TEACHING – LEARNING PROCESS

Unit Objectives

The student will

1. apply theories of learning to the teaching-learning process as associated with educating clients.

2. appreciate the need for nurses to promote and maintain clients health through formal and informal teaching relevant to their health status.

3. identify the characteristics of learners at selected developmental stages with their readiness to learn.

4. apply findings from research focusing on patient/client education to individuals.

RN with accolades for excellent patient care
Photo by Lee-Ellen Kirkhorn (used with permission)
PRINCIPLES OF LEARNING THEORIES

CLASSICAL CONDITIONING BY DAN G. PERKINS

Principles:

1. An organism can be conditioned to previously neutral stimuli.
2. The conditioned response may be weakened and eventually extinguished by presentation of the conditioned stimulus alone.
3. Stimulus generalization follows specific principles.
4. Higher-order conditioning occurs when substitute stimuli produce the conditioned response.
5. Classical conditioning may not necessarily require a strong biological unconditioned stimulus.
6. Conditional emotional responses can be established through conditioning having motivational components.
7. Fear is a learned drive.
8. Aversive Pavlovian conditioning can be a constraint on later learning.

THORNDIKE’S CONNECTIONISM BY MARY F. MAPLES AND JOAN M. WEBSTER

Principles:

1. The Laws of Readiness, Exercise, and Effect govern all processes in learning.
2. Learning can be categorized by four types: Connection-forming, connection-forming with ideas, analysis or abstraction, and selective thinking or reasoning.
3. All learning is incremental.
4. In learning there are certain states of affairs which the subject always welcomes and does nothing to avoid: Its satisfiers.
5. The intellect, character, and skill possessed by any person is the product of certain original tendencies and the training those tendencies have received.
6. Learning is extended by spread of effect.
7. All mammals learn in the same manner.

GUTHRIE’S CONTIGUITY THEORY BY JOHN G. CARLSON

Principles:

1. Learning is an association between stimulus and response.
2. Movements themselves are a source of stimuli.
3. Learning is an “all-or-none” process.
4. Extinction of responding is actually a process of association.
5. Rewards are not necessary for learning.
6. Motivation is simply persistent, internal stimulation.
7. The important thing about punishers is the behaviors they evoke.
8. Attention involves an active response of the organism.

**HULL’S DRIVE THEORY BY CHARLES I. BROOKS**

Principles:

1. Habit strength increases gradually with number of reinforcements.
2. Habit strength decreases with increasing delays in reinforcement.
3. Habit strength decreases with increases in the Conditioned Stimulus – Unconditioned Response interval.
4. The amount of reinforcement affects incentive motivation.
5. Response probability shows a sigmoid relationship to number of reinforcements.
6. Habits generalize to stimuli other than those involved in original conditioning.
7. Habit, drive, and incentive combine multiplicatively.
8. Drives energize all behavior.
9. Each drive state has a characteristic drive stimulus.
10. Drive properties can be acquired.
11. Reinforcement operates through drive reduction.
12. Reinforcement properties can be acquired.
13. Response effort produces a negative drive state which can be learned.

**SKINNER’S OPERANT THEORY BY A CHARLES CATANIA**

Principles:

1. Behavior analysis examines relations between experimental operations and changes in responding.
2. Consequences can make responding increase (reinforcement) or decrease (punishment).
3. Punishment is an effective but undesirable procedure for changing behavior.
4. Operant classes are created by differential reinforcement.
5. New behavior can be shaped by reinforcing successive approximations.
6. Discriminated operants are established by differential reinforcement with respect to stimuli.
7. Response sequences can be chains or behavioral units in their own right.
8. Operant analyses must consider both arbitrary and species-specific behavior relations.
9. Behavior is a product of evolution.
ETHOLOGICAL LEARNING THEORY BY ROBERT C. BOLLES

Principles:

1. Almost all behavior is adaptive.
2. Almost all behavior is functional.
3. Almost all behavior solves some problem.
4. Almost all behavior is unlearned.
5. Learning is an adaptation.
6. Learning is mostly about stimuli.
7. Animals learn evaluations.
8. Animals learn affordances.

