

# **Naturalistic or Biblical View of Human Development: Renewing the Mind**

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# Our Son's Story

Traumatic Birth

Language Processing Disorder

- Receptive/Expressive Language

Symptoms of:

- Dyslexia
- Dyscalculia
- Dysgraphia



IQ Composite: Below Average

Psychologists said: low expectations, working memory, and processing cannot be changed.

Attended Boyce College

- Aug. 2011 – Dec. 2014
- Biblical Counseling Degree
- GPA: 3.2
- Educational & Cognitive Therapist
- Married 2018
- Father 2021



## *Developmental theories inform our perspectives, expectations, and limitations of learners who have intellectual, behavioral, and physical challenges*

LOW EXPECTATIONS: Decide how much children can learn before they even start based on a diagnosis and IQ

LACK OF CURRICULUM: They tried but didn't have the right tools to help

FOCUS ON ACCOMMODATIONS, MODIFICATIONS, STRATEGIES, MEDICATION, OT, PT, and SPEECH

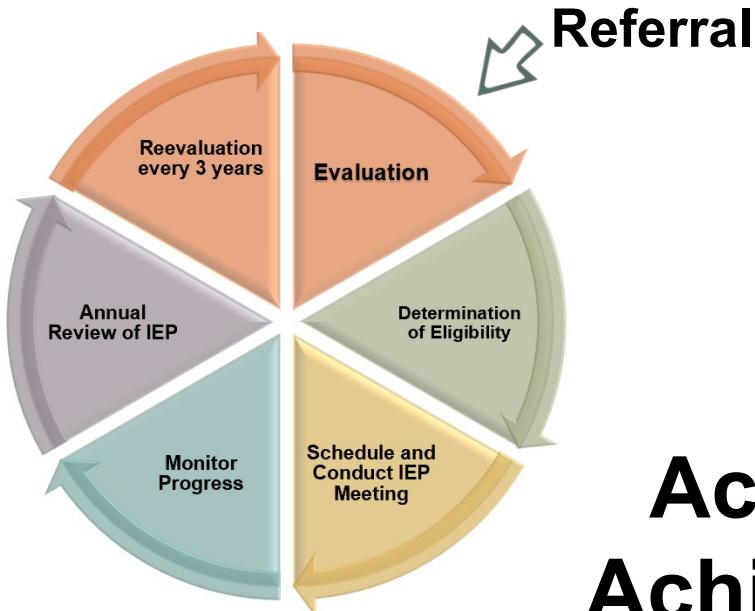
LACK OF BELIEF THAT THE BRAIN CAN CHANGE

BELIEF IN A CRITICAL AGE

LIMITED FAITH-BASED SCHOOLS



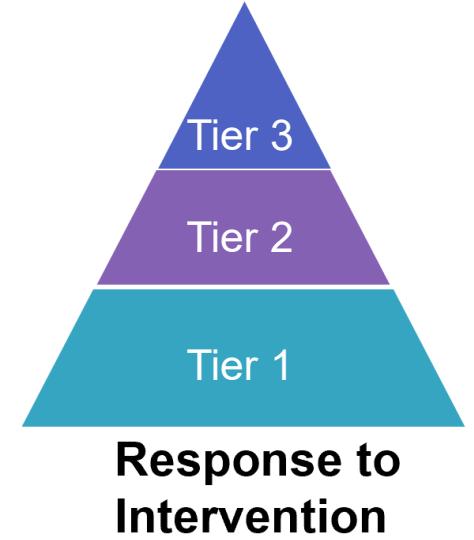
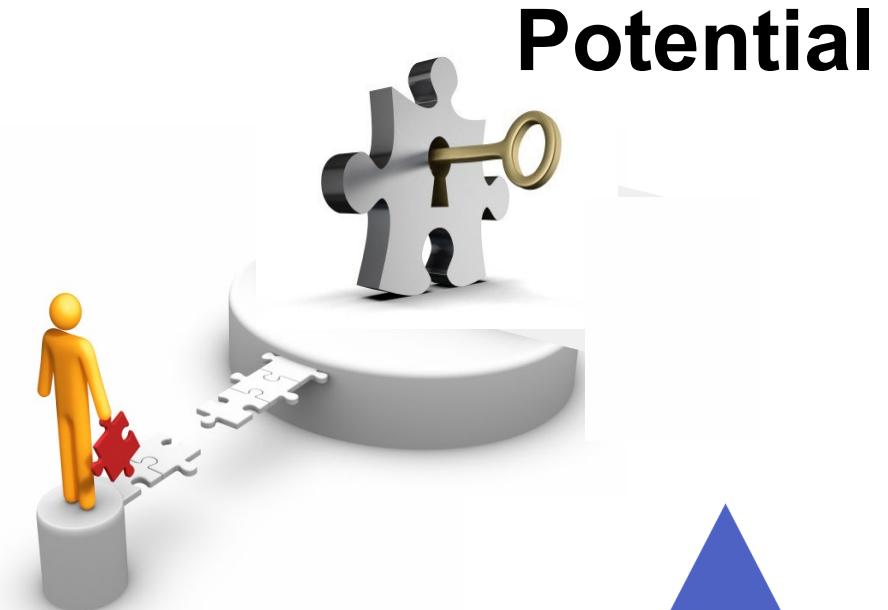
# Achievement Gap



