

Background

The term ‘homework’ signifies any task assigned by school teachers that are meant to be carried out during non-school hours¹. A widely practiced education technique, “[m]ost educators believe that homework can be an important supplement to in-school academic activities.²” Simply completing homework assignments, however, is not necessarily enough for deeper learning to occur. The general purpose of my study, therefore, was to test homework logs that are designed to encourage higher quality study habits in students and determine how they affected students’ learning and attitudes about learning.

I conducted my research at St. Monica Academy in Montrose, CA. Just outside the heavily populated city limits of Los Angeles, the private, coed school currently has an enrollment of 248 students³. Recent enrollment records show that 57% of the student body is White, 32% Hispanic, 8% Asian, 2% African-American, and 2% of Native American descent. Student families are generally well of with an average income above \$90,000.⁴

Focus Question	Data Source 1	Data Source 2	Data Source 3	Data Source 4
1.	Homework Quality Surveys	Documented problem-solving CAT	Pre- and Post-treatment assessment scores	Student Interviews
2.	Homework Quality Surveys	Documented problem-solving CAT		Student Interviews
3.	Homework Quality Surveys	Documented problem-solving CAT		Student Interviews
4.	Homework Quality Surveys	Documented problem-solving CAT	Pre- and Post-treatment assessment scores	Student Interviews

Table 1. Data Triangulation Matrix

Focus Questions

1. What is the effect of homework logs on students’ learning?
2. How do homework logs influence students’ study habits?
3. What is the effect of homework logs on students attitudes about homework?
4. How do homework logs influence students’ attitudes toward learning?



Figure 1. Science Students at St. Monica Academy

Treatment

Students were divided into two groups of similar academic ability. One half maintained a Homework Quality Log for three units of my standard level Chemistry class while half went through the same class with no treatment. Roughly half of the group were male and a little over half of the group were high school sophomores, the rest were juniors. The log was modeled after similar instruments utilized by Bembenutty and White⁵ and Cooper, Horn, and Strahan,⁶ and consisted of a table with ten columns in which students recorded and self-evaluated different characteristics of their homework.

