

# Notes 6 Questions

## Study Background

A researcher wants to determine if a QUANTITATIVE versus CONCEPTUAL -focused teaching style improves test scores.

A school volunteers for a program and lets teachers volunteer for either program until there are an even number signed up for each.

At the end of 3 months, students take a 200 question multiple choice test. Students in the CONCEPTUAL group score higher than the QUANTITATIVE group.

The research asserts giving students CONCEPTUAL teaching produces better learning.

# **1. Experiment Variables**

What is the independent variable?

- a. teaching style
- b. number of teachers that volunteered
- c. the period of the study
- d. the test outcomes

## **2. Experiment Variables**

What is the dependent variable?

- a. teaching style
- b. number of teachers that volunteered
- c. the period of the study
- d. the test outcomes

### **3. Experiment Variables**

Which is likely to be a confounding variable?

- a. number of teachers that volunteered
- b. the period of the study
- c. teacher's attitude
- d. school quality

## **4. Experimental Design**

Is the study based on observation or manipulation?

- a. observation
- b. manipulation

## 5. Experiment Characteristics

A professor has two grad students that each have a **different skill-building program** for toddlers with suspected autism. The professor allows each grad student to implement their program on a group of toddlers that each grad **recruits separately**.

What problems does this study have?

- A. Not doing a manipulation
- B. Not implementing good control
- C. Not doing random assignment
- D. More than one of these

## 6. Experiment Characteristics

A linguist compares the **number of verbs learned by age 3 in Asian versus Western cultures**. She recruits children in each area by **randomly dialing phone numbers**, and then **excludes** those with medical conditions, serious poverty, or multi-language households.

Based on her findings, she asserts Asian cultures teach children verbs more quickly than Western cultures.

What problems does this study have?

- A. Not doing a manipulation
- B. Not implementing good control
- C. Not doing random assignment/sampling
- D. More than one of these