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Principles of Adult Learning for Achieving Effective Teaching

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www.webbertraining.com May 28, 2019

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Goals and Objectives

Applying adult learning principles for effective teaching.

- Specify learning strategies (needs, motivators, roadblocks) and learning domains
- Identify learning theories that explain learner motivation and success

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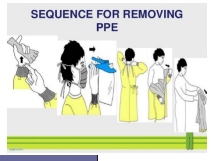
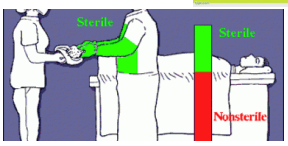
Problems with Non-compliance with Critical Practices

- Appropriate hand hygiene
- Reprocessing endoscopes
- Following isolation precautions
- Wearing appropriate PPE
- Using aseptic practices





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"Learning is a way to transform knowledge, insights, and skills into behavior.

The learning environment in healthcare settings is unique because of the diversity of the healthcare personnel."

APIC Text of Infection Control and Epidemiology 4th Edition

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Infection Prevention & Control Audience:

- Patients/Family
- Housekeeping
- Dietary
- Nursing Assistants
- LPNs
- Nurses
- Special Technicians (Radiology, Laboratory)
- Resident/House staff
- Physicians

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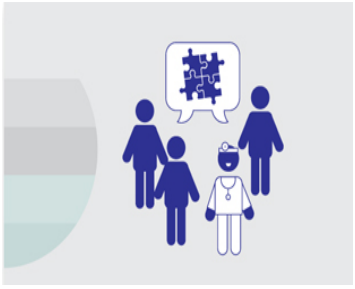
Adult Learner's Needs



- Acceptance
- Respect
- Support
- Spirit of mutuality
- Freedom of expression
- Known by name
- Valued as unique

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Adult Learner's Motivators

Self concept
- How they see themselves
- How do they want others to see them
- How do they want to be treated

Motivation
- Internal incentives
- Curiosity
- External motivators

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Roadblocks to Learning

- Education/training does not always predict improved behavior
- Learners become rapidly bored
- Adults are afraid of embarrassment
- Fear of failure

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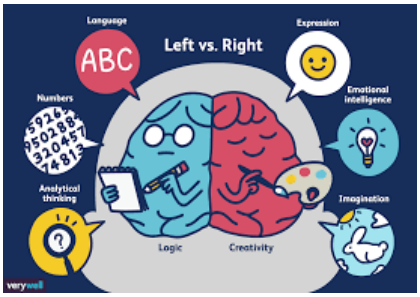
Learning Styles

- Left brain dominant - technical, rules, regulations
- Right brain dominant - intuitive, artistic, global thinker



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Learning Process

- Transforming new knowledge, skills, and values into behavior
- Directed toward goals
- Involves conflict and resistance to giving up comfortable ways of doing things
- Decision to change is necessary before learning can occur.

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Learning Domains

- Cognitive -recall, intellectual, application
- Affective - ideas, feelings, desire to learn
- Psychomotor - learning new skills or new way of acting or doing

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Cognitive Learning Domain

- Definition: Recall or recognition of knowledge involving the acquisition of new insights, new ways of thinking, problem-solving, and the development of intellectual abilities.

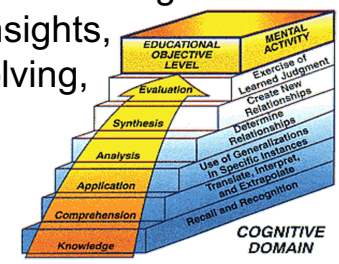

Figure 1-4. Dr. Bloom's hierarchical taxonomy for the cognitive domain (knowledge) includes six educational objective levels.

- Examples:
  1. Recognizes the PPE to be worn in caring for patient on Contact Precautions.
  2. Evaluates OR policies for traffic control.

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Affective Learning Domain

- Definition: Learning new attitudes, values, beliefs, and way of being.

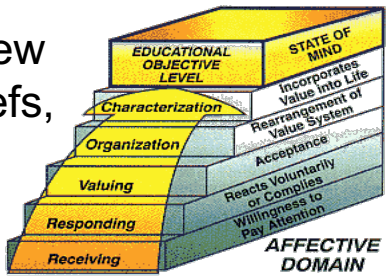

Figure 1-5. D. R. Krathwohl's hierarchical taxonomy for the affective domain (attitudes, beliefs, and values) contains five educational objective levels.

- Examples:

1. Student accepts constructive criticism easily.
2. Student is motivated to learn new material

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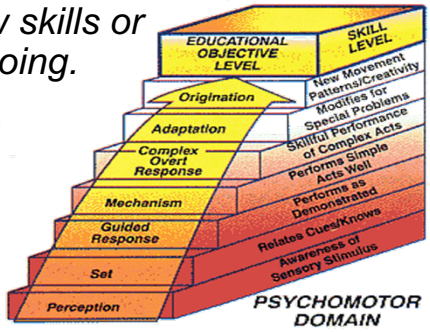
Psychomotor Learning Domain

- *Definition: Learning new skills or new ways of acting or doing.*



- Example: Demonstrating the appropriate techniques used to suction a tracheostomy.

