Seven Revolutionary Discoveries from Neuroscience that will Change Education

Eric Jensen  ISACS  Nov.4, 20005

Model for Understanding Brain-Based Learning

- Brain’s “Natural Rules” for ALL Learning
- SUPPORT STRATEGIES for ALL Learning
- NECESSARY CONDITIONS for Complex Learning
- BASELINES (for any and all basic learning)
- Environmental Structures Influencing Learning
Recent Discoveries

1. Neurogenesis
CONNECTIONS... (exercise, nutrition and improving learning with under-performers)

2. Allostasis
CONNECTIONS... (increasing control, keeping stress down, building relationships, reducing bullying, supporting teachers)

3. Malleable memories
CONNECTIONS... (less intense learning but lengthen the learning over time, review and revise more, alter expectations, change assessments)

4. Neural plasticity
CONNECTIONS... (reduction in reading problems, higher standards and support for underachievers, use of OT, learning software such as FastForword, pullout programs focused on mind-body skill-building)
Enrichment (significant possibilities for improvement with movement, learning and new environments)

5. Social Neuroscience
CONNECTIONS... (strengthening social ties, allowing more time for cooperation, use of teams, groups, more student input, respect gender differences)

6. Developmental Differences
CONNECTIONS... (these are greater than earlier thought, bringing both opportunities and vulnerabilities)

7. Mind-Body-Emotions Interplay
CONNECTIONS... (far greater dependence on each other than earlier thought)
NOTES

1. Neurogenesis

2. Allostasis

3. Malleable memories

4. Neural plasticity

5. Social Neuroscience

6. Developmental Differences

7. Mind-Body-Emotions Interplay
References

1. Neurogenesis


2. Allostasis

3. Social/Environmental Neuroscience

4. Changing Brains/Neural plasticity/Brain rehabilitation  

5. Malleable memories  
Tehan G.
6. Developmental Differences and Variability


7. Mind-Body-Emotions Interplay