GESTALT THEORY BY MICHAEL WERTHEIMER

Principles:

1. Learning depends on perception.
2. Learning involves reorganization.
3. Learning does justice to what is learned.
4. Learning is about what leads to what.
5. Insight avoids stupid errors.
6. Understanding can be transferred to new situations.
7. Genuine learning does not extinguish.
8. Memorizing is a poor substitute for understanding.
9. Learning by insight is its own reward.
10. Similarity plays a crucial role in memory.

CONSTRUCTIVISM (PIAGET) BY GEORGE E. FORMAN

Principles:

1. Learning is a specific case of development.
2. Development is a process of becoming increasingly conscious of the knower-known relation.
3. Perception is guided by mental operations that are themselves not the result of previous perceptions.
4. Learning is an organic process of creation rather than a mechanical process of accumulation.
5. Every acquired concept involves an inference.
6. Errors often are not the result of carelessness but result from an elementary form of reasoning.
7. Meaningful learning requires active self-regulation.
8. Meaningful learning occurs when the person resolves a discrepancy between predictions and outcomes.
9. Meaningful learning occurs by negating earlier, incomplete levels of understanding.
10. All negations are constructed by the individual and are not the automatic result of feedback from the environment.

MATHEMATICAL LEARNING BY W.K. ESTES

Principles:

1. Behavior is a probabilistic phenomenon.
2. Elements are conditioned on an all-or-none basis.
3. The stimulus situation is viewed as a population of stimulus elements.
4. A population of homogenous stimulus elements is viewed as a single element.
5. The passage of time is viewed as the fluctuation of stimulus elements.
6. Discrimination learning is learning to distinguish between common and unique elements of two stimulus populations.
7. An alternative formulation: The stimulus situation is a unique pattern of stimulus elements.
8. Associations are formed on an all-or-nothing-basis.

INFORMATION PROCESSING BY BARRY H. KANTOWITZ & HENRY L. ROEDIGER III

Principles:

1. Information flow is the basis for behavior.
2. Stimuli that did not occur can exert control over behavior.
3. The human has a limited capacity for processing information.
4. Mental events can be inferred from chronometric analysis.
5. Memory for a stimulus depends on the complexity of the mental operations applied to it when it was initially processed.
6. Forming images of material to be remembered greatly aids later recall.
7. Memory for an event is a product of information from two sources: The memory trace laid down by the event and the cues in the retrieval environment when recall is attempted.
8. The effectiveness of retrieval cues depends on their relation to the nature of the stored information.
9. Events occurring prior to or after events that are to be remembered interfere with recall of the to-be-remembered events.
OBSERVATIONAL LEARNING (BANDURA) BY CORNELIUS J. HOLLAND AND AKIRA KOBASIGAWA

Principles:

1. Much of human learning is cognitive.
2. One major source of learning is through response consequences.
3. A second major source of learning is through observation.
4. The attention process is influenced by the model, the observer, and incentive conditions.
5. The retentional process is aided by coding and rehearsal.
6. The motor reproductive process involves images and thoughts to guide overt performance.
7. The motivational process is influenced by (1) external reinforcement, (2) vicarious reinforcement, and/or (3) self-reinforcement.
8. Response information in observational learning is conveyed through physical demonstration, words, or pictures.
9. Exposure to a model may produce different effects.
10. Observational learning is a major source of rules or principles.
11. Observational learning is a major source of creative behavior.

SOCIAL LEARNING THEORY (ROTTER) BY E. JERRY PHARES

Principles:

1. The unit of investigation is the interaction of the individual and his meaningful environment.
2. Constructs of this theory are not dependent for explanation upon constructs in any other field.
3. Behavior takes place in space and time; it may be described by psychological constructs but also by physical constructs.
4. Not all behavior may be usefully described with personality constructs; the level, complexity, and stage of development of the organism are critical.
5. A person’s experiences influence each other; otherwise stated, personality has unity.
6. Behavior has a directional aspect; it may be said to be goal-directed, and the directional aspect is inferred from the effect of reinforcing conditions.
7. The occurrence of a behavior is determined not only by goals or reinforcements but also by the person’s expectancy that these goals will occur.

