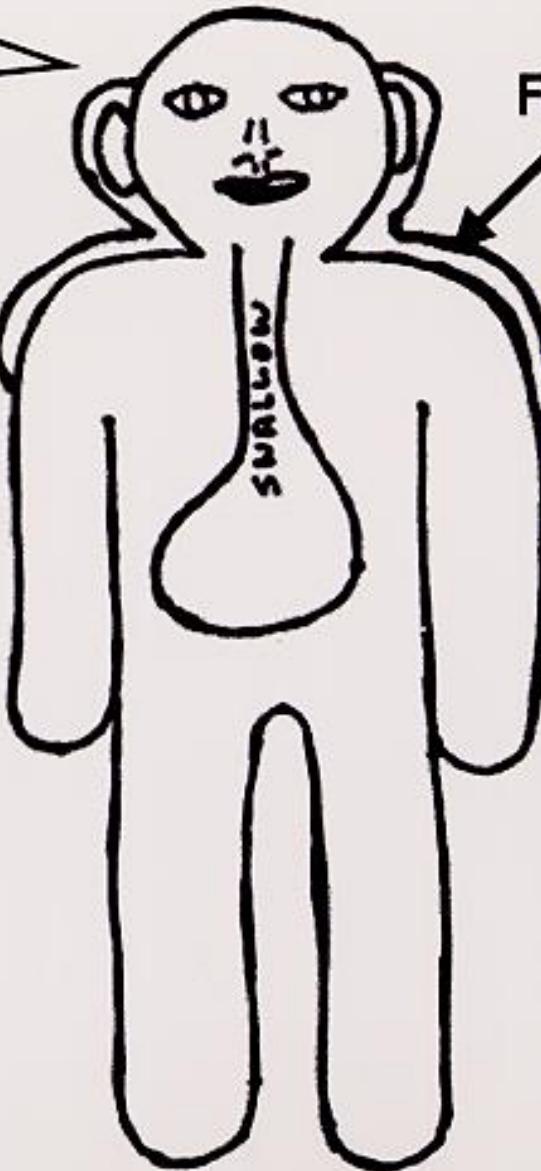
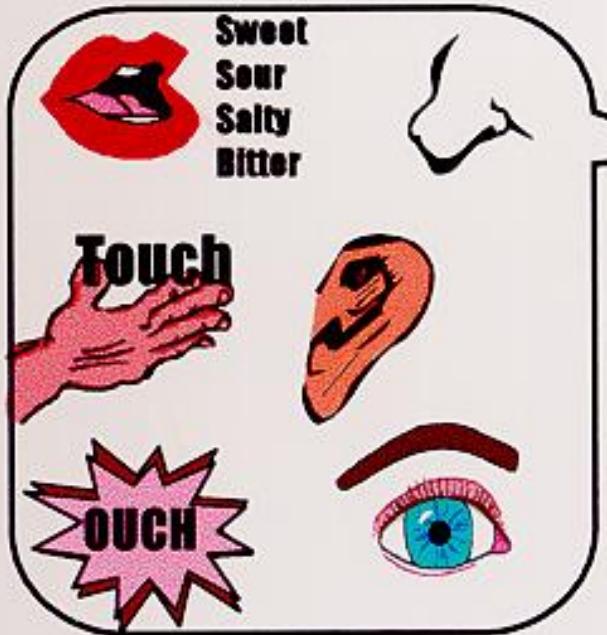


