



Effects of Student Self-Assessment in an Engineering Classroom

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Treatment

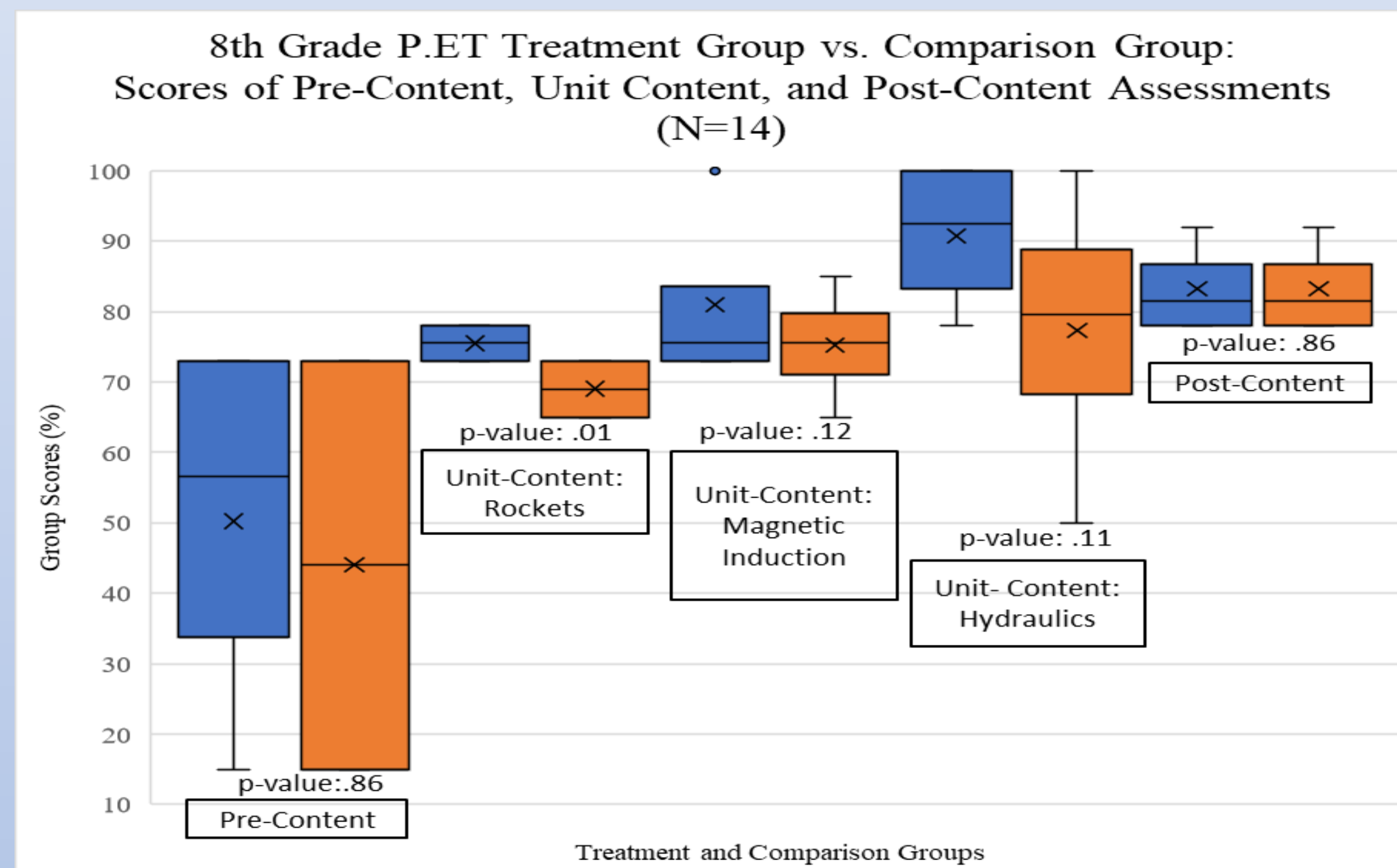
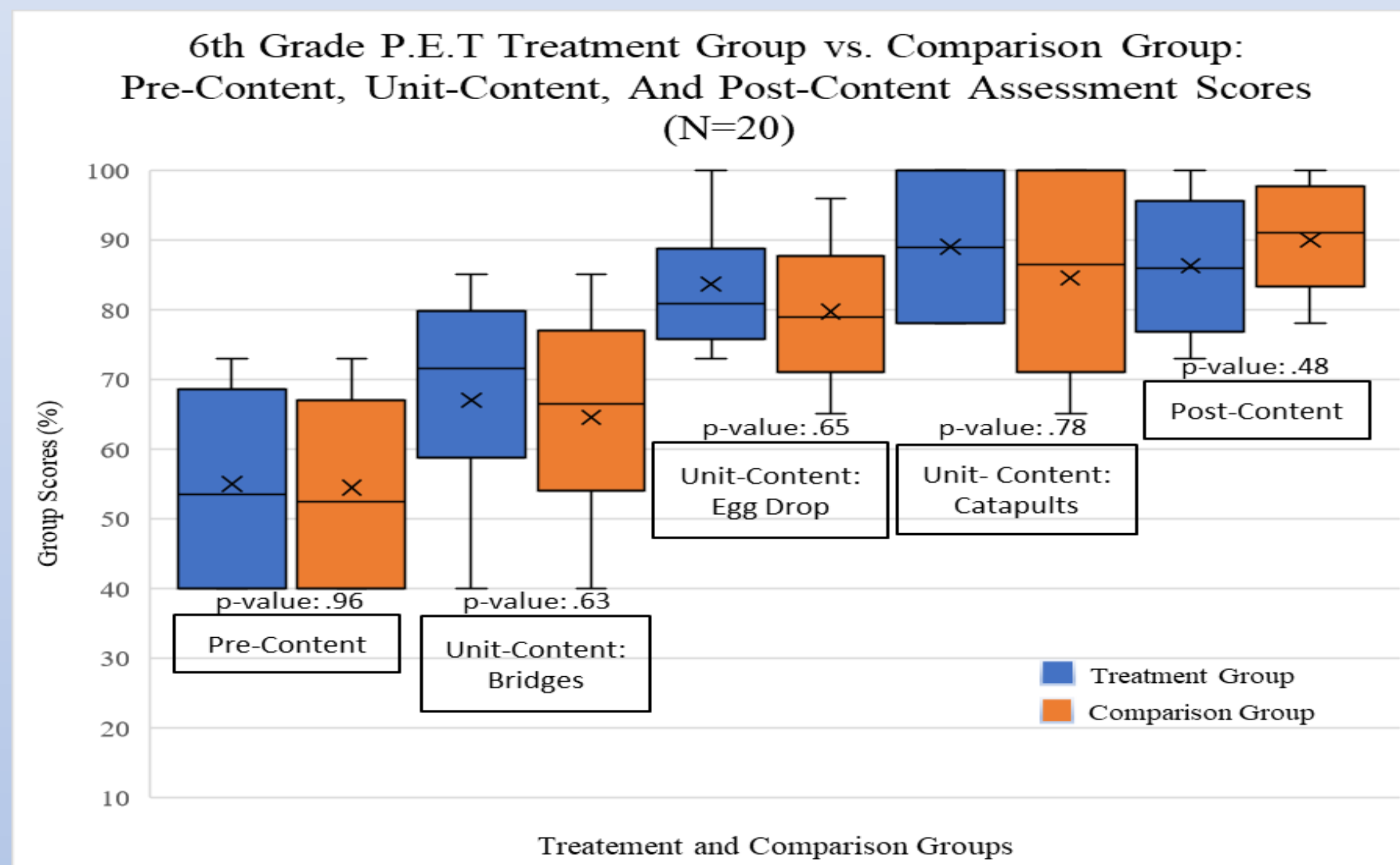
Research Questions