### TEACHING-LEARNING THEORIES AND APPLICATION TO PATIENT EDUCATION

#### Pre-20th Century

<table>
<thead>
<tr>
<th>Theory and Key Persons</th>
<th>Attributes of Teaching-Learning Process</th>
<th>Teaching Learning Concepts</th>
<th>Application to Patient Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviorism or Mental Discipline</td>
<td>Teacher trains intrinsic mental power</td>
<td>Learning consists of minds being trained.</td>
<td>Change of diet.</td>
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<td>Plato-Aristotle - early</td>
<td>Learner maintains strict discipline</td>
<td>- factual material</td>
<td>Basic pathophysiology</td>
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<td></td>
<td>Knowledge focus</td>
<td>Change dressings.</td>
<td>Change dressings.</td>
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<td>Teacher centered - active learners</td>
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<td>Practice &quot;We learn by doing&quot; Aristotle</td>
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<td>Natural Unfoldment or Self actualization</td>
<td>Learner discovers that which nature or a creator has put within him/her</td>
<td>Learning through prompting of own interests.</td>
<td>Self-care activities</td>
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<td></td>
<td>Learner focused</td>
<td>Self-directed.</td>
<td>Prenatal visits</td>
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<td></td>
<td>Natural curiosity</td>
<td>No room for imposition of ideas or coercion.</td>
<td>Wellness programs</td>
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<td></td>
<td>Well child care</td>
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<tr>
<td>Apperception</td>
<td>New ideas associated with ideas that already exist in learner.</td>
<td>Mind is composed of active mental states or ideas.</td>
<td>Build on learner's previous knowledge.</td>
</tr>
<tr>
<td>J. F. Herbart</td>
<td>Teacher explains and learner grasps generalizations.</td>
<td>Recognition, use of insights, principles, concepts, theories, or laws.</td>
<td>Expand and deepen.</td>
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<td></td>
<td>Knowledge focused</td>
<td>Teachers are mind builders.</td>
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#### 20th Century

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</tr>
</thead>
<tbody>
<tr>
<td>Stimulus - Response Conditioning or Behavior Modification</td>
<td>Involves conditioning</td>
<td>Response linkages probability of desired responses.</td>
<td>Reinforcement of desired learnings.</td>
</tr>
<tr>
<td>D. B. Skinner, R. Gagne</td>
<td>Response stimulus reinforcements Knowledge Focused</td>
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<tr>
<td>Gestalt, Cognitive-Field, Humanistic</td>
<td>Gains or changes outlooks, insights, or thought patterns - perception</td>
<td>Person, environment and interactions simultaneous</td>
<td>Affective learning</td>
</tr>
<tr>
<td>J. Dewey, K. Lewin, M. Bigge</td>
<td>Reorganizes perceptions</td>
<td>Teacher assists and facilitates.</td>
<td>Critical thinking and problem solving for individual or group.</td>
</tr>
<tr>
<td>M. Montessori</td>
<td>Learner involvement, problem solving, problem raising</td>
<td>- Content meaningful to learner.</td>
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<td>Cooperative-Interactive Inquiry</td>
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<tr>
<td>Mastery learning - Late 1950's B. Bloom J. Black</td>
<td>Breaks down complex materials into smaller units. Encourages self-development. Learner focused</td>
<td>90% of learners able to achieve or master tasks.</td>
<td>Mastery of skills Adult learner Crash courses Insulin-dependent diabetics</td>
</tr>
<tr>
<td>Social learning A. Bandura - 1982</td>
<td>Process of learning influenced by personal mastery vicarious experiences verbal persuasion physiologic feedback Learner focused Teachers can be family members or other learners</td>
<td>Belief that one is capable of performing desired behavior, performance desired outcome Teachers can be family or other learners Self-confidence and efficacy can lead to desired health behavior changes.</td>
<td>Health maintenance Self-care Wellness program</td>
</tr>
<tr>
<td>Information processing R.E. Slavin - 1991</td>
<td>Information flow - basis for behavior sensory register decision to note or ignore store thought</td>
<td>Only 5-7 thoughts at one time</td>
<td>Pace and timing of information</td>
</tr>
</tbody>
</table>

Adapted from M. C. Bigge and A. Bandura

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A Taxonomy of Learning Objectives

COGNITIVE DOMAIN

Major Categories

1. Knowledge - the recall of previously learned material, from specific facts to complete theories; the lowest level of outcomes of the cognitive domain.

