



Back in the Anatomy Lab: Evaluating Student Preparedness and Proficiency in the Clinical Anatomy & Radiology Selective



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About the Selective

- ❖ Our Phase 3 Basic Science Selective, Clinical Anatomy and Radiology, is divided into two, 2-week sessions that each focus on different regions of the body
 - Session 1: Thorax, Neck, Abdomen, and Pelvis
 - Session 2: Head, Neck, and Limbs
- ❖ Each session includes:
 - Dissections
 - Surgical presentations
 - Radiology presentations
 - Radiology shadowing

About the Research

- ❖ We administered a pre-test and post-test in each session to:
 - Better understand student preparedness prior to the session
 - Assess learning during the session
- ❖ We hypothesized that post-test scores would be higher than pre-test scores, but students would demonstrate content familiarity in both tests

Methods

- ❖ Students completed the pre-test before they accessed session materials and completed the post-test at the end of the session
- ❖ The anatomy and radiology questions tested student knowledge of:
 - Anatomical facts and relationships
 - Indications for imaging studies
 - Imaging findings

Analysis

- ❖ We performed a two-tailed t-Test on the difference in pre-test and post-test scores for each session
- ❖ We analyzed the response length and jargon usage

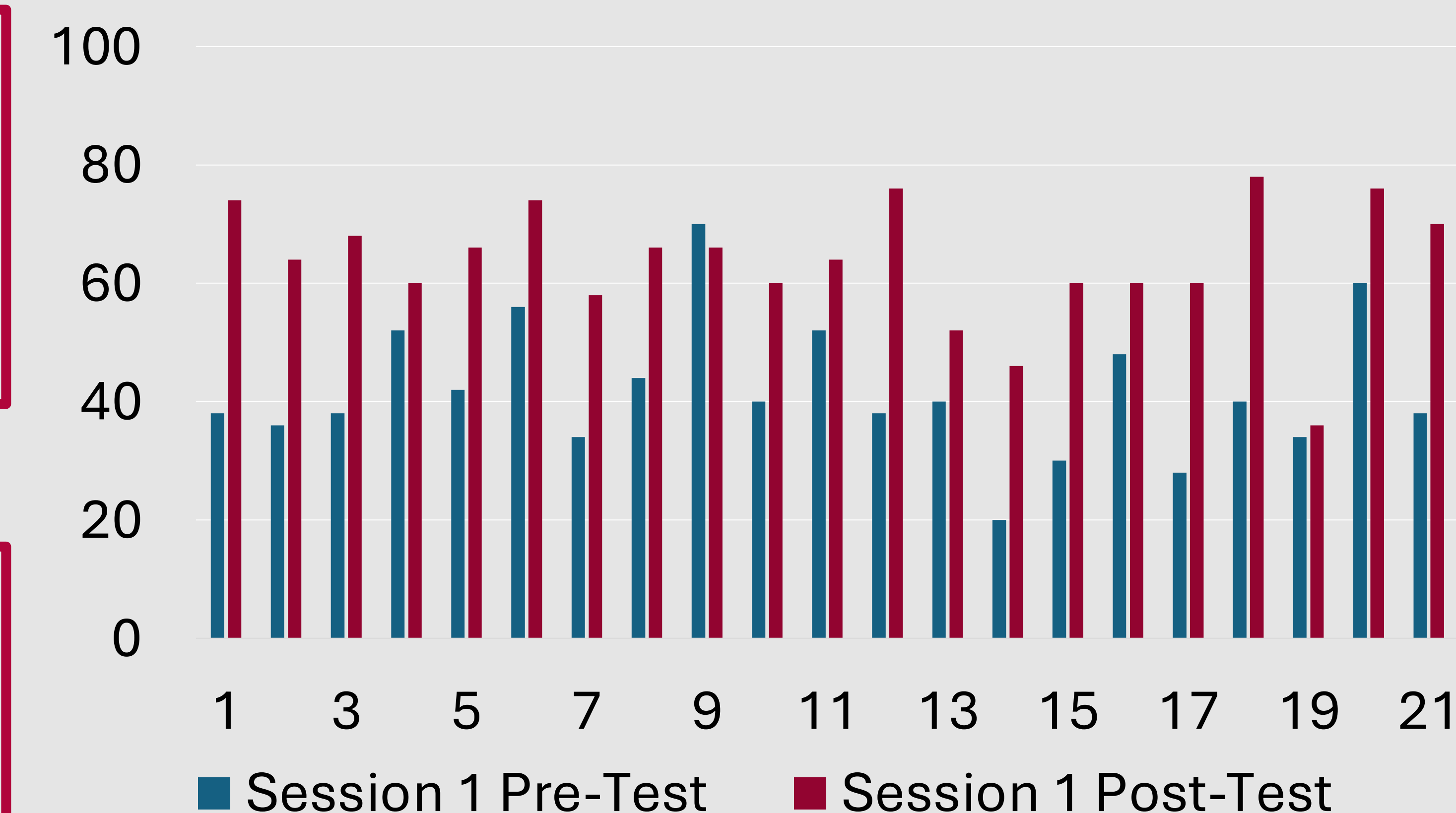
Results

- ❖ Student means were significantly higher ($p < 0.001$) and standard deviations were smaller on the post-tests compared to the pre-tests
 - Session 1:
 - Pre-test mean (SD): 42% (11%)
 - Post-test mean (SD): 63% (10%)
 - Session 2:
 - Pre-test: 45% (15%)
 - Post-test: 68% (14%)
- ❖ Students left fewer blank or “unsure” responses on the post-tests
- ❖ Increased familiarity with content led to:
 - More complete and correct answers
 - More abbreviations
 - More educated guesses

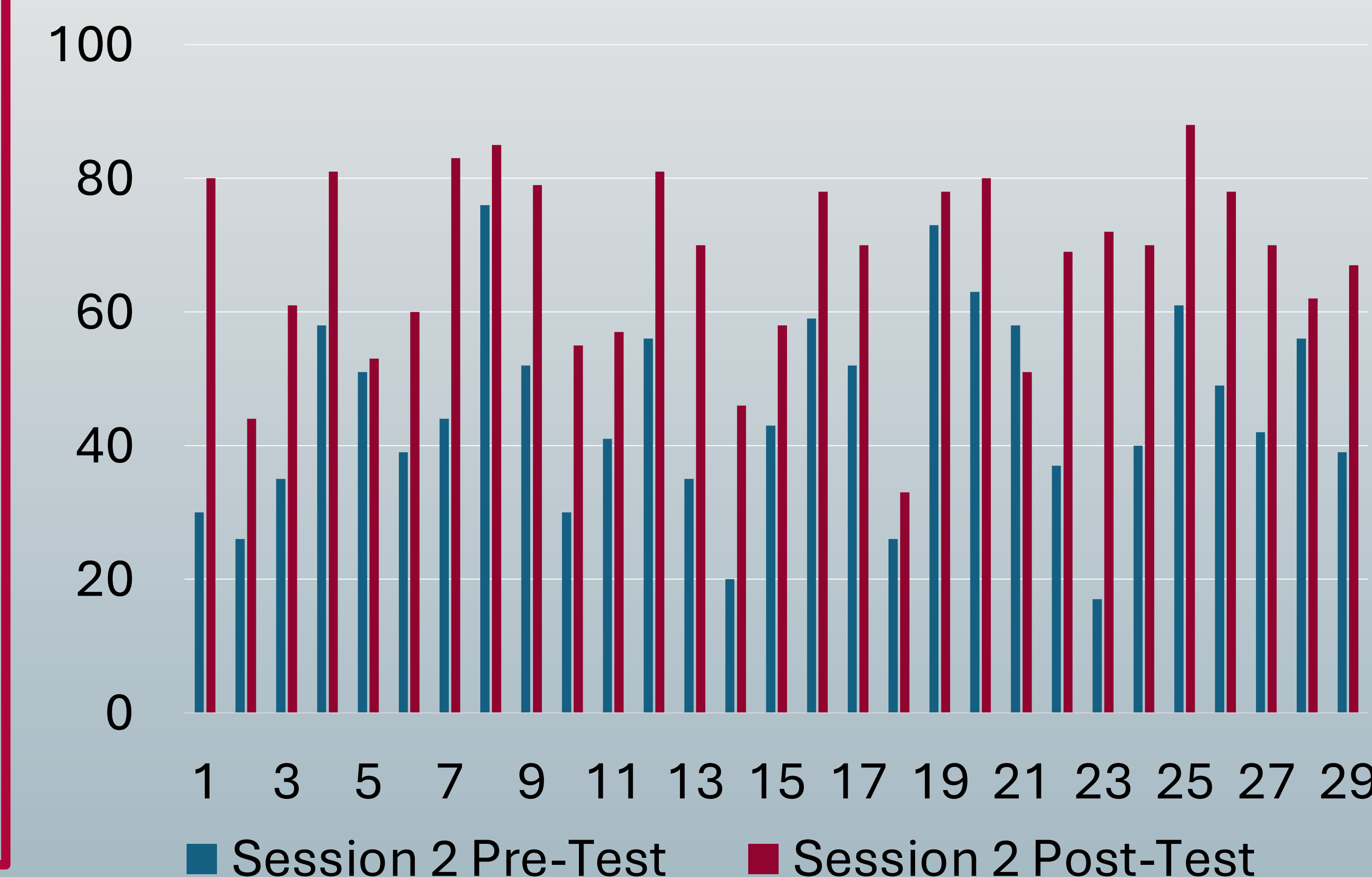
Takeaways

- ❖ Students have lost knowledge of anatomical details since Phase 1
- ❖ Students successfully review and learn anatomy and radiology concepts in the sessions
- ❖ Student efforts on the pre- and post-tests vary markedly
- ❖ Responses will inform edits to pre- and post-test questions for Spring 2025 sessions

Session 1 Scores



Session 2 Scores



Blank or Unsure Responses

