



New Century Education

## SCIENTIFIC RESEARCH UPDATE

**Curriculum:** Reading and Math

**Student Population:** Elementary Schools, Economically Disadvantaged,

**State:** Florida

**Years:** 2003-2004

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### *Elementary Students Who Used New Century's Reading and Math Intervention Outperformed Students at Comparable Schools by Statistically Significant and Large Margins in an Independently Conducted Study*

#### RESEARCH SUMMARY

**Location:** Elementary Schools, Palm Beach County School District, Florida.

**Targeted Student Population:** 3rd, 4th and 5th grade students. The study included 556 students in 3rd, 4th and 5th grades, distributed across four schools. Of these, 124 attended Washington Elementary and used New Century software (the experimental group) and 432 came from three demographically similar elementary schools (Lincoln, West Riviera and Northmore) which did not use New Century software and comprised the Main Comparison Group of schools (the control group).

**Student Demographics:** All four schools had demographics that fell within a narrow band of between 87.3% and 90.1% African American students. Also, between 69.5% and 78.1% of students at each of the four schools qualified for Free and Reduced lunch.

**Research Design:** The purpose of this analysis was to compare FCAT Reading and Math scores and SRI Reading scores at Washington Elementary School, where students used the New Century software, to the scores of students at the Main Comparison Group of schools, who did not use New Century software. The analysis was conducted using scores from the Spring 2004 testing. Utilizing an Analysis of Covariance (ANCOVA), the previous year scores were used as a covariate in order to control for previous differences in the FCAT scores of each student.

**Assessment Instruments:** Florida Comprehensive Assessment Test (FCAT), a criterion referenced test, and the Scholastic Reading Inventory (SRI), an independent reading assessment.

**Results:** FCAT Reading: 126 3rd, 4th and 5th graders at Washington Elementary school had both 2004 scores and matching 2003 scores. The ANCOVA analysis of 2004 scores resulted in a Mean score of 1455.60. Among the 430 3rd, 4th and 5th graders at the Main Comparison Group schools, the comparable ANCOVA calculation resulted in a Mean score of 1334.29.



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This mean difference of 121.31 points in favor of Washington School students was both statistically significant ( $p < .0000001$ ) and substantial ( $d = .415$ ). Analyzing the results separately by grade level resulted in outcomes for 3rd, 4th and 5th grade that were consistent as well as statistically significant and substantial.

**SRI Reading:** 192 3rd, 4th and 5th graders at Washington Elementary school had both 2004 scores and matching 2003 scores. The ANCOVA of 2004 scores resulted in a Mean score of 617.85. Among the 697 3rd, 4th and 5th graders at the Main Comparison Group schools, the comparable ANCOVA calculation resulted in a Mean score of 568.35. This mean difference of 49.5 points in favor of Washington School students was both statistically significant ( $p < .00015$ ) and substantial ( $d = .190$ ). Analyzing the results separately by grade level resulted in outcomes for 3rd, 4th and 5th grade that were consistent.

**FCAT Math:** 124 3rd, 4th and 5th graders at Washington Elementary school had both 2004 scores and matching 2003 scores. The ANCOVA of 2004 scores resulted in a Mean score of 1501.97. Among the 432 3rd, 4th and 5th graders at the Main Comparison Group schools, the comparable ANCOVA calculation resulted in a Mean score of 1455.25. This mean difference of 46.72 points in favor of Washington School students was both statistically significant ( $p < .0075$ ) and substantial ( $d = .192$ ). Analyzing the results separately by grade level resulted in outcomes for 3rd and 4th grade that were consistent as well as statistically significant and substantial. Results for the 5th grade were contrary.

**Report:** *Evaluation of the Effect of NCIS Reading and Math Programs on FCAT and SRI Scores of Students in the Palm Beach County Schools*

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