2. Comprehension - ability to grasp the meaning of material, translating from one form to another (words to numbers); interpreting (explaining or summarizing); estimating future trends (predicting consequence or effect). The lowest level of understanding.

3. Application - the ability to use learned material in new and concrete situations, such as applying rules, methods, concepts, or theories.

4. Analysis - ability to break down material into its component parts; may include identification of parts; relationship between parts, and recognition of organizational principles.

Examples of Health Education Objectives

Lists the three purposes of the stir-up regimen following surgery.

When handling sterile supplies, recognizes contamination when that occurs.

Applies principles of asepsis when changing dressings on a wound.

Distinguishes between true and false labor pains.

Distributes the organizational structure.

Identifies unstated assumptions.

Illustrative Behavioral Terms

Defines, describes, identifies, labels, lists, matches, names, outlines, recalls, records, repeats, reproduces, selects, states, verbalizes

Clarifies, converts, defends, discusses, distinguishes, estimates, explains, extends, generalizes, gives examples, identifies, locates, paraphrases, summarizes, reports, translates

Applies, changes, computes, demonstrates, discovers, employs, manipulates, modifies, operates, performs, practices, predicts, produces, relates, shows, sketches, solves, uses

Analyzes, breaks down, categorizes, critically examines, diagrams, differentiates, discriminates, distinguishes, experiments, identifies, illustrates, infers, outlines, points out, relates, selects, separates, subdivides.
Cognitive Domain (continued)

5. Synthesis - the ability to put parts together to form a new whole; stresses creative behaviors, and formulation of new patterns.

6. Evaluation - the ability to judge the value of material for a given purpose; based on definite criteria which the student may determine or be given. Learning outcomes are highest of the cognitive domain because they contain elements of all the other categories, plus conscious value judgements based on clearly defined criteria.

Major Categories

1. Receiving - represents the lowest level of learning outcome on the affective domain. Learning outcomes range from simple awareness of existence to selective attention. Is willing to tolerate a stimulus, not avoid it.

2. Responding - represents a higher level of learning outcome on the affective domain. Learning outcomes range from simple awareness of existence to selective attention. Is willing to tolerate a stimulus, not avoid it.

3. Valuing - represents the highest level of learning outcome on the affective domain. Learning outcomes range from simple awareness of existence to selective attention. Is willing to tolerate a stimulus, not avoid it.

AFFECTIVE DOMAIN

Examples of Health Education Objectives

1. Tolerates having nasogastric tube in place.
2. Listens attentively.

Illustrative Behavioral Terms

1. Asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits erect, replies, tolerates
Affective Domain (continued)

2. Responding - voluntary participation; reacts as well as attends. Behavior accompanied by satisfaction or enjoyment.

3. Valuing - the worth or value attached to a particular object, phenomena or behavior; from the simple acceptance of a value to more complex commitment, expressed in overt behavior. Consistent and stable behavior make the value identifiable. Attitudes and appreciation are included in this category.

4. Organization - concerned with bringing together different values, resolving conflicts, and begin building an internally consistent value system; emphasis on comparing, relating, and synthesizing values; values are conceptualized and organized into a value system.

5. Characterization by a Value or Value Complex - individual has developed a characteristic lifestyle; behavior is pervasive, consistent, and predictable.

Cooperates with the insertion of a nasogastric tube.
Participates in class and seminar discussions.
Accepts the food intake limitations inherent in use of nasogastric suction.
Proposes consumer participation in health care.
Describes the role of nursing in the health field.

Regularity chooses those foods which are easily tolerated.
Formulates a life plan that harmonizes with one's abilities, interests, and beliefs.

Displays safety consciousness.
Demonstrates self-reliance when working independently.
Practices cooperation in groups.
Demonstrates self-discipline.

Answers, assists, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes
Completes, describes, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works

Adheres, alters, arranges, combines, compares, completes, defends, explains, generalizes, formulates, identifies, integrates, modifies, organizes, prepares, relates, synthesizes.

Acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, uses, verifies.
Major Categories

1. Perception - the first step in performing a motor act. A process of becoming aware of objects, qualities or relations by way of senses.

