




CLINICAL EXPERIENCE: DATA GATHERING IN CLINICAL PRACTICE

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Objectives

Participants will be able to:

- Understand the role of hypothesis generation in the evaluation process
- Use clinical reasoning skills and existing data to interpret the results obtained from different forms of data gathering
- Apply the Reasoning in Action Model (RAM) to a clinical case
- Determine which treatment approaches to combine to provide evidence-based based meaningful intervention

This presentation is partially based on Blanche, Guiffrida, Hallway, Edwards, & Test (2022)



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Basic Assumptions

- Data drives the therapeutic process
- We make informed and evidence-based decisions
- Evidence includes clinical reasoning, best external evidence, client's choices (Sackett et al., 1996)

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The Importance of Clinical Reasoning in Data-Driven Practice and EBP

Provides choices of what assessment tools to utilize

Helps us analyze what we see – our observations during the evaluation and the intervention process

Provides choices of the evidence to utilize in the intervention process

Helps us understand how to apply them

Helps us understand what and how to measure the outcomes of the intervention

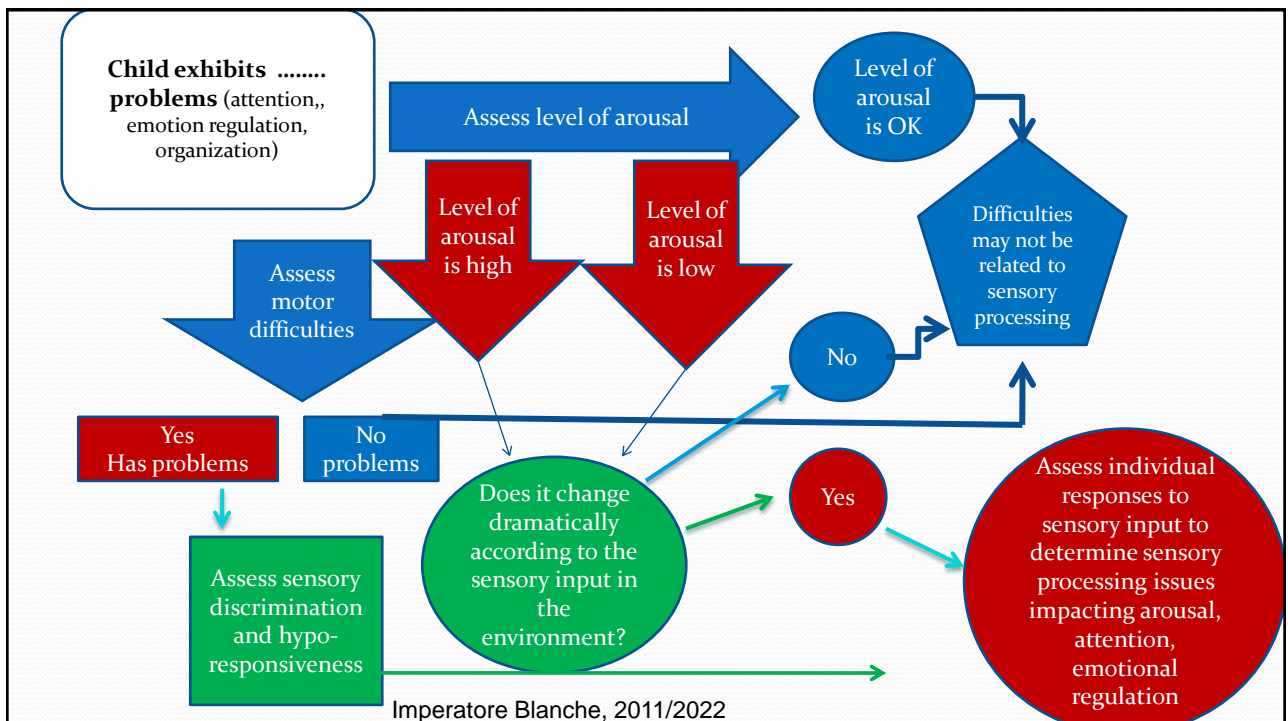
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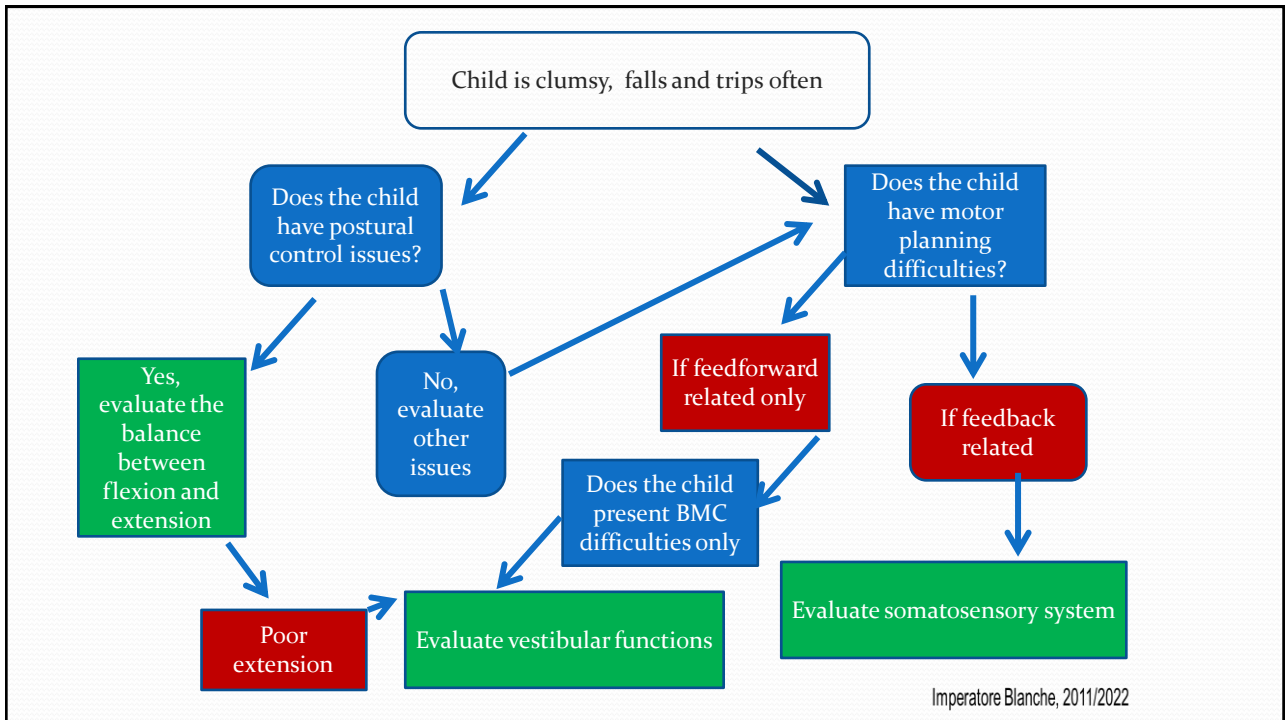
The Evaluation and Intervention Process Requires Systematizing Clinical Reasoning

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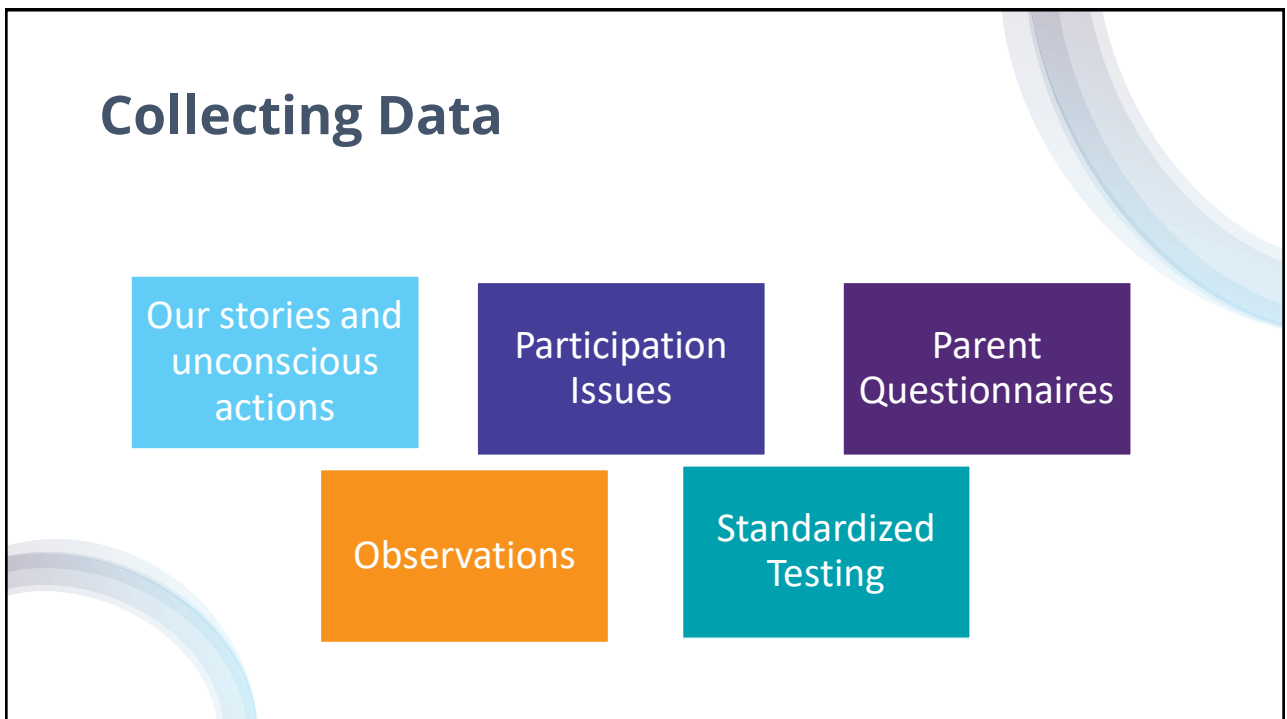
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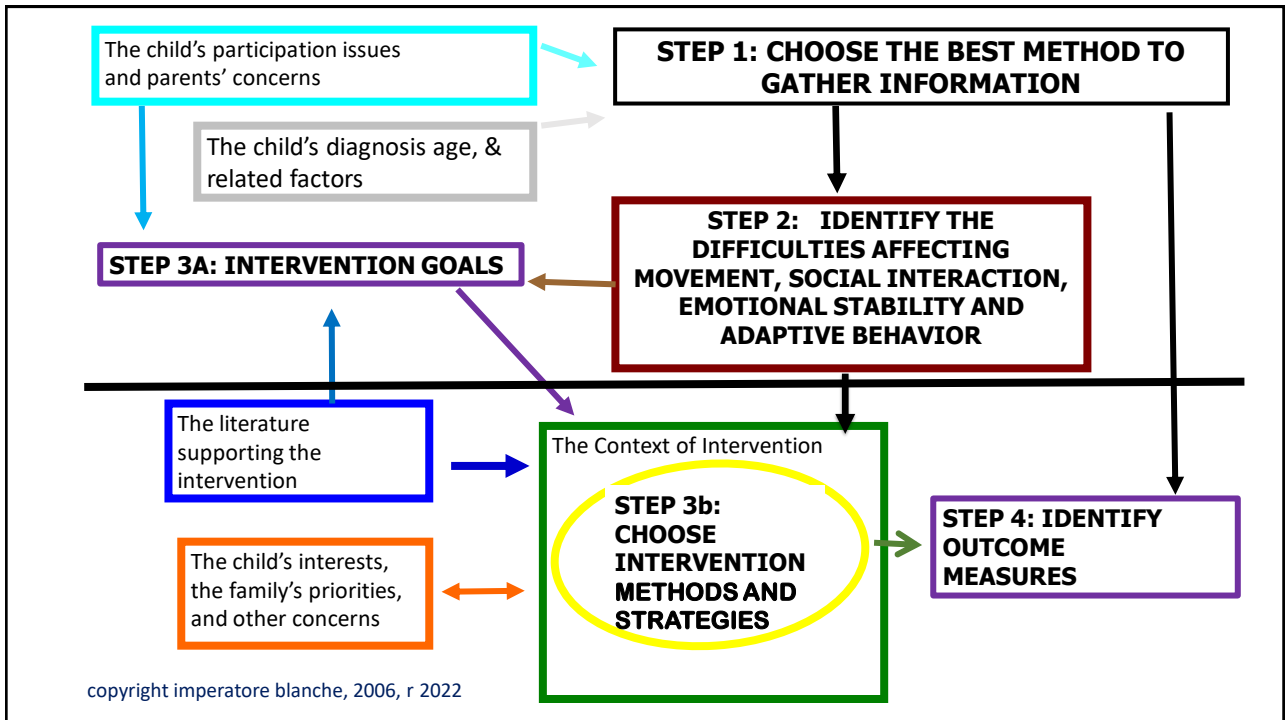
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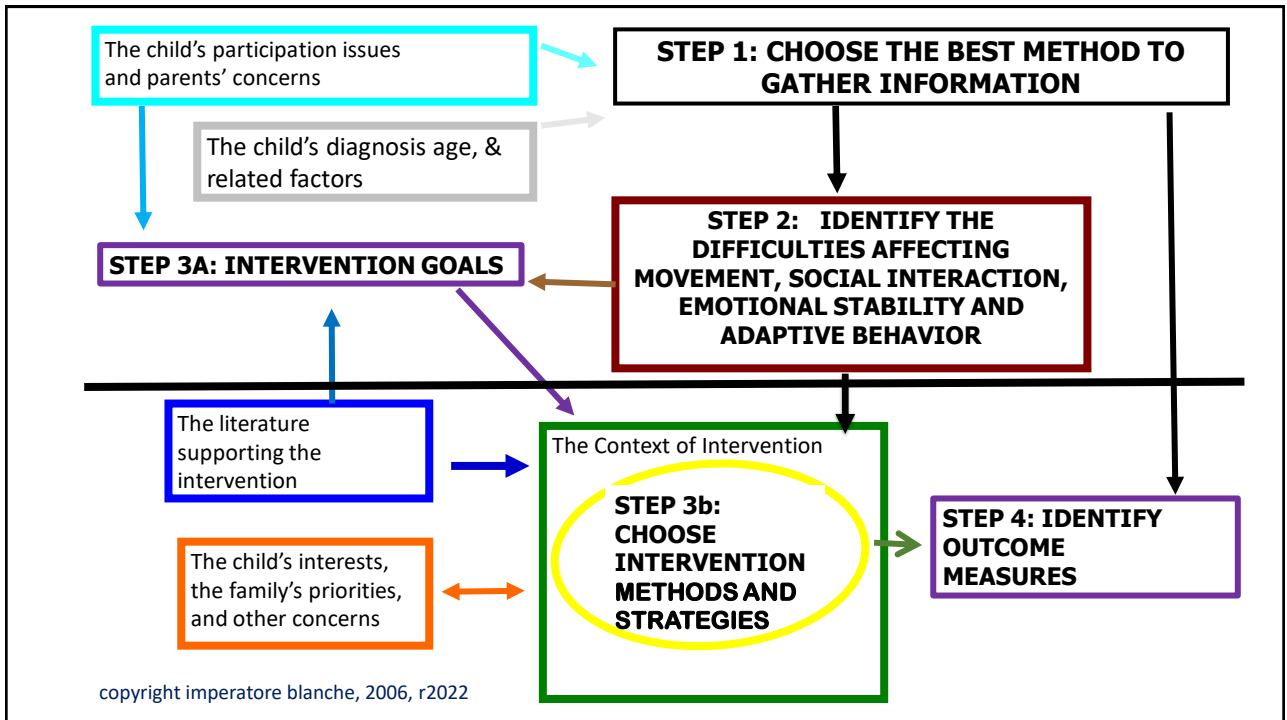


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Step 1: Choosing the best method to gather information

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Answering Complex Questions



- What information do I have available to me?
 - Reason for referral
 - Parent surveys/child interview
 - Standardized assessments
 - Observations – Why are observations important during the evaluation and intervention process?

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CASE: Background Information and Reason for Referral



- Age: Six year old
- No diagnosis
- Reason for referral:
 - Overly active – stands up during meals and in the classroom
 - Decreased attention
 - Difficulty handwriting/fatigue
 - Does not get his work done on time

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Relationship
between the
reason for
referral and
potential
issues
(starting to form
hypotheses)

- REASON FOR REFERRAL: Fidgety, does not attend, does not stay in seat
 - ADHD – executive functions?
 - Stressed?
 - Seeks proprioception?
 - Too social, likes interacting with other
 - Sensory processing difficulties?
 - Under responsive to vestibular input?
 - Over responsive to visual, auditory, tactile?
 - Over responsive to tactile?
- REASON FOR REFERRAL: Does not complete handwriting tasks
 - Script or cursive?
 - Tremor, neuromotor problem?
 - Motor planning issues – can't copy/imitate?
 - Visual perception?
 - Somatosensory processing?
 - Motor planning - Letter formation?
 - Somatosensory processing?

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Information Provided by the Assessment Tools

- Parent Questionnaires
 - Pursues movement – interferes with daily routine
 - Rocks in chair
 - Takes unnecessary risks
 - Gets frustrated easily
 - Has trouble finishing tasks
 - Leaves messes that others need to clean up
 - Leaves seat at the wrong time
- Observational Tools: Standardized Tests
 - VMI within typical range
 - No fine motor difficulties
 - Difficulty with tasks requiring bilateral motor coordination
 - Sequencing
 - Can't catch a ball thrown to the wall
 - No difficulties copying simple actions
 - PRN below 5 seconds to each side

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Unstructured Observations in the Home



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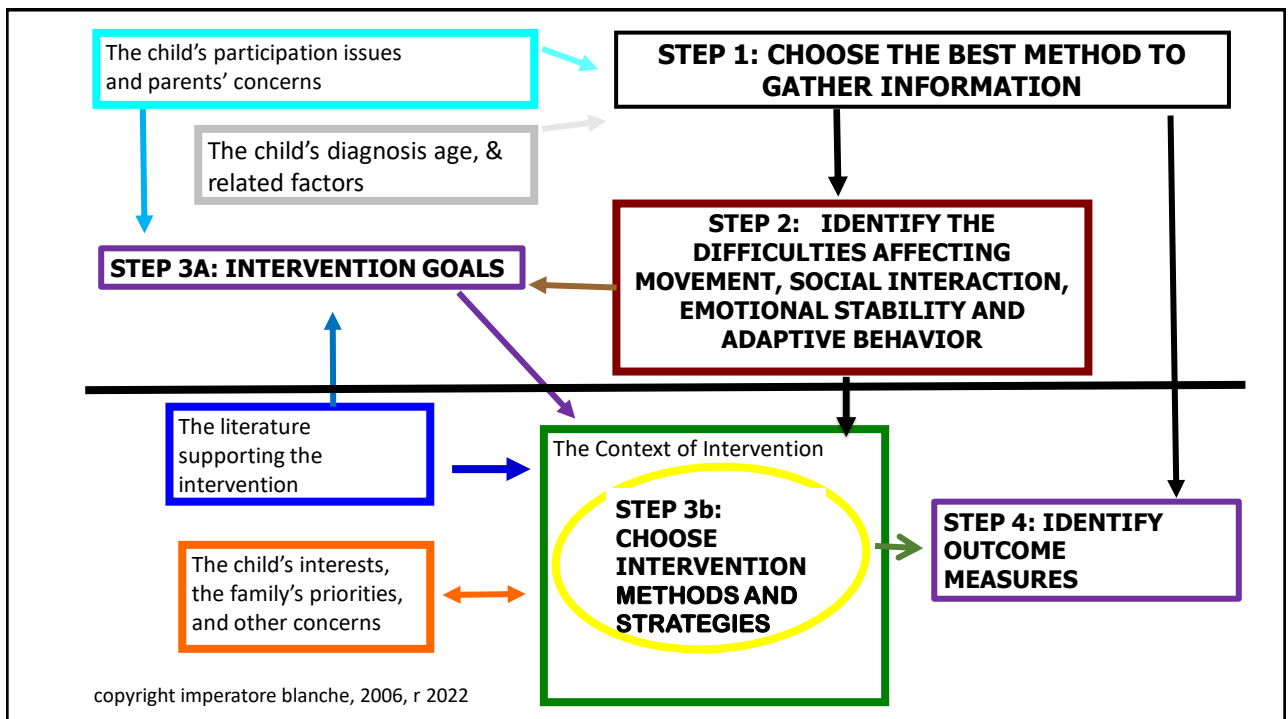
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STEP 2: Identifying the difficulties affecting performance

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Hypotheses Generation

Objective Data	Interpretation/hypothesis

- Differentiating between objective data and interpretations
- Clustering the data to form hypotheses
- What patterns do you see to form a conclusion and start choosing intervention methods?



The importance of hypothesis generation



Objective Data	Interpretation/hypothesis

Reproducible Working Document 1		
First Phase: Data (Issues in participation, observations, other available information)	Second Phase: Hypotheses Generation/ Interpretations	Third Phase: Counting Data points and Conclusion.
Reason for referral:		
Parent questionnaires and interview		
Observations in the classroom or community	🏠	
Observation in the specialized setting		
Structured observations in specialized setting:		
Standardized testing:		

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First Phase: Data (Issues in participation, observations, other available information)	Second Phase: Hypotheses Generation/ Interpretation	Third Phase: Counting Data points
<ul style="list-style-type: none"> Reason for referral: Decreased attention Overly active Does not like soccer Does not complete handwriting activities/fatigues Observations: Both arms don't move at the same time Does not jump with both feet of the floor Rope is not moved evenly/fluid Misses rope when jumping Parent survey Pursues movement – interferes with daily routine Rocks in chair Takes unnecessary risks Standardized Assessments Low scores in catching/throwing balls Low scores in postural control (standing on one foot) Low scores in items requiring bilateral motor coordination and sequencing (skipping, JJ) PRN below 5 seconds to each side 	<ul style="list-style-type: none"> Under responsive to prop Seeks prop Seeks vestibular/under-responsive Bilateral motor coordination Decreased postural control Decreased fluidity/sequencing/grading Decreased feedforward skills Motor planning (feedback) Tactile defensiveness Gravitational insecurity OTHER CONCERNS: ATTENTION, RISK TAKING, SPENDS TIME SOCIALIZING 	<ul style="list-style-type: none"> 2 4 3 1 2 3 0 0 0

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Conclusion



- Under responsive to vestibular input
- May be under-responsive to proprioception – seeks proprioception either to get more information about the body
- Vestibular processing can be related to decreased bilateral motor coordination, ability to maintain a stable visual field necessary for feedforward, and decreased postural control
- Proprioception can be related to decreased postural control, fluidity, and decreased feedforward abilities
- No signs of tactile defensiveness – tactile discrimination needs to be further evaluated
- Motor planning skills (feedback-related) seem OK, can be further evaluated
- Decreased inhibition, self monitoring may be related to attention not finishing tasks on time self-monitoring

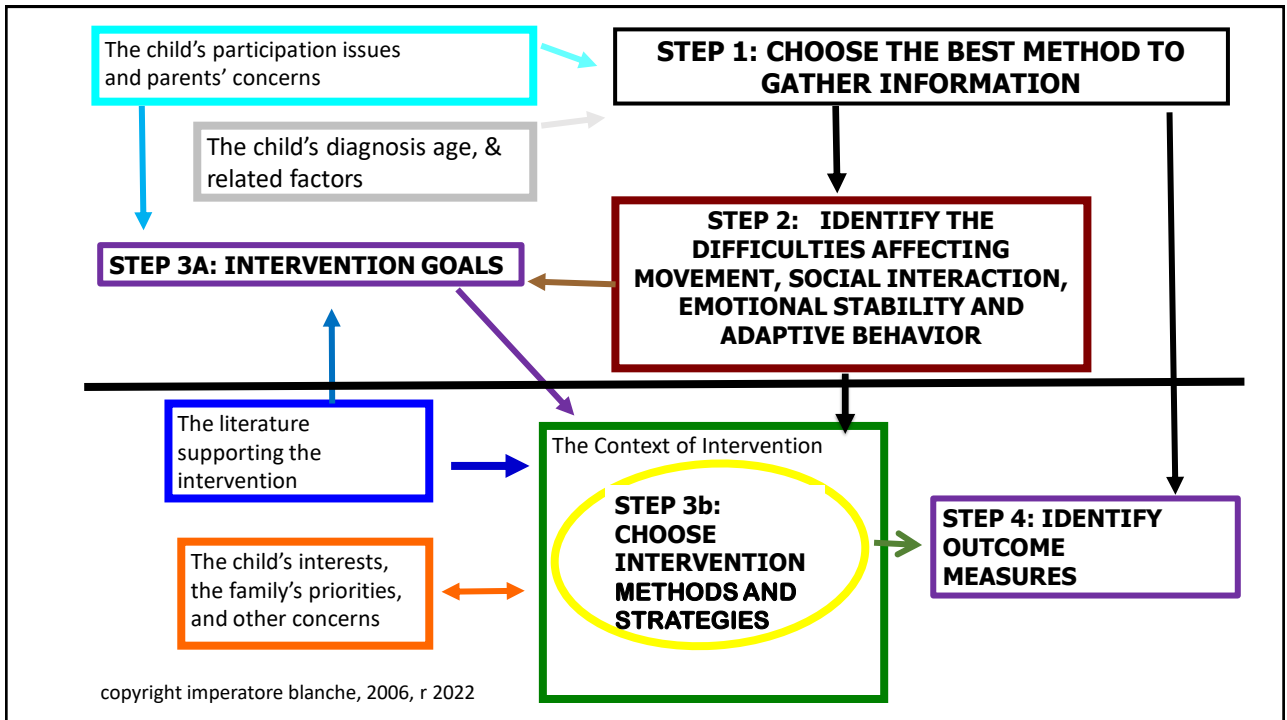
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STEP 3: Intervention

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The Intervention: SI and Other Approaches



- The sensory experience will be utilized based on the evaluation results.
- Participation issues will be targeted in the goals and during the intervention.
- The adaptive response will depend on
 - The difficulties identified during the evaluation
 - The challenges presented during the intervention and the difficulties related to participation
- The physical environment will depend on what is available
- Other intervention methods will depend on additional problems

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The Intervention: SI and Other Elements

- The sensory experience will be utilized based on the evaluation results.
Under responsive to vestibular and proprioception experiences influencing bilateral motor coordination, feedforward, attention, postural control, fluidity and sequencing, feedforward, (motor planning)
- Participation issues will be targeted in the goals and during the intervention.
Increase attention during activities rich in vestibular input If participation issues are related to behaviors (seeking) then address seeking behaviors
- The adaptive response will depend on
 - The difficulties identified during the evaluation
 - The challenges presented during the intervention and the difficulties related to participation
 Adaptive responses: body alignment throughout, motor planning with balls (feedforward related as feedback skills appear OK), inhibition, and self-monitoring throughout organization of behavior tasks
- The physical environment will depend on what is available
Clinic/park/playground
- Other intervention methods will depend on additional problems
Motor control, executive functions

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Complementing SI Principles

SI PRINCIPLES	USED IN TRADITIONAL SI INTERVENTION	WHAT ELSE IS NEEDED?
THE SENSORY SYSTEMS	Tactile Vestibular Proprioceptive	
ADAPTIVE RESPONSE/CHALLENGE	Adaptive responses utilize sensory experiences Focus on motor and behavior	
CONTEXT OF PLAY/CHILD CENTERED	Intrinsic motivation Enjoyable Spontaneous	
THERAPEUTIC ALLIANCE	A partnership Child directed/Therapist modified	
PHYSICAL ENVIRONMENT	Sensory rich gym type environments	

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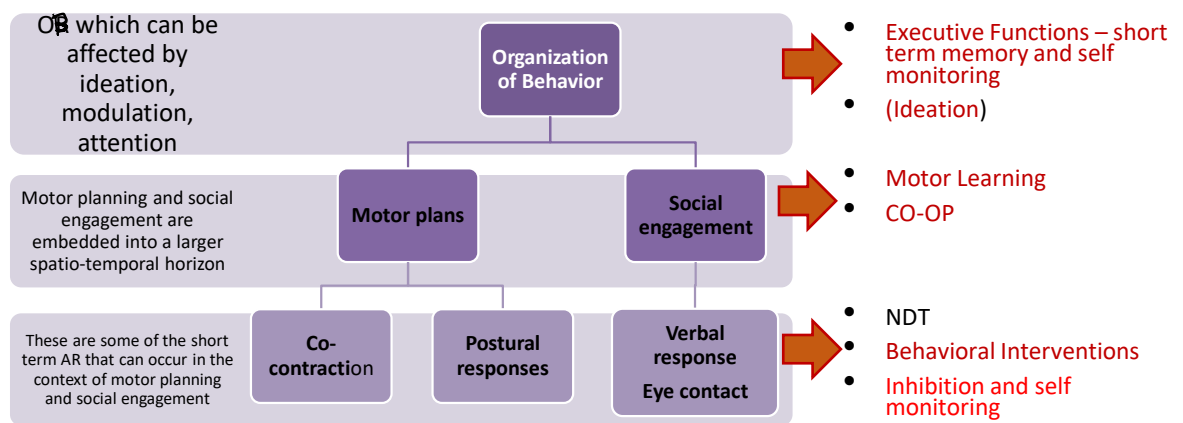
Complementing SI Principles

SI PRINCIPLES	USED IN TRADITIONAL SI INTERVENTION	WHAT ELSE IS NEEDED?
THE SENSORY SYSTEMS	Tactile Vestibular Proprioceptive	Visual, Auditory, Olfactory Interceptive
ADAPTIVE RESPONSE/CHALLENGE	Adaptive responses utilize sensory experiences Focus on motor and behavior	Focusing also on executive functions, short term memory, posture, neuromotor, and social emotional challenges Behavior: what about ideation, organization, and social skills?
CONTEXT OF PLAY/CHILD CENTERED	Intrinsic motivation Enjoyable Spontaneous	Understanding child-centered interventions, when to use them, and when we cannot. Learning to enter into the child's choices
THERAPEUTIC ALLIANCE	A partnership Child-directed, therapist modified	Always
ENRICHED PHYSICAL ENVIRONMENT	Sensory rich gym type environments	Is that enough? What about the community? School? Playground? Home?

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Why Are Adaptive Responses Important?

Nesting Adaptive Responses/Behaviors



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Conclusion

- Complex issues require considering multiple variables impacting the child's functional skills and participation
- Data drives our evaluation and interventions
- Data is collected through multiple sources
- Interventions require consideration of the complexity of the issues assessed



Thank you!

Additional Readings



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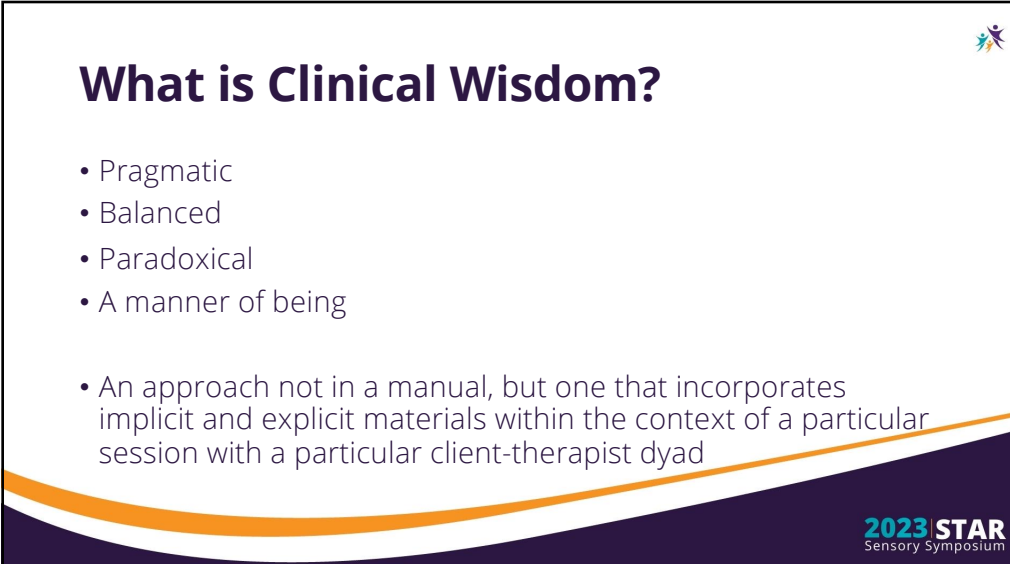


Cultivating Clinical Wisdom through Reflection

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October 7, 2023 Denver, CO

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What is Clinical Wisdom?

- Pragmatic
- Balanced
- Paradoxical
- A manner of being

• An approach not in a manual, but one that incorporates implicit and explicit materials within the context of a particular session with a particular client-therapist dyad

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What is Clinical Wisdom?

- The linkage of theory, knowledge, and ingenuity with pragmatic, interpersonal, and affective components within the context of a therapeutic interaction to inform therapeutic decision-making
- Unique to each therapist-client dyadic interaction
- Encompasses both the art and science of OT

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How do we become clinically wise?

- Be curious
- Be open
- Recognize your own limitations
- Accept what you can and cannot control
- Be in pursuit of change

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What does clinical wisdom look like?



- Curiosity
- Humility
- Authenticity
- Vulnerability
- OK with failure
- Articulating a sound rationale for therapeutic hypotheses and ideas
- Able to consider therapeutic situations from multiple perspectives and weigh out the possibilities
- Guide on the side rather than sage on the stage
- Reflective

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What do we mean by Reflection?



- Recap
 - Articulate
 - Consider connections
 - Respond
-
- Active process of seeking to be changed by deepening our understanding and perception of previous events/experiences so that we can be more effective in the future

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Conceptualizations of Reflection



- Revisiting an experience to learn from it (Schon, 1983; Parham, 1987)
- “A deliberate affective activity in which individuals engage to explore their experiences in order to lead to new understanding and appreciation” (Boud, Keough, & Walker, 1985, p.19)
- Critiquing one’s own clinical thinking about dilemmas arising in practice
- Leads to emotional or physical changes necessary to increase client engagement and move therapeutic process forward

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How is Reflection Different from Clinical Reasoning?



- Clinical reasoning leads us to problem solving –
 - why
 - what’s next
 - maybe [xxx] will work
- Reflection leads to change in the therapy process AND the practitioner
 - I wonder...
 - What about...
 - How come...

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What is Involved in Reflection?

- What am I doing (reflecting in action)
- What just happened (reflecting on action)
- Wondering
- Allowing and recognizing affective responses
- Remaining open to being changed
- Considering what comes next


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A Sample Reflection

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Benefits of Reflection


- Promotes synthesis and deep learning
- Furthers personal growth and development
- Advances internalization of knowledge

- Propels us forward in becoming effective, excellent and expert practitioners




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When is Reflection Helpful?

- Sorting out
- Considering options
- Seeking to understand self or other




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Reflective Practices

- Narrative writing
- Storytelling
- Journaling
- Meditation
- Verbal feedback
- Videotape sessions and review them for purpose of reflection




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To Deepen Reflection

- Recognize that different people can see the same event in different ways
- Step back and view the event from a different lens
- Consider the event from the perspective of the others
- Revisit the event over time
- Consider emotions of self and the others involved



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Another Reflection



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Reflection in your Practice




- Does reflection come naturally to you?
- When do you reflect?
- What works best for you?
- What interferes with your reflective practices?




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What to Expect when you Reflect

- Discovery
- Discomfort
 - I wish I had...
 - I should have...
 - They probably think...
 - I wish I knew...



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A final Reflection




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Some final Reflective Questions

- If your reflective practices were to change,
 - what else might change in your practice?
 - What might change in you?
- Is it worth it?



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