**Academic Achievement**

**Personalization**

**Differentiation**



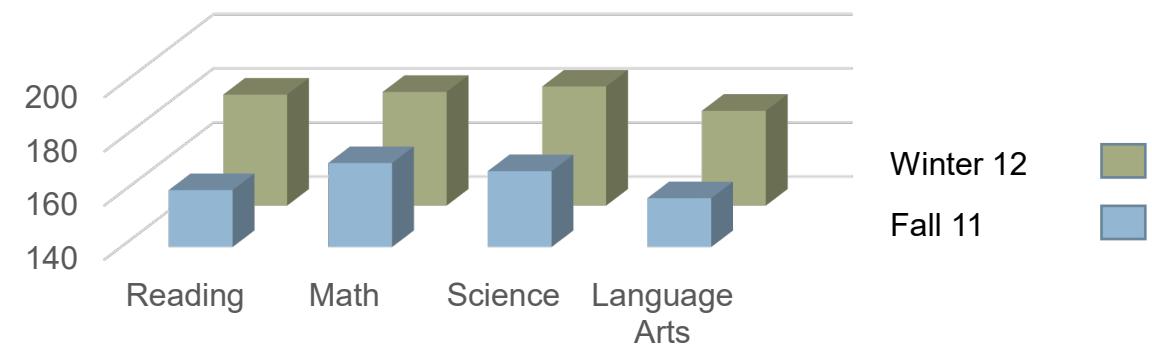
**Students Who Struggle Early Rarely Catch Up**



In 3<sup>rd</sup> grade, her parents heard the words,  
"Rosé can't learn anymore."



Academic Gains after 9 Weeks



Equipping Minds  
Cognitive Development Exercises



12 Weeks lead to a 4 year case study



# Dr. Reuven Feuerstein

## Cognitive Psychologist 1921-2014



“

“Learning begins  
with the belief  
that every child  
is capable of  
learning.”

*Reuven Feuerstein*



Theist: Orthodox Jew who believed we are created in the image of God. His religious beliefs were the foundation for his theories of cognitive development.



# Structural Cognitive Modifiability

*Intelligence is modifiable regardless of age, neurodevelopmental conditions, genetics, and developmental disabilities.*