2. Set - a readiness for a particular kind of action.

3. Guided response - overt behavioral act under guidance of instructor.

4. Mechanism - learned response is now habitual. Learner has achieved confidence and a degree of skill.

5. Complex overt response - performs complex motor act with high degree of skill.

6. Adaptation - altering of motor activities to meet demands of problematic situation.

7. Origination - creates new motor acts or ways of manipulation of materials.

PSYCHOMOTOR DOMAIN

Examples of Health Education Objectives

1. Recognizes the "feel" of holding a syringe effectively.
2. Identifies appropriate anatomical landmarks for I.M. site selection.
3. Demonstrates well-balanced stance with crutches.
4. Positions skin correctly for z-track injection.
5. Return performance of I.M. injection procedure following demonstration.
6. Discovers most effective method for changing bed linens through trial of several different methods.
7. Performs I.M. injection with ease.
8. Controls fall of mercury in sphygmomanometer evenly.
9. Measures blood pressure accurately within ± 5 mm. as compared with an expert.
10. Performs CPR skillfully and effectively.
11. Performs own method of transfer of a hemiplegic client in a home setting.
12. Designs walker to meet the needs of hemiplegic client.

Illustrative Behavioral Terms

1. Chooses, examines, handles, recognizes, starts, responds, identifies, follows, relates.
2. Demonstrates, positions, practices, patterns, volunteers, reacts.
3. Imitates, discovers, builds, experiments, gives, explores, manipulates.
4. Applies, assembles, controls, performs, measures.
5. Integrates, measures, performs, carries out, administers.
6. Adapts, alters, rearranges, reorganizes, revises, varies.
7. Combines, composes, constructs, designs, originates.

<table>
<thead>
<tr>
<th>FORMAT</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead Transparencies</td>
<td>9. Hardware is easy to operate, relatively low cost, sometimes portable</td>
<td>9. Learner may play a passive role</td>
</tr>
<tr>
<td>(continued)</td>
<td>10. Hardware is readily available in most settings</td>
<td>10. Lettering size can be a problem</td>
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<td>11. Learner response/feedback may not be considered</td>
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<td>12. Size and distance may be distorted</td>
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<tr>
<td>Opaque Projection</td>
<td>1. Permits projection of non-transparent materials (example: books)</td>
<td>1. Hardware is large, bulky, cumbersome, and noisy to operate</td>
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<td></td>
<td>2. Enlarges materials for group viewing</td>
<td>2. Heat may destroy original materials</td>
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<tr>
<td></td>
<td>3. Inexpensive</td>
<td>3. Room must be dark</td>
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<tr>
<td>Slides</td>
<td>1. Can be paced by instructor or used for self-instructional teaching</td>
<td>4. Learner may play a passive role</td>
</tr>
<tr>
<td></td>
<td>2. Can be arranged in varying sequences, used with different audiences to match learning objectives and teaching styles</td>
<td>5. Commercially produced materials available</td>
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<td></td>
<td>3. Relatively simple to produce and duplicate</td>
<td>6. Must be handled carefully</td>
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<td></td>
<td>4. Easy to revise and update</td>
<td>7. Learner may play a passive role</td>
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<td></td>
<td>5. Relatively inexpensive presentation in color</td>
<td>8. Near duplication of reality through motion</td>
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<td></td>
<td>6. Can present visual effects and realism in the classroom</td>
<td>9. Insures consistency of presentation</td>
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<td>7. Compact packaging and storage minimizing damage</td>
<td>10. More expensive than slide production</td>
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<td></td>
<td>8. Can be used for small or large audiences</td>
<td>11. Commercial productions may be expensive</td>
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<tr>
<td></td>
<td>10. Hardware is relatively portable, easy to operate</td>
<td>13. Takes care, time to load and sequence properly</td>
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<tr>
<td>Filmstrips</td>
<td>1. Can be used for self-instruction or classroom</td>
<td>14. Preparation and production can be expensive and time-consuming</td>
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<tr>
<td></td>
<td>2. Content is fixed</td>
<td>15. Commercial packages may be expensive</td>
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<tr>
<td></td>
<td>3. Can present visual effects and realism</td>
<td>16. Must be handled carefully</td>
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<td></td>
<td>4. Adaptable to small or large audiences</td>
<td>17. Learner may play a passive role</td>
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<td></td>
<td>5. Commercially produced materials available</td>
<td>18. Requires an audiotape for narration</td>
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<tr>
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<td>6. Hardware is relatively portable, easy to use, inexpensive</td>
<td>19. Time-consuming, expensive, requires skill to produce</td>
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<td></td>
<td></td>
<td>20. Expensive to purchase</td>
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<tr>
<td>Motion Picture, Film</td>
<td>1. Nearest duplication of reality through motion</td>
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<tr>
<td>FORMAT</td>
<td>ADVANTAGES</td>
<td>DISADVANTAGES</td>
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<tr>
<td>Motion Picture, Film</td>
<td>4. Can be used for any size audience</td>
<td>3. Editing or updating is difficult</td>
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<td>5. Can record real life or simulated events</td>
<td>4. Pacing is set</td>
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<td></td>
<td>6. Available from many sources for preview, rental, or purchase</td>
<td>5. Fragile and easily damaged</td>
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<td>7. Hardware is readily available in most settings</td>
<td>6. Room must be darkened</td>
</tr>
<tr>
<td>Television or</td>
<td>1. Nearest duplication of reality through motion</td>
<td>7. Hardware is not very portable and requires knowledge to operate</td>
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<tr>
<td>Videotaping</td>
<td>2. Insures consistency of presentation</td>
<td>8. May not provide for learner response/feedback</td>
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<td></td>
<td>3. Special effect possible to enhance learning</td>
<td>9. May convey distorted size and time concepts</td>
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<td>4. Can be used for any size audience</td>
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<td>5. Can record real life or simulated events</td>
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<td>6. Updating, modifying is relatively easy</td>
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<td>7. May portray still or motion</td>
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<td>8. Easily stored and retrievable information</td>
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<td>9. Instant replay and pacing control possible</td>
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<td>10. Local production is feasible</td>
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<td></td>
<td>11. Hardware is easy to operate</td>
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<td>12. Can be used for role playing, immediate feedback</td>
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<td></td>
<td>13. Commercial tapes are available</td>
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<td>14. Room lights may remain on</td>
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<td></td>
<td>15. Format is familiar, easily accepted by most audiences</td>
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<td></td>
<td>16. Available from many sources for preview, rental, purchase</td>
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<tr>
<td>Computer Assisted</td>
<td>1. Multisensory input, verbal, visual, auditory</td>
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<tr>
<td>Instruction (CAI)</td>
<td>2. Self-instructional, self-paced and sequenced</td>
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<tr>
<td></td>
<td>3. Can provide immediate learner feedback, repetition, reinforcement</td>
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<td>4. Learner may play an active role</td>
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<td>5. Room lights may be on or off</td>
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<td>6. Micro disks can be easily store</td>
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<td>7. In combination with other media, can portray still or motion, realism and simulation</td>
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<td>8. Many types of programs available commercially</td>
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Prepared By:
L. Cembewski 12/86
TEACHING METHODS

LECTURE

Definition
A segment of content presented orally.

Uses
The lecture method:
1. is an effective method for teaching in the cognitive domain.
2. provides for large amounts of information to be transferred efficiently.
3. is effective with large groups.
4. allows all students to receive the same information consistently.

Advantages
The lecture method:
1. provides clarification of facts, concepts, principles.
2. allows for flexibility in delivery and learner input and questions.
3. allows for selected reinforcement.

Disadvantages
The lecture method:
1. can be too consistent in delivery.
2. is passive and doesn't always allow for learner input.
3. requires much time for planning and researching.
4. requires supplemental methods and media.

Instructor Role
1. Communicate objectives
2. Present current information with an unbiased approach
3. Design learning activities to stimulate involvement
4. Ensure learner understanding of concepts by reinforcement and examples
5. Pace presentation to group’s needs
6. Question and encourage questioning
7. Summarize
DEMONSTRATION

Definition
A form of illustrative teaching by exhibition and explanation. Usually combined with lecture and discussion. It includes cognitive and psychomotor learning.

Uses
The demonstration method:
1. teaches patient procedures or treatments.
2. shows procedures or methods in a classroom or natural setting.
3. presents standards of performance.

