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# Session 9

## **C-EDUC5 (3 units)** **ASSESSMENT in Learning 1**

**Fall Semester 2023**



## **Session 9**

### **C-EDUC5 ASSESSMENT in Learning 1**

**Fall Semester  
2023**

# **The Multiple-Choice Test**

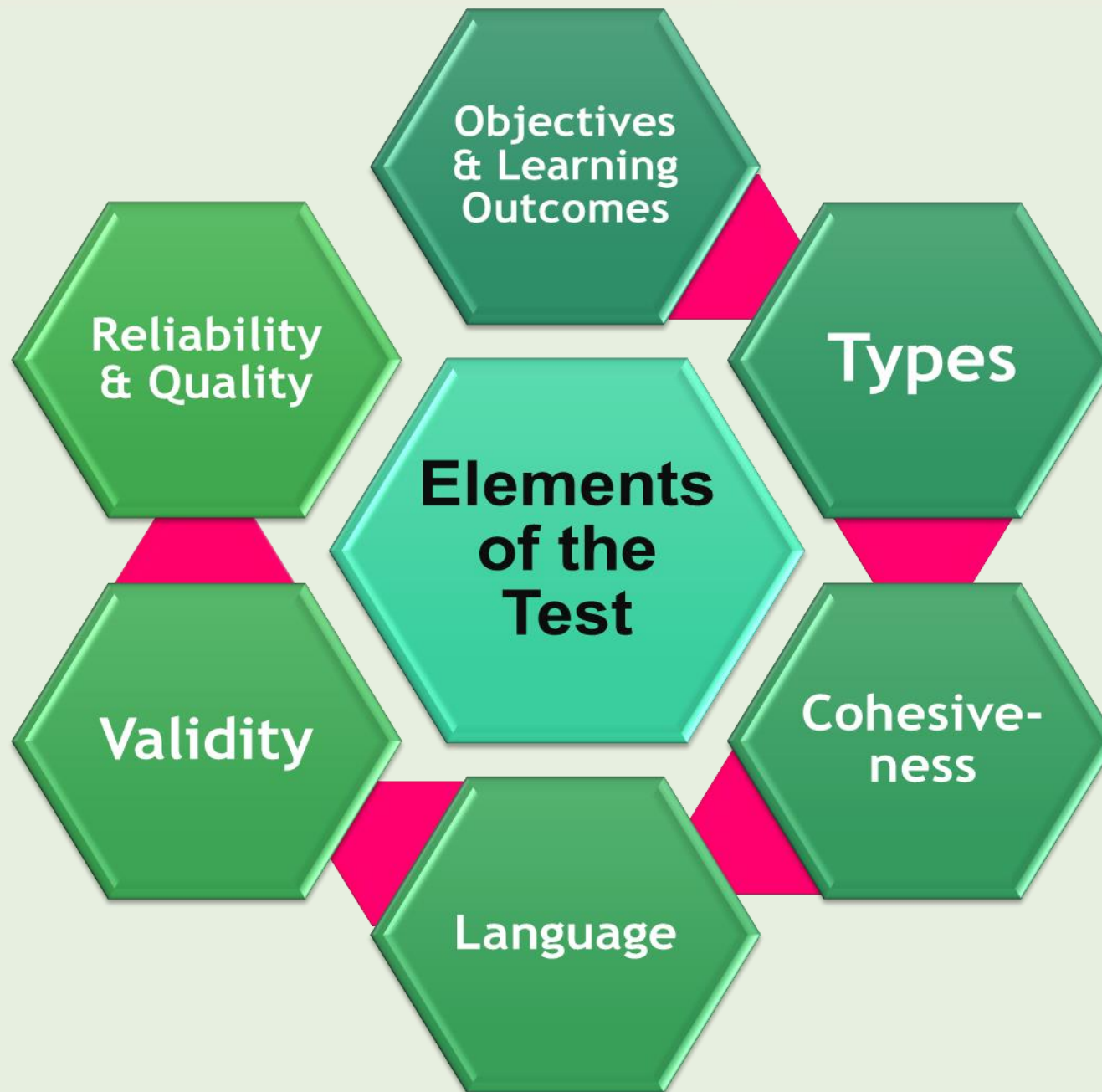
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**P H I L I P P I N E S**



