

# Using Annotation in the Elementary Classroom

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## Annotation:

*A cognitively engaging activity that promotes a deeper involvement and interaction in subject content and text complexity.*

## Introduction

Students need to perform better on their classroom assessments and on standardized tests. Annotation is a learning strategy that increases academic performance while at the same time supporting engagement with the text to promote the development of higher cognitive learning, which transfers to other domains inside and outside of the classroom environment.

## Objective

Does using annotation as an intervention strategy in upper elementary grades increase reading comprehension, content retention, and academic achievement? This study was designed to evaluate the difference in test scores between regular instruction and instruction with annotation to assess its impact and effectiveness on instruction in an elementary classroom.

## Methodology

The setting for this research study was a 4th-grade classroom in a parochial school in the Hudson Valley of New York.

Age of the students: 10-11 Males-20 Females:13

Assessment: Two tests given to the same group of students.

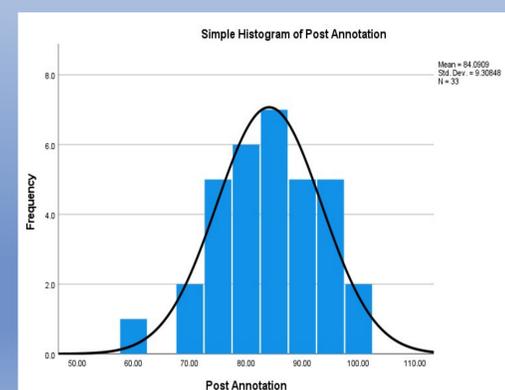
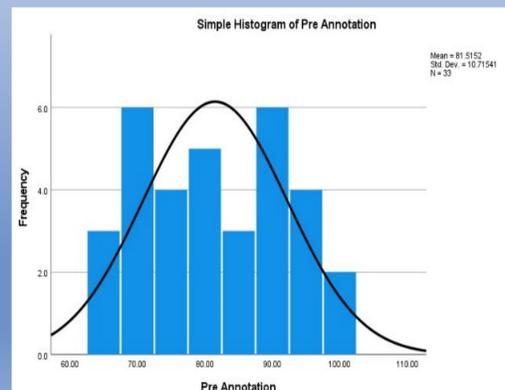
One Post Regular Instruction and One Post Instruction with Annotation; each 20 points with a calculated percentage score.

Independent Variable: The students before and after using annotation.

Dependent Variable: The pre- and post-assessment test scores.

## Data and Analysis

Quantitative data were analyzed to evaluate measures of central tendency to compare the mean, median, and mode differences in the participant's test scores and obtain the standard deviation for two or more groups and one scale variable. A paired t-test of independent samples was used to analyze the differences in gain between the participant's scores and group scores pre- and post-annotation treatment intervention.



Simple Histograms with Measure of Central Tendency for Test Scores Pre and Post Annotation

## Results and Findings

The mean score for social studies reading comprehension increased from 81.52 ( $sd = 10.72$ ) on the pre-annotation test to a mean of 84.09 ( $sd = 9.31$ ) on the post-annotation test. The difference between the two means is statistically significant at the .01 level ( $t(32) = -3.150$ ,  $p$  is less than .004). Therefore, the Null Hypothesis is rejected, and the Alternative Hypothesis is accepted that students who use annotation as a reading intervention in their Social Studies content will score higher than those students who do not use annotation as a reading intervention. Statistically, it is significant that the fourth-grade students in this study gained higher posttest scores as a result of their use of annotation, in contrast to those fourth-grade students who only received regular instruction.

## Conclusions

In the pressure of today's learning climate to improve standardized test scores and meet the metrics of state standards, using annotation as an intervention strategy in the classroom for content subjects such as Social Studies to improve reading comprehension makes sense. Most importantly, however, it is a strategy that will travel with the student and transfer to other domains of learning outside of the classroom and with them as they progress to higher grade levels and higher education. It is a needed strategy that provides ownership and active over passive learning.

The purpose of this study was to build on prior research, most notably in secondary grades and post-secondary education. It has demonstrated its effectiveness as a powerful tool to access language and its demands and scaffold those learners that have difficulty reading and lack competency in comprehension.

## References

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