

Econ 340: Research Project Submission 1 Example
Student Name 1 and Student Name 2

1. Clearly specify what your research question is.

- *Does the student-teacher ratio affect elementary school education?*

2. Why do you think this question is interesting or important?

- *This is an important question as it informs policymakers of the value of mandating maximum class sizes. Increasing the student-teacher ratio across schools is a costly affair. Being able to quantify its benefits can help policymakers make more informed decisions.*

3. Fill in the following table. Use the names of the variables in the dataset.

	Name	Description
Name of your dataset	<i>caschools.csv</i>	<i>Data on school characteristics and test performance for 420 school districts in California from 1998-99.</i>
Dependent variable	<i>testscr</i>	<i>Average reading and writing score</i>
Main Independent variable	<i>str</i>	<i>Student-teacher ratio</i>
First additional control variable	<i>high_comp_stu*</i>	<i>Binary variable that takes value 1 if computers per student are above the median, and 0 otherwise</i>
Second additional control variable	<i>meal_pct</i>	<i>Percent qualifying for reduced-price lunch</i>

* We will create this variable using *comp_stu* (computers per student).

4. How do you think the primary independent variable correlates with the dependent variable? Explain the reasoning behind your thinking.

- *We think that there should be a negative correlation between test scores and the student-teacher ratio. That is, a higher student-teacher ratio should lead to worse student performance as each student is not getting much individual attention in the class.*

5. Fill the following table with the *expected* sign of the correlation between different variables.

	<i>Computers per student > median</i>	<i>Reduced-price lunch</i>
<i>Test score</i>	+	-
<i>Student-teacher ratio</i>	-	+