# Implementation of the Allen Scale into Clinical Practice



# Review of the 6 Allen Cognitive Levels

## Thinking About: Survival



## Level 1 Automatic Actions

Field of Conscious Awareness

### Associated Movements:

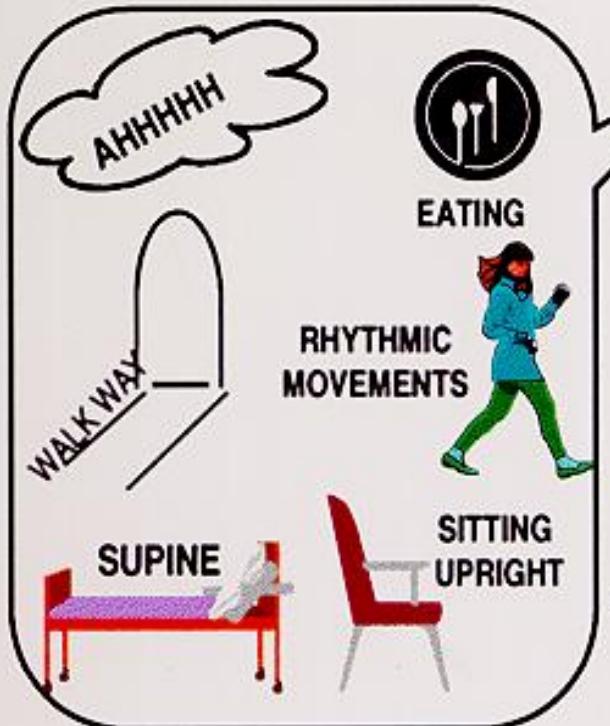
- Protective Reflexes
- Locating Strong Stimuli
- Sustenance

### Attention to 5 Senses:

- Smell
- Sound
- Taste
- Sight
- Touch

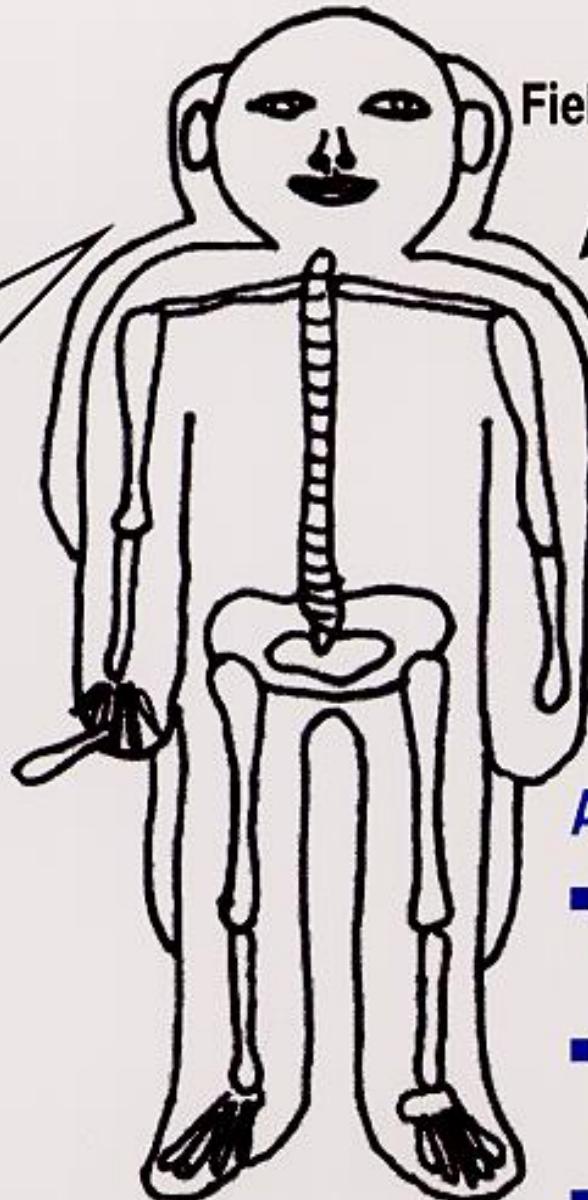
### Thought Process:

- Proprioceptive Cues
- Stability / Falls
- Safety / Comfort



### Level 2

## Postural Actions



Field of Conscious Awareness

#### Attention to:

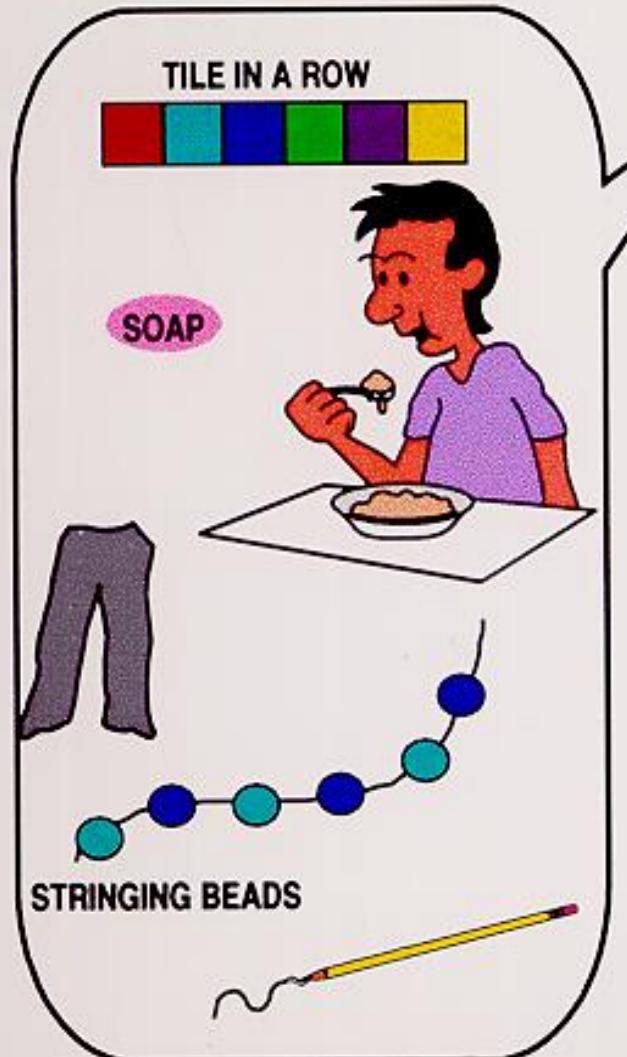
- Trunk Balance
- Movements of Extremities
- Large External Objects
- Cues to Barriers

#### Associated Movements:

- Overcoming Effects of Gravity
- Sit, Stand, Walk, ROM, Push
- Avoiding Barriers

Thinking About (not goal directed):

- Feeling, Moving, & Identifying Objectives
- Cause & Effect on Objects



**Level 3**

## **Manual Action**

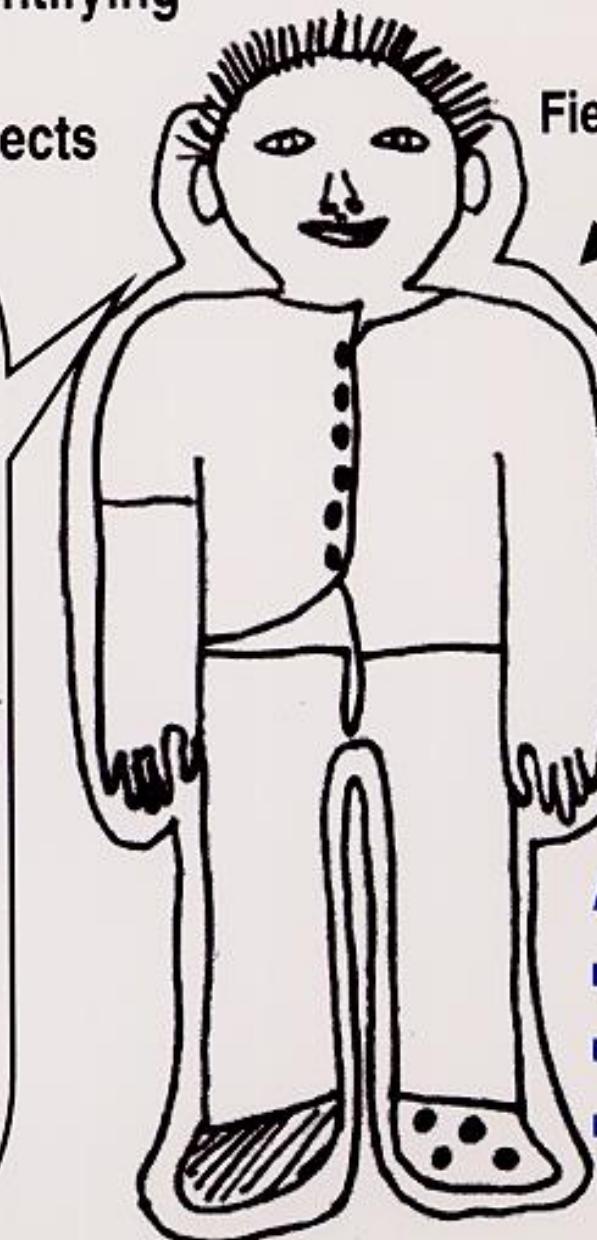
Field of Conscious Awareness  
(Tunnel Vision)

Attention to:

- Gross Hand Coordination
- Finger Opposition
- Perceptual Categories; size, shape, row
- Sustaining Actions

Associated Movements:

- Handling Objection
- Repetitive Action
- Following Cues



## Thinking About:

- What's next?
- Is this right?
- This is mine/yours.
- I've done this before.

## COLOR

RETRIEVAL OF  
OLD LEARNING



## SIZE



NEW  
PROBLEMS

SIMPLE SEQUENCE



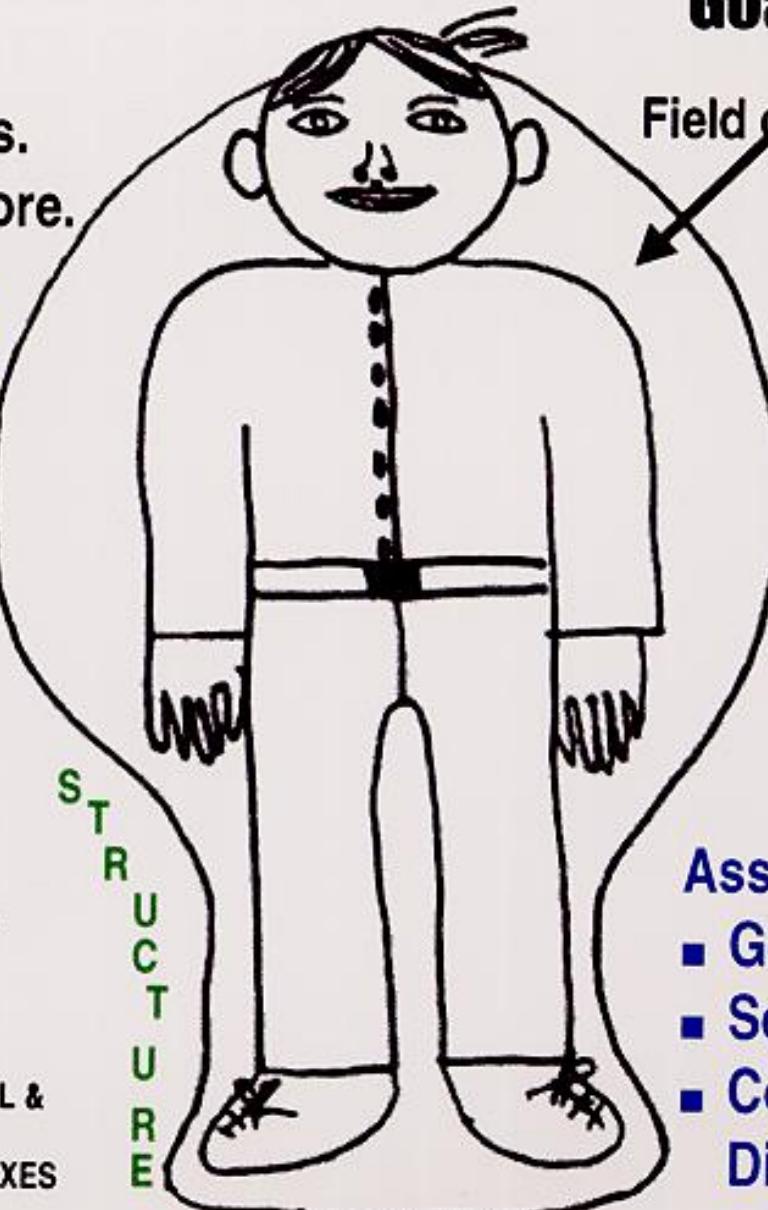
"TELL ME  
WHAT TO DO"

TAKING TURNS



HORIZONTAL &  
VERTICAL AXES

S  
T  
R  
U  
C  
T  
U  
R  
E



## Level 4 Goal Directed Activity

Field of Conscious Awareness

Attention to:

- Figure-Ground Perception
- Striking Visual Cues
- Old Effects of Actions
- Errors, Samples
- Possessions

Associated Movements:

- Goes to Next Step
- Self-Care Alone
- Complies With Directions

### Thinking About...

- How can I make this easier, faster, better?
- What's in it for me?
- It's not my fault?
- 'Us' against 'them'



3 Dimensions

WORLD REVOLVES  
AROUND  
HIM



*I wonder what they  
meant by that?*

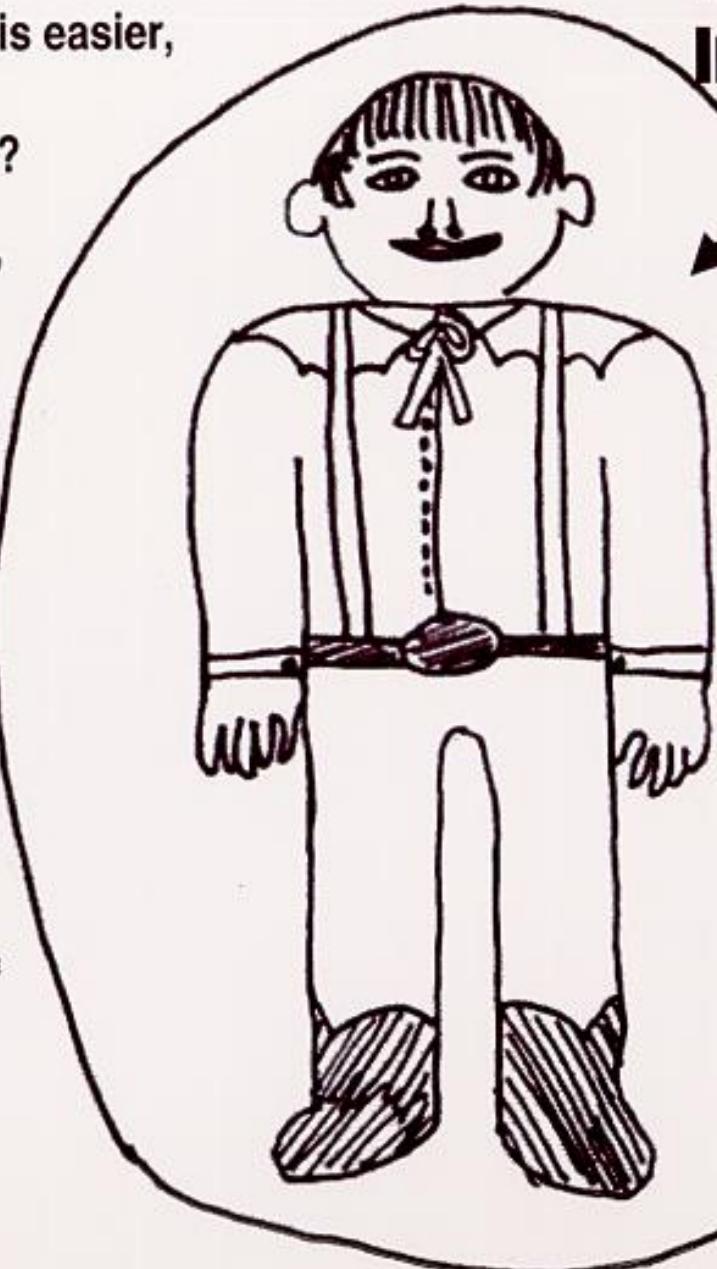
I think another tool would be  
better for this job



**"Show me..."**

I'LL BE THE MOST  
'HAPPENING' DUDE IN THE  
PLACE!

*Nobody understands me!!!*



## Level 5 Independent Learning

Field of Conscious  
Awareness

Attention to:

- Discovery of new effects & remember
- Surface properties, sheen, texture
- Spatial properties assembly, part, whole, tiny parts
- Feelings of self & personal rights

Associated Movements:

- New exploratory actions
- Fine motor adjustments
- Talks & works
- Impulsive

Thinking About:  
What would happen if...?  
What do you think about this?  
What are my options?  
How can I help you?

How could this effect others?

*What would happen if...*

I wonder what the best  
approach would be?

**THEY MAY BE HAVING A  
BAD DAY...**

By analyzing this, I can deduce  
that...

How do **YOU** see this?

I may be wrong...

*I need more information.*

★ ◉ \* ◉ ◉ \* ◉ ◉ ◉

▼ \* ▼ \* ▼ \* ▼

What are my options?

Hypothetically speaking...

Take responsibility for my  
choice...

**How could I be  
CONTRIBUTING TO THIS...**



## Level 6 Planned Actions

### Field of Conscious Awareness

#### Attention to:

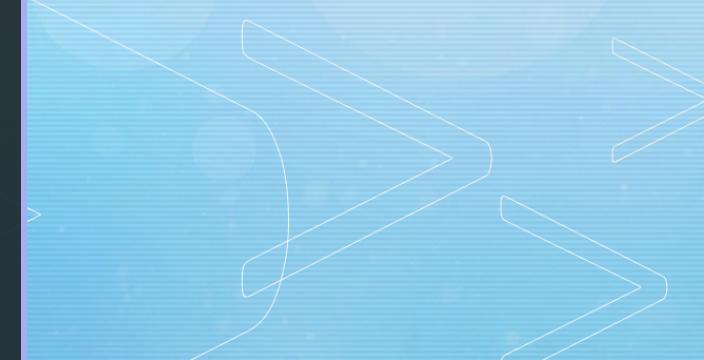
- Symbolic/Abstract Cues: Time, Gravity, Evaporation
- Hypothetical Risks as Anticipated Hazards
- Social Expectations and Personal Obligations
- Greater Good

#### Associated Movements:

- Stopping to think
- Seeking more information
- Checking clock/schedule
- Considering needs of others
- Organizing/Prioritizing Activities



# Function and Associated Cognitive Levels





# Adaptive Equipment

- Often refuse or misuse adaptive equipment
- If it doesn't look familiar they probably won't use it
- Knowing the cognitive level will enable you to know exactly which equipment to use or not use
- Pictures, words, labels, and arrows

# WALKER

- 3.8 Use a familiar cane
- 4.0 Wheeled walker with verbal cues
- 4.2 Start to use pick up walker
- 4.6 Improved use of pick up walker
- 5.2 Uses walker safely on uneven surfaces



# Wheelchair

- ◆ With constant cues to “walk” chair and assistance to steer, Level 3.2.
- ◆ Safety with use of wheelchair brakes, using extensions to provide a striking visual cue; Level 4





# GAIT

- 2.4: Walk on flat surface
- 2.6: Scan below knees to maneuver around barriers
- 5.2: Walk on uneven surfaces safely
- 5.4: Adjusts to spatial properties
- 5.6: Independent and safe with ambulation and use of assistive device



# Stairs

- ◆ Begin to Step up Curb or Step With SBA/CG; Level 2.6.
- ◆ Supervised Stairs at Level 3.0.
- ◆ Learning to Use a Walker for Stairs; Level 5



# Transfers

- ◆ Can Begin to Assist With Pivot Transfer at Level 2.0.
- ◆ Begin “Situation Specific”, Long-term, Repetitive Training to Perform Safe Transfer Sequence ...
  - ➔ I.E. Lock Brakes, Use Safety Rails, Overhead Trapeze
  - ➔ DO NOT Expect Generalization; Level 4.0
- ◆ Learns New Transfer Sequences With Safety Precautions Slowly, by Rote, With Demonstration and Performs Invariantly, Level 5.6



## Transfer, cont

- ◆ Safe, independent use of transfer board;  
Level 5.6

# ADAPTIVE EQUIPMENT: FEEDING

- 1.4 Two handled cup, flow control cup, one way straw, rubber coated spoons with flat bowl (hand over hand)
- 1.6 Nosey Cups (hand over hand)



# ADAPTIVE EQUIPMENT: FEEDING

- 3.0: Dycem, built-up utensils, universal cuff, self handled utensils, plate guard, inner lip plate, adjustable utensils, weighted utensils
- 4.6: Rocker knife, swivel utensils, long handled utensils, flexible utensils
- 4.8: Automatic feeder, mobile arm support



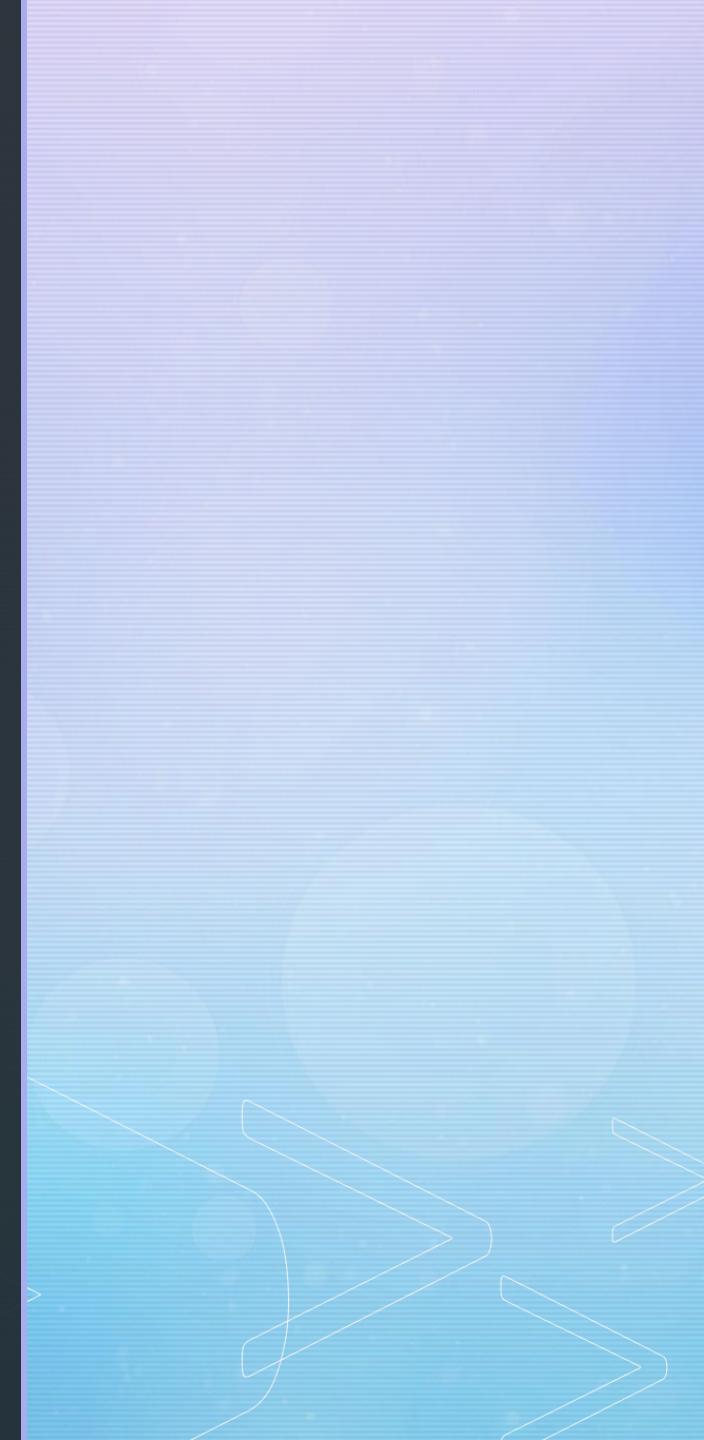
## DRESSING/GROOMING/ BATHING

- 3.0: Wash mitt
- 4.0: Adapted dispenser handles, long handled shoehorn
- 4.6: Dressing stick, shoe fasteners, elastic shoelaces, sock aid (solid)
- 5.2: Introduce reacher, suctioned denture brush



# DRESSING/GROOMING/ BATHING

- 5.4: Button aid
- 5.6: Independent and safe with reacher and buttonhook



# Treatment Planning

# Hierarchy of Information Processing

- Verbal Cues
- Visual Cues
- Verbal Directives
- Demonstration
- Hand-Over-Hand

# Goal Writing: STG's

- Progressive Illness:
  - Establish goals at ACLS score
- Expect Slow Improvement:
  - Establish goals 1 mode higher than ACLS score
- Expect Rapid Improvement:
  - establish goals 2 modes higher than ACLS score

## Goal Writing: LTG's

- Use prior functional level if appropriate and known
- Establish at 4 modes above baseline ACLS score

	ACL Score	Short Term Goal	Long Term Goal
<b>Expect Slow Progress</b>	4.2	(1 mode above the ACL Score) 4.4	2-4 modes above the ACL Score 4.6-5.0
<b>Expect Fast Progress</b>	4.2	(2 modes above the ACL Score) 4.6	4 modes above the ACL Score 5.0
<b>Degenerative Disease</b>	4.2	Same as the ACL Score 4.2	Same as the ACL Score 4.2

	ACL Score	Short Term Goal	Long Term Goal
<b>Expect Slow Progress</b>	5.0	(1 mode above the ACL Score) 5.2	2-4 modes above the ACL Score 5.4-5.8
<b>Expect Fast Progress</b>	5.0	(2 modes above the ACL Score) 5.4	4 modes above the ACL Score 5.8
<b>Degenerative Disease</b>	5.0	Same as the ACL Score 5.0	Same as the ACL Score 5.0

Discharge Planning

# LEVELS OF ASSIST



# Levels of Assistance

- 1: 24 hours nursing care
- 2: 24 hour nursing care
- 3: 24 hour supervision
- 4.0-4.2: 24 hour supervision
- 4.4: Live with someone with daily checks
- 4.6: Live alone with daily checks

# Levels of Assistance

- 5.0-5.2: Live alone with weekly checks
- 5.4: Live alone, have job with wide margin for error
- 5.6: Live alone but need consistency
- 5.8: Live alone and work independently



# Case Studies



# Case Study 1: LCVA

- Your patient is a 67 year old male with a recent LCVA with right hemiparesis. Prior to the stroke he was independent with all ADL/IADL's and driving. He was an avid golfer and fisherman. He lives with his wife and they have 3 grown children who live in the area. The results of the evaluation are as follows:
- Moderate assistance with UB dressing, Max assistance with LB dressing. Minimal assistance with grooming and feeding. ACLS score is a 4.6. Transfers require moderate assistance. He requires max assistance for toileting due to poor balance and limited use of the left UE.

## Case Study 2: Dementia and LTHR

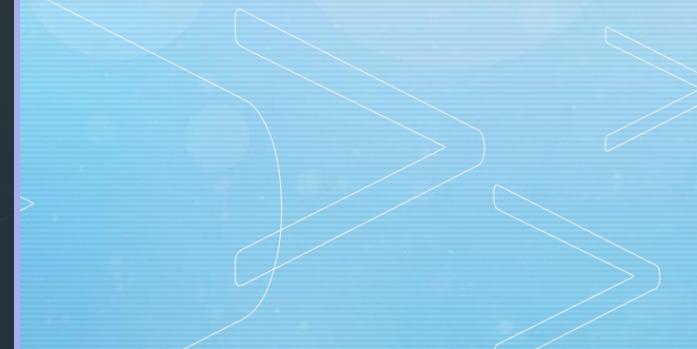
- Your patient, Ima Pain, is an 80 year-old female with a history of Alzheimer's disease. She was admitted to the skilled nursing facility secondary to left hip fx with a total hip replacement. She scored a 3.4 on the Large Allen Cognitive Level Screen (LACLS). She lives with her husband who does everything for her. Her husband reports that he is very stressed and burnt out. The initial evaluation indicates that she is total assist with LB dressing, minimal assistance with UB dressing, minimal assistance with feeding and grooming. She requires max assistance with transfers.



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# Questions?



# Video Links

- Set-Up: <https://www.youtube.com/watch?v=WZUsOnCLnI>
- Running Stitch:  
<https://www.youtube.com/watch?v=eKZef9MviDE&index=3&list=PLwvjaJWhFpQZfjmgFlag97YvivtBN6lgg>
- Whip Stitch:  
[https://www.youtube.com/watch?v=ua2Y\\_c5wMAs&index=4&list=PLwvjaJWhFpQZfjmgFlag97YvivtBN6lgg](https://www.youtube.com/watch?v=ua2Y_c5wMAs&index=4&list=PLwvjaJWhFpQZfjmgFlag97YvivtBN6lgg)
- Twist Error: [https://www.youtube.com/watch?v=v7uE\\_EvVwxo](https://www.youtube.com/watch?v=v7uE_EvVwxo)
- Cross in Back: <https://www.youtube.com/watch?v=UnKgR6121fw>
- Single Cordovan:  
<https://www.youtube.com/watch?v=pChYy26vvnE&list=PLwvjaJWhFpQZfjmgFlag97YvivtBN6lgg>

# Resources and Where to Order Supplies

- <http://www.allen-cognitive-network.org/index.php>
- S & S World Wide (ssww.com)

## More Resources

- Allen Cognitive Network:  
<https://www.allen-cognitive-network.org/>
- Next Symposium: Butler Hospital,  
Providence RI: October 4-5 2019

# More Resources

- Allen, C. K., Blue, T., & Earhart, C. A. (1998). *Understanding cognitive performance modes*(Version 1.4. ed.). Ormond Beach, FL: Allen Conferences, Inc.
- Allen, C. K., Blue, T., & Earhart, C. A. (1992). *Occupational therapy treatment goals for the physically and cognitively disabled*. Bethesda, MD: American Occupational Therapy Association.
- Katz, N., & American Occupational Therapy Association. (2011). *Cognition, occupation, and participation across the life span: Neuroscience, neurorehabilitation, and models of intervention in occupational therapy* (3rd ed.). Bethesda, MD: AOTA Press.
- Allen's Cognitive Levels: Meeting the Challenges of Client Focused Services