (coaching, parent-mediated), direct, telehealth**
  - **School (direct, push in, consultative)**

# Identification of Treatment Focus

- **Underlying factors impacting goals**
- **Child's level of function/abilities/interests**
- **The child in the context of their environment**
- **Context/delivery method(s)**
- **Family or teacher's needs/preferences**
- **Therapists skill set**
- **Therapy is an art and a science**

# C Step 8: Conduct Intervention



# Conduct the Intervention

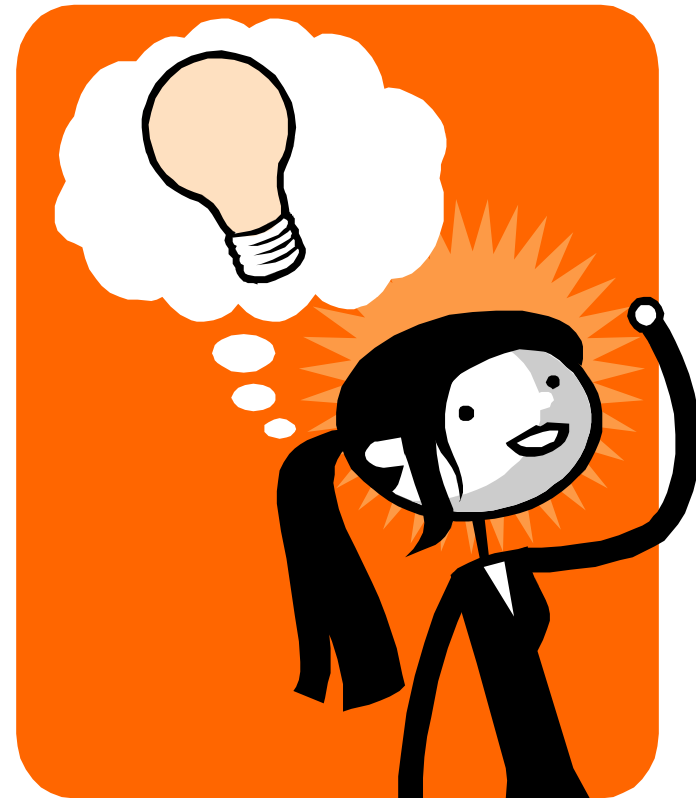
- Use evidence-based strategies
- Use manualized, tested protocols
- Replicate interventions as closely as possible
  - Recognize that evidence-based practices are oftentimes in ideal settings and modifications may be needed for use in “real-life” situations
- Tailor to individual and make it replicable:
  - Articulate rationale
  - Consider how chosen theoretical approach guides intervention
  - Use assessment data to identify approach
  - Identify treatment activities
- Plans for collaboration with key stakeholders, (including adapting activities and modifying routines and activities in the home or school)



# For OT-ASI Think about...

- Have the goal in your head
- Activity in your pocket
- FUN in your heart

Then you can follow the child's lead, play, be spontaneous and have fun



# DDDM Intervention Planning Worksheet

**Goal #1:**

**Current Performance:**

**Strengths:**

Assessment Data	Hypotheses	Intervention Plan for Clinic/School/Center	Parent/Teacher Education and Environmental Adaptation

# Step 8: Conduct Intervention

## DDDM Treatment Plan Worksheet

**Goal: Improve ability to sit for learning activities**

**Current Performance:** Able to sit for 10-20 seconds during learning activities; then walks around classroom. Requires 2 physical redirections to go back to seat.

**Strengths:** Loving/kind, enjoys roughhouse play, enjoys being outside, good with language/communication, interested in clocks/light switches