Advantages
The demonstration method:
1. activates several senses.
2. increases learner involvement by including observation and manipulation of materials.
3. correlates theory with practice.
4. provides an opportunity for immediate application or practice of learning.
5. provides an effective means of evaluation.
6. achieves greater retention.

Disadvantages
The demonstration method:
1. requires time-consuming preparation.
2. requires expensive use of materials.
3. is slower for teaching content.
4. is not useful for large groups.

Instructor Role
1. Communicate the objectives, procedure, purpose, concepts.
2. Select, assemble, pretest equipment prior to use.
3. Use a positive approach.
4. Perform procedure smoothly and correctly while speaking.
5. Provide a setting that is comfortable and as true to life as possible.
6. Provide prompt practice.
7. Provide follow-up discussion.
ROLE PLAY

Definition
A spontaneous, relatively unstructured acting out and analysis of human relations situations. The learner accepts or represents a specific concept and improvises his/her behavior accordingly.

Uses
The role play method:
1. is an effective method for teaching the affective domain and high level cognitive areas.
2. develops leadership and listening skills.
3. develops problem-solving, observational skills.
4. provides an opportunity to practice real-life behaviors.

Advantages
The role play method:
1. provides learning through actual experience.
2. provides learner involvement.
3. assists participants in seeing many points of view.
4. emphasizes human relation problems in a safe environment.
5. provides a common experience for discussion.

Disadvantages
The role play method:
1. may provide an emotional classroom atmosphere.
2. requires careful planning and monitoring.

Instructor Role
1. Communicate objectives, situation, roles and classroom process.
2. Plan a situation to include the learning outcome and experiences desired.
3. Provide a follow-up discussion designed to analyze the experience.
DISCUSSION

Definition
A cooperative, problem-solving activity which seeks consensus rather than solution or conclusion.

Uses
The discussion method:
1. is good for teaching high level cognitive and affective domain.
2. is useful in conjunction with other methods.
3. is useful with small groups.

Advantages
The discussion method:
1. promotes independent thinking and creativity.
2. develops problem-solving skills through practice.
3. provides learner involvement and therefore increases learning.
4. allows individuals to share knowledge and experiences for learning.
5. provides prompt feedback.

Disadvantages
The discussion method:
1. is ineffective without learner preparation and participation.
2. does not always accommodate for individual personalities.
3. requires planning and targeting.

Instructor Role
1. Communicate the objectives, process and learner responsibilities.
2. Prepare an outline and questions to stimulate participation.
3. Take a positive approach.
4. Guide discussion and act as a resource person.
5. Arrange the classroom to be conducive to verbal exchange.
6. Summarize the tie discussion together for analysis.

Other Discussion Methods
- Seminar
- Panels
- Brainstorming
SAMPLE TEACHING PLAN
Alternate Protein Sources for the Vegetarian

ASSESSMENT

Target Audience: Vegetarians

Need: Vegetarians need to know the importance of daily protein in their diets and how to get this protein requirement without eating red meat.

Readiness: Express interest and willingness to attend presentation.

LESSON PLAN

Goal: Learner will have adequate protein in their diet.

Objectives: Following the presentation, the learner will:

1. List three reasons why protein is important in the diet (C1).

2. Identify a consequence of a diet which is inadequate in protein (C2).

3. Explain at least two reasons why vegetarian diets tend to be deficient in protein (A3).

4. Correctly identify five foods high in protein that will fit into his/her own dietary practices (C3).

5. Define complementary proteins and give at least two examples of complementary food combinations (C1 & A1).

CONTENT

I. Importance

A. Replace tissue before broken down by body.
B. Requirement of nine essential amino acids.
C. Only source of nitrogen.

ACTIVITIES

Hand out high protein snack mix before beginning presentation. Hand out booklet on Vegetarian Nutrition before beginning, to refer to throughout presentation.

Show overhead with list of importance of proteins.

Point out key word: essential amino acid.
D. Component of immune system.
E. Transport of O2 and nutrients in blood.
F. Healing mechanisms
G. Maintenance of acid-base balance.

II. Consequences of Deficiencies
   A. Kwashiorkor
   B. Breakdown of muscle tissue
   C. Upset nitrogen balance.

III. Reasons for Deficiencies in vegetarian diets
   A. Incomplete vegetable proteins
   B. Lower protein concentration
   C. Less digestible
   D. More difficult to absorb

IV. Foods
   A. Requirements for protein vary with age, developmental stages, gender, activity level, stress level, weight, genetic differences and general health of the individual.
   B. Recommend to have complete protein source at each meal.
   C. Discuss the different source shown on the collage.

V. Complements
   A. Definition
   B. Identification of different combinations for complements:
      1. grains + legumes
      2. grains + milk products
      3. seeds + legumes

VI. Summary and Closure
   A. Importance nutrients needed daily.
   B. Deficiencies upset normal body functioning.
C. Vegetarian diets tend to lack adequate protein due to incomplete protein sources.

D. Need to have at least one complete protein source at each meal.

E. Use of complements to receive complete proteins.

F. Belief that plant-centered diets are dull. Frances Moore Lappe states, “Just compare! There are basically 5 different kinds of meat and poultry, but 40-50 kinds of common eaten vegetables, 24 kinds of peas, beans, and lentils, 20 fruits, nuts and 9 grains. Variety of flavor, texture, and color obviously lies in the plant world.” (p. 160)

VII. Evaluation

Oral test:
List reasons why protein is important in the diet.

Identify consequences of a diet inadequate in protein.

Explain why vegetarian diets tend to be deficient in protein.

Identify foods high in protein.

Define complementary proteins and give examples of complementary food combinations.

VIII. References:


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<th><strong>Goal:</strong></th>
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<th><strong>Learning Objectives:</strong></th>
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<th><strong>Content/Topic Outline:</strong></th>
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Teaching Plan C21.xos
College of Nursing & Health Sciences
DIRECTIONS FOR TEACHING PROJECT

Each student is to prepare for and teach a small group of student’s health related information. Students will work alone to plan and do the related presentations.

A. The topic is chosen based on a health related area of interest and knowledge.

B. A typewritten lesson plan is prepared and includes:
   1. A brief statement of need/interest and learner readiness.
   2. A comprehensive goal statement which may not be measurable.
   3. Objectives which flow from the goal statement and include condition, behavioral outcome (measurable verb), and criteria or standard. Domain and level is indicated for each objective.
   4. Comprehensive content development. Include all information needed to fulfill objectives. Concise statements rather than sentences are encouraged.
   5. Delineation of teacher and learner activities to facilitate learning.
   6. Plans for summary, closure and evaluation which reinforce important concepts and evaluate achievement of objectives at correct domain level.
   7. At least two references, including one from a current journal. APA format is used.

C. Teaching is done in lab as assigned.
   1. Teach for approximately 10 minutes but no more than 12 minutes.
   2. Use the prepared lesson plan as the basis for the teaching.
   3. Evaluate at least one objective as part of oral presentation - all objectives must be evaluated on written plan.
   4. Provide "Evaluation of Teaching Project" form to instructor prior to teaching and the written lesson plan at conclusion of teaching.

D. Evaluation will be based on the written plan and the teaching. See "Evaluation of Teaching Project" on next page for specific expectations and criteria.
EVALUATION OF TEACHING PROJECT

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I. Teaching a group
   A. Introduction
      1. Established interest and readiness
      2. Objectives clearly stated
   B. Content
      1. Meaningful to learners
      2. Level of content appropriate to learners' estimated capacity
      3. Lesson well organized
      4. Amount of content, well selected
   C. Presentation
      1. Teaching technique and strategy effective
      2. Involves learners
      3. Teacher/learner activities appropriate
      4. Media clarifies/reinforces
      5. Movement, gesture, voice tone facilitated learning
      6. Suitable pace
      7. Maintains eye contact

II. Written Plan
   A. Assessment
      1. Documented assessment of need appropriate to target audience
   B. Goals and Objectives
      1. Goal statement comprehensive
      2. Objectives flow from goal
      3. Domain and levels correctly indicated
      4. Objectives clearly stated and measurable verb, condition, criteria
   C. Content and Activities
      1. Content development thorough
      2. Content correct and accurate
      3. Planned activities facilitate learning
      4. Evaluation covers all objectives
      5. Evaluation at level corresponding with objective levels
      6. Summary reinforces major concepts
      7. References current and correctly documented/APA format

Total _______