## Looking back...

### Elements and Types of Test of Cognitive Learning





## **Looking back...**

Elements and  
Types of Test of  
Cognitive  
Learning

**The type of test to be used  
can make or break the  
learning achievement of  
the students.**



## **Looking back...**

Elements and  
Types of Test of  
Cognitive  
Learning

## **Objective Tests**

- Assessment outcomes can be directly evaluated against learning outcomes
- **Assessor has no bias over results**

## **Types of Test**

- **Assessment outcomes are evaluated against learning outcomes via rubrics**
- Assessor may influence the results

**Subjective Tests**



## Looking back...

Elements and  
Types of Test of  
Cognitive  
Learning

## Objective Tests

- Assessment outcomes can be directly evaluated against learning outcomes
- **Assessor has no bias over results**

### Multiple-choice

Identification

Matching type

Dichotomous

Enumeration

Keylist test

Cloze test



## **Looking back...**

### **SESSION 8 CONCLUSIONS**

1. The test instrument is grounded on the statements of learning outcomes or objectives. The test type, mechanics, and language are cohesive with the learning objectives, which will also determine the instrument's validity and reliability.
2. The objective type of testing is preferred to be used when the teacher needs to assess the cognitive skills expected to be learned by the students by giving absolute responses.



**Springboard  
question to  
ponder**



*Image 1: Yes, Let Your 3-Year-Old Decide Certain Things on Her Own (and Learn to Live With It!) (Source: Perez, 2019: Online)*

**How can our tests engage learners to think analytically and critically?**



## **Session 9**

### **The Multiple-Choice Test**

## **OBJECTIVES**

- 1. To discuss the importance, purposes, advantages, and disadvantages of using the multiple-choice type in various aspects and**
- 2. To determine the mechanics and guidelines in crafting valid multiple-choice test items**



## **Intro**

**Making  
Students  
THINK in  
their tests**

## **Indicators of Analytical Thinking**

- **Able to break down general ideas into significant parts**
- **Can articulately compare and contrast the characteristics of two or more concepts**
- **Able to infer and predict an event by merely observing related incidents, situations and conditions**



## **Intro**

**Making  
Students  
THINK in  
their tests**

## **Indicators of Critical Thinking**

- Able to provide logical reason to support a certain concept, process or situation
- Can evaluate things resulting in possible solutions or options
- Able to give value judgment on the importance or significance of an idea to another



## **Topic 1**

# **Essentials of the Multiple- Choice Test**

## **Implications of Assessment**

- (1) Indication whether students learned or not**
- (2) Minimizing guessing**
- (3) Determining misconceptions and mislearning**
- (4) Cueing how instruction be done: reinforcement, enhancement, or enrichment**



## **Topic 1**

# **Essentials of the Multiple- Choice Test**

**Multiple-choice**

**Identification**

**Matching type**

**Dichotomous**

**Enumeration**

**Keylist test**

**Cloze test**

- Versatile
- Covers all cognitive skills logically
- Invites analytical and critical thinking
- Tests decision-making skills of students



## **Topic 1**

# **Essentials of the Multiple- Choice Test**

## **Advantages of the Multiple-choice Test**

- It is simple to keep score of, either manually or digitally.
- It can be constructed to probe a wide variety of higher-level cognitive abilities.
- It can deal with a wide range of topics yet can still be completed in one sitting.



## **Topic 1**

# **Essentials of the Multiple- Choice Test**

## **Disadvantages of the Multiple-choice Test**

- Literacy is frequently evaluated this way. Even if the student understands very little about the topic, the solution is evident if they read the question carefully.
- It allows students who haven't studied to guess; if their guess is correct, they'll receive credit for the material.



## **Topic 1**

# **Essentials of the Multiple- Choice Test**

## **Disadvantages of the Multiple-choice Test**

- It introduces false information that can shape students' perspectives on the topic.
- Good questions require effort and expertise to formulate.



## **Topic 2**

### **Crafting Valid Multiple- Choice Test Items**

## **Suggested Steps:**

- 1. Begin with the expected or correct answer.**
- 2. Draft the stem or question.**
- 3. Assign distracter.**



**Topic 2**  
**Crafting**  
**Valid**  
**Multiple-**  
**Choice Test**  
**Items**

1. **Begin with the expected or correct answer.**

*Example:*

*Lesson Objective:* To illustrate how the three major processes in the water cycle occur

*Expected Answer:* Evaporation  
Condensation  
Precipitation



**Topic 2**  
**Crafting**  
**Valid**  
**Multiple-**  
**Choice Test**  
**Items**

## 2. Draft the stem or question

*Lesson Objective:* To illustrate how the three major processes in the water cycle occur

*Cognitive Skill:* Remembering

*Expected Answer:* Evaporation

*Stem/Question:* What process involves water heating up and changing into gas form?



**Topic 2**  
**Crafting**  
**Valid**  
**Multiple-**  
**Choice Test**  
**Items**

## 2. Draft the stem or question

*Lesson Objective:* To illustrate how the three major processes in the water cycle occur

*Cognitive Skill:* Applying

*Expected Answer:* Heats up and turns into gas form

*Stem/Question:* What happens to water during evaporation in the water cycle?



## Topic 2

# Crafting Valid Multiple- Choice Test Items

## 3. Assign worthy distracters

*Cognitive Skill:* Remembering

*Expected Answer:* Evaporation

*Test Item:*

What process involves water heating up and changing into gas form?

A. Condensation

C. Precipitation

B. Evaporation

D. Sublimation



## Topic 2

# Crafting Valid Multiple- Choice Test Items

## 3. Assign worthy distracters

*Cognitive Skill:* Applying

*Expected Answer:* Heats up and turns  
into gas

*Test Item:*

What happens to water during evaporation in the water cycle?

- A. Cools down and forms clouds
- B. Expands and becomes rainfall
- C. Heats up and turns into gas
- D. Gets smaller and vanishes



## **Topic 2**

# **Crafting Valid Multiple- Choice Test Items**

## **Other examples:**

***Lesson Objective:* To describe the contribution of Emilio Jacinto during the Spanish-Philippine war**

***Cognitive Skill:* Understanding**

***Test Item:***

**How was Emilio Jacinto considered as a leader during the Spanish-Philippine war?**

- A. Brain of the Katipunan**
- B. Conscience of the people**
- C. Developer of the *Himagsikan***
- D. Executioner of the colonizers**



## **Topic 2**

# **Crafting Valid Multiple- Choice Test Items**

## **Other examples:**

***Lesson Objective:*** To compare the characteristics of prose and poetry

***Cognitive Skill:*** Analyzing

***Test Item:***

If poetry is too lyrical, what is too prose?

A. Figurative

B. Musical

C. Narrative

D. Rhythmic



## **Topic 2**

# **Crafting Valid Multiple- Choice Test Items**

## **Other examples:**

***Lesson Objective: To justify the benefits of warm-up activities in sports training***

***Cognitive Skill: Evaluating***

***Test Item:***

**Why does an athlete need to warm up first before formal training?**

- A. Following the rules of exercise**
- B. Proper muscle conditioning**
- C. Doing the basic steps**
- D. Bone development**



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

### Poor item UNWANTED CLUES

1. What global problem is a result of the greenhouse effect in the atmosphere?
- a. global warming
  - b. pollution
  - c. ozone depletion
  - d. carbon monoxide

### Good item

1. The greenhouse effect in the atmosphere may result in \_\_\_\_.
- a. carbon emission
  - b. global warming
  - c. ozone depletion
  - d. pollution



## Topic 2

Crafting  
Valid

Multiple-  
Choice Test  
Items

## 4. Be cautious of the “don’ts”

**Poor item**    **ABSURD REPETITION**

2. What are beaks of birds for?

- a. They are used for transportation.
- b. They are used for eating.
- c. They are used for protection.
- d. They are used for attacking enemies.

