EDUCATIONAL THEORIES

CDE Exam Preparation

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AGENDA

- Standards and Quality Assurance
- Principles of Adult Learning
- Styles of Learning
  - Individual
  - Group
- Behavior Change and Educational Theories
- Objectives
- Sample Test Questions
Canadian Diabetes Association, Diabetes Educator Section

Standards for Diabetes Education in Canada 2014

Cognition

Training

Intelligent

Teacher

Education

Theory

Information

Knowledge

Test

Teacher
STANDARDS FOR DIABETES EDUCATION

- Structure (6)
- Process (6)
- Outcome (5)
QUALITY ASSURANCE

- Standards and Criteria
- Evaluation
  - Structure
  - Process
  - Outcome
- Remedial Plan
  - Who, When, What, Where, How
ADULT LEARNING THEORIES

Belton A.B. The How to of Patient Education 3rd edition. 2017
DEFINITIONS

To **educate** is: “To train by formal instruction and supervised practice, especially in a skill, trade, or profession. To develop mentally or morally especially by instruction”.

To **learn** is: “To gain knowledge or understanding of a skill in the study, instruction, or experience”. Learning is the desired outcome of education.

To **teach**: “To cause to know something. To cause to know how. To instruct by precept, Example, or experience” Teaching is the process of facilitating education”.

PRINCIPLES OF ADULT LEARNING

- Adults are self directed
- Adults are task or problem oriented
- Adults bring life experience and knowledge to the learning situation
- Adults are more likely to learn when learning has meaning for who they are – for their social roles and responsibilities
- Adults are practical
- Adult learners like to be respected

Malcolm Knowles
INDIVIDUAL LEARNING STYLES

- Visual
- Auditory
- Kinesthetic
- Tactual
<table>
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<tr>
<th>Individual Learning Styles</th>
<th>Description</th>
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| **Visual**                | Provide demonstration  
 Use pictures or illustrations  
 Use actual product to show them e.g. insulin pen |
| **Auditory**              | Verbally explain  
 Read print information aloud |
| **Kinesthetic**           | Move the client from one area to another for teaching  
 Posters that a person moves from one to the next  
 Role Play |
| **Tactual**               | Provide the item e.g. insulin pen  
 Encourage to make notes or underline on the instruction sheet  
 Doodler |
STYLES OF LEARNING

In a Group Setting

- Assimilative
- Divergent
- Convergent
- Accommodative

Arndt/Underwood
ASSIMILATIVE

- Facts and Knowledge
- Value the knowledge of an expert (health professional)
- Lectures work well
- Taking a break allows this learner to reflect and integrate new information with past experience
DIVERGENT

- Emphasis is on Feeling
- Interaction is important
- Ask the learner what they know from past experience
- Allows them to link personal meaning to information
CONVERGENT

- Like to apply knowledge
- Hands-on activities
- Give an opportunity to practice a skill

Let me do it
ACCOMMODATIVE

- Learn by ‘Trial and Error’
- Problem solvers
- Like to know the options available
BEHAVIOR CHANGE THEORIES
Knowledge ≠ Changed Behavior
The health care provider is responsible for the client's health and the client follows the directions.

A person is able to make informed choices and take action, aware of the consequences. The person and healthcare provider are equal partners.
BEHAVIOR CHANGE THEORY

- Self-efficacy
- Empowerment
- Stages of Change
- Health Belief Model
- Social Learning Theory
SELF EFFICACY

The degree of confidence the person has in doing a task or behavior which directly correlates to whether the task will be performed.

I can do this!
STEPS TO EMPOWERMENT

- Explore the problem
- Explore feelings
- Set goals
- Make a plan
- Evaluate the result

Anderson and Funnell 2000
**TRANSTHEORETICAL MODEL OF BEHAVIOR CHANGE**

**STAGES OF CHANGE**

- **Precontemplation:** Not considering change > 6 months
- **Contemplation:** Considering – but not soon
- **Preparation:** Getting ready - soon
- **Action:** Trying it out
- **Maintenance:** Doing it for more than 6 months

Transtheoretical Model of Change Prochaska
Self Efficacy
Low self confidence
  - may be lack of knowledge
  - previous failure
Decisional Balance
Cons > Pros
Processes
Consciousness raising
Dramatic relief
Contemplation

Self Efficacy
Low self confidence
  - may be starting to think a change is possible

Decisional Balance
Cons > Pros

Processes
Evaluation of environment and self
  - possible barriers
  - build the positive of change
Self Efficacy
Low self confidence has improved
  -some doubts
Decisional Balance
Cons < Pros
Processes
Stimulus control (Obstacles)
Self liberation
  -states an intention
  -avoid triggers of old behavior
Self Efficacy
High self confidence
- may be starting to think a change is possible

Decisional Balance
Pros > Cons

Processes
Reinforcement and helping relationship
Counter conditioning
- praise and support
- risk of relapse is high
Relapse

**Self Efficacy**
Decreased self confidence

**Decisional Balance**
Pros<Cons

**Processes**
Reassess Motivation and barriers
Evaluate triggers
Plan coping strategies
Maintenance

Self Efficacy
High self confidence

Decisional Balance
Pros > Cons

Processes
Reinforce and support
We learn by watching what others do and what happens to them.
SOCIAL LEARNING THEORY

Relationship between

Personal factors  ↔  Behavior

Environmental influences

There is continuous interaction between these factors. When one aspect is changed the others are influenced as well.
SOCIAL LEARNING THEORY

**Locus of Control**

**Internal**
Things that happen are a result of their own behavior.
Likely to initiate change

**External**
Things that happen are due to external factors.
Influenced by others
HEALTH BELIEF MODEL

- Perceived Susceptibility
- Perceived Severity
- Perceived Benefit
- Perceived Barriers
- Self Efficacy
WRITING OBJECTIVES
WRITING OBJECTIVES- DOMAINS

- Cognitive
- Affective
- Psychomotor

Survival/Basic
Intermediate
Advanced
WRITING OBJECTIVES- COGNITIVE

Knowledge
To list three symptoms of hypoglycemia

Comprehension
To explain the causes of hypoglycemia

Application
To relate the symptoms of hypoglycemia to the correct method of treatment
WRITING OBJECTIVES - AFFECTIVE

- **Responding**
  To feel satisfaction in caring for oneself

- **Valuing**
  To accept some adaptations to his or her lifestyle
Perception
To recognize the various injection sites

Set
To demonstrate a correct injection

Adaptation
To correctly adjust insulin dose to blood glucose values
TYPES OF QUESTIONS

- Recall
- Application
  + Case Study
- Analysis
  + Case Study
A 50 year old man recently been diagnosed with diabetes. During the first education session, his wife frequently asks questions, often interrupting the educator’s discussion with questions that are unrelated to the topic. What is the educator’s best option.
ASSESS EACH TEST ITEM - ANALYSIS STYLE

Cont’d

a) Answer the questions and resume the planned course of instruction
b) Discourage the questions until the end of the class
c) ✓ Allow several minutes for questions, then teach the topic of most concern to the husband and wife
d) Remind the learners that there are still important topics to learn in a limited amount of time

ASSESS EACH TEST ITEM-

- Read the question
- Look for hints
  “always” “never” “most” “least” “best” “priority”
- Avoid overthinking
- Don’t waste time looking for patterns or sequences
- If you absolutely have no clue, leave the question and come back to it – put an answer down- best guess.

QUESTION 1

What should be included in the teaching materials for low literacy clients?

a) Abbreviations
b) Large Print
c) Cartoons to add humour
d) A lot of white space on each page
QUESTION 2

Which of the following factors should be considered when teaching elderly people with diabetes?

✔️ a) Present information at a slower pace

b) Use reading materials written in upper case letters

c) Address several major topics at each session

d) Use reading material at a grade 9 level
QUESTION 3

Which of the following strategies would best enhance learning?

a) Suggest learners take notes
b) Hold group sessions
c) Use overheads to illustrate lecture materials

✓ d) Ask questions during and at the end of each session
Which of the following educational strategies is most likely to help adult learners remember important information about diabetes?

a) Provide written exercises for the participants to complete at home
b) Provide examples to highlight key information
c) Present theoretical information through independent video instruction
d) Design activities for learners to find ways to fit new information into their lifestyle

✓

✓
**QUESTION 5**

How can a process standard be evaluated?

- a) By changes in clients’ knowledge scores
- b) By a reduction in diabetes-related admissions
- c) By an increase in the interactive component of the classes
- d) By an improvement in diabetes control as measured by A1c
QUESTION 6

After completing an information session about physical activity, a client describes an appropriate adjustment to the meal plan for a planned physical activity period. What does this statement reflect?

a) A basic goal of the education program

✓ b) A behavioral objective in the cognitive domain

 c) A behavioral objective in the affective domain

d) A behavioral objective in the psychomotor domain
QUESTION 8

What statement provides evidence of a lifestyle behavioral change?

a) Return demonstration of correct self-monitoring blood glucose technique.
b) Change in knowledge scores pre-post program

✓ c) Selection of an appropriate meal in restaurant
d) Completion of a food diary
QUESTIONS

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