



Lost in Space

SOCIAL, EMOTIONAL, FUNCTIONAL AND ACADEMIC CHALLENGES DUE TO
VISION CHALLENGES

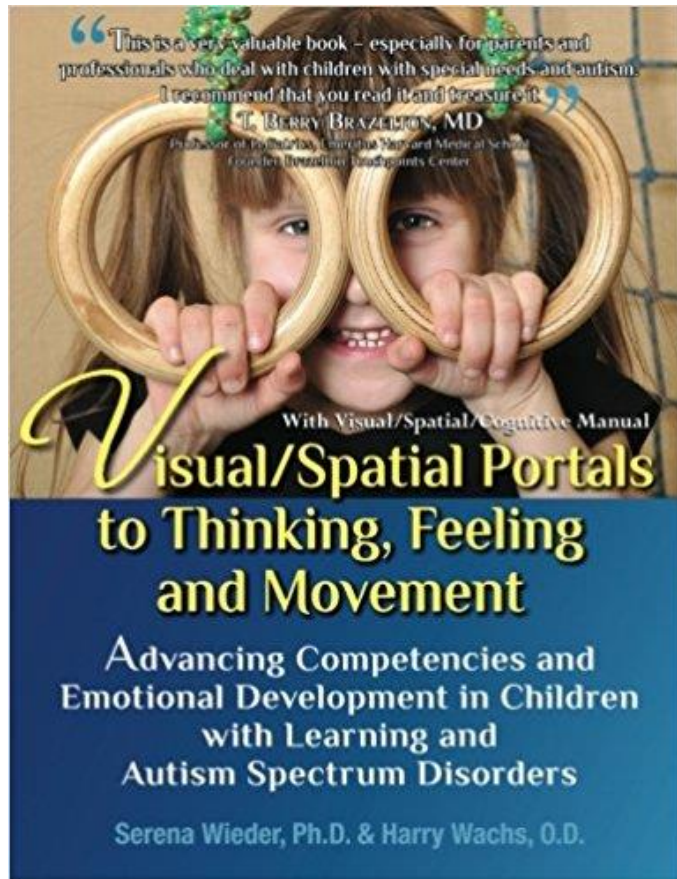
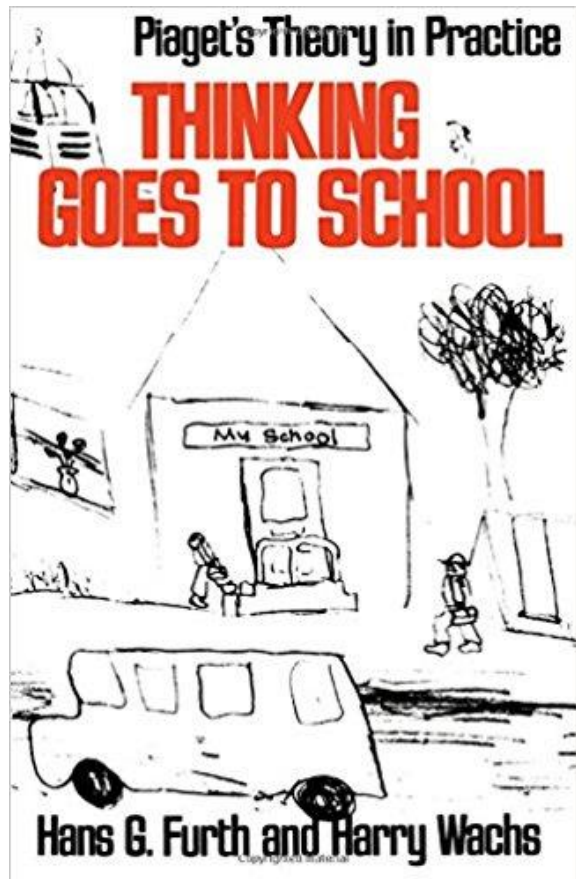
Dr. Mehrnaz D. Azimi Green

KISS 2021



Harry Wachs (1924-2016)

- ▶ Vision is the foundation of cognition
- ▶ Integrated stages of Piaget's cognitive development with the development of vision
- ▶ Visual-Cognitive therapy integrates sensorimotor and cognitive hierarchies to strengthen vision development



Vision Problems Impacting Everyday Life

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=VQVNX2KERVW&FEATURE
=YOUTU.BE&AB_CHANNEL=SH](https://www.youtube.com/watch?v=VQVNX2KERVW&feature=youtu.be&ab_channel=SH)

How do they feel?

- ▶ Stuck
- ▶ Scared
- ▶ Anxious
- ▶ Helpless
- ▶ Angry
- ▶ Frustrated
- ▶ Hopeless



Lost in Space-Why?

- ▶ Inflexible with their thinking-unable to appreciate the escalator as stairs
- ▶ Can't figure out how to move their body to solve the problem
- ▶ Feeling that the world happens to them, rather than being an active participant of their situation
- ▶ Learned helplessness-somebody needs to save me



Lost in Space = Vision Deficits



- ▶ Vision vs. Sight
- ▶ Vision guides purposeful movement through space

EXIT



Gates A1 - A14
Puertas de Embarque A1 - A14

Gates A1 - A14
Puertas de Embarque A1 - A14



Boarding

DE

THANK YOU

A12

ADELTA



Dr. Serena Weider

- ▶ “Poor visual spatial knowledge will interfere with movement, sequencing and learning language because visual experiences will be distorted or inconsistent.”
- ▶ “Poor visual spatial knowledge can derail daily adaptation, executive functions, interactions with family and peers, and learning.”
- ▶ “Poor visual spatial knowledge can interfere with symbolic development and abstract thinking”

Recognizing Vision Problems: Ocular Sensorimotor Challenges

- ↓ Closing of an eye
- ↓ Eye turning in or out at any time
- ↓ Excessive blinking
- ↓ Squinting
- ↓ Tearing
- ↓ Redness
- ↓ Swelling
- ↓ Poor attention Span
- ↓ Poor tracking
- ↓ Poor eye-hand coordination
- ↓ Poor eye teaming
- ↓ Confusion of Shapes
- ↓ Learning challenges
- ↓ Holding book very close or very far away
- ↓ Eye discomfort and fatigue
- ↓ Headaches
- ↓ Burning
- ↓ Itching
- ↓ Double vision
- ↓ Dizziness
- ↓ Blur

Recognizing Vision Problems: Holds on to Visual Anchors



Same clothes



Same routines



Rigid about the way people,
objects or environments look

Recognizing Vision Problems: Social Challenges

- ▶ Poor eye contact
- ▶ Aimless
- ▶ Poor shared attention
- ▶ Poor awareness of personal space

Recognizing Vision Problems: Social Challenges

Poor
problem-
solving skills

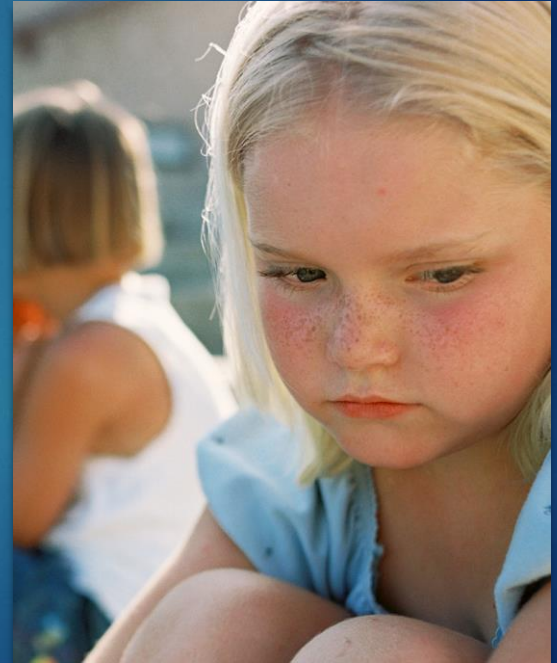
Difficulty
reading
social cues

Poor
organization

Fearful

Anxious

Obsessive



Recognizing Vision Problems: Challenges with ADL



Challenges using utensils



Challenges getting dressed



Difficulty finding objects



Difficulty following directions



Difficulty organizing and
completing tasks

Recognizing Vision Problems: Challenges when Playing



AVOID OR HAVE DIFFICULTY WITH GAMES THAT REQUIRE VISUAL PERCEPTUAL SKILLS OR STRATEGIES

CANNOT FIND DESIRED TOYS IN PLAIN SIGHT

WANT TO PLAY WITH SAME TOYS AND PUZZLES

USE TACTILE SENSES, NOT VISION, TO GUIDE THEM WITH PUZZLES

AVOIDS CONSTRUCTION TOYS

Recognizing Vision Problems: Movement Challenges

- ▶ Prefer individualized activities
- ▶ Prefer 1:1 activities
- ▶ Difficulty throwing and catching balls
- ▶ Avoid group sports



Recognizing Vision Problems: Cognitive Challenges

Sense of self

Abstract
thinking

Reflective
Thinking



Intellect and Affect: Two Sides of the Same Coin

“Intellect and Affect are two important intertwined aspects of development. Optimal development depends on both growing at the same rate and building on each other.”-Harry Wachs



PIAGET'S THEORY



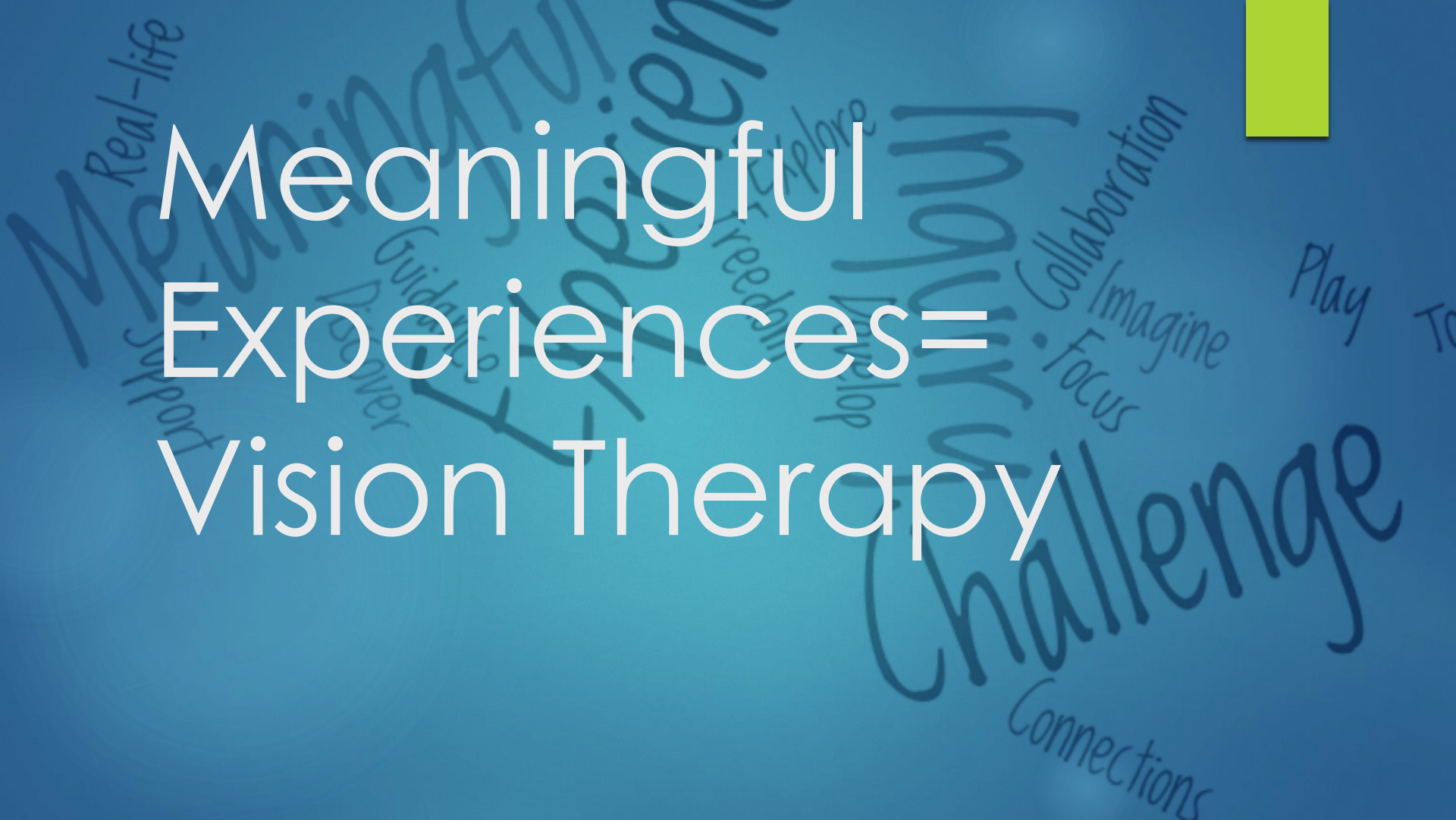
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1





Meaningful Experiences= Vision Therapy

Concept Learning vs. Content Learning: Development Verses Learning-Thinking Goes to School

Content=robotized learning

Memorizing instead of understanding

“A child’s learning of geographical names would be quite senseless if he(/she) does not have a general comprehension of spatial, historical, and social relations. One should not teach that Boise is the capital of Idaho to a child who confuses the concepts of state and city. A child’s learning of mathematical formulas would be quite useless if he(/she) did not have a general comprehension of the number system...intelligent comprehension is the most vital ingredient of the total learning process.”

Scared

Surprised

Shy

ssy



Sleepy



Embarrassed

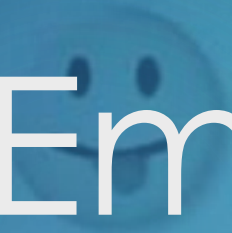


Mean



Proud

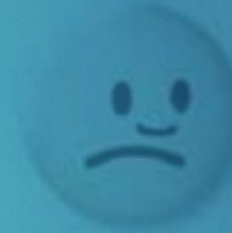
Emotions



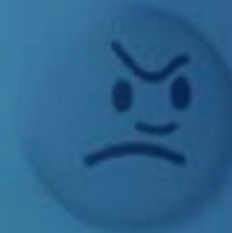
Silly



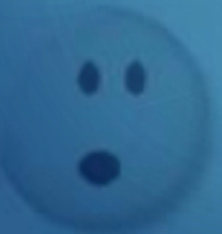
Disappointed



Confused



Impatient



Curious



Kind



Alarmed

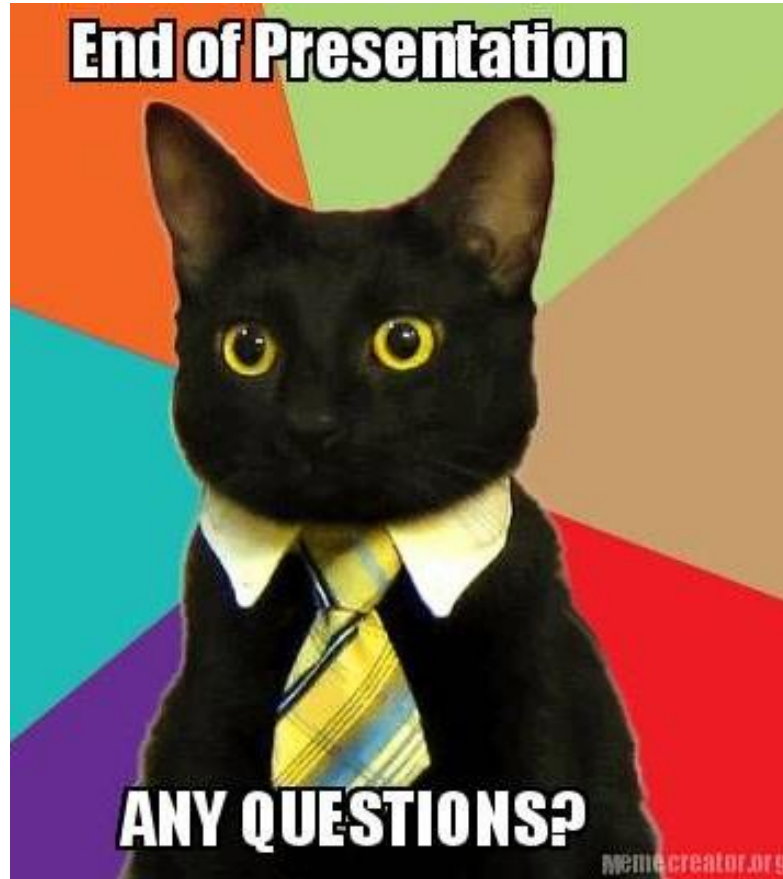


Excited

The Goals of Vision Therapy:

- ▶ Short Term- The patient leaves having worked a problem through and feels good about their success
- ▶ Long Term- The patient has a fully developed understanding of his/her world and approaches challenges with confidence





Thank
You!