## 1. Human beings are shaped by:

- Environment
- Human Biology
- Mediation

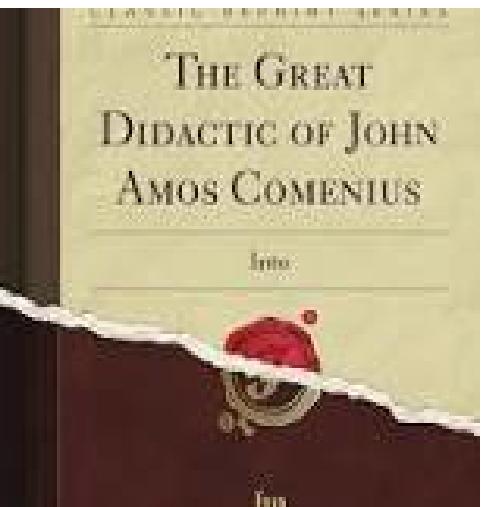
## 2. Intelligence is adaptive

## 3. The brain is plastic and can generate new structures through external and internal factors.





# Jon Amos Comenius: 1592-1670 Father of Modern Education & Developmental Psychology



- \*Theologian, Educator, and Philosopher
- \*Image of God, Scripture & Nature, Salvation of Humanity
- \*Embraced Science, a wholistic view, All Truth is God's Truth
- \*EVERYONE should be educated regardless of intellectual ability, boys and girls, rich and poor
- \*Right of Inclusion for diverse learners
- \*Unlimited Potential of the Mind- Neuroplasticity
- \*Life Long Learning
- \*Joy of Learning
- \*Sought throughout Europe to reform education
- \*System of progressive instruction
- \*Multi-sensory instruction
- \*First children's picture book: *Orbitus Pictus*
- \*Exercise, play, nutrition, work, and sleep



*Neuroplasticity is the most important discovery in all of neuroscience as it confirms the brain is built to change in response to experience and training, enabling learning.*

Boleyn-Fitzgerald

- › Comenius understood there is no truth or intellectual endeavor Christ did not bring into being.
- › God in Christ is the Creator of all things (Gen 1:1, Col.1:15-16, Heb.1:2), the sustainer of all things (Col. 1:16-18 Heb 1:3), and the reconciler of God with humanity (Col.1:19-20).
- › God creates all of humanity in His image for His purposes and glory (Gen 1:28-29, Isaiah 43:7).
- › These were essential truths for Comenius and are relevant for Christian educators and psychologists today as the Bible is the lens through which we view human life and provides the message for salvation.
- › Since man is created in God's image, he is “capable of acquiring knowledge of all things.” Comenius saw the mind's unlimited potential because he saw humanity from a biblical worldview of human development.
  - › “It is evident that man is naturally capable of acquiring a knowledge of all things, since, in the first place, he is the image of God... If a thousand years were granted to man, in which, by grasping one thing after another, he might continually learn something fresh, he would still find some spot from which the understanding might gain fresh objects of knowledge. So unlimited is the capacity of the mind that in the process of perception, it resembles an abyss. The body is enclosed by small boundaries: the voice roams within wider limits; the sight is bounded only by the vault of heaven; but for the mind, neither in heaven nor anywhere outside heaven, can a boundary be fixed.”



*To have a voice for those who have no voice and sit at the academic table*

## Research Study with Specific Learning Disorders

Thirty-two students with a diagnosed specific learning disorder (SLD) were randomly assigned to one of two groups. Half of the students trained with EMCDC (Training Group) and the other half received extra academic tutoring (Active Control). Each group received training or academic tutoring for one hour a day, five days a week for 30 hours over 7 weeks.

