

# Bale Elementary School

LITTLE ROCK SCHOOL DISTRICT  
LITTLE ROCK, ARKANSAS.

## BALE ELEMENTARY SCHOOL STUDENTS MAKE GROWTH IN READING, LANGUAGE ARTS AND MATHEMATICS

BALE ELEMENTARY CHOSE PLATO ACHIEVE NOW TO USE AS PART OF A SUPPLEMENTAL EDUCATIONAL SERVICES (SES) AFTERSCHOOL PROGRAM FOR STUDENTS IN GRADES THREE, FOUR AND FIVE. STUDENTS WHO PARTICIPATED IN THE EIGHT-WEEK IMPLEMENTATION MADE GAINS IN TOTAL READING, LANGUAGE ARTS AND MATHEMATICS.

PLATO REQUIRES STUDENTS TO ATTEND A MINIMUM OF 75% OF THE SCHEDULED SESSIONS AND BY THE END OF THE PROGRAM PERIOD, 75% OF PROGRAM PARTICIPANTS ARE EXPECTED TO ATTAIN A 15% INCREASE IN PROFICIENCY SCORES.

A COMPARISON OF ALL STUDENT SCORES ON THE PLATO ACHIEVE NOW PROGRESS TESTS SHOWED THAT THE PARTICIPATING STUDENTS MADE A 3.52 ( $p=.164$ ) PERCENTAGE POINT GAIN IN TOTAL READING AND LANGUAGE ARTS AND A 2.27 ( $p=.262$ ) PERCENTAGE POINT GAIN IN TOTAL MATHEMATICS. IN TERMS OF AVERAGE PERCENTAGE CHANGE, THE PARTICIPATING STUDENTS IN GRADES THREE, FOUR AND FIVE MADE AN 8.43% INCREASE IN THEIR TOTAL READING AND LANGUAGE ARTS PROFICIENCY SCORES AND AN 11.59% INCREASE IN THEIR TOTAL MATHEMATICS PROFICIENCY SCORES, WHEN PRE- AND POST-TEST SCORES WERE COMPARED.

BY GRADE LEVEL, THIRD-GRADE STUDENTS GAINED AN AVERAGE PERCENTAGE INCREASE OF 15.78% IN TOTAL READING AND LANGUAGE ARTS PROFICIENCY SCORES AND AN AVERAGE PERCENTAGE INCREASE OF 7.23% IN TOTAL MATHEMATICS PROFICIENCY SCORES. FOURTH-GRADE STUDENTS HAD AN AVERAGE PERCENTAGE INCREASE OF 5.50% IN TOTAL READING AND LANGUAGE ARTS PROFICIENCY SCORES AND AN AVERAGE PERCENTAGE INCREASE OF 25.26% IN TOTAL MATHEMATICS PROFICIENCY SCORES. FIFTH-GRADE STUDENTS SAW AN AVERAGE PERCENTAGE INCREASE OF 1.67% IN TOTAL READING AND LANGUAGE ARTS PROFICIENCY SCORES AND AN AVERAGE PERCENTAGE INCREASE OF 7.26% IN TOTAL MATHEMATICS PROFICIENCY SCORES.

BALE ELEMENTARY WAS IDENTIFIED AS A SCHOOL IN NEED OF IMPROVEMENT BASED ON RESULTS FROM THE ARKANSAS STATE TESTS. AS A RESULT, BALE ELEMENTARY OFFERED PLATO<sup>®</sup> ACHIEVE NOW IN AN SES AFTERSCHOOL PROGRAM TO SELECTED STUDENTS. SELECTION WAS BASED ON TEACHER RECOMMENDATION AND PARENT CHOICE. STUDENTS ATTENDED THE SES PROGRAM FOR TWO HOURS AFTER SCHOOL, TWO DAYS EACH WEEK FOR A TOTAL OF EIGHT WEEKS. STUDENT IMPROVEMENT WAS MONITERED USING PLATO ACHIEVE NOW PROGRESS CHECKS AND TEACHER OBSERVATION. PROGRAM SUCCESS WAS ASSESSED THROUGH A CAREFUL EXAMINATION OF PLATO ACHIEVE NOW PROGRESS TEST RESULTS. TEST RESULTS ARE REPORTED BY GRADE LEVEL, EXCEPT FOR FIFTH GRADE STUDENTS WHO TOOK THE FOURTH GRADE TEST. PARENTS WERE INFORMED OF STUDENT PROGRAM PROGRESS DURING AN END OF PROGRAM MEETING IN FEBRUARY.

### SCHOOL PROFILE

325 STUDENTS PREK-6  
70% Free/Reduced Lunch  
84% African American  
8% White  
6% Hispanic  
1% Asian  
<1% Native American

### PLATO ACHIEVE NOW<sup>™</sup> IMPLEMENTATION

After School Model  
Grades 3, 4, 5  
Reading, Vocabulary Comprehension, Mathematics Focus  
8 Week Implementation  
Supplemental Education Services Implementation

### RESEARCH INSTRUMENTS

Achieve Now Progress Test

### RESEARCH TIME FRAME

January-February of 2004-2005  
School Year

# SCHOOL IMPLEMENTATION PROGRESS

**Standards:** Bale Elementary offered Supplemental Educational Services to students based on the school's School Improvement Status as identified by the Arkansas Department of Education. The school offered parents and students the choice of participating in an after school program provided by authorized vendors taken from an approved state SES provider list. Parents chose PLATO® Achieve Now interactive curriculum in an effort to improve their child's performance. Individual student goals were determined by test results gathered from the PLATO® Achieve Now Pretest.

**Curriculum and Instruction:** PLATO® Achieve Now interactive curriculum was used in an after school Supplemental Educational Services program. Students were offered instruction after school two days each week, for two hours each day; the program was offered in an eight-week implementation. Students worked individually or in small groups with the curriculum which targeted individual student weaknesses. Student progress was monitored to allow tutors the ability to tailor instruction from Student Tutorial Plans specifically designed to meet each student's individual needs.

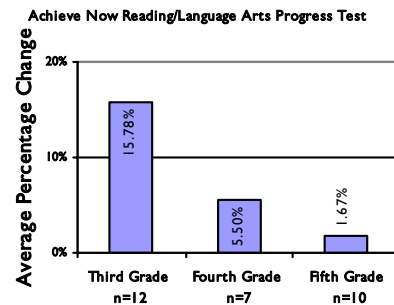
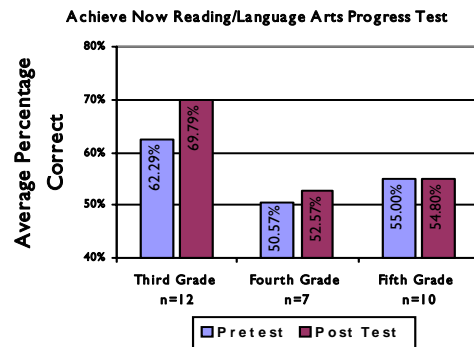
**Assessment/Evaluation:** Various assessments which included PLATO Achieve Now Progress Tests, PLATO Achieve Now Progress Checks and student observations were used to closely monitor student progress. The program was closely monitored by an on-site SES Lead Tutor. Program success was measured by improvement on the PLATO® Achieve Now Progress Tests as indicated by the PLATO SES program indicators.

**Professional Development:** The PLATO SES consultant and the on-site SES Lead Tutor designed professional development to teach tutors how to incorporate the Achieve Now curriculum into the after school program and to correlate this curriculum with the Arkansas State standards.

## Gains made by third- and fourth-grade students in Reading and Language Arts

On the PLATO® Achieve Now Progress Tests, third-grade and fourth-grade students made gains while fifth-grade students saw a slight decline in Total Reading and Language Arts scores, when pre- and post-test scores were compared. On average, third-grade students made a 7.50 ( $p=.041$ ) percentage point gain moving from a mean score of 62.29% on the pretest to a mean score of 69.79% at post test. On average, fourth-grade students made a 2.00 ( $p=.706$ ) percentage point gain moving from a mean score of 50.57% on the pretest to a mean score of 52.57% at post test. On average, fifth-grade students made a 0.20 ( $p=.968$ ) percentage point decline dropping from a mean score of 55.00% on the pretest to a mean score of 54.80% at post test. Fifth-grade students took the fourth-grade test.

In terms of average percentage change, third-grade students had an increase of 15.78%, fourth-grade students had an increase of 5.50% and fifth-grade students had an increase of 1.67% in Total Reading and Language Arts proficiency scores. The average attendance hours for the students who had pre-and

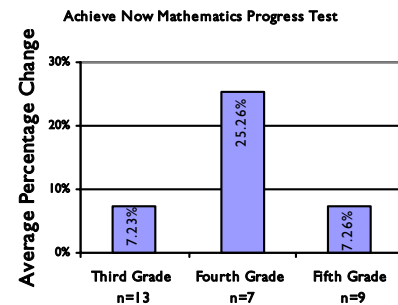
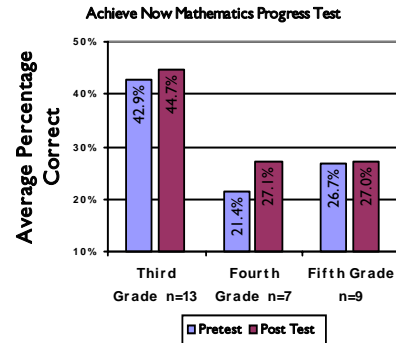


post-test results were 26.83 hours for third-grade students, 24.29 hours for fourth-grade students and 25.20 hours for fifth-grade students.

## Gains made by all three grade levels in Total Mathematics scores

On the PLATO Achieve Now Progress Tests, third-grade, fourth-grade and fifth-grade students made gains in Total Mathematics scores, when pre- and post-test scores were compared. On average, third-grade students made a 1.73 (p=.628) percentage point gain moving from a mean score of 42.93% on the pretest to a mean score of 44.66% at post test. On average, fourth-grade students made a 5.71 (p=.165) percentage point gain moving from a mean score of 21.43% on the pretest to a mean score of 27.14% at post test. On average, fifth-grade students made a 0.37 (p=.904) percentage point increase moving from a mean score of 26.67% on the pretest to a mean score of 27.04% at post test. Fifth-grade students took the fourth-grade test.

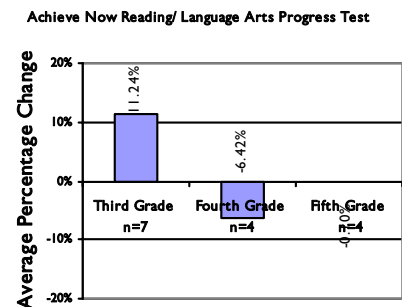
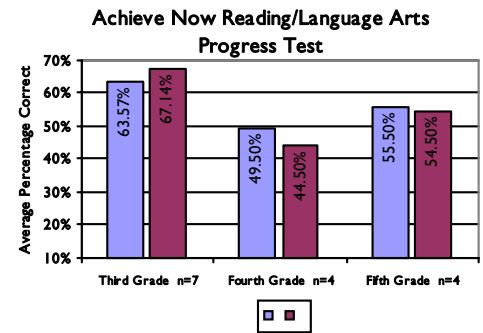
In terms of average percentage change, third-grade students had an increase of 7.23%, fourth-grade students had an increase of 25.26% and fifth-grade students had an increase of 7.26% in Total Mathematics proficiency scores. The average attendance hours for the students who had pre-and post-test results were 24.77 hours for third-grade students, 24.29 hours for fourth-grade students and 25.56 hours for fifth-grade students.



## Reading and Language Arts gains made by third-grade students who attended 80% of the eight-week implementation

For students at Bale Elementary to demonstrate an 80% attendance rate, they had to attend 25.6 or more hours of instruction after school during the eight-week implementation. When pre-and post-test Reading and Language Arts scores were compared, third graders realized a gain while fourth and fifth graders showed declines. Fifth-grade students took the fourth-grade test. On average, third-grade students who had an 80% or higher attendance rate made a 3.57 (p=.434) percentage point gain moving from a mean score of 63.57% on the pretest to a mean score of 67.14% at post test. On average, fourth-grade students who had an 80% or higher attendance rate had a 4.00 (p=0.444) percentage point decline dropping from a mean score of 49.50% on the pretest to a mean score of 45.50% at post test. On average, fifth-grade students had a 1.00 (p= 0.895) percentage point decline dropping from a mean score of 55.50% on the pretest to a mean score of 54.50% at post test. Results are not significant for any grade level.

