## Questions in the Classroom



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THINK
LEARN
SHARE

WRITING MATTERS

2013-2023 Quality Enhancement Plan for the University of the Incarnate Word

UIW QUALITY ENHANCEMENT PLAN: IMPROVING THE QUALITY OF UNDERGRADUATE STUDENT WRITING ACROSS THE DISCIPLINES

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## FIRST YEAR COMPOSITION



- WRITING LAB
- 8 WORKSHOPS
- OVER 20 FT AND PT FACULTY PER WORKSHOP

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## CENTER FOR TEACHING AND LEARNING



- 6 WORKSHOPS
- OVER 20 PARTICIPANTS PER WORKSHOP

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## WRITING ACADEMY



**2ND COHORT STARTING (FALL 2016)**
- ATHLETIC TRAINING
- BIOLOGY
- COMMUNICATION ARTS
- HISTORY
- RELIGIOUS STUDIES

**3RD COHORT NEXT YEAR**
- BS BUSINESS ADMINISTRATION
- MARKETING
- ATMOSPHERIC SCIENCE
- PSYCHOLOGY
- WORLD LITERATURE

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## WRITING AND LEARNING CENTER



EMBEDDED TUTORS AVAILABLE

## WHAT YOU CAN DO

- ONE MORE
  - ONE MORE ASSIGNMENT OR
  - ONE MORE PAGE OR
  - ONE MORE DRAFT
- MAKE YOUR FEEDBACK COUNT
- WRITE BEFORE SPEAKING IN CLASS

## Overview of Research: The Testing Effect



## Is testing more than an assessment tool?

- The testing effect: "Taking a test on the material can have a greater positive effect on future retention of that material than spending an equivalent amount of time restudying the material, even when performance on the test is far from perfect and no feedback is given on missed information." (Roediger et al., 2006, p. 181)

Roediger et al., 2006

## Basic Research Design: Between Groups

**Experimental group:**
- Participants studied material
- Took an initial test (or repeated tests)
- Took a final criterial test

V
S

**Control group:**
- Studied material
- Took final criterial test

**Alternate control group:**
- Studied material
- Studied material again
- Took final criterial test

*Results: Overall, the **experimental group** did BETTER than **control groups** even without feedback on initial test.*

## Memory for Prose

- 3 conditions with prose passages
  - Condition 1: study---test----study----test
  - Condition 2: study---study----study---test
  - Condition 3: study---test---test---test
- Results
  - Immediate results showed similar patterns of memory
  - Delayed recall (1 week),
    - STST recalled 90%
    - STTT recalled 72%
    - SSST recalled 48%

(Karpicke & Roedinger, 2006; Tulving, 1967)

## Format of Test

- Short Answer VS Multiple Choice
  - Testing with short answer and multiple choice promotes retention two weeks later & EVEN 5 MONTHS LATER! (Nungesster & Duchastal, 1982)
  - When the initial test is short answer, long term retention is best for both short answer and multiple choice final tests. (Kang et al., 2007)
  - Students in classes that included about 7 short answer questions at the end of each class had better scores on final tests than students from other sections without the frequent testing (Leeming, 2002)

## Why give up valuable class time for testing?

- Students *must* have the basic knowledge to engage in <u>critical thinking</u> & *testing accomplishes this goal*!
- Why does it work?
  - Research on the brain (Erikkson et al., 2011)
    - Repeated retrieval of information leads to **higher brain activation during testing**
    - This activity is correlated to retrieval 5 months later
    - This region is associated with memory consolidation
    - ***Thus, testing may change the brain to enhance memory consolidation***



THEORY INTO PRACTICE
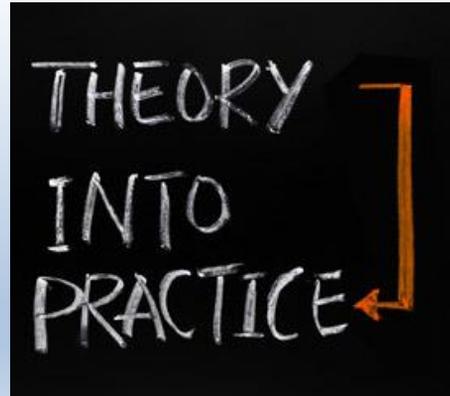


### The Finger Quiz



## Which sequence of Studying (S) and Testing (T) was most Effective for Delayed Recall?
(Vote with your Fingers ☝✌...)

1. SSST
2. STST
3. STTT

## **Another "No-Tech" Strategy**
Think-Pair-Share

**Another "No-Tech" Strategy**
  Think-Write-Pair-Share

Exercise

1. Write down some techniques you already use
2. Pair
3. Share

**Free "clicker" apps**

socrative.com
polleverywhere.com
getkahoot.com

Teacher sign up link

**Try Kahoot**

In browser, go to kahoot.it

Student link

**A similar tool**

- Three item formats—T/F, M/C and short answer
- An "adult" appearance
- If graded, results download to a spreadsheet

socrative
by Mastery**Connect**

**Again**
  Think-Write-Pair-Share

## Exercise

1. Write down a short answer, multiple choice, or true/false question you might use in the next week or two.
2. Pair & Share



## Blackboard "Test" Function

- readiness quizzes taken before class
- review quizzes used as study tools
- primarily an individual activity

## Finger Quiz



*Several students in Dimensions of Wellness are planning a study group. Given what we know about human learning, which practice would be the most helpful?*

1. *They make sure that everyone can meet for at least 4 hours the night before each test.*
2. *Every member commits to create 10 review questions for each study session.*
3. *The leader creates a study group comprised only of her personal friends.*
4. *The group divides the readings up, with each person summarizing the material he/she read.*

## Taking a quiz can be fun….

Scratch off answer
Keep trying until correct
Play as a team
Great review activity



## More "No-Tech" Strategies
Make a list

## More "No-Tech" Strategies
Exit permit



## The Big Share

- We have shared some of our recipes for putting the Testing Effect into practice
- We'd like to hear about your own home cooking that employs these principles



## Questions in the Classroom



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