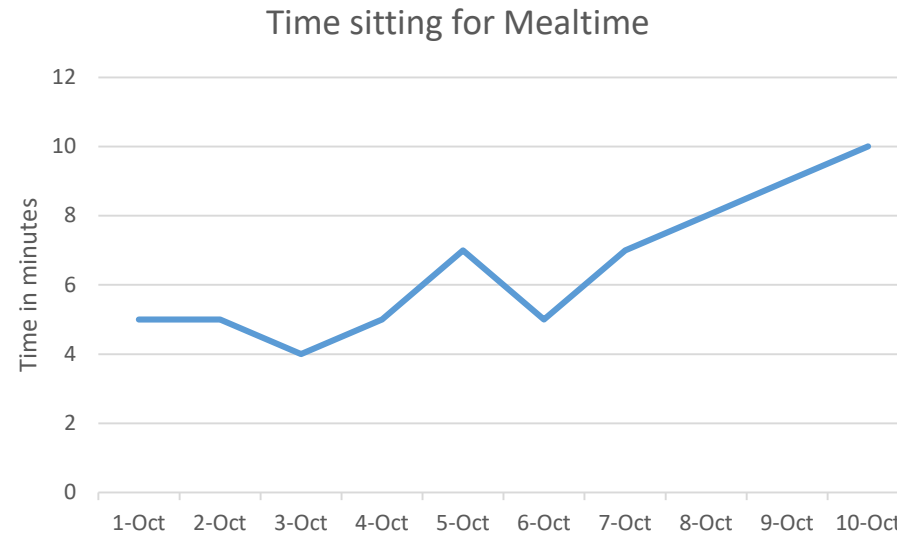
Assessment Data	Hypotheses	Intervention Activities	Home/Classroom Activities and Environmental Adaptations
<p>Poor tactile/proprioceptive perception</p> <p>Decreased vestibular processing</p> <p>Poor postural control</p> <p>Poor praxis</p>	<p>Decreased perception of tactile and proprioceptive input contributes to poor body awareness and difficulty sitting.</p> <p>Decreased vestibular perception/processing and poor postural control contributes to difficulty with balance and postures.</p> <p>Poor praxis contributes to difficulty completing activities</p>	<p><b>Treatment protocol:</b> Active, individually-tailored sensory motor activities to facilitate vestibular functioning, posture, balance, tactile and proprioceptive awareness and praxis.</p> <ul style="list-style-type: none"> <li>• Movement of head through space: Prone in net, lycra or other swing swing with bean bag toss.</li> <li>• Sit on bolster swing and reach for beanies</li> <li>• Play in ball pit</li> <li>• Hide and seek with crash pad</li> <li>• Pretend Spiderman with climbing and jumping</li> </ul>	<p>Provide parents guidance on playground play</p> <ul style="list-style-type: none"> <li>• Swings</li> <li>• Slides</li> <li>• Climbing equipment</li> </ul> <p>Adapt home or classroom with opportunities for movement and postural control</p> <ul style="list-style-type: none"> <li>• Flexible seating (with movement cushion or ball)</li> <li>• Opportunities for praxis with couch pillows or outdoor play equipment</li> </ul>

# Monitor Outcomes and Measure Progress

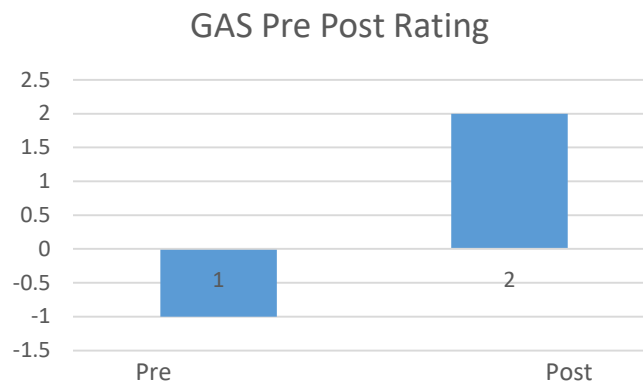


# Measures Outcomes

- Charts/Graphs
- Narrative reports
- Rubrics
- Goal reporting
- Goal Attainment Scales



Data Sheet for time spent sitting for mealtime		
Date	Time/min	Comments
October 1	5	
October 2	5	
October 3	4	Not feeling well
October 4	5	Not feeling well
October 5	7	Good day
October 6	5	Start of new week
October 7	7	Good day
October 8	8	Good day
October 9	9	
October 10	10	



Rubric		
Optimal Outcome	Some improvement	Poor outcome
Brushes teeth with prompting from mom in 9–12 minutes	Brushes teeth with prompting from mom in 13–16 minutes	Brushes teeth with prompting from mom in 17–20 minutes
No tantrums or crying	Some (one or two) tantrums or crying	More than two episodes of tantrums and crying

# Participant Application

- **Use the slide template to follow the steps of DDDM for a client**
- **Use the DDDM worksheets**
  - **Hypothesis Generation**
  - **DDDM Table**
  - **DDDM Treatment Planning Worksheet**

# Supplemental Materials

- Occupational Profile
- DDDM Worksheet
- DDDM Table