

# The Effect of Cell Phone Policy on Student Achievement

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## Background

### Bucks County Technical High School:

- Enrollment = 1399
- Student population consists of students from 5 sending school districts in Lower Bucks County

### Foundations 11<sup>th</sup> Grade Chemistry:

- Three sections
- Sample size of 49 students and 68 teachers

### Context of Study:

- Student dependency on and use of cell phones has only been exacerbated since the COVID-19 pandemic.
- There is not a general consensus on what is the best use of cell phones in a high school classroom.

## Research Questions

1. How should we modify our classroom management skills, including cell phone policy, to better suit the modern student?
2. What is the role of cellphones in the classroom and how do other teachers manage cellphone/internet usage?
3. What impact do cell phones have in my class?
4. How do students in my classroom feel about cell phone usage and prevalence after being faced with the science about cell phones?

## Cell Phone Policies

Policy	Description
<b>Away</b>	Phones were placed in either pocket or bookbag
<b>Table</b>	Phones were deliberately placed on corner of desk
<b>Wall</b>	Phones were placed in cell phone holder in corner of room
<b>Wall +</b>	Phones were placed in cell phone holder in corner of room and were allowed to be charged through duration of class

## Treatment

Different cell phone policies were tested to determine their effect on students achievement on mandatory department wide summative assessments.

## Data

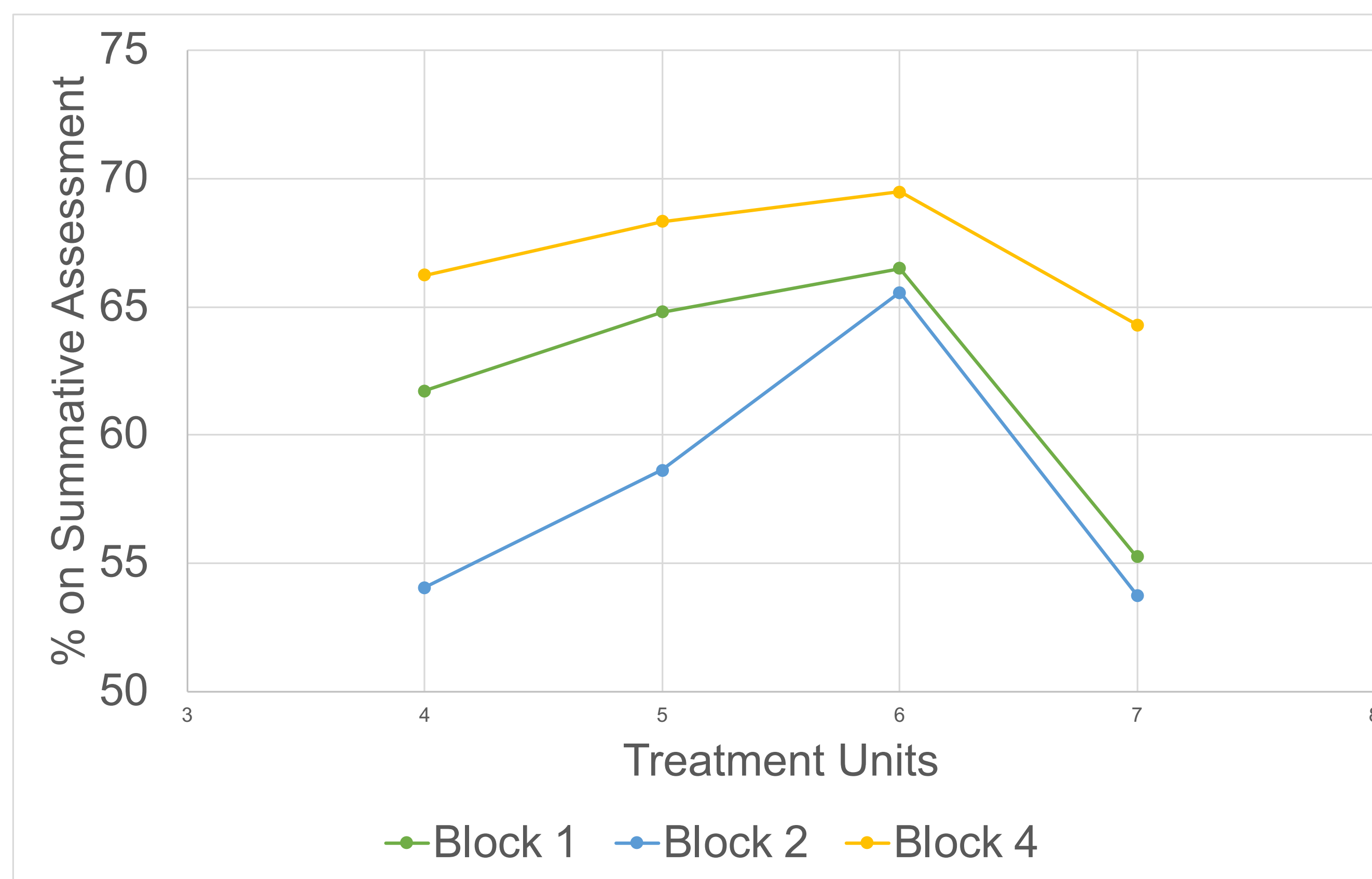


Figure One: Student Achievement Over Duration of Treatment, Block 4 (n=14), Block 1 (n=18), Block 2 (n=18).