All students, no matter if in the treatment or comparison group, were given a pre-test where they defined an engineering problem. Then, all students participated in three engineering units where they were to first define the engineering problem involved in the unit. After defining the engineering problem of each unit, the students who were part of the treatment group self-assessed on how well they defined the engineering problem. At the end of the three units, all students then took the post-test (the post test is the same test as the pre-test).

Main Research Question: What effect does student self-assessment have on student achievement when defining engineering problems?

Sub Question 1: What effect does student self-assessment have on student confidence when defining engineering problems?

Sub Question 2: How does the analysis of student self-assessment improve my teaching?



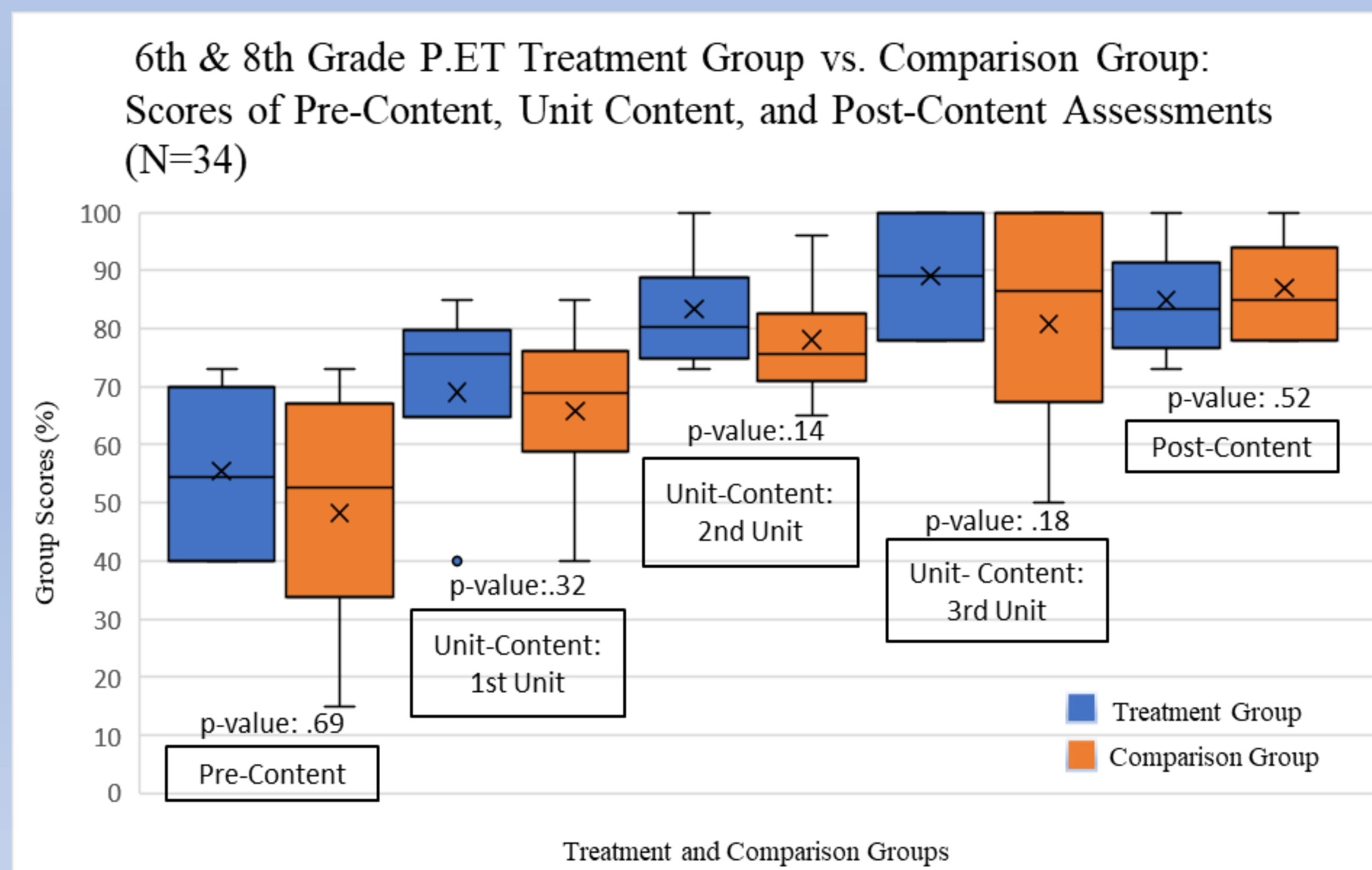
Implications to My Teaching

What the Data Shows is Good to Do:

- Repeatedly exposing students to expected achievement criteria, and having them self-assess how well they met it, helps them gain greater achievement over time.

What I will Continue to do in The Future:

- I will continue to have students self-assess in the future but will extend the practice of self-assessment to other assignments to help students gain greater achievement.



7/9 (78%) of students interviewed reported that self-assessing helped them gain greater achievement when defining engineering problems

7/9 (78%) of students interviewed reported that self-assessing boosted their confidence in some way

Analyzing Student Self-Assessment allowed me, as a teacher, to more easily identify misconceptions