Is There a Relationship Between Exam Review, Sample Test, and Test Performance?

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Introduction

Why Exam Review and Practice Test?

Davis (2009):

✓ Alleviate exam fears
✓ Reduce test anxiety
✓ Increase confidence
✓ Know exam expectations
✓ Help prepare for exam including organizing notes, reviews, etc.
✓ Improve performance
Introduction

Why Exam Review and Practice Test?

From Teachers’ Perspectives:

- Review content for exams
- Set and review exam questions
- Weightage of questions based on content taught or covered
- Answer or clarify questions
- Reinforce learning
- Satisfaction
Objectives

Determine:

✓ If exam review and sample test make a difference in test performance

✓ The usefulness of exam reviews and sample tests

✓ Type of questions asked in two different exams:
  ✓ Memory or recall questions (facts)
  ✓ Critical thinking questions
  ✓ Application questions
  ✓ Other
Methods

Course Description:

✓ Upper level (400) level class

✓ Extension program design delivery

✓ 20 students enrolled

✓ Eight different majors from three different colleges at PSU

✓ Junior/senior and graduate students
Methods

Course Description

☑ Met 2 days (75 minutes each) a week

☑ Each week students were given class materials - PP slides, handouts, and other resources

☑ Assignments included:
  ☑ Extension delivery methods write-up
  ☑ Two presentations
  ☑ *Two tests*
  ☑ Final project
  ☑ Guest lecture/Extension specialist report
Methods

Design and Instrumentation:

- **Exam 1:**
  - Exam review sheet
  - Sample test questions

- **Exam 2:**
  - No exam review sheet
  - No sample test questions

- Scores on both exams compared

- Six-week gap between exams 1 and 2

- Short survey to elicit:
  - Feedback on question types
  - Usefulness
Results

Test Performance

Test 1 – 139.90

Test 2 - 132.00

Note: Tests 1 and 2 were not identical. Therefore, cannot be treated as pre-post
Results

Review for Exam Helpful

95%

5%

YES

NOT SURE
Results

Continue Exam Review

- 95% Continue as is
- 5% Change to reflect

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Virginia Tech
Results

Sample test helpful

- Yes: 90%
- No: 5%
- Not sure: 5%

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Results

Did giving a sample test ... confidence in test taking?

- Decreased 10%
- Increased 90%
- No difference
- Stop giving sample test

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Results

Type of Questions Asked in Exam 1

- Application Q
- CT Q
- Memory Q

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Type of Questions Asked in Exam 2

- Application Q
- CT Q
- memory Q

- 0-10%
- 11-25%
- 26-50%
- 51-75%
- 76-100%
Results

Type of Questions Asked in Exam 1
- Application Q
- CT Q
- Memory Q

Type of Questions Asked in Exam 2
- Application Q
- CT Q
- Memory Q
Select Verbatim Comments

- “It helps the students to concentrate well on preparation for exam with quick brush-up.”

- “It was helpful to know what topics would be covered on the exam and what type of information you were looking for in your answers.”

- “It gave us an orientation about exam and we were mentally prepared for the exam.”

- “My scores on both the tests were close, but the first was much higher. It is possible that it is because of the sample test.”

- “Not only the sample test helpful, but the review sheets were as well.”
Conclusions

- Test review and practice test do make a difference in test performance
- Test review was helpful and should be continued
- Sample test was helpful and increased students’ confidence in test taking
- Students can differentiate between types of test questions
- Overall, test scores and course grades improve
Implications

- Teachers continue to offer practice exams and exam reviews on a regular basis
  - Identify topics for further study/review
- Ensure sample test questions reflect actual test questions
- Test questions should measure different levels of Bloom’s Taxonomy
- Teachers should increase students’ higher-order thinking by incorporating more higher-order test questions on subsequent tests
- Use a control group or intact classes to measure change in test performance
Thank you!