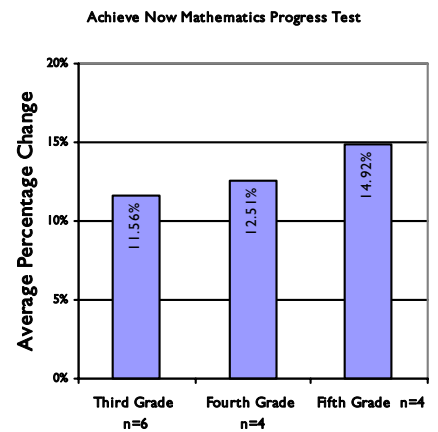
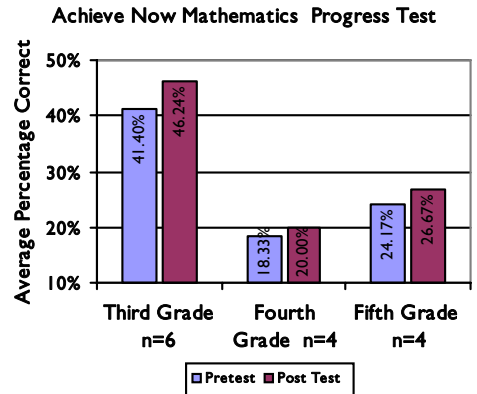
In terms of average percentage change for students who had an 80% attendance rate (25.6 hours), third-grade students had an increase of 11.24%, fourth-grade students had a decrease of 6.42% and fifth-grade students had a decrease of 0.10% in Total Reading and Language Arts proficiency scores.



## Mathematics gains made by students who attended 80% of the eight-week implementation

For students at Bale Elementary to demonstrate an 80% attendance rate, they had to attend 25.6 or more hours of instruction after school during the eight-week implementation. When PLATO® Achieve Now Mathematics pre- and post-test scores were compared, third-, fourth- and fifth-grade students made gains. Fifth-grade students took the fourth-grade test. On average, third-grade students who had an 80% or higher attendance rate made a 4.84 (p=.405) percentage point gain moving from a mean score of 41.40% on the pretest to a mean score of 46.23% at post test. On average, fourth-grade students who had an 80% or higher attendance rate had a 1.67 (p=0.391) percentage point gain moving from a mean score of 18.33% on the pretest to a mean score of 20.00% at post test. On average, fifth-grade students had a 2.50 (p= 0.571) percentage point gain moving from a mean score of 24.17% on the pretest to a mean score of 26.67% at post test. Results are not significant for any grade level.

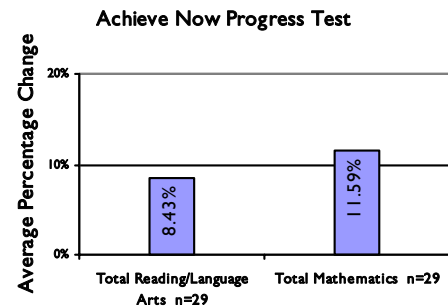
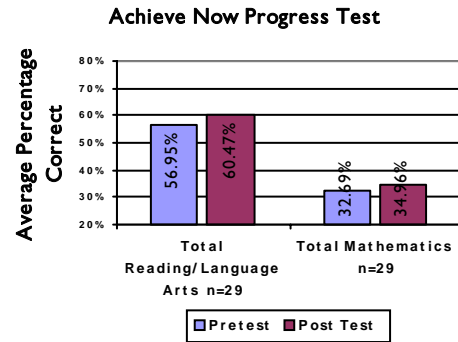
In terms of average percentage change for students who had an 80% attendance rate (25.6 hours), third-grade students had an increase of 11.56%, fourth-grade students had an increase of 12.51% and fifth-grade students had an increase of 14.92% in Total Mathematics proficiency scores.



## Grades combined by achievement data show gains in Reading, Language Arts and Mathematics

At Bale Elementary, a combined evaluation of the achievement data for grades three, four and five who participated in the after school Supplemental Educational Services program using PLATO Achieve Now made gains in Total Reading, Language Arts and Mathematics scores. Third-, fourth- and fifth-grade students combined made a 3.52 (p=.164) average percentage point gain in Total Reading and Language Arts score moving from a mean score of 56.95% on the pretest to a mean score of 60.47% at post test. Third-, fourth- and fifth-grade students combined made a 2.27 (p=.262) average percentage point gain in Total Mathematics score moving from a mean score of 32.69% on the pretest to an average score of 34.96% at post test. Fifth-grade students took the fourth-grade test.

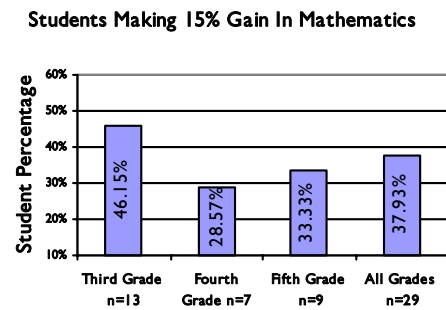
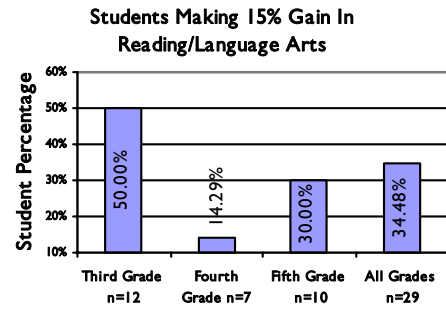
In terms of average percentage change, the combined grade levels showed an 8.43% increase in their Total Reading and Language Arts proficiency scores and an 11.59% increase in their Total Mathematics proficiency scores. The average attendance for this group of students who had pre- and post-test results in Reading and Language Arts was 25.66 hours. The average attendance for this group of students who had pre- and post-test results in Mathematics was 24.90 hours.



## Some students made 15% gains in Reading and Language Arts and Mathematics

Of the entire group of students (grades 3, 4 and 5) participating in the after school SES program at Bale Elementary who were using PLATO Achieve Now, 34.48% made a 15% or more increase in Total Reading and Language Arts proficiency scores and 37.93% made a 15% or more increase in

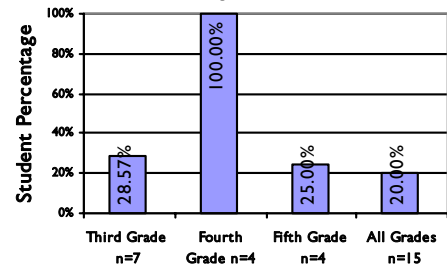
Total Mathematics proficiency scores, when pre- and post-test scores were compared. By grade levels, in third grade, 50.0% of the students made an increase of 15% or more in Total Reading and Language Arts proficiency scores and 46.15% of the students made an increase of 15% or more in Total Mathematics proficiency scores. In fourth grade, 14.29% of the students made an increase of 15% or more in Total Reading and Language Arts proficiency scores and 28.57% of the students made an increase of 15% or more in Total Mathematics proficiency scores. In fifth grade, 30.00% of the students made an increase of 15% or more in Total Reading and Language Arts proficiency scores and 33.33% of the students made an increase of 15% or more in Total Mathematics proficiency scores, when pre- and post-test scores were compared.



