

NEUROPLASTICITY

The Ability of the Brain to Reorganize Itself,
Both in Structure and How It Functions

HOW THE BRAIN CHANGES



NEUROGENESIS
Continuous generation of new neurons in certain brain regions



NEW SYNAPSES
New skills and experiences create new neural connections



STRENGTHENED SYNAPSES
Repetition and practice strengthens neural connections



WEAKENED SYNAPSES
Connections in the brain that aren't used become weak

NEUROPLASTICITY CAN TAKE PLACE WHEN CHANGES OCCUR IN:



Characteristics of Dendritic Spines



Properties of Membrane and Ion Channels



Hormonal Activity



Microglia Activity



DNA Regulation and Transcription



Neurotransmitters

NEUROPLASTICITY CAN RESULT FROM:



Traumatic Events



Stress



Social Interaction



Meditation



Emotions



Learning



Paying Attention



Diet



Exercise



New Experiences

Science now supports the effectiveness of the **Arabian Horse Reading Literacy Project**. Neuroplasticity results from the highly exhilarating and stimulating experiences the children are encountering. With new neuropathways being created and the brain changing, we see children who have never read before beginning to read to the horses. We see the confidence grow in young readers who have been insecure with their reading.



Arabian Horse

Reading Literacy Project
arabianhorsereading.com

Motivating 'kids' to want to read

nicabm
www.nicabm.com