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As a university professor teaching in a physical therapy program, I have been very interested in ways to improve the re ective critical thinking strategies of students who will soon be working in the clinical setting with patients. My research has therefore focused in part on the development, implementation and evaluation of the e ectiveness of a workshop, created to help physical therapist students develop skills in clinical decision-making strategies that require re ective critical thinking. My hypothesis during the workshop conducted in 2008 was that there would be a signi cant increase in student Health Sciences Reasoning Test (HSRT; a version of the California Critical inking Skills Test) scores a er attending the workshop when compared to a control group of students who did not yet attend the workshop. e development of this 2008 workshop was based upon the elements depicted in Bloom's Taxonomy [1-3], incorporating strategies for metacognition [4] collaborative learning with attention to the zone of proximal development [5] and hands-on learning [6]. Students from two class courts were separated into two di erent groups using controlled random assignment. One group attended the workshop and one did not. All students (experimental and control) took the Health Science Reasoning Test (HSRT) before and a er the rst three-session workshop. Although there were gains in the problem solving and evaluation scores for the experimental group, these were not found to be statistically signi cant when compared to the control group. In a post hoc analysis of the experimental group alone, signi cant gains were found, between the total pre and post test HSRT scores for the African American participants (p=.027). e Caucasian group also showed increased total HSRT scores, but these were not shown to be statistically signi cant. Although the Caucasian group demonstrated much higher total HSRT scores than the African American group for the pre-test, the African American group's post-test scores surpassed the scores of the Caucasian group a er the workshop. Although the reason for this remains unclear, this information could help provide an indication of the teaching strategies that are most e ective for various groups. One African American student surmised that the workshop helped her increase the HSRT score because it was information she "had never been exposed to before," where many of her Caucasian counterparts had previously experienced some form of critical thinking course. She believed that the novelty of the activities in the workshop made it more e ective. is research supports thesas ption that the workshop was e ective to build decision-making strategies that require re ective critical thinking fothe African American student participants. Further research is currently being conducted to learn

help improve scores for all students and not just a sub-group.

## References

1. Aviles CB (1999) Understanding and Testing for "Critical Thinking" with

whether or not providing novelty to all students in the classroom might<sub>Corresponding author:</sub> Natalie Housel, Professor, Tennessee State University, Department of Physical Therapy, Nashville, Tennessee, USA, Tel: 615 963-2168; E-mail: nhousel1@Tnstate.edu

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