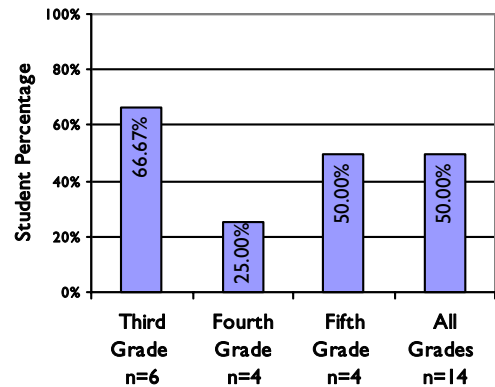
## Some students with 80% attendance rate make gains in Reading, Language Arts and Mathematics

Of the entire group of students (grades 3, 4 and 5) with attendance rates of 80% (25.6 hours) who were using PLATO Achieve Now, 20.00% of the students made a 15% or more increase in Total Reading and Language Arts proficiency scores and 50.00% made a 15% or more increase in Total Mathematics proficiency scores, when pre- and post test scores were compared. Of the third-grade students who had attendance rates of 80% (25.6 hours) or higher, 28.57% of the students made an increase in Reading and Language Arts of 15% or more. Of the third grade students with 80% or higher attendance rates, 66.67% of them made an increase in Mathematics of 15% or higher. Of the fourth-grade students who had attendance rates of 80% or higher, 100.00% of the students made an increase in Total Reading and Language Arts proficiency scores of 15% or more. Of the fourth grade students with 80% or higher attendance rates, 25.00% of them made an increase in Total Mathematics proficiency scores of 15% or higher. Of the fifth-grade students who had attendance rates of 80% or higher, 25.00% of the students made an increase in Total Reading and Language Arts proficiency scores of 15% or more. Of the fifth-grade students with 80% or higher attendance rates, 50.00% of them made an increase in Total Mathematics proficiency scores of 15% or higher.

Students with 80% Attendance Making 15% Reading Gains

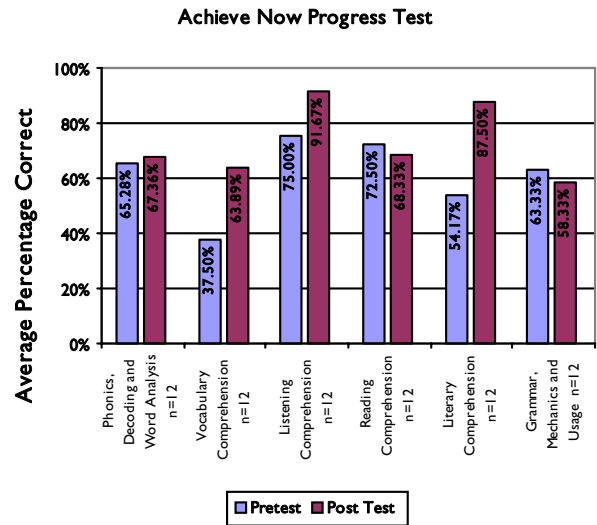


Students with 80% Attendance Making 15% Mathematics Gains



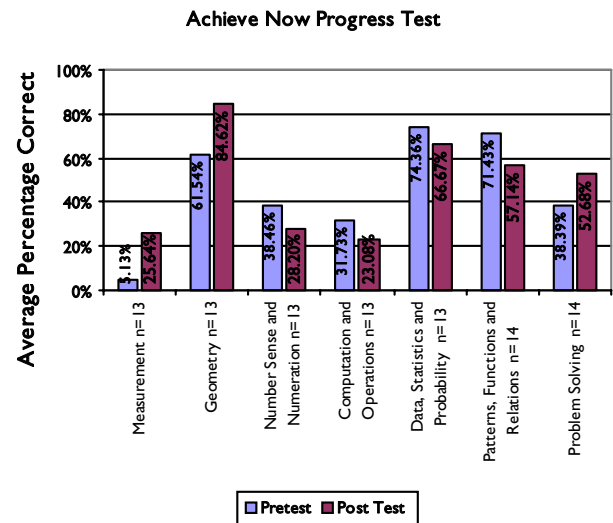
## Third-grade students make gains in four Reading and Language Arts sub-categories

When pre- and post-test scores of the PLATO Achieve Now Progress Test were compared, Bale Elementary third-grade students using PLATO Achieve Now made percentage point gains of 2.08 ( $p=.714$ ) in Phonics, Decoding and Word Analysis moving from an average score of 65.28% on the pretest to an average score of 67.36% at post test. Third graders made a percentage point gain of 26.39 ( $p=.001$ ) in Vocabulary Comprehension moving from an average score of 37.50% on the pretest to an average score of 63.89% at post test. Third-grade students made a percentage point gain of 16.67 ( $p=.026$ ) in Listening Comprehension moving from an average score of 75.00% on the pretest to an average score of 91.67% at post test. Third-grade students made a percentage point gain of 33.33 ( $p=.001$ ) in Literary Comprehension moving from an average score of 54.17% on the pretest to an average score of 87.50% at post test. Third grade students did show a 4.17 ( $p=.576$ ) percentage point decline in Reading Comprehension dropping from an average score of 72.50% on the pretest to an average score of 68.33% at post test. Third graders also showed a percentage point decline of 5.00 ( $p=.515$ ) in Grammar, Mechanics and Usage dropping from an average score of 63.33% on the pretest to an average score of 58.33% at post test. Results are statistically significant for Vocabulary Comprehension, Listening Comprehension, and Literary Comprehension.



