

Session Objectives

- 1. Identify a strategy to relate to students about whether or not to change test answers.
- 2. Discuss what the literature says about changing test answers.
- 3. Determine if changing answers is beneficial or not.

To Change or Not to Change

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Heard These?

- I changed my answers and that's why I didn't do well
- I had it right and then I changed my answer
- So glad I changed my answer because I had it wrong first

What do you Believe?

- Students should change answers
- Students should not change answers
- Changing answers improves test scores
- Changing answers hurts test scores

What Should We Tell Students?

- Don't change any answers?
 - First thought that comes to mind is most often right – go with your gut (not always true)
 - Talk yourself out of right answers more than into them (also not true)
- Change some? When?
 - There is learning that occurs during an exam
 - Change answers when you are sure (misread question/answers; mistaken answer marking)

Avoid Changing Answers?

- Believed by most students and faculty to be true
 - Why? Right to wrong answer changes are remembered more than wrong to right answer changes
 - Leads to regret and then reinforcement of not changing
- Research says that students should change answers

First Research Study – 1929!

- 22,000 multiple choice items examined for changes = 555
 - 53% raised score
 - 21% lowered score
 - 26% had no effect
- 18,000 true-false items with 570 changes
 - 63% raised score
 - 34% lowered score

J Educ Psych 1929;20:280

Research from 1928 – 1983 (n = 33)

- Majority of answers changed from wrong to right
- Most students who change answers improved scores
- 68-100% students felt that changes would not improve their score; 75% felt that it would hurt
- 57-96% of students studied changed answers

Teaching of Psychology 1984;11:133

135 Pre-Licensure Nursing Students

- “How do you feel about changing answers?”
 - Risk: afraid and lack of confidence
 - Careless mistakes: marked wrong answer or misread question
 - Adequate preparation: when prepared = confident and rarely change answers
 - Instinct: gut = 1st answer is right
 - Cues from test: answers changed based on other questions

J Nurs Educ 2016; 55(4): 220-223

“What was your reason for changing answers?”

- Indecisiveness: wasn't sure and 2nd guessing
- Test Review: more review = more likely to change answers
- Rationale: changed reasoning

J Nurs Educ 2016; 55(4): 220-223

Quantitative Analysis

- 135 junior and senior nursing students who took 472 exams used in study (1-4 exams/student) with 487 answer changes
 - 17% wrong to wrong
 - 28% right to wrong
 - 57% wrong to right
- Average net increase of 0.558 correct answers/50 question exam

J Nurs Educ 2016; 55(4): 220-223

Changing Answers from Wrong to Right

- 55.6% (J Nurs Educ; 2016;55:220)
- 58%; 2.8 times more often than right to wrong (J Med Educ 1975; 50:685)
- 87% (J Nurs Educ 2001; 40:142)
- 57% (J Cont Ed Nursing 1994;25:155(meta-analysis of 61 studies))

Changing Improved Test Scores

- 0.558/50 questions (J Nurs Educ; 2016;55:220)
- 55% gained points/18% lost points (J Nurs Educ 1990;29:337)
- 68% improved final score/15% lowered final score/17% had same score (J Cont Ed Nursing 1994;25:155(meta-analysis))

Student Attitudes

- Changing answers is bad; prefer not changing (J Nurs Educ 1996; 35:88)
- But 83% students change at least one answer (J Cont Ed Nursing 1994;25:155(meta-analysis))

Faculty Attitudes – Texas A&M

College	N	Improve	Hurt	No Change	Don't Know
Education	23	30%	52%	13%	4%
Liberal Arts	19	5%	53%	5%	37%
Science	16	6%	63%	13%	19%
All	58	16%	55%	10%	19%

Give Instruction on Changing Answers?

Yes = 33%

Don't change = 63%

Teaching of Psychology 1984;11:133

Instruction on Changing Answers

- 79 3rd year medical students divided into 2 groups
 - 1 = before exam told benefits of changing answers
 - 2 = not given that information
 - All were told to mark all answer changes made
- Answer changes were predominately wrong to right in both groups
- Group 1 changed answers more but did not score significantly higher than group 2

BMC Med Educ 2007; 7:28

Conclusions

- Don't tell students NOT to change answers
- Encourage students to change answers when they realize that they mistakenly marked the wrong answer or misread or misinterpreted the question
- The literature says that changing answers is more likely to result in a positive or neutral effect rather than a negative effect