Build a Better Brain

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Agenda

- Brain factoids
- Nutrients and Toxins
- Brain works basics
  - Conscious and Subconscious
- Fit with our leadership lives
- Fun!

dynamic transitions
Cycle of Results

Thought → Emotion → Action → Results

dynamic transitions
COOL BRAIN FACTOIDS

• 100 Billion neurons
  – 1,000 – 10,000 connections
  – Learning makes new connections
• 90% water and fat
• 2% body weight; uses
  ▪ 20% oxygen
  ▪ 25% energy
Brain “Nutrients”

• Exercise
  – Learning
    • Mood
    • Attention
    • Retention
  – Memory
    • Hippocampus increase 2%
    • Non-exercisers decrease 1.5%
Brain “Nutrients”

- Sleep
  - Consolidation
    - Pulls data together
    - Makes memories stronger
  - Brain’s dishwasher
    - Sloughs toxins
Brain “Nutrients”

- **Food**
  - **Omega-3 Fatty Acids**
    - Salmon, walnuts, flax seeds
  - **Flavonoids**
    - Green tea, citrus fruits, dark chocolate, wine
  - **Vitamins**
    - B, D, E
Brain “Toxins”

• Alcohol
  – Absorbed by water and fat
  – Hijacks neurotransmitter receptors
Your Brain on ETOH

- 0.01
  - Reduced ability to assess risks
  - Lowered judgement making ability
  - Slowed reaction times
  - Reduced social inhibitions
  - Increased feelings of happiness

- 0.05
  - Clumsiness, exaggerated emotions
  - Increased loss of coordination
  - Further slowing of decision making times
  - Impaired ability to drive

- 0.08
  - Potential nystagmus
  - Peripheral vision
  - Depth perception

- 0.10
  - Confusion
  - Slurred speech
  - Balance
  - Increased aggression

- 0.25
  - Loss of sensation
  - Loss of consciousness

- 0.40
  - Potential coma

- 0.50
  - Potential death
Brain “Toxins”

- **Fatigue**
  - Similar symptoms to alcohol
    - Loss of concentration
    - Slowed reactions
    - Irritability
    - 3x likely to have an accident
  - Mobile phone battery
    - Microsleep
Brain “Toxins”

• Food
  – Trans-fat
    • Potato chips, fries,
  – Saturated fat
    • Butter, lard, red meat
  – Sugar and Fructose
    • Almost every processed food on the planet
Stress – Nutrient and Toxin
Stress – Nutrient - Eustress

• The perceived ability to embrace one’s current challenges
  – Aroused physiological response
  – Interpreted as positive
  – Feeling of motivation, excitement, vigor
Stress – Toxin - Distress

• The perceived inability to respond to one’s current challenges
  – Aroused physiological response
  – Interpreted as adverse
  – Feeling out of control
• Surge of adrenaline
  – Immediate
  – Damaging over time
Distress Reduction Techniques

- Moving from subconscious to conscious
  - 5x5
  - ABC
    - Alter
    - Avoid
    - Accept
      - Build Resistances
      - Change Perspective
Brain and Energy

- Produces Energy
- Uses Energy
- Conserves Energy

dynamic transitions
CONSCIOUS CONSERVES ENERGY

• Limits
  – Speed
  – Capacity

• Takes Shortcuts
  – The “whole” (big picture)
  – Turn over to Subconscious
    • Habits
    • “Programmed” Responses
WE’RE WIRED TO MAKE SENSE OF THINGS

Aoccdrnig to rscheearch at an Elingsh uinervtisy, it deosn't mttae in waht oredr the ltteers in a wrod are, olny taht the frist and lsat ltteres are at the rghit plcneas. The rset can be a toatl mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae we do not raed ervey lteter by ilstef, but the wrod as a wlohe.
SUBCONSCIOUS

• Storage

• Service to Conscious
  – Conscious = programmer
  – Subconscious = program
    • “Wired to Respond”

• Creative Problem Solver

• Habits

• Energy Monitor
The Subconscious Brain and Leadership

• Pygmalion Theory
  – Robert Rosenthal and Lenore Jacobson - teachers
  – J. Sterling Livingston - managers

• Choices in one person about another influences the other person
  – Stated or Implied!
**Multiple Intelligences**

Howard Gardner

*Intrapersonal* – ability to be self-aware and in tune with one’s own inner feelings, values, beliefs and thinking processes

*Logical/Mathematical* – ability to think conceptually and abstractly; capacity to discern logical or numerical patterns

*Verbal/Linguistic* – ability to manipulate words and language, verbal expression; sensitivity to the sounds, meanings and rhythms of words

*Musical* – ability to recognize and compose musical pitches, tones, timber and rhythms
Multiple Intelligences

**Naturalist** – ability to recognize and categorize plants, animals and other objects in nature; capacity to discern connections among different elements of nature

**Interpersonal** - ability to recognize and respond appropriately to moods, motivations and desires of others

**Visual/Spatial** – ability to think in images and pictures, to visualize accurately and abstractly

**Bodily/Kinesthetic** – ability to coordinate one’s body movements and to handle objects skillfully
Personal Success

• Locus of Control
  – How a person perceives control over their situation.

• Internal LOC
  – Behavior guided by personal decisions and efforts
  – Feel control over responses to life
  – Goal focused
  – Adaptive to change

• External LOC
  – Behavior guided by blame
    • fate, destiny, society
  – Feel lack of control over response to life
  – Excuse focus
  – Passive acceptance or angry defensiveness

dynamic transitions
## Language and Perception

<table>
<thead>
<tr>
<th>Internal LOC Language</th>
<th>External LOC Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’ll match how he communicates</td>
<td>He just doesn’t listen to me</td>
</tr>
<tr>
<td>Let’s look at more alternatives</td>
<td>There’s nothing I can do</td>
</tr>
<tr>
<td>I can choose another approach</td>
<td>That’s just the way I am</td>
</tr>
<tr>
<td>I can control my own feelings</td>
<td>He makes me so mad</td>
</tr>
<tr>
<td>I can deliver the results</td>
<td>They won’t give me resources</td>
</tr>
<tr>
<td>I’ll get input from diverse sources</td>
<td>They never like what we do or propose</td>
</tr>
</tbody>
</table>

*How we “frame it”*
**WHICH IS YOUR LOCUS OF CONTROL?**

**Internal locus of control**
- "I make things happen."
- "I look what I can do!"
- "You make things happen."

**External locus of control**
- "There is nothing I can do about my future."
- "Why does everything happen to me?"
- "Things happen to you."
Your Brain Going Forward!

• Use knowledge for helpful adjustments
  – Eating, sleeping, exercise, stress
  – Conscious vs. subconscious processes
  – Multiple “intelligences”
  – ILOC/ELOC

• Everyone’s brain is the same and different
  – Use the similarities
  – Value the differences