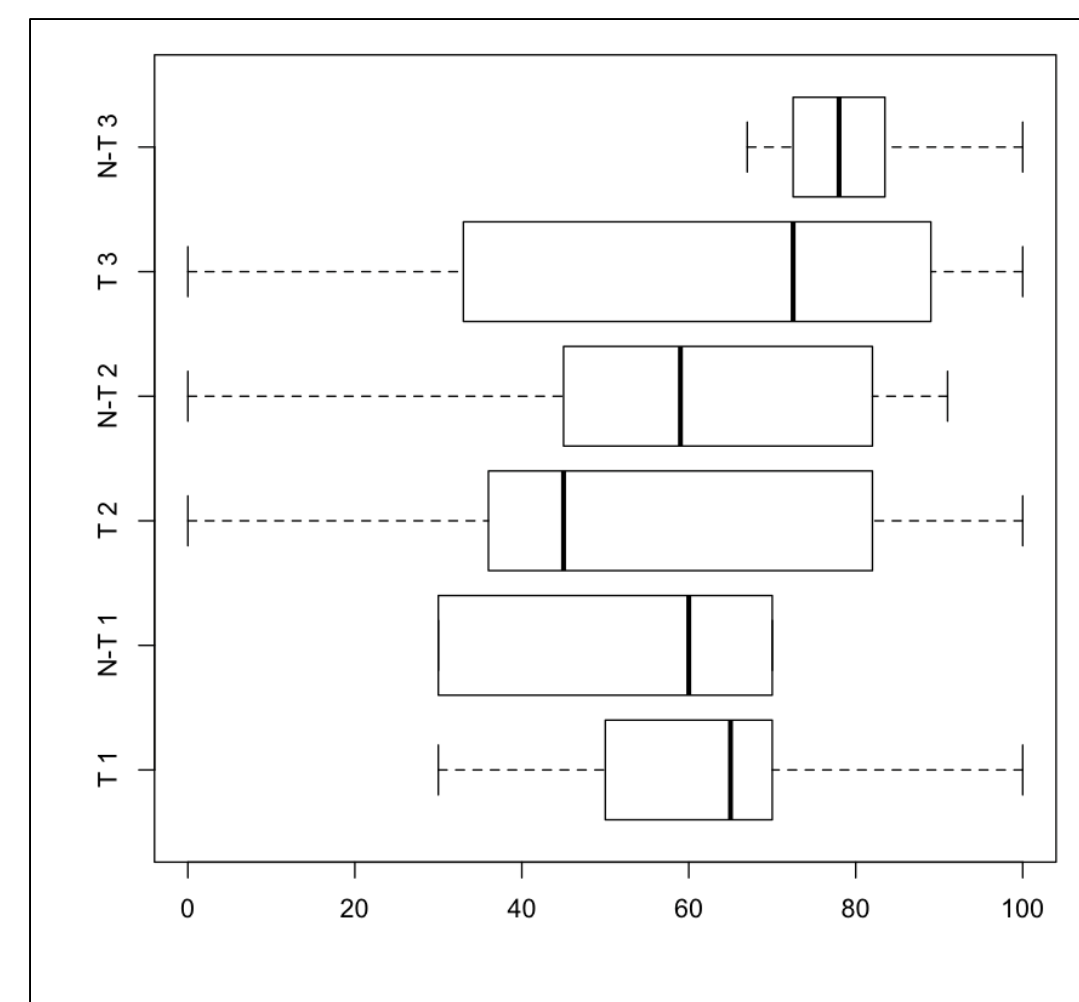


Figure 2. Treatment and Non-Treatment Post-Test Scores Box and Whisker Plots For All Three Units, (N=20)

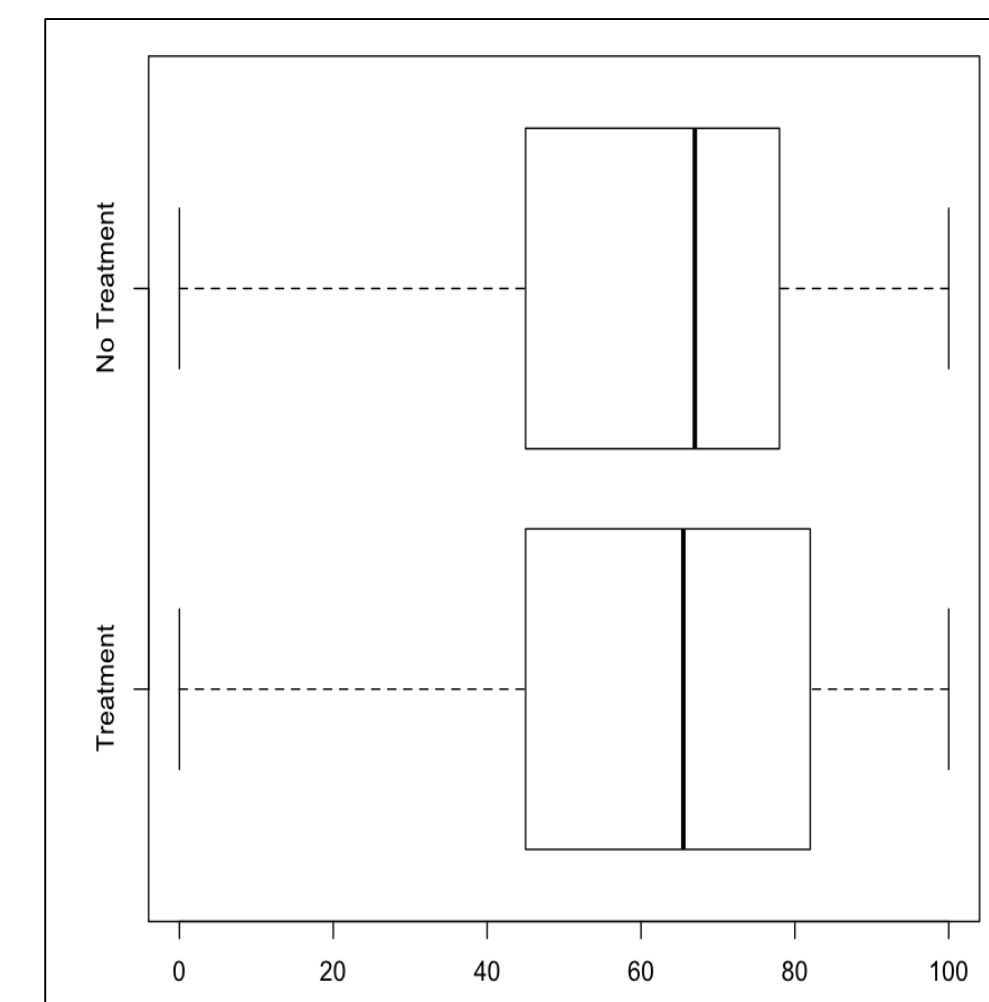


Figure 3. Pooled Pre- and Post-Test Scores Box and Whisker Plot, (N=20)

Data Collection and Triangulation

This research project included four instruments. Each unit began with a Pre-Treatment Assessment. At the end of each, students participated in Homework Quality Surveys, Documented-Problem Solving CAT, and a Post-Treatment Assessment. Five students were also selected at random to participate in an interview before and after the treatment. These five instruments and their relation to the focus questions are summarized above (Table 1).