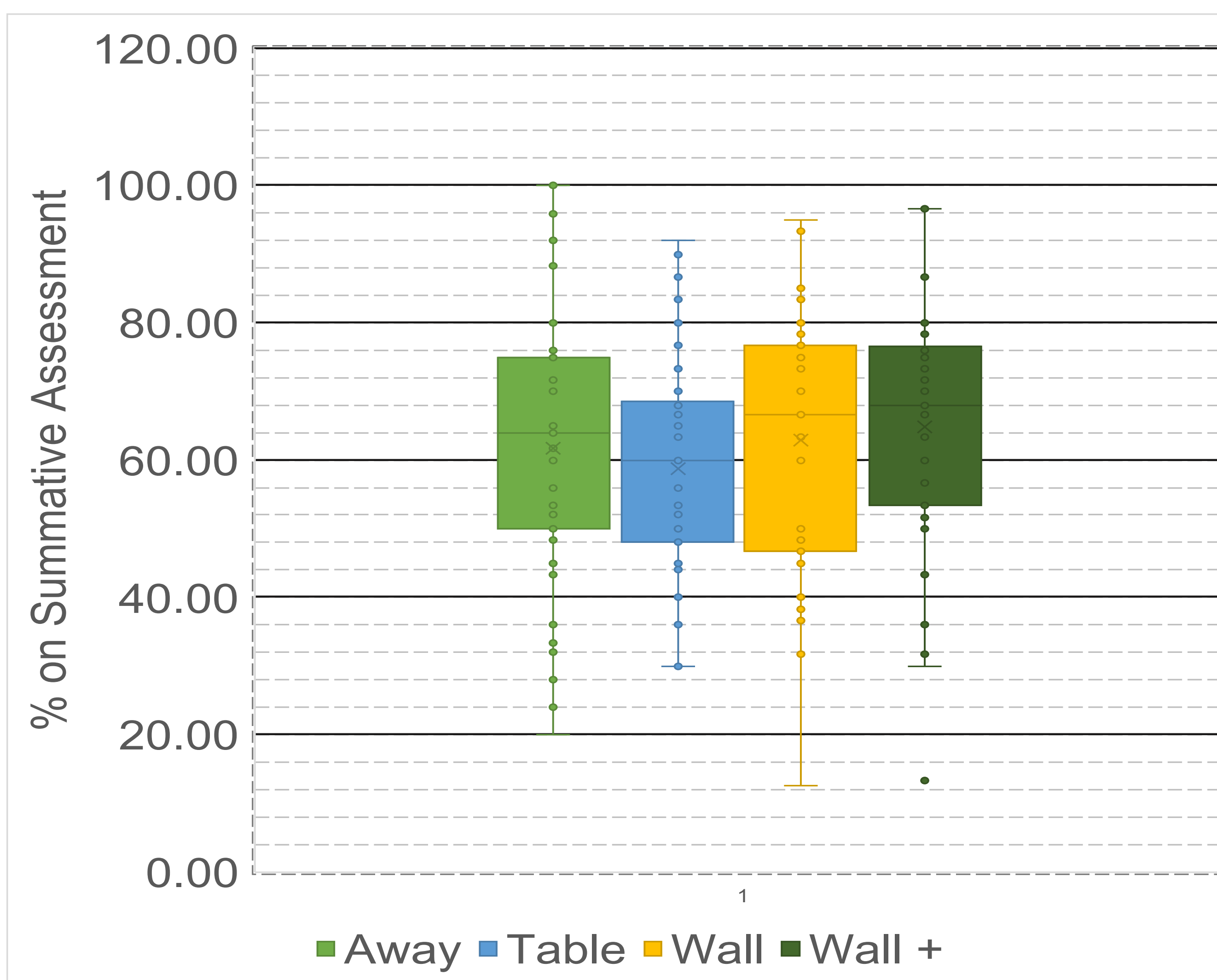


Figure Two: Distribution of Student's Scores by Policy, Away (n=43), Table (n=46), Wall (n=47), Wall+ (n=46).

## Methodology

### Cell Phone Policy

- Four different cell phone policies were tested.

### Teacher Surveys

- Find out other teacher's thoughts on cell phones

### Student Surveys

- Measure differences in student opinion pre and post cell phone policy

## Results (Research Matrix)

- The class starting the treatment cycle with the worst conceived policy consistently did the worst over all four units.
- The biggest improvements in achievement were between the wall and wall+ policies for each class compared to themselves.
- The class that did worse from wall to wall+ followed the trend of doing worse, but dropped by less than half of other groups.
- Majority of teachers are frustrated with the use of cell phones
- Student perception on the relationship between cell phone usage and personal well being/living without cell phones can be changed

## Conclusions

- There could be a psychological connection between having phones charging and student achievement
- A common cell phone policy needs to be found to ease teachers frustration as well as improve students academic achievement
- A unit about cell phone and social media usage should be taught to students so they can live healthier lives