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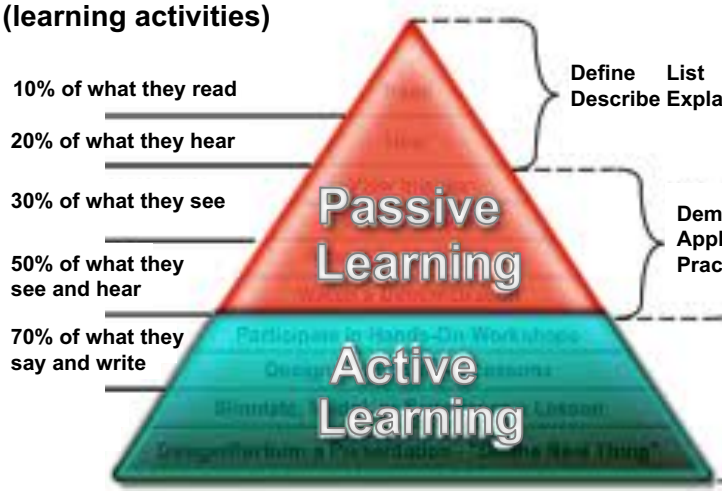
People generally remember... (learning activities)

People are able to... (learning outcomes)



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Historical Learning Theories

Learning theory common elements- learning produces a relatively permanent behavior change and is an internal process that varies from person to person.

- **Psychoanalytic**-control urges (Freud)
- **Behavioralist**–reward-motivation-conditioning-productivity (Pavlov, Skinner)
- **Humanist:** hierarchy of needs to achieve highest level of self actualization (Maslow)
- **Cognitive**: affiliation, power (Piaget)

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Alternative Learning Theories

- Andragogy vs. pedagogy-adult/child
- Constructivism
- Social Psychology Theory "Social Power"
- Shared consciousness

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Knowles Theory of Andragogy

Andragogy vs. pedagogy-adult/child (Knowles)

Characteristics of Adult Learners:

1) Motivated by job needs
2) Accumulated life experiences
3) Prefers practical information
4) Immediate application
5) Problem solving orientation to learning

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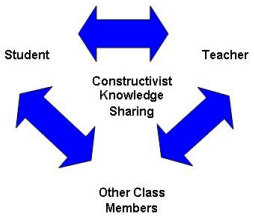
Constructivist Theory

Learners come with already formulated knowledge, ideas, and understandings. Learning by experience.

Teachers pose questions and guide students to find their own answers.



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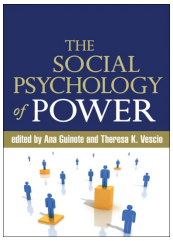
Social Psychology Theory "Social Power"



- **Opinion leaders**
  - Those who can exert significant influence over others within their social/work groups
  - Can also influence how effectively new information is accepted by the group

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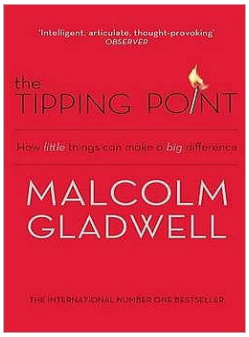
Shared Consciousness Theory

"100th Monkey Phenomenon"

The Tipping Point



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Customized IPC Education

Differentiated Learning Strategies Factors:

- General educational background
- Reasons for attending
- Level in the decision-making tree
- Current level of knowledge

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Peer to Peer Mentoring Model

- Students learn by explaining their ideas to others and by participating in activities where they learn from their peers.
- Example: CDC NSHN HAI criteria and surveillance

https://www.effectiveinstitutions.org/media/The_EIP_P_to_P_Learning_Guide.pdf

Improves competency and compliance

"Well-constructed peer groups serve as an anchor for learning."

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Precede Model

- Predisposing factors - OR staff must believe wearing head coverings will prevent HAIs
- Reinforcing factors – positive feedback
- Enabling Constructs - reduce barriers comfort and convenience
- Diagnosis and Evaluation - compliance measurement

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Hybrid Educational Program Model

- "Hybrid" or "blended" learning is a formal education course.
- Some traditional face-to-face or classroom methods are replaced by online learning activities.
- Example: attendance at a live event with assigned follow-up activities.

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Summary

HCP education and training is unique and complex because of a diversity of personnel. Successful strategies includes considering:

- Age, cultural background, ethnicity, educational level, and learning styles
- Literacy, cultural diversity, cross training and technological advances
- Applying learning theories and educational needs of learner population and institution

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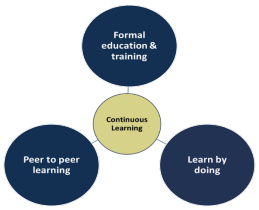
"*I believe that education is the principal component of infection control. Without education, every other activity of our specialty is just so much meaningless busy work.*"

Sandra J. Pfaff, 3rd Annual Carole DeMille Lecture



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	(FREE Teleclass – Broadcast live from the IPAC Canada conference) **ONE HEALTH: THE RISKS AND REWARDS OF LOVING ANIMALS** Speaker: **Prof. Jason Stull**, Ohio State University
May 29, 2019	***Broadcast sponsored by GOJO Canada***
June 5, 2019	*(South Pacific Teleclass)* **THE ROLE OF ACTIVE SURVEILLANCE CULTURE IN RESOURCE-LIMITED SETTINGS** Speaker: **Prof. Anucha Apisarnthanarak**, Thammasart University Hospital, Pratumthani, Thailand
June 13, 2019	*(FREE Teleclass)* **SSI SURVEILLANCE STRATEGIES IN UNDER-RESOURCED SETTINGS** Speaker: **Dr Joseph S Solomkin**, University of Cincinnati College of Medicine, and World Surgical Infection Society ***Sponsored by the World Surgical Infection Society***

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