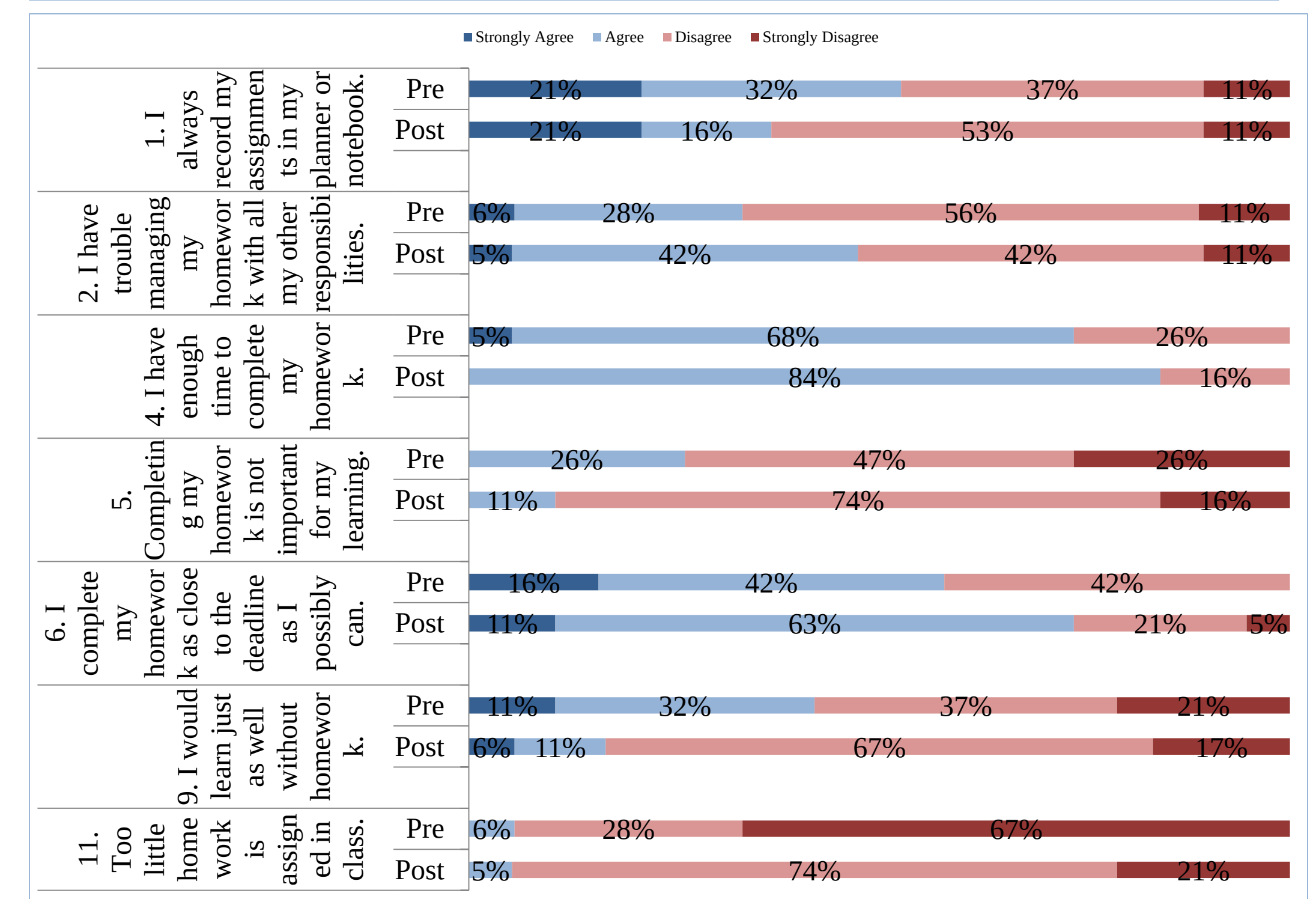


Figure 4: Selected Homework Quality Survey responses (N=20)

Results

Data collected from post exam assessments, student interviews, and surveys suggested that the Homework Quality Log improved students’ focus, diligence and organization but did not significantly improve students’ comprehension or understanding of the material. Though probably effective in promoting focus and organization, the Homework Quality Log would need to be supplemented with training in specific study skills and techniques in order to produce a significant change in academic performance, to say nothing of solid instruction and effective assessments.

Contact

Jacob Whalen
St. Monica Academy
Email: jakewhalen@gmail.com
Phone: 612-790-8076

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