The Cost of Looking at Your Cell Phone In Science Class

RESEARCH QUESTION
What is the academic impact of a strict no-cell-phone policy in my high school chemistry class?

TREATMENT
Implement a New Cell Phone Policy:
Put your phone in a pocket at the charging station (picture right) or put it in your backpack. Either way, never have it in class.

DATA COLLECTION AND METHODS
1) Measuring Student Learning: Student test scores on 6 Unit Tests and Final Exam, Wilcoxon Rank-Sum Test to test for significant differences in distributions
2) Measuring Effectiveness of Treatment: Student Surveys
3) Measuring Teacher Impact: Researcher Notes, Survey of local Middle School Principals and Teachers

COMPARISON GROUPS
Students who always turned in their phone (Turn In Phone Group) N=27
Students who always kept their phone (Keep Phone Group) N=60
Students who switched halfway through N=22

RESULT #1: STUDENT LEARNING
The Turn In Phone Group performed and average of nearly 6% better than the Keep Phone Group (picture right). Of the students who switched half-way through the treatment, 68% performed better when they turned in their phone.

RESULT #2: EFFECTIVENESS OF THE POLICY
Student Survey Says: 65% of Keep Phone Group checked their phone at least once each class period

RESULT #3: IMPACT ON TEACHERS
Better relationships with students (students were more social)
More effective use of class time (faster transitions between activities)
Lose the ability to have students use apps or look something up quickly

CONCLUSION #1:
Students who distance themselves from their phones perform better

CONCLUSION #2:
The new cell phone policy did not reduce the cell phone distraction for the Keep Phone Group

CONCLUSION #3:
The risks of cell phones outweigh the benefits of cell phones

INTERPRETATION AND VALUE
The data justifies having a cell phone policy that distances students from their devices. While this treatment was a good start, a better method is needed in order to benefit more students.