Children Learn to See and Then See to Learn

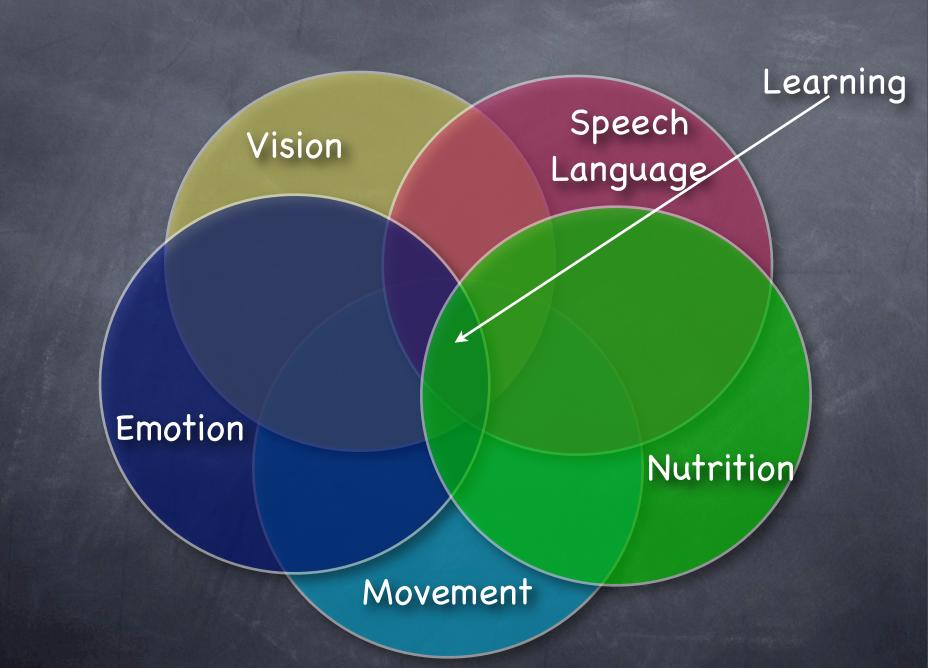
The San Diego Center For Children February 22, 2012

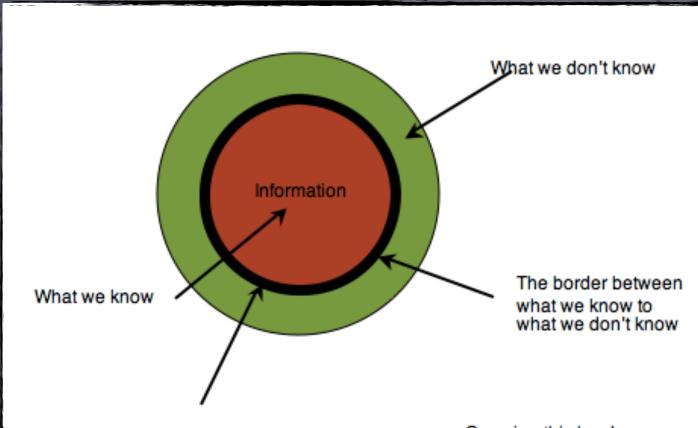
Carl G. Hillier, OD, FCOVD

Director - San Diego Center For Vision Care

Director - Vision Rehabilitation Clinic, Alvarado Hospital, San Diego Rehabilitation Institute

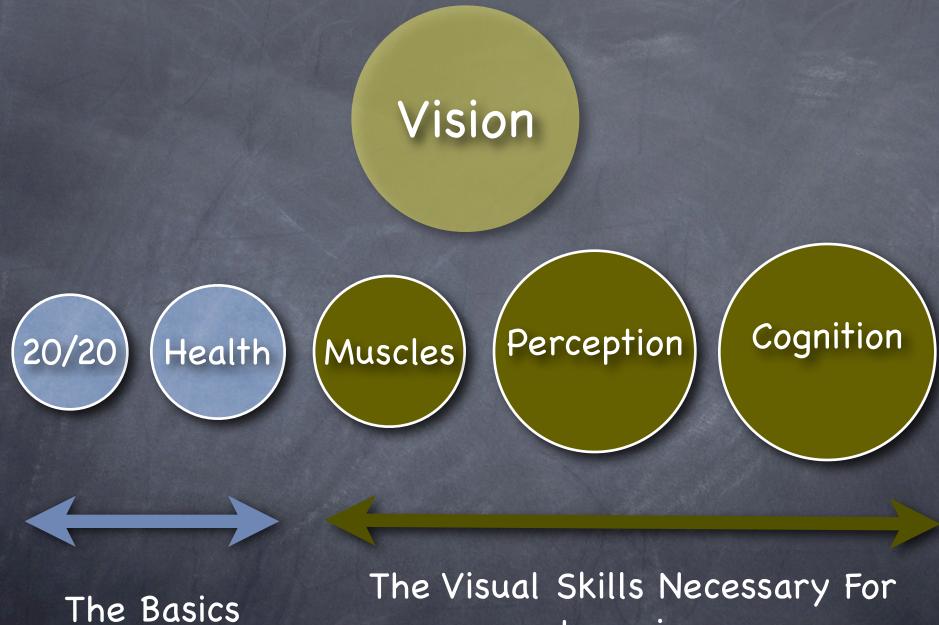
Fellow - College Of Optometrists in Vision Development



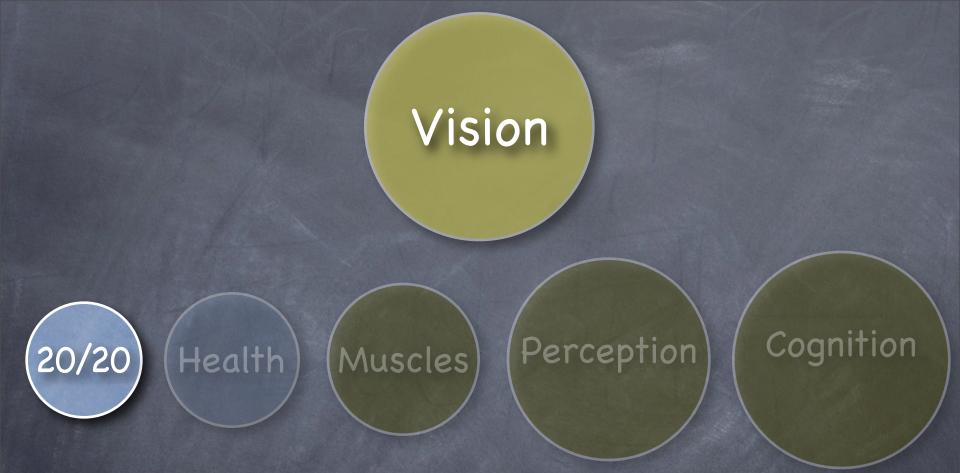


If this border is too wide, one may not be able to cross it, and *derive meaning* from the previously unknown part of the world. Crossing this border sometimes takes *courage* and always takes *desire*.

Vision



Learning



Seeing small things far away...that is all !!!

Vision

20/20 (Health) (Muscles) (Perception) (Cognition

- Cataracts - Glaucoma - Retinal Detachment -

The vision skills necessary for learning

Vision

*Ability *Skill *Endurance

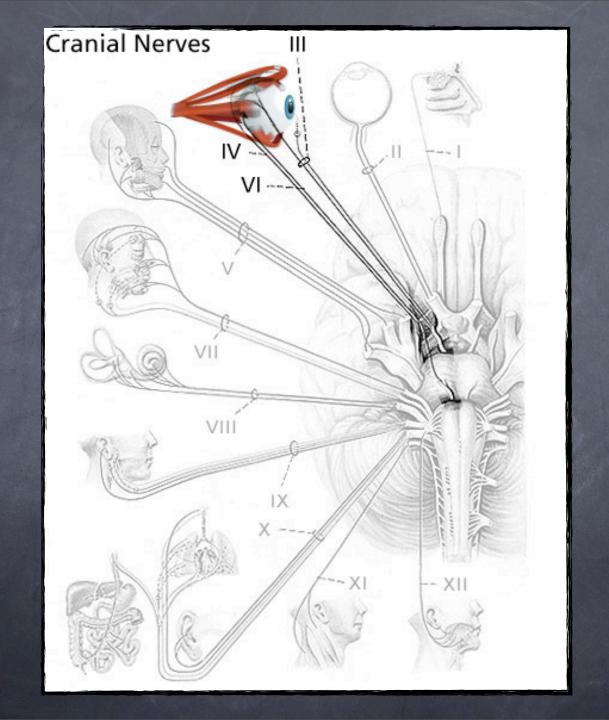


Superior oblique CN IV
 Superior rectus CN III

Lateral rectus CN VI

Medial rectus CNIII

Inferior rectus CN III
 Inferior oblique CN III



The vision skills necessary for learning

Health

20/20

Vision

Muscles

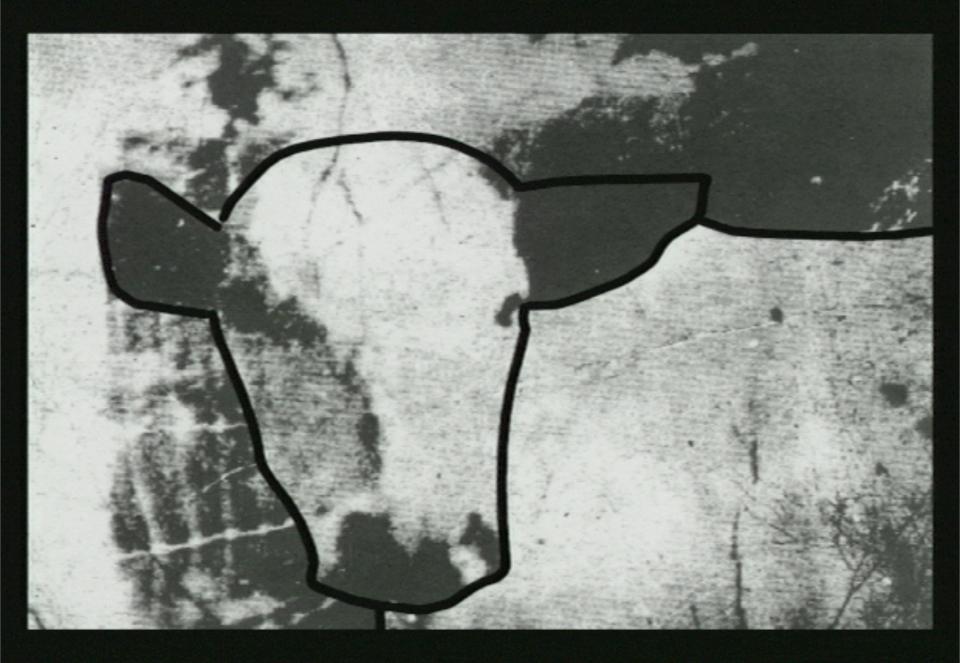
Perception

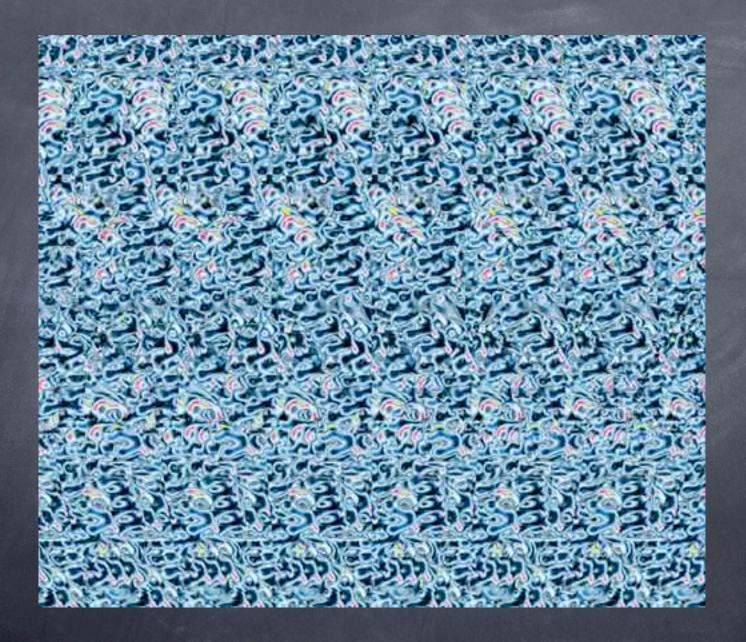
*Ability *Skill *Endurance

Cognition





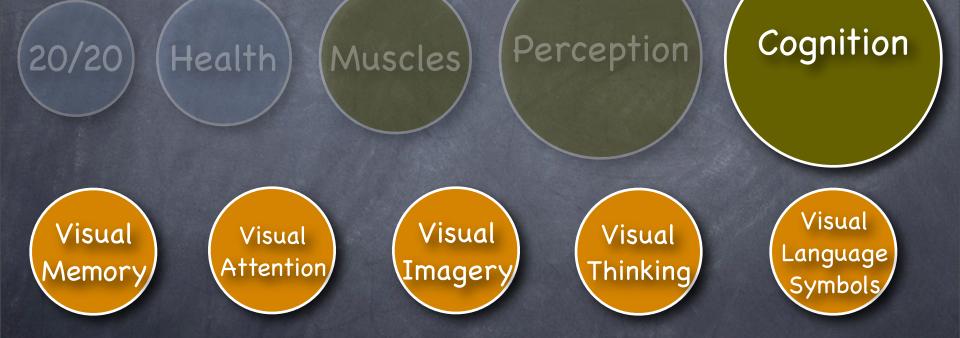




The vision skills necessary for learning

Vision

*Ability *Skill *Endurance



There Is A Significant Difference Between

Eye-sight And Vision If the intention is to determine if a child is visually prepared to learn, the Snellen (20/20) eye chart is the least important visual tests one can give a child

Three Behaviors That Indicate Difficulty With A Part Of The Visual System

Avoidance

Inefficiency

Physical Symptoms

Primary Support

Prepare the visual part of the brain for learning øvisual warm-ups @ trees in the wind ø four corner fixations near-far fixations

Secondary Supports

Arrange the environment for optimal learning lighting øposition of reading material distance of eyes to the page @ Posture

Tertiary Support

Typographs @ opaque under transparent under øfinger as a marker

pencil grips
graph paper
Kindle

