

*Prentice Hall  
Biology*

National  
Effect-Size Study  
*Executive Summary*

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# Prentice Hall *Biology*

## National Effect-Size Study Executive Summary:

### An Evaluation of Student Performance of Prentice Hall Users vs. Non-Users

#### Background

Prentice Hall retained the services of Gatti Evaluation, Inc., an independent research firm that designs and performs evaluations of the effects of educational programs on student performance, to conduct a large-scale, national study on the impact of Prentice Hall *Biology* on student achievement levels.

#### Study Design

The quasi-experimental study design examined longitudinal test results of 273 closely matched user and non-user districts as a point of comparison across the same time periods and achievement tests. Two states, California and Virginia were examined as part of the study as they are among the few states that report biology scores independent of cumulative science scores. Because state tests are unique and measure different standard benchmarks, the analysis measured the percent of students meeting or exceeding state standards in addition to student NCE scores.

*\*\*NOTE: Approximately 80% of districts included in this study contain one or more urban schools as defined by NCES (National Center for Education Statistics)*

#### Matched Districts

Districts were matched based on the following demographic characteristics:

- similar metropolitan location (i.e., urban, suburban, rural)
- enrollment, ethnicity (i.e., percent white/Caucasian school aged children)
- relative wealth (i.e., percent receiving free or reduced priced lunch)

#### Goals

The main goal of the study was to quantify the comparative impact of Prentice Hall *Biology* on district Science achievement for 10th grade students. The results may be used to answer critical questions for potential users such as:

- How likely are school districts that adopt Prentice Hall *Biology* to see immediate gains in Science achievement on state sponsored norm referenced and criterion referenced tests?
- Are districts that adopt Prentice Hall *Biology* as likely or more likely to see achievement gains as similar non-users districts?

#### Results

**Overall, 90% of districts that adopted Prentice Hall *Biology* saw a significant increase** from pre-to post-implementation in student achievement levels versus 68% of matched, non-user districts.

For urban users, 80% of districts saw a significant increase in student achievement levels from pre-to post-implementation versus 56% of matched, non-user districts.

In California, **Prentice Hall *Biology* users outperformed their counterparts 8 out of 10 times.** In Virginia **Prentice Hall *Biology* users outperformed their counterparts 7 out of 11 times.**

If these results are generalizable, they indicate:

- Districts adopting Prentice Hall *Biology* are likely to see immediate and significant gains in science achievement outcomes.
- Districts adopting Prentice Hall *Biology* are more likely to see statistically significant achievement gains as similar non-user districts.

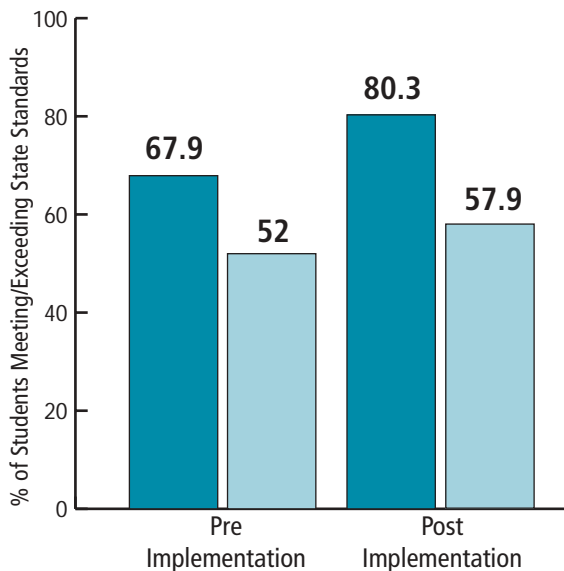
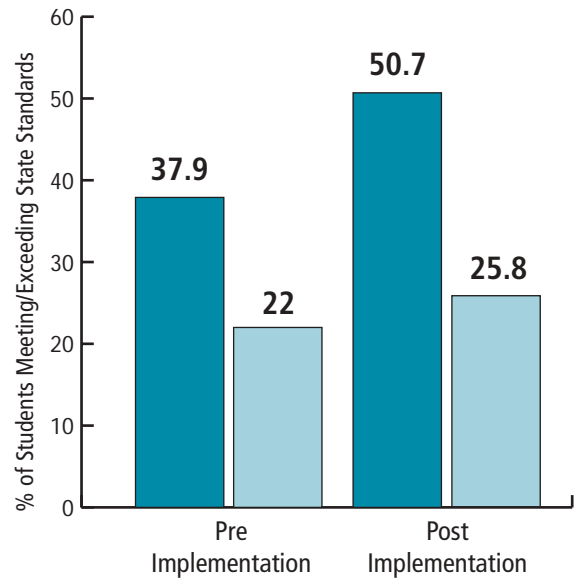
#### Research indicates:

**Prentice Hall *Biology* is bringing more students up to state standards and increasing district rankings**

# Prentice Hall *Biology* National Effect-Size Study Highlights

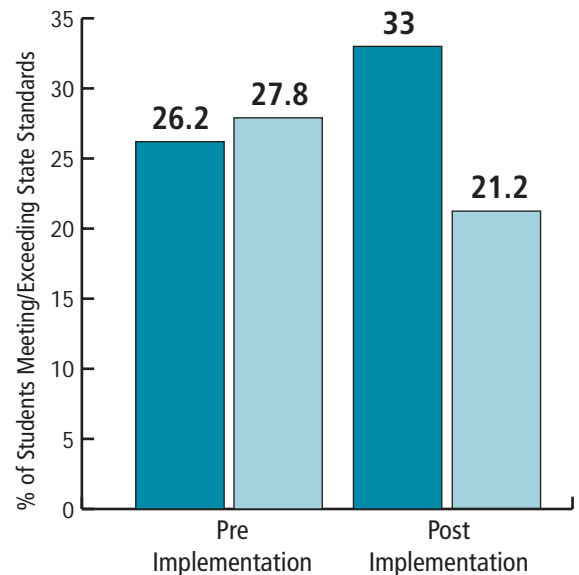
## District 1

	Prentice Hall	Other
<b>Enrollment</b>	<b>24,582</b>	<b>18,130</b>
% Caucasian	31.6	30.6
% African-American	2.1	5.7
% Hispanic	63.8	57.8
% Other	2.5	5.9
% Free/Reduced Lunch	50.8	51.6
<b>Net Increase</b>	<b>33.7%</b>	<b>17%</b>



## District 2

	Prentice Hall	Other
<b>Enrollment</b>	<b>4,303</b>	<b>7,360</b>
% Caucasian	71.2	77.4
% African-American	1	3.5
% Hispanic	3	10.6
% Other	24.8	8.5
% Free/Reduced Lunch	4	2
<b>Net Increase</b>	<b>18.3%</b>	<b>11.3%</b>



## District 3

	Prentice Hall	Other
<b>Enrollment</b>	<b>11,431</b>	<b>13,138</b>
% Caucasian	19.8	16.9
% African-American	1.4	2.4
% Hispanic	75.2	73.2
% Other	3.6	7.5
% Free/Reduced Lunch	30.2	51.4
<b>Net Increase</b>	<b>26%</b>	<b>-23.7%</b>

Key: ■ Prentice Hall ■ Other

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