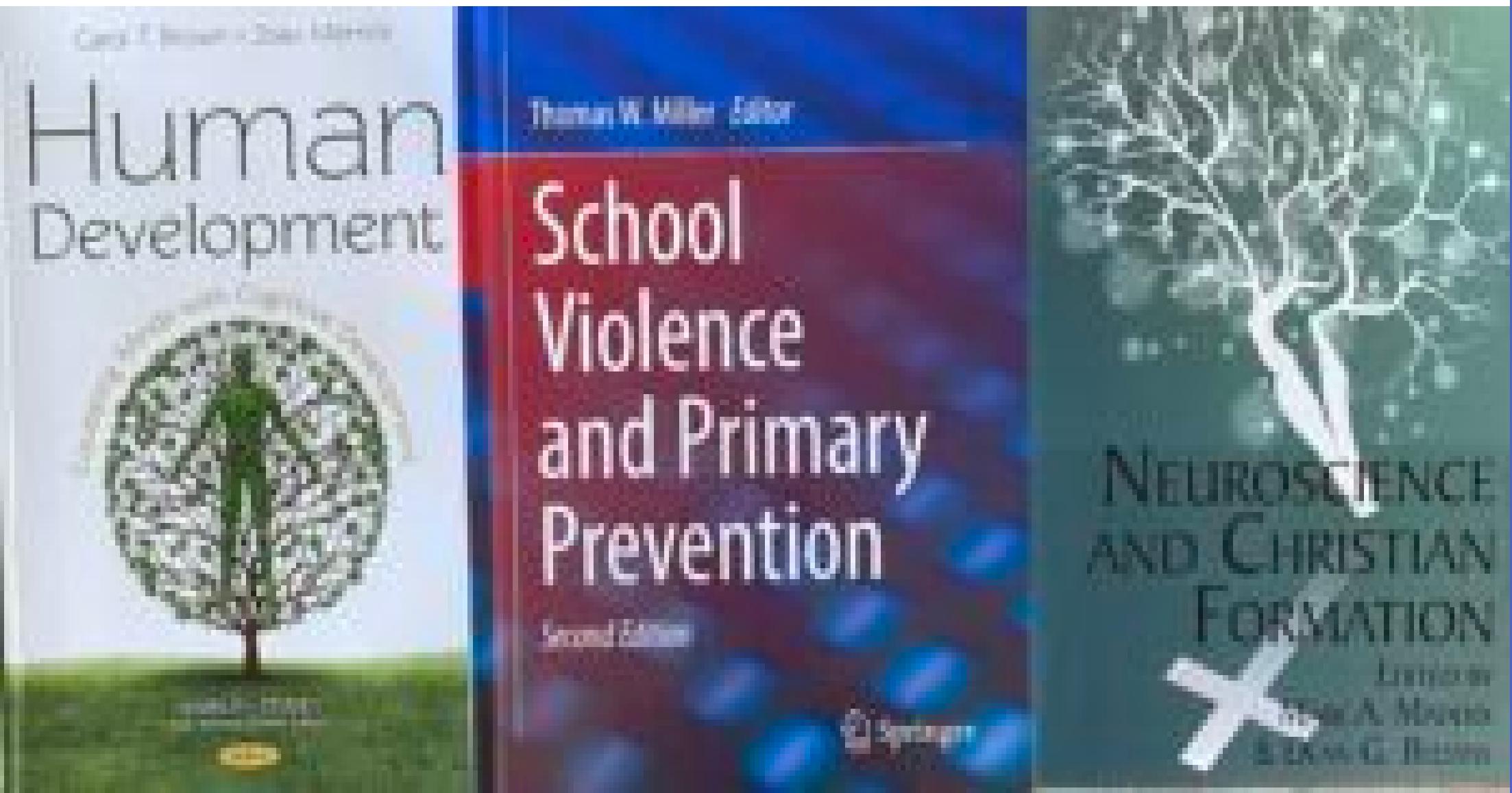
**The Training group showed statistically significant improvements in:**

- verbal abilities
- nonverbal abilities
- IQ composite
- Science
- **Training Group made greater improvements in reading, science, language, and social studies than the Active Control Group.**

The Active Control, who received 30 hours of academic tutoring did not make significant improvements in working memory, nonverbal abilities, IQ, or academic skills. However, they did make gains in verbal abilities.



# Peer-reviewed Published Research





*Do not conform to the pattern of this world, but be transformed by the renewing of your mind.* Romans 12:2

- › Changing our mindset
- › Image of God includes the whole person
- › Jesus grew in wisdom, and stature in favor with God and man
- › Scripture says God gives the ability to know Him
- › To Think, To Know, and To Remember...involve working memory, which can be developed
- › Science, Education, and Scripture should not be separated
- › Neurotheology: Psychology, Neuroscience, & Spirituality
- › Restoration is a lifelong process



# Intervention: Cognitive Development Therapy

Results: Follow Multi-step Directions

## Visualize

Letters  
Numbers  
Images



Reading/Spelling  
Math  
Comprehension

Improves Behavior and Language



# Nethra





# Tic Tac Toe





## Malawi teachers



## Kenya teacher





# Mexico



# Brain Fit Seniors





- › “God Himself has frequently asserted that with Him there is no respect of persons, so that, if, while we admit some to the culture of the intellect, we exclude others, we commit an injury not only against those who share the same nature as ourselves, but against God himself, who wishes to be acknowledged, to be loved, and to be praised by all upon whom He has impressed His image.
- › Now we do not know to what uses divine providence has destined this or that man; but this is certain, that out of the poorest, the most abject, and the most obscure, He has produced instruments for His glory.”



