

# Cyril B. Busbee, Greendale, and North Aiken Elementary Schools

AIKEN COUNTY PUBLIC SCHOOL DISTRICT  
AIKEN COUNTY, SOUTH CAROLINA.

<b>SCHOOL PROFILE</b>
<p><b>24,801 STUDENTS, GRADES PRE-K-12 ON 39 CAMPUSES</b> 53.14% Free/Reduced Lunch 59.6% White 34.7% African-American 3.6% Hispanic 2.1% Asian/American Indian/Other .02% LEP</p> <p>Cyril B. Busbee Elementary <b>588 STUDENTS, GRADES 5K-5</b> 74% Free/Reduced Lunch 51% African-American 2% American Indian 1% Asian 2% Hispanic 44% White</p> <p>Greendale Elementary <b>414 STUDENTS, GRADES 5K-5</b> 77% Free/Reduced Lunch 48% African-American 2% Asian 10% Hispanic 40% White</p> <p>North Aiken Elementary <b>566 STUDENTS, GRADES 5K-5</b> 88% Free/Reduced Lunch 83% African-American 2% American Indian 2% Hispanic 13% White</p>
<b>PLATO ACHIEVE NOW™ IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>▪ After-School Model</li> <li>▪ Grades K-5, Began February 2005</li> <li>▪ Reading/Mathematics Focus</li> <li>▪ Supplemental Educational Services</li> </ul>
<b>RESEARCH INSTRUMENTS</b>
<p>Early Reading Program (ERP) Assessments Achieve Now Progress Test</p>
<b>RESEARCH TIME FRAME</b>
2004-05 School Year

## STUDENTS IN GRADES K THROUGH 5 DEMONSTRATE GAINS IN READING AND MATHEMATICS

STUDENTS IN GRADES K THROUGH 3 PARTICIPATING IN THE SUPPLEMENTAL EDUCATIONAL SERVICES (SES) PROGRAM AT BUSBEE, GREENDALE, AND NORTH AIKEN ELEMENTARY SCHOOLS DEMONSTRATED GAINS IN READING AS MEASURED BY THE EARLY READING PROGRAM (ERP) ASSESSMENTS. THE STUDENTS IN GRADES K THROUGH 3 DEMONSTRATED AVERAGE GAINS OF 17 (p=.031) PERCENTAGE POINTS IN PHONEMIC AWARENESS, 1 (p=.812) PERCENTAGE POINT IN PHONICS, 7 (p=.043) PERCENTAGE POINTS IN VOCABULARY, AND 20 (p<.001) PERCENTAGE POINTS IN COMPREHENSION ON THE EARLY READING PROGRAM TEST.

IN TERMS OF AVERAGE PERCENTAGE CHANGE, THE STUDENTS IN GRADES K-3 MADE INCREASES OF 36% IN PHONEMIC AWARENESS, 4% IN PHONICS, 17% IN VOCABULARY, AND 41% IN COMPREHENSION ON THE EARLY READING PROGRAM TEST.

STUDENTS IN GRADES 4 AND 5 PARTