

Addressing Functional Cognition in Mental Health

Session 3: Interventions for Cognitive Impairment

Taylor LaVoi, Jessa Hulteng, & Sarah Nielsen

October 24th, 2023



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

Disclaimer and Funding Statement

This presentation was prepared for the Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) under a cooperative agreement from the Substance Abuse and Mental Health Services Administration (SAMHSA). All material appearing in this presentation, except that taken directly from copyrighted sources, is in the public domain and may be reproduced or copied without permission from SAMHSA or the authors. Citation of the source is appreciated. Do not reproduce or distribute this presentation for a fee without specific, written authorization from the Mountain Plains MHTTC. For more information on obtaining copies of this presentation please email casey.morton@und.edu.

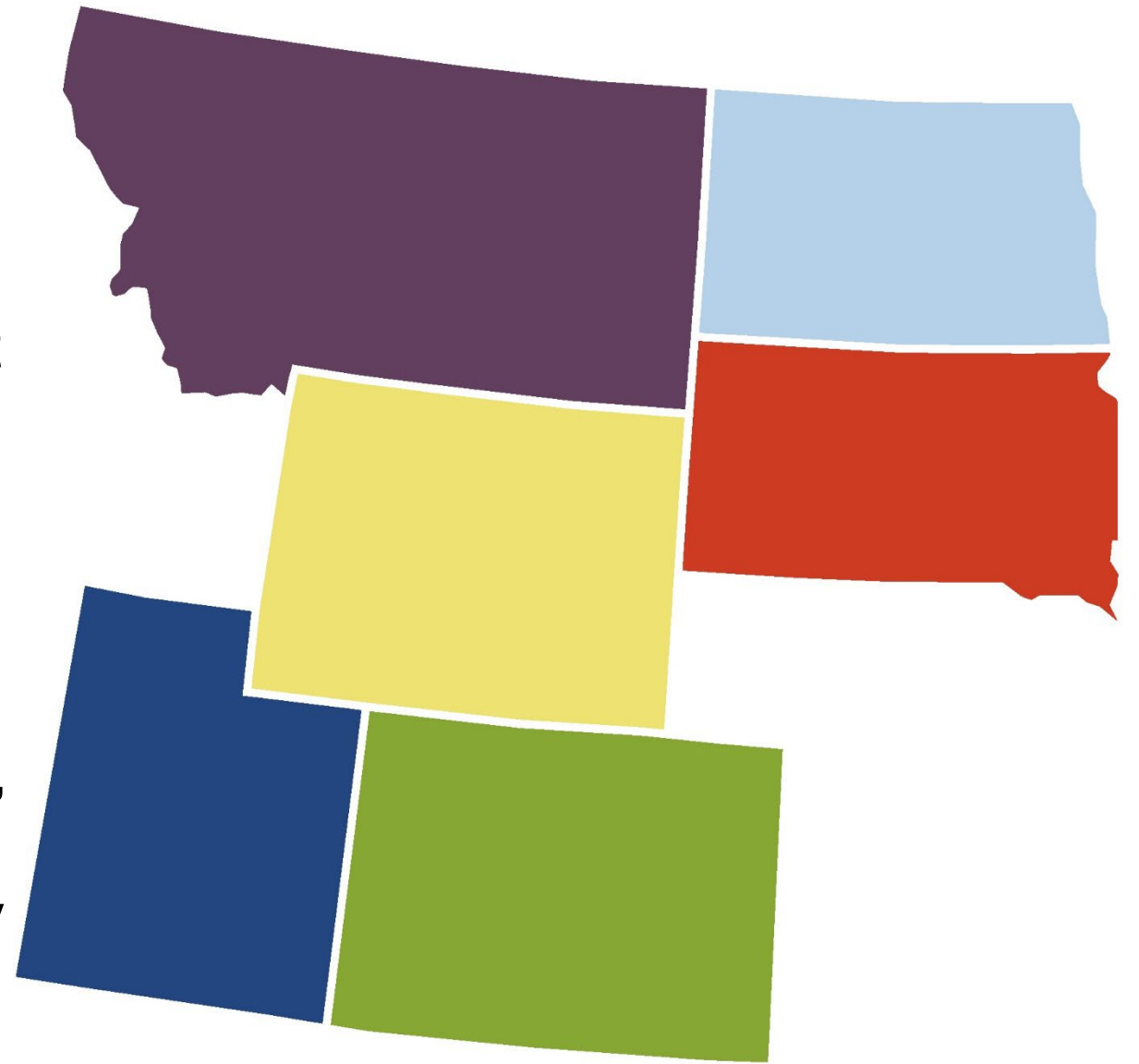
At the time of this presentation, Tom Coderre served as acting SAMHSA Assistant Secretary. The opinions expressed herein are the views of Taylor LaVoi, Jessa Hulteng, and Sarah Nielsen and do not reflect the official position of the Department of Health and Human Services (DHHS), or SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this presentation is intended or should be inferred.

The work of the Mountain Plains MHTTC is supported by grant H79SM081792 from the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

The Mountain Plains Mental Health Technology Transfer Center

The Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) provides training and technical assistance to individuals who serve persons with mental health concerns throughout Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming).

We belong to the Technology Transfer Center (TTC) Network, a national network of training and technical assistance centers serving the needs of mental health, substance use and prevention providers. The work of the TTC Network is under a cooperative agreement by the Substance Abuse and Mental Health Service Administration (SAMHSA).



Land Acknowledgement Statement

Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.



The MHTTC Network uses affirming, respectful and recovery-oriented language in all activities. That language is:

STRENGTHS-BASED
AND HOPEFUL

INCLUSIVE AND
ACCEPTING OF
DIVERSE CULTURES,
GENDERS,
PERSPECTIVES,
AND EXPERIENCES

HEALING-CENTERED AND
TRAUMA-RESPONSIVE

INVITING TO INDIVIDUALS
PARTICIPATING IN THEIR
OWN JOURNEYS

PERSON-FIRST AND
FREE OF LABELS

NON-JUDGMENTAL AND
AVOIDING ASSUMPTIONS

RESPECTFUL, CLEAR
AND UNDERSTANDABLE

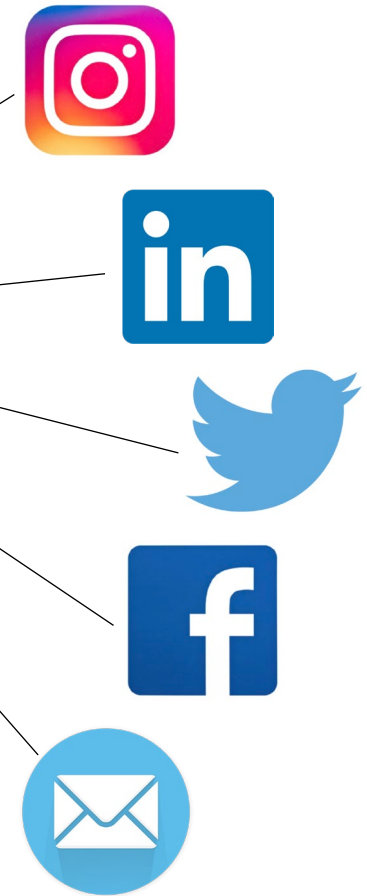
CONSISTENT WITH
OUR ACTIONS,
POLICIES, AND PRODUCTS

Stay Connected

Scan this QR code to follow us on Instagram, LinkedIn, Twitter, and Facebook. You can also join our e-mail newsletter!



SCAN ME



Session 3: Interventions for Cognitive Impairment

Taylor LaVoi, MOT, OTR/L, Sanford Behavioral Health

Jessa Hulteng, PhD, OTR/L & Sarah Nielsen, PhD,
OTR/L, FAOTA, University of North Dakota

October 24th, 2023



Poll

Objectives

1. Differentiate between 3 approaches to cognitive intervention
2. Understand examples of each cognitive intervention approach
3. Understand differences in intervention-based context

Background

- Cognition and the International Classification of Functioning, Disability and Health
 - Health conditions
 - Everyday life activities
 - Executive functions (body function)

Health and Well-Being

- Cognition overall is a predictor of outcomes of health and well-being
- Evaluation of cognition and influence on every life should be part of initial treatment planning

Occupational Therapy

Occupational therapy is a science-driven, evidence-based profession that enables people of all ages to participate in daily living or live better with injury, illness, or disability. This is accomplished through designing strategies for everyday living and customizing environments to develop and maximize potential.

(AOTA, nd).

Cognition

The mental process involved in knowing, learning and understanding as well as the way in which knowledge is implemented in everyday life

Acquiring, manipulating, storing and using information

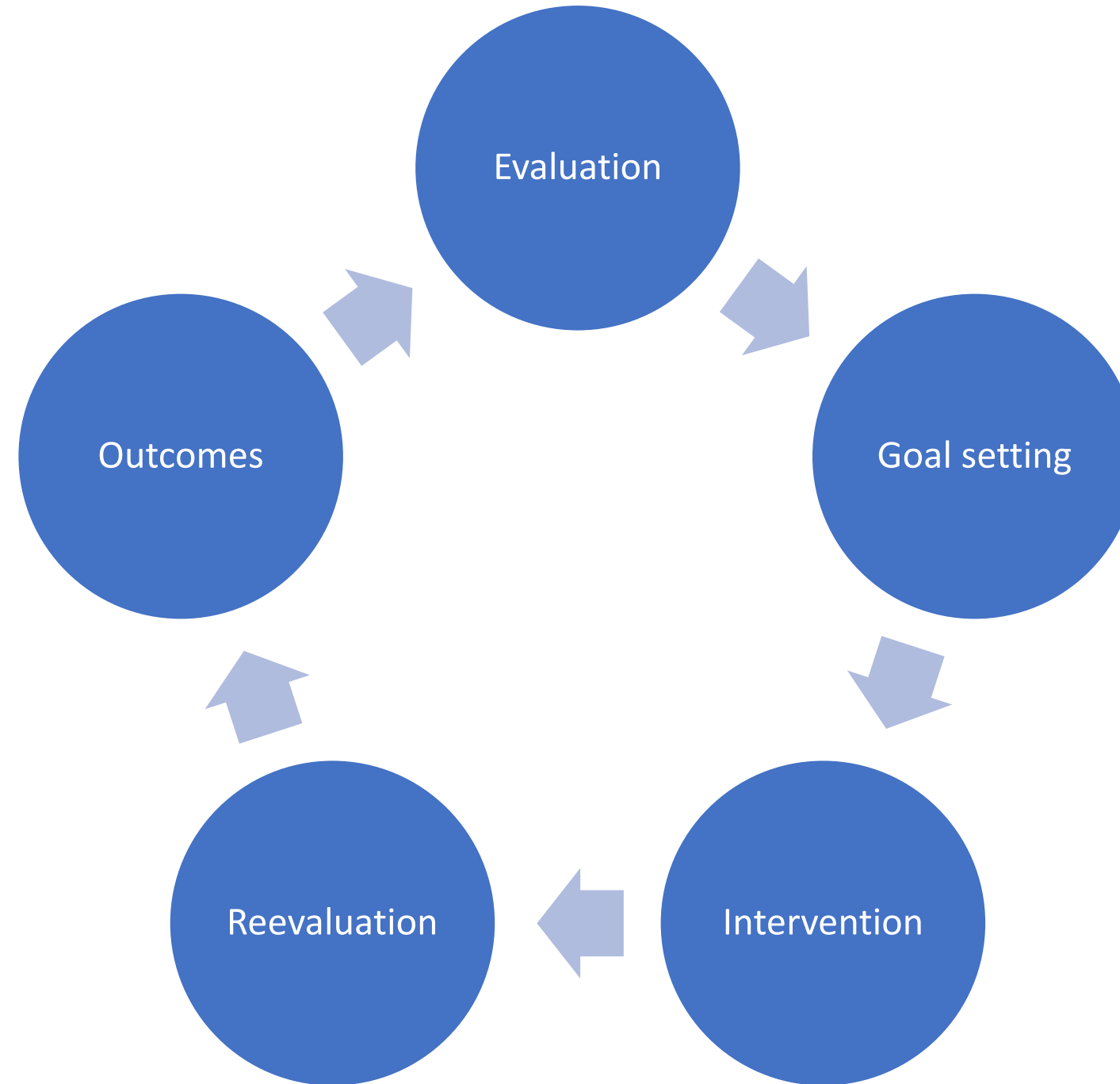
Encompasses attention, perception, memory, language and executive functioning

Functional Cognition

- Thinking and processing skills that are used to accomplish everyday activities in clinical and community living environments



Process

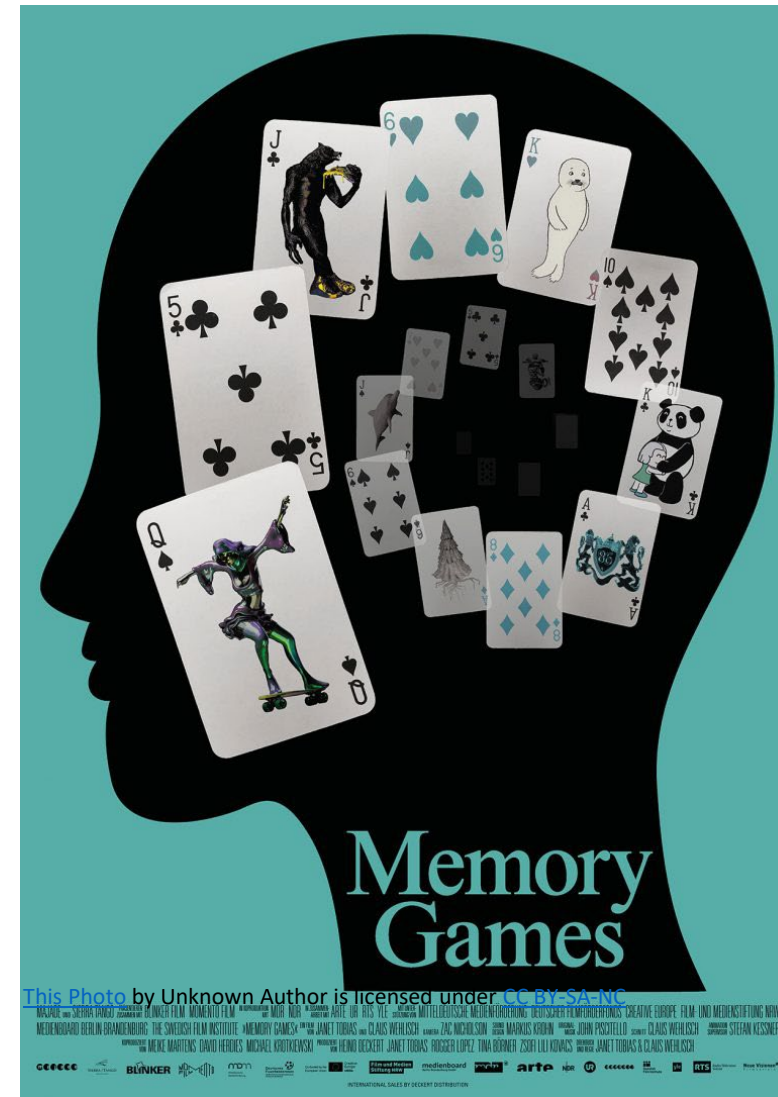


Cognitive rehabilitation

- Aims to help individuals with various levels of cognitive impairment understand impairment and learn skills, apply compensation strategies, and modify the environment to live a better life.
- Two approaches, with option to combine

1. Remedial

- Process oriented
- Direct retraining of impaired core cognitive skills



2. Functional or Adaptive Approach

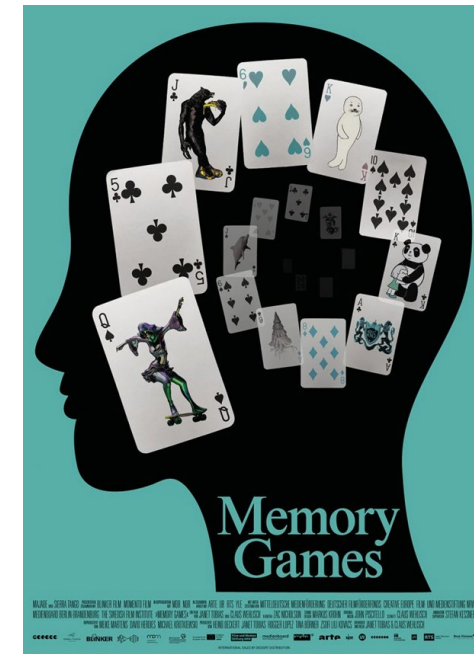
- Environmental adaptation
- Caregiver training
- Strategy training



[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)

3. Integrated Approach (combination)

- Remedial
- Functional



Functional Approaches

- Environmental adaptation
 - Task modification
 - Contextual cues
- Caregiver training
- Strategy training
 - Compensation

Cognitive Disabilities Model

- Cognitive Disabilities Model
 - Can do
 - Will do
 - May do
- 6 Levels including:
 - Safety considerations
 - Specific cuing

Environmental Adaptions Approach

- Environmental adaptation
 - Task modification
 - Contextual cues
- Caregiver training
 - Internalized activation
- Cuing hierarchy
 - Tactile, verbal and visual cues
 - Verbal and non-verbal cues
 - Indirect>direct verbal prompts

Strategy Approach

- Compensatory actions
 - Goal oriented
 - Facilitates learning
 - Facilitates task performance
 - Aides in establishing or remediating automatic internal operations
- Learning v. Self-regulation or metacognitive strategies
 - Modality specific
 - Mental or self-verbalization
 - Task specific modification

Strategy Training

- Learning v. Self-Regulation or Metacognitive Strategies
 - Modality specific
 - Mental or self-verbalization
 - Task specific modification

- Metacognitive Strategy Generalization
 - Anticipation
 - Error Detection
 - Error Correction
 - Strategy Generation
 - Self-Evaluation

Multicontext approach, 2017; Toglia et al., 2012

Client Living with Schizophrenia

- Client's Goals
 - Prevent re-hospitalization
 - Use bus in community
 - Keep house clean
- Intervention Planning
 - Task modification and Environmental Set up with Medications
 - Visual sequence cue card for use of bus
 - Weekly visual chore chart for household chores

Allen Cognitive Group, 2023; Allen et al., 1995; McCraith & Earhart, 2018

Environmental Adaptation Intervention



Weekly Schedule

Monday	Tuesday	Wednesday	Thursday	Friday

Visual Sequence Cue Card

<p>Work Quietly</p>	<p>Get to work!</p>	<p>Take out your pencil.</p>
<p>Open your book.</p>	<p>High five!</p>	<p>You should be reading.</p>
<p>Show Respect.</p>	<p>You're doing Great!</p>	<p>Thank you for doing the right thing.</p> <p>THANK YOU!</p> <p><small>©2010 Susan Gingras Fitzell</small></p>

Client Living with TBI

- Client's Goals
 - Preserve marriage
 - Re-gain control and independence in life
- Intervention Planning
 - Metacognitive Training
 - Mental or self-verbalization strategy:
 - "Stop and Think" method
 - Identify areas of perceived occupational deprivation
 - Create behavior plan
 - Include timeline

Multicontext approach, 2017; Toglia et al., 2012

Strategy Training Intervention

- Mental or self-verbalization:
 - "Stop and Think" Method
 - Compensatory > remediation skill acquisition
- Occupational participation behavior plan with timeline
 - Include spouse
- Metacognitive Training
 - Role modeling during interactions
 - Simulate occupations
 - Video recording
 - Apply metacognitive strategies for generalization during behavior plan creation

Multicontext approach, 2017; Toglia et al., 2012

Client Living with ASD

- Client's Goals
 - Keep my desk organized
 - Transition from subject to subject to be ready for class on time
 - Having everything I need in my back pack
 - Finish my work on time
- Intervention planning
 - Developing executive function
 - Strong cognitive skills
 - Capacity for strategy training
 - Hot and cold executive function

Strategy Training Intervention - Cold

- Cognitive Orientation to Occupational Performance
 - Key features
 - Goal Identification
 - Dynamic Performance Analysis
 - Cognitive strategies
 - Goal, Plan, Do, Check
 - Domain Specific Strategies
 - Guided Discovery

Sample

- Goal: Pack my backpack to bring home
- Breakdown points:
 - Forgets to check school planner for items needed
 - Leaves backpack at desk or in bus
- Plan
 - Get out my planner
 - Put one item in backpack and check it off on planner
 - Put next item in backpack and check it off on planner
 - Put backpack on my back when teacher says put your backpack on and line up

Strategy Training Intervention - Hot

- Interoception
- Emotion Regulation
- Coping Skills
- Positive Communication Skills
- Evidence-based curriculums
- Peer mediated
- Video modeling
- These skills are then used within the Goal Plan Do Check

Poll

Presenter Contacts

- Jessa Hulteng
 - Sarah Nielsen
 - Taylor LaVoi
- Jessa.hulteng@und.edu
 - Sarah.k.nielsen@und.edu
 - Taylor.lavoi@sanfordhealth.org

References

- Allen Cognitive Group. (2023). <https://allencognitive.com/pdf-downloads/>
- Allen, C., Blue, T., & Earhart, C. (1995). Understanding cognitive mode performance. Allen Conferences, Inc
- Dawson, D.R., McEwen, S.E., & Polatajko, H.J. (2017). Cognitive orientation to daily occupational performance in occupational therapy: Using the CO-OP approach to enable participation across the lifespan. American Occupational Therapy Association.
- McCraith, D.B., & Earhart, C.A., (2018). Cognitive disabilities model: Creating fit between functional cognitive abilities and cognitive activity demands. In N. Katz & J. Togli (Eds.), Cognition, occupation, and participation across the lifespan (4th ed., pp. 469-498). AOTA Press.
- Multicontext Approach. (2017). <https://multicontext.net/treatment-approach>
- Togli, J.P., Rodger, S.A., & Polatajko, (2012). Anatomy of cognitive strategies: A therapists primer for enabling occupational performance. Canadian Journal of Occupational Therapy.