# Cognitive Development

Reasoning  
Processing  
Comprehension  
Working & Long-Term  
Memory

**Sensory  
and  
Motor  
Development**

Primitive  
Reflexes  
Visual & Auditory  
Processing

**Equipping  
Minds**

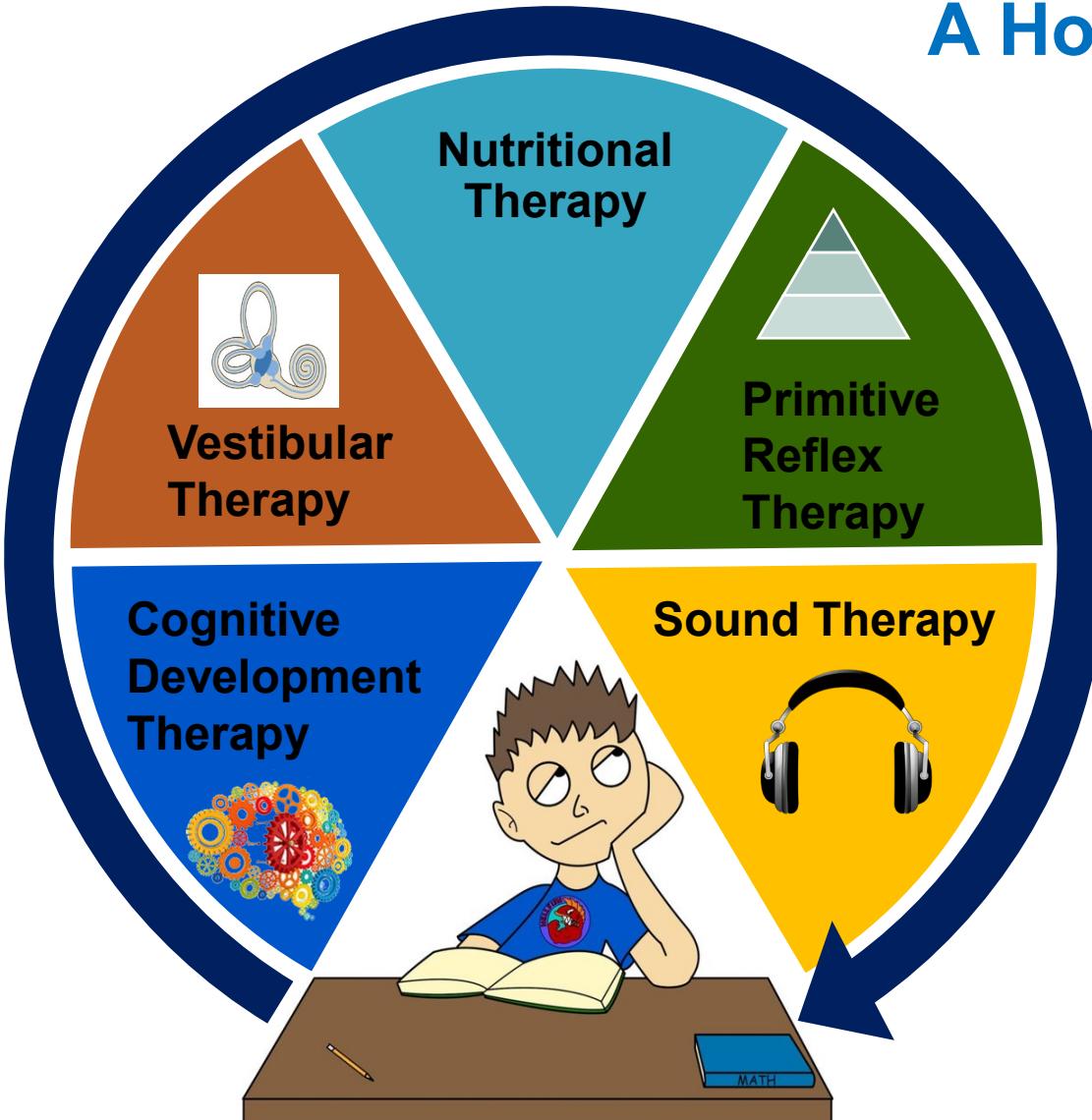
Relational  
Confidence  
Language  
Self-regulation

**Social  
and  
Emotional  
Development**



# Equipping Minds of Learners

**A Holistic-Integrated Approach**



**Mediated Learning Experience**



# Doulos Discover School