**Good item**

2. How do birds primarily use their beaks?

- a. attacking enemies
- b. eating
- c. protection
- d. transportation



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

**Poor item** **SPECIFIC DETERMINERS**

3. Which issue is discussed by sociologists?

a. political system

b. democracy

c. factors that influence people’s behaviors 

d. unemployment rate

**Good item**

3. Which topic may be mostly studied by economic sociologists?

a. democracy

b. human behavior

c. political system

d. unemployment



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

Poor item

### ARTICLE CLUES (a/an)

4. An \_\_\_\_\_ is a word that describes a noun or a pronoun?

- a. adjective
- b. adverb
- ~~c. gerund~~
- ~~d. verb~~

Good item

4. Which part of speech is used to describe a noun or a pronoun?

- a. adjective
- b. adverb
- c. gerund
- d. verb



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

### Poor item TRIVIAL OPTIONS

5. Who is the first woman President of the Philippines?

- |                             |                             |
|-----------------------------|-----------------------------|
| a. Corazon <u>A.</u> Aquino | c. Corazon <u>C.</u> Aquino |
| b. Corazon <u>B.</u> Aquino | d. Corazon <u>D.</u> Aquino |

### Good item

5. Who is the first woman President of the Philippines?

- |                      |                     |
|----------------------|---------------------|
| a. Corazon C. Aquino | c. Leni G. Robredo  |
| b. Gloria M. Arroyo  | d. Imelda R. Marcos |



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

Poor item

### OVERLAPPING OPTIONS

6. Which is the best synonym of “beautiful”?

- a. good-looking
- b. gorgeous
- c. pleasing
- d. pretty

Good item

6. Which synonym of “beautiful” is most fitted to describe a cute and attractive girl?

- a. fine
- b. gentle
- c. noble
- d. pretty



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

**Poor item** **NEGATIVE OVERKILL**

7. Which does not show an anti-immoral action?
- a. acting according to government law
  - b. behaving based on religious beliefs
  - c. dealing with people with respect
  - d. taking advantage of others’ weakness

**Good item**

7. Which is considered to be an “immoral” action?
- a. taking advantage of others’ weakness
  - b. acting according to government law
  - c. behaving based on religious beliefs
  - d. dealing with people with respect



## Topic 2

### Crafting Valid Multiple- Choice Test Items

## 4. Be cautious of the “don’ts”

### Poor item UNWANTED CLUES

8. What science process is involved in using the senses to examine the environment?

- a. defining
- b. describing
- c. discussing
- d. detecting

### Good item

8. What science process is involved in using the senses to examine the environment?

- a. analyzing
- b. describing
- c. experimenting
- d. observing



**Topic 2**  
**Crafting**  
**Valid**  
**Multiple-**  
**Choice Test**  
**Items**

**Other things good to consider:**

1. Always keep the format regular (margins, font, spacing, etc.)
2. Alphabetize one or two-word choices.
3. Arrange longer options from longest to shortest or vice-versa



**Topic 2**  
**Crafting**  
**Valid**  
**Multiple-**  
**Choice Test**  
**Items**

Learning Outcomes as  
how they were taught

Thinking skills involved  
(R, U, Ap, An, E)

Specifying the correct / best answer

Translating outcomes into item stem / question

Assigning distracters and  
evaluating against the correct answer

Reviewing grammar, spelling, format



## **Session 9**

### **The Multiple-Choice Test**

## **CONCLUSION**

The multiple-choice test is versatile because it encompasses almost all cognitive learning skills. The action of the learning objective determines the test stem and the answers following the procedure:

- (1) begin with the expected answer,
- (2) draft the stem or question, and
- (3) assign worthy distracters.



## **Session 9**

### **The Multiple-Choice Test**

## **REFERENCES**

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