## Third-grade students make gains in three Mathematics sub-categories

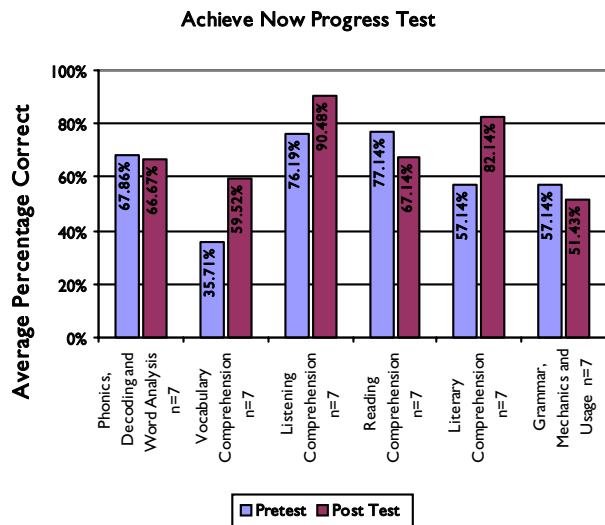
When pre- and post-test scores on the PLATO Achieve Now Mathematics Progress Test were compared, third-grade students made a percentage point gain of 20.51 ( $p=.040$ ) in Measurement moving from an average score of 5.13% on the pretest to an average score of 25.64% at post test. Third graders made a percentage point gain of 23.08 ( $p=.002$ ) in Geometry moving from an average score of 61.54% on the pretest to an average score of 84.62% at post test. Third-grade students did show a percentage point decline of 10.26 ( $p=.303$ ) in Number Sense and Numeration dropping from an average score of 38.46% on the pretest to an average score of 28.20% at post test. Third graders also showed a percentage point decline of 5.00 ( $p=.515$ ) in Computation and Operations dropping from an average score of 31.73% on the pretest to an average score of 23.08% at post test. Third graders also showed a percentage point decline of 5.00 ( $p=.515$ ) in Data, Statistics and Probability dropping from an average score of 74.36% on the pretest to an average score of 66.67% at post test. Third graders also showed a percentage point decline of 5.00 ( $p=.515$ ) in Patterns, Functions and Relations dropping from an average score of 71.43% on the pretest to an average score of 57.14% at post test. Third graders also showed a percentage point decline of 5.00 ( $p=.515$ ) in Problem Solving dropping from an average score of 38.39% on the pretest to an average score of 32.66% at post test.



score of 28.20% at post test. Third-grade students made a percentage point decline of 8.65 ( $p=.168$ ) in Computations and Operation moving from an average score of 31.73% on the pretest to an average score of 23.08% at post test. Third graders also made a percentage point decline of 7.69 ( $p=.427$ ) in Data, Statistics and Probability moving from an average score of 74.36% on the pretest to an average score of 66.67% at post test. Third graders also showed a 14.29 ( $p=.111$ ) percentage point decline in Patterns, Functions and Relations dropping from an average score of 71.43% at pretest to an average score of 57.14% at post test. Third-grade students made a percentage point gain of 14.28 ( $p=.003$ ) in Problem Solving moving from an average score of 38.39% on the pretest to an average score of 52.68% at post test. Results are statistically significant for the sub-categories of Measurement, Geometry, and Problem Solving.

### Third-grade students with 80% attendance rate make gains in three Reading and Language Arts sub-categories

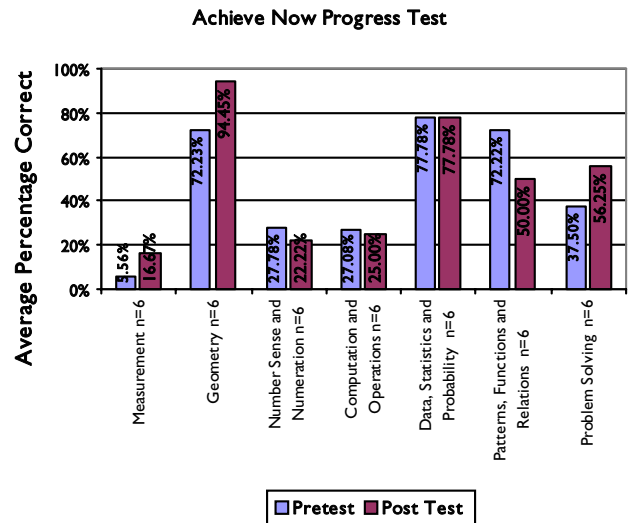
When pre- and post-test scores of the PLATO Achieve Now Reading and Language Arts Progress Test were compared, Bale Elementary third-grade students who had an attendance rate of 80% (25.6 hours) or better during the eight-week SES program and who were using PLATO Achieve Now saw a percentage point decline of 1.19 ( $p=.890$ ) in Phonics, Decoding and Word Analysis moving from an average score of 67.86% on the pretest to an average score of 66.67% at post test. These third graders made a percentage point gain of 23.81 ( $p=.047$ ) in Vocabulary Comprehension moving from an average score of 35.71% on the pretest to an average score of 59.52% at post test. These third- grade students made a percentage point gain of 14.28 ( $p=.078$ ) in Listening Comprehension moving from an average score of 76.19% on the pretest to an average score of 90.48% at post test. This group of third-grade students made a percentage point gain of 25.00 ( $p=.038$ ) in Literary Comprehension moving from an average score of 57.14% on the pretest to an average score of 82.14% at post test. These third graders did show a 10.00 ( $p=.412$ ) percentage point decline in Reading Comprehension dropping from an average score of 77.14% on the pretest to an average score of 67.14% at post test. These third graders also showed a percentage



point decline of 5.71 ( $p=.569$ ) in Grammar, Mechanics and Usage dropping from an average score of 57.14% on the pretest to an average score of 51.43% at post test. Results were statistically significant for Vocabulary and Literary Comprehension.

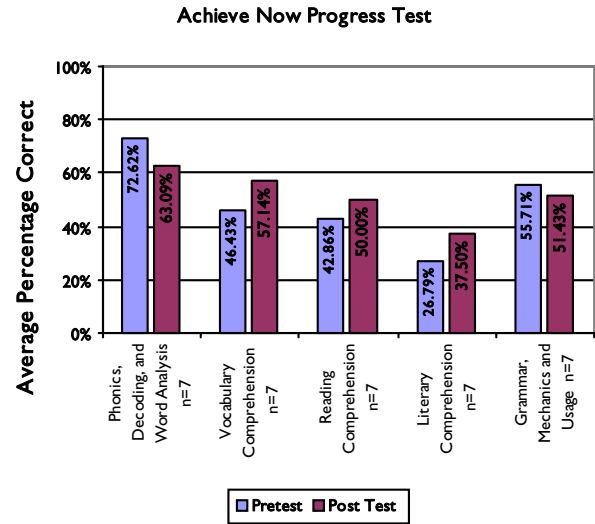
### Third-grade students with 80% attendance rate make gains in three Mathematics sub-categories

When pre- and post-test scores of the PLATO Achieve Now Mathematics Progress Test were compared, Bale Elementary third-grade students who had an attendance rate of 80% (25.6 hours) or better during the eight-week SES program using PLATO Achieve Now made a percentage point gain of 11.11 ( $p=.363$ ) in Measurement moving from an average score of 5.56% on the pretest to an average score of 16.67% at post test. These third graders made a percentage point gain of 22.22 ( $p=.102$ ) in Geometry moving from an average score of 72.23% on the pretest to an average score of 94.45% at post test. Third-grade students did show a percentage point decline of 5.56 ( $p=.611$ ) in Number Sense and Numeration dropping from an average score of 27.78% on the pretest to an average score of 22.22% at post test. Third-grade students made a percentage point decline of 2.08 ( $p=.611$ ) in Computations and Operation moving from an average score of 27.08% on the pretest to an average score of 25.00% at post test. Third graders also made no percentage point gain ( $p=1.00$ ) in Data, Statistics and Probability remaining at an average score of 77.78% on both pretest and post test. Third-grade students also made a percentage point gain of 18.75 ( $p=.017$ ) in Problem Solving moving from an average score of 37.50% on the pretest to an average score of 56.25% at post test. Third graders also showed a 22.22 ( $p=.235$ ) percentage point decline in Patterns, Functions and Relations dropping from an average score of 72.22% at pretest to an average score of 50.00% at post test. Results are statistically significant for Problem Solving.



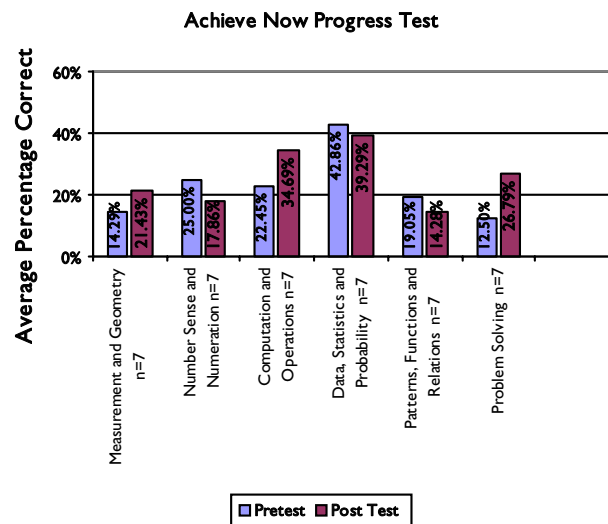
## Fourth-grade students make gains in three Reading and Language Arts sub-categories

When pre- and post-test scores of the PLATO Achieve Now Progress Test were compared, Bale Elementary fourth-grade students using PLATO Achieve Now made a percentage point decline of 9.53 ( $p=.413$ ) in Phonics, Decoding and Word Analysis dropping from an average score of 72.62% on the pretest to an average score of 63.09% at post test. Fourth graders made a percentage point gain of 10.71 ( $p=.341$ ) in Vocabulary Comprehension moving from an average score of 46.43% on the pretest to an average score of 57.14% at post test. Fourth-grade students did show a 7.14 ( $p=.143$ ) percentage point gain in Reading Comprehension moving from an average score of 42.86% on the pretest to an average score of 50.00% at post test. Fourth-grade students made a percentage point gain of 10.71 ( $p=.341$ ) in Literary Comprehension moving from an average score of 26.79% on the pretest to an average score of 37.50% at post test. Fourth graders also showed a percentage point decline of 4.29 ( $p=.629$ ) in Grammar, Mechanics and Usage dropping from an average score of 55.71% on the pretest to an average score of 51.43% at post test. Results were not statistically significant for any sub-category.



## Fourth-grade students make gains in three Mathematics sub-categories

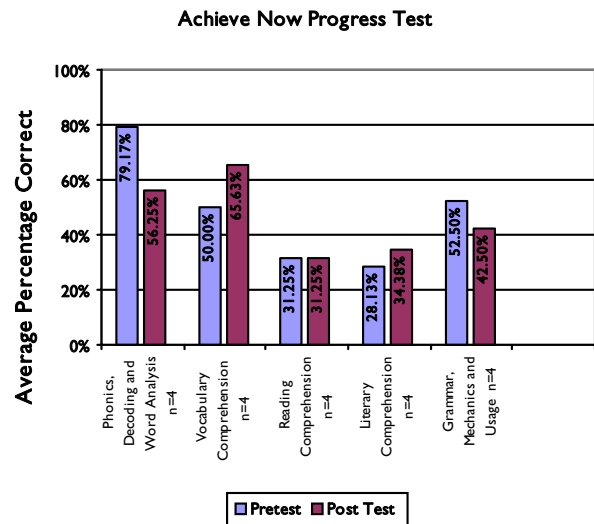
When pre- and post-test scores on the PLATO Achieve Now Mathematics Progress Test were compared, fourth-grade students made a percentage point gain of 7.14 ( $p=.457$ ) in Measurement and Geometry moving from an average score of 14.29% on the pretest to an average score of 21.43% at post test. Fourth-grade students did show a percentage point decline of 7.14 ( $p=.569$ ) in Number Sense and Numeration dropping from an average score of 25.00% on the pretest to an average score of 17.86% at post test. Fourth-grade students made a percentage point increase of 12.24 ( $p=.143$ ) in Computation and Operation moving from an average score of 22.45% on the pretest to an average score of 34.69% at post test. Fourth graders also made a percentage point decline of 3.57 ( $p=.736$ ) in Data, Statistics and Probability dropping from an average score of 42.86% on the pretest to an average score of 39.29% at post test. Fourth graders also showed a 4.76 ( $p=.689$ ) percentage point decline in Patterns, Functions and Relations dropping from an average score of 19.05% on the pretest to an average score of 14.29% at post test. Fourth graders also showed a 4.76 ( $p=.689$ ) percentage point decline in Problem Solving dropping from an average score of 26.79% on the pretest to an average score of 22.03% at post test.



19.05% at pretest to an average score of 14.28% at post test. Fourth-grade students made a percentage point gain of 14.29 (p=.066) in Problem Solving moving from an average score of 12.50% on the pretest to an average score of 26.79% at post test. Results are not statistically significant for any sub-category.

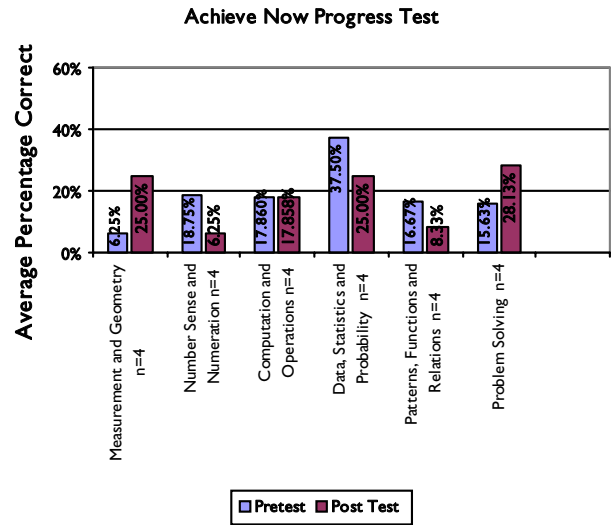
## Fourth-grade students with 80% attendance rate make gains in two Reading and Language Arts sub-categories

When pre- and post-test scores of the PLATO Achieve Now Reading and Language Arts Progress Test were compared, Bale Elementary fourth-grade students with an attendance rate of 80% (25.6 hours) or better during the eight-week SES program and who were using PLATO Achieve Now made a percentage point decline of 22.92 (p=.049) in Phonics, Decoding and Word Analysis dropping from an average score of 79.17% on the pretest to an average score of 56.25% at post test. Fourth graders made a percentage point gain of 15.63 (p=.239) in Vocabulary Comprehension moving from an average score of 50.00% on the pretest to an average score of 65.63% at post test. Fourth graders made no percentage point gain (p=1.0) in Reading Comprehension scoring an average score of 31.25% on both the pretest and the post test. Fourth-grade students made a percentage point gain of 6.25 (p=.604) in Literary Comprehension moving from an average score of 28.13% on the pretest to an average score of 34.38% at post test. Fourth graders also showed a percentage point decline of 10.00 (p=.514) in Grammar, Mechanics and Usage dropping from an average score of 52.50% on the pretest to an average score of 42.50% at post test. Results are statistically significant for Phonics, Decoding and Word Analysis only.



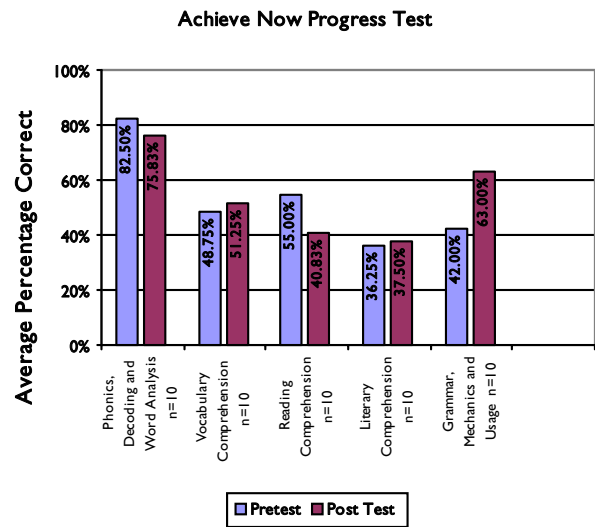
## Fourth-grade students with 80% attendance rate make gains in three Mathematics sub-categories

When pre- and post-test scores of the PLATO Achieve Now Mathematics Progress Test were compared, Bale Elementary fourth-grade students with an attendance rate of 80% (25.6 hours) or better during the eight-week SES program and who were using PLATO Achieve Now made a percentage point gain of 18.75 (p=.215) in Measurement and Geometry moving from an average score of 6.25% on the pretest to an average score of 25.00% at post test. Fourth-grade students did show a percentage point decline of 12.50 (p=.391) in Number Sense and Numeration dropping from an average score of 18.75% on the pretest to an average score of 6.25% at post test. Fourth-grade students made a percentage point decline of less than 0.003 (p=1.00) in Computation and Operation moving from an average score of 17.858% on the pretest to an average score of 17.860% at post test. Fourth graders also made a percentage point decline of 12.50 (p=.182) in Data, Statistics and Probability moving from an average score of 37.50% on the pretest to an average score of 25.00% at post test. Fourth graders also showed an 8.33 (p=.638) percentage point decline in Patterns, Functions and Relations dropping from an average score of 16.67% at pretest to an average score of 8.33% at post test. Fourth-grade students made a percentage point gain of 12.50 (p=.353) in Problem Solving moving from an average score of 15.63% on the pretest to an average score of 28.13% at post test. Results are not statistically significant for any sub-category.



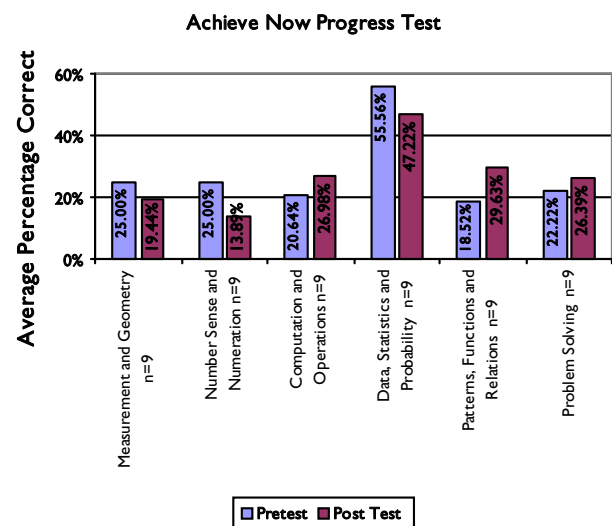
## Fifth-grade students make gains in three Reading and Language Arts sub-categories

When pre- and post-test scores of the PLATO Achieve Now Progress Test were compared, Bale Elementary fifth-grade students using PLATO Achieve Now made a percentage point decline of 6.67 (p=.137) in Phonics, Decoding and Word Analysis dropping from an average score of 82.50% on the pretest to an average score of 75.83% at post test. Fifth graders made a percentage point gain of 2.50 (p=.794) in Vocabulary Comprehension moving from an average score of 48.75% on the pretest to an average score of 51.25% at post test. Fifth graders did see a 14.17 (p=.094) percentage point decline in Reading Comprehension dropping from an average score of 55.00% on the pretest to an average score of 40.83% at post test. Fifth-grade students made a percentage point gain of 1.25 (p=.868) in Literary Comprehension moving from an average score of 36.25% on the pretest to an average score of 37.50% at post test. Fifth graders also showed a percentage point gain of 21.00 (p=.023) in Grammar, Mechanics and Usage moving from an average score of 42.00% on the pretest to an average score of 63.00% at post test. Results are statistically significant for Grammar, Mechanics and Usage.



## Fifth-grade students make gains in three Mathematics sub-categories

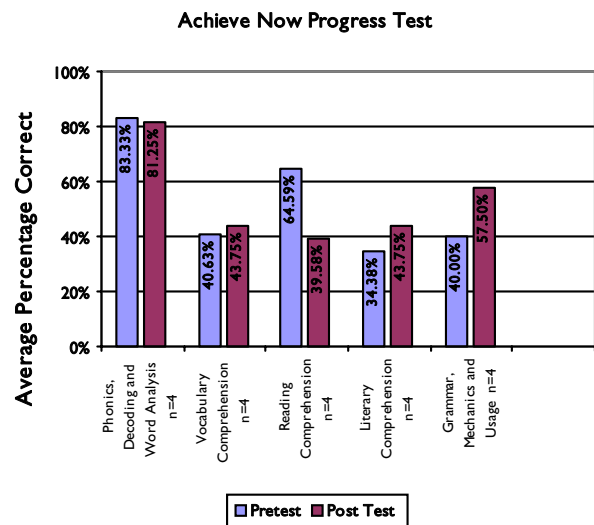
When pre- and post-test scores on the PLATO Achieve Now Mathematics Progress Test were compared, fifth-grade students made a percentage point decline of 5.56 (p=.447) in Measurement and Geometry dropping from an average score of 25.00% on the pretest to an average score of 19.44% at post test. Fifth-grade students did show a percentage point decline of 11.11 (p=.104) in Number Sense and Numeration dropping from an average score of 25.00% on the pretest to an average score of 13.89% at post test. Fifth-grade students made a percentage point increase of 6.35 (p=.569) in Computation and Operations moving from an average score of 20.64% on the pretest to an average score of 26.98% at post test. Fifth graders also saw a percentage point decline of 8.33 (p=.471) in Data, Statistics and Probability moving from an average score of 55.56% on the pretest to an average score of 47.22% at post test. Fifth graders also showed an 11.11 (p=.397) percentage point increase in Patterns, Functions and Relations moving from an average score of 18.52% at pretest to



an average score of 29.63% at post test. Fifth-grade students made a percentage point gain of 4.17 ( $p=.631$ ) in Problem Solving moving from an average score of 22.22% on the pretest to an average score of 26.39% at post test. Results are not statistically significant for any sub-category.

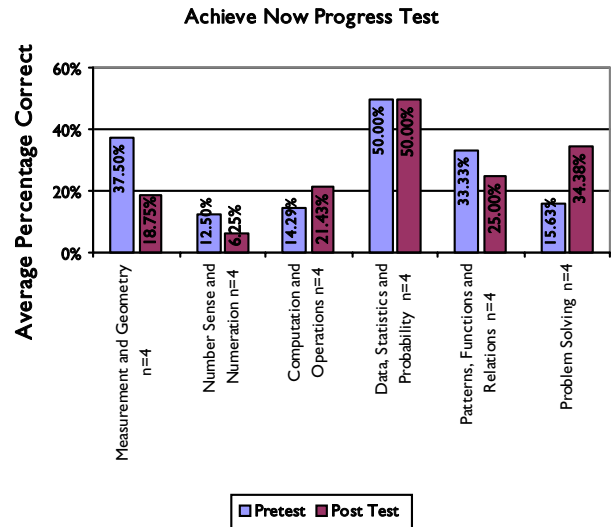
## Fifth-grade students with 80% attendance rate make gains in three Reading and Language Arts sub-categories

When pre- and post-test scores of the PLATO Achieve Now Progress Test were compared, Bale Elementary fifth-grade students using PLATO Achieve Now made a percentage point decline of 2.08 ( $p=.718$ ) in Phonics, Decoding and Word Analysis dropping from an average score of 83.33% on the pretest to an average score of 81.25% at post test. Fifth graders made a percentage point gain of 3.13 ( $p=.867$ ) in Vocabulary Comprehension moving from an average score of 40.63% on the pretest to an average score of 43.75% at post test. Fifth graders saw a 25.00 ( $p=.103$ ) percentage point decline in Reading Comprehension dropping from an average score of 64.59% on the pretest to an average score of 39.58% at post test. Fifth graders also showed a percentage point gain of 9.38 ( $p=.215$ ) in Literary Comprehension moving from an average score of 34.38% on the pretest to an average score of 43.75% at post test. Fifth graders also showed a percentage point gain of 17.50 ( $p=.293$ ) in Grammar, Mechanics and Usage moving from an average score of 40.00% on the pretest to an average score of 57.50% at post test. Results are not statistically significant for any sub-category.



## Fifth-grade students with 80% attendance rate make gains in two Mathematics sub-categories

When pre- and post-test scores of the PLATO Achieve Now Mathematics Progress Test were compared, Bale Elementary fifth-grade students with an attendance rate of 80% (25.6 hours) or better during the eight-week SES program and who were using PLATO Achieve Now made a percentage point decline of 18.75 (p=.058) in Measurement and Geometry moving from an average score of 37.50% on the pretest to an average score of 18.75% at post test. Fifth-grade students made a percentage point decline of 6.25 (p=.391) in Number Sense and Numeration dropping from an average score of 12.50% on the pretest to an average score of 6.25% at post test. Fifth-grade students made a percentage point gain of 7.14 (p=.604) in Computation and Operations moving from an average score of 14.29% on the pretest to an average score of 21.43% at post test. Fifth graders also made no percentage point gain (p=1.00) in Data, Statistics and Probability making an average score of 50.00% on both the pretest and the posttest. Fifth graders also showed an 8.33 (p=.638) percentage point decline in Patterns, Functions and Relations dropping from an average score of 33.33% at pretest to an average score of 25.00% at post test. Fifth-grade students made a percentage point gain of 18.75 (p=.103) in Problem Solving moving from an average score of 15.63% on the pretest to an average score of 34.38% at post test. Results are not statistically significant for any sub-category.



## Bale Elementary School Background

Identified as a school in need of improvement by the Arkansas State Department of Education, Bale Elementary was one of the schools in the Little Rock School District which offered parents and students the opportunity to participate in an SES after school program. Funded through Supplemental Educational Services, Bale chose to offer PLATO Achieve Now as their instructional program designed to improve student performance in Reading, Language Arts and Mathematics.

Students were selected to participate based on individual teacher recommendation and parent choice. The program served approximately 40 students in grades three through five. Students were administered the PLATO Achieve Now Pretest in December to determine specific areas of need. Each student had a Student Tutorial Plan with an individual learning path created which specified areas of need with the correlating CDs and assessments. A portfolio was created for each student which included the learning plan. Parents were given opportunities to review the Student Tutorial Plan at an initial parent meeting in December.

The school employed tutors who were not employees of the school system to work with the students using PLATO Achieve Now two afternoons each week for eight weeks, for a total of 32 hours of instruction. The tutors participated in professional development sessions learning how to effectively use the curriculum and how to assist students in both individual and group instruction.

Program progression was monitored using PLATO Achieve Now Progress Checks. Parents were updated on student work biweekly. Program success was measured by an evaluation of PLATO Achieve Now Post Test in February. Attendance records were kept and correlated with progress test results. Parent involvement was monitored through surveys, conferences and by sign-in sheets. Each individual student's results were reported to each parent at the End of Program Meeting.



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