# 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

# STANDARDS FOR DIABETES EDUCATION

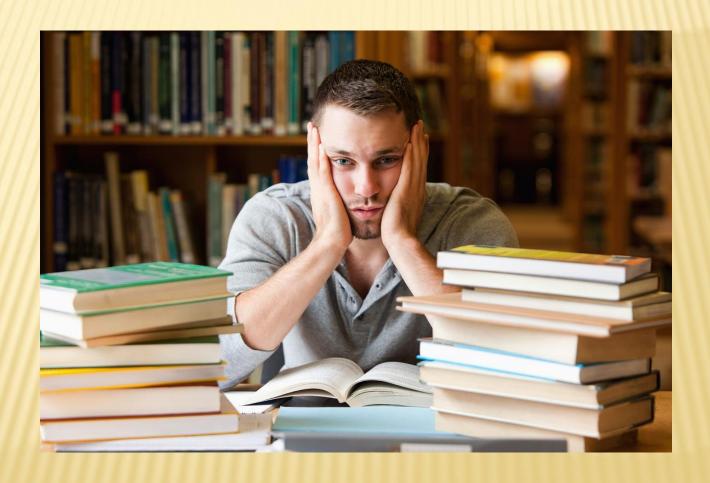
2014

- × 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



# **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

# INDIVIDUAL LEARNING STYLES

- × Visual
- Auditory
- × Kinesthetic
- \* Tactual

# INDIVIDUAL LEARNING STYLES

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

# **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

# Just the facts

# 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

# **Feelings**

# 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

## **Problem solver**



# Knowledge Changed Behavior

# COMPLIANCE

The health care provider is responsible for the clients health and the client follow the directions.

# **EMPOWERMENT**

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!

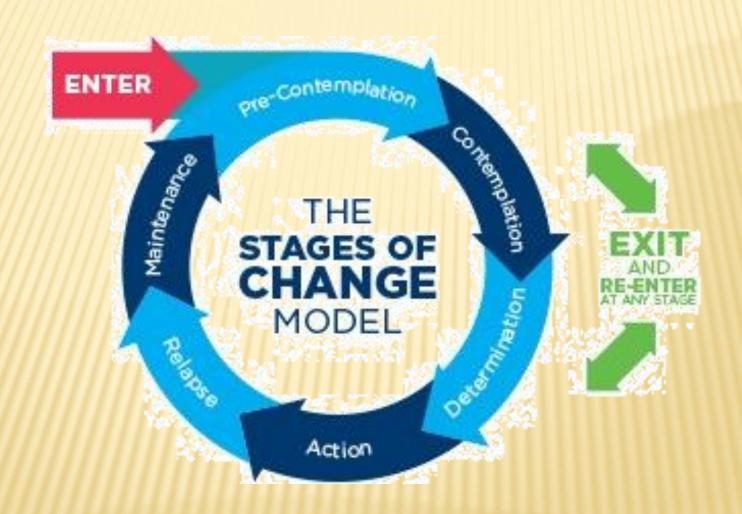
# STEPS TO EMPOWERMENT

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

# 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

### STAGES OF CHANGE



# Precontemplation

#### Self Efficacy

Low self confidence

-may be lack of knowledge

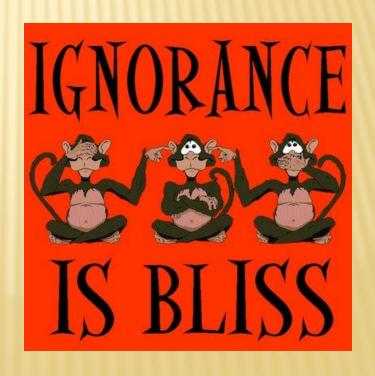
-previous failure

#### **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



# Preparation

#### 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



#### Action

#### 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



#### SOCIAL LEARNING THEORY

also know as Social Cognitive Theory

We learn by watching what others do and what happens to them.

# SOCIAL LEARNING THEORY

#### Relationship between



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

# SOCIAL LEARNING THEORY

#### Internal

Things that happen are a result of their own behavior.

Likely to initiate change



#### Locus of Control

#### External

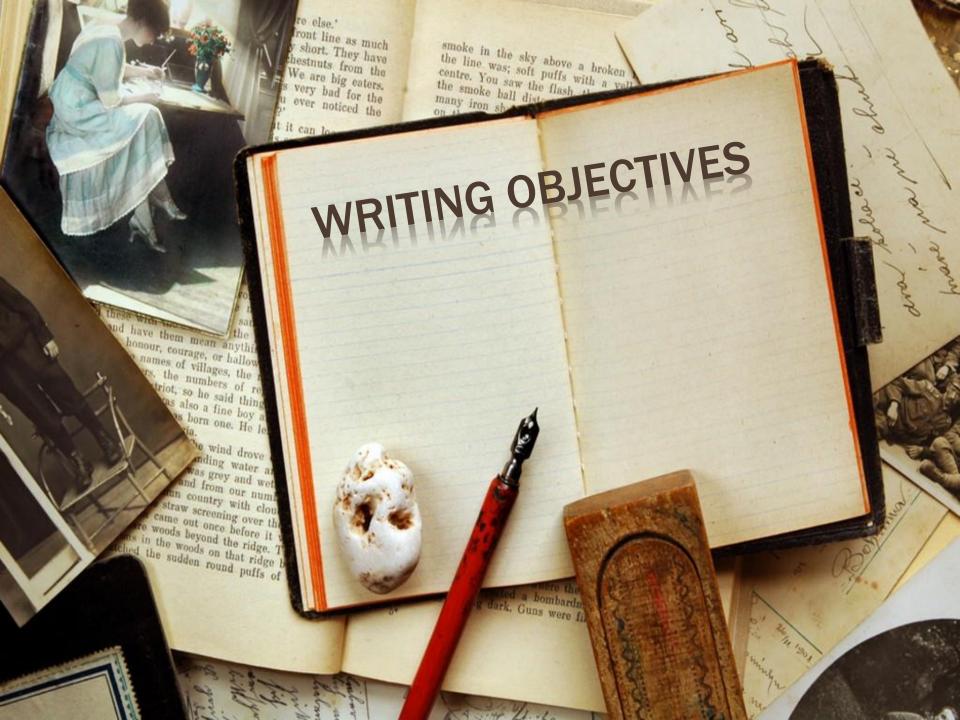
Things that happen are due to external factors.

Influenced by others



# HEALTH BELIEF MODEL

- Perceived Susceptibility
- Perceived Severity
- Perceived Benefit
- Perceived Barriers
- × Self Efficacy



# WRITING OBJECTIVES- 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

### WRITING OBJECTIVES- PSYCHOMOTOR

### × 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

### ASSESS EACH TEST ITEM- ANALYSIS STYLE

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.

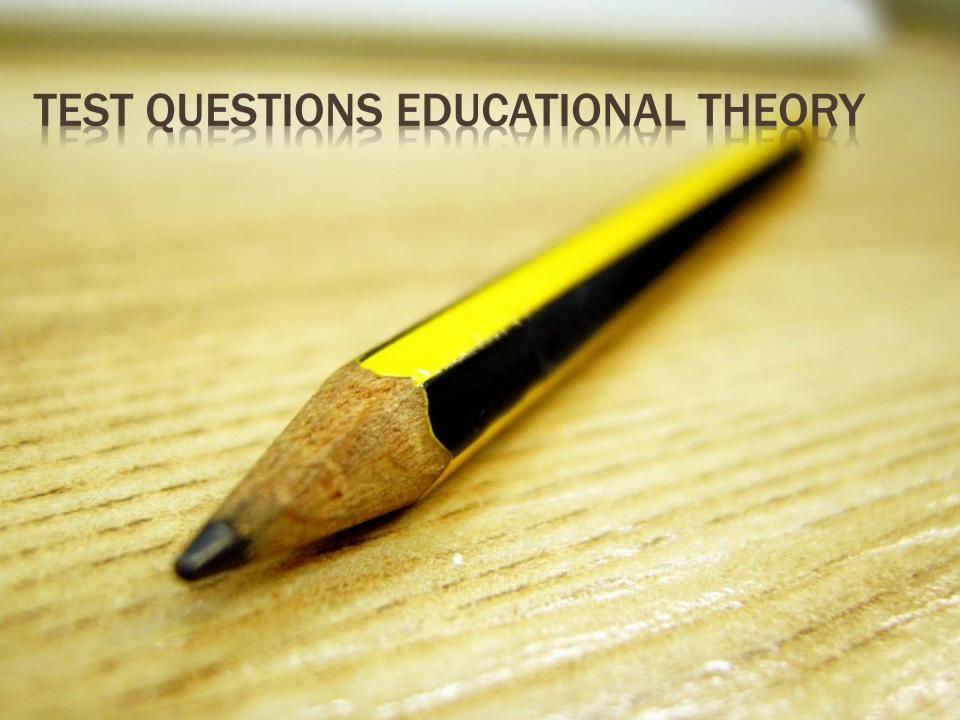
### ASSESS EACH TEST ITEM- ANALYSIS STYLE

#### Cont'd

- Answer the questions and resume the planned course of instruction
- Discourage the questions until the end of the class
- Allow several minutes for questions, then teach the topic of most concern to the husband and wife
- 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.



## 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

- 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

## 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

#### 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

- 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

## What statement provides evidence of a lifestyle behavioral change?

- a) Return demonstration of correct selfmonitoring 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



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