CHAPTER 4

Setting Goals
Modeling the Learning Process

James Zull. *The Art of Changing the Brain*  
(Sterling, VA: Stylus Publishing, 2002)
4 Basic Functions the Brain Uses for Learning

- Getting Information
- Making Meaning of Information
- Creating New Ideas
- Acting on Those Ideas
Learner \textit{Begins} as \textit{Receiver} of Knowledge
Gathering Information Enters through Senses

• Can you remember four things that influence this gathering?
• Interest
• Intent
• Basic Background (prior knowledge)
• Understanding
Gathering takes place in the sensory cortex
Setting Goals

Gathering

• You discovered:
  • Information about setting goals
    – Why set goals
    – Elements of a useful goal
    – Guidelines for setting goals
Analyzing to Make Meaning

REFLECTION

• Try to make personal
• Try to determine connection to past experiences
• Try to discover relevance and usefulness
• Try to discover what it's like that we already know.
Analyzing takes place in the Back Integrative cortex
Goal Setting
Analyzing

• You analyzed areas of your life
• You tried to determine what was really important for you to do.
Creating
Convert comprehension to

• Ideas
• Hypothesis
• Plans
Goal Setting
Creating

• You to determine what you must do to reach your destination.
Creating Takes Place in the front integrative cortex
Acting
Testing Ideas

• Writing
• Speaking
• Drawing
• Can you think of other ways?
Acting Takes Place in the Motor Cortex
Goal Setting

Acting

- Wrote useful goals for several areas in your life
- You created a plan by breaking large goals into smaller ones.
- You took the first steps in achieving your goals.
Learner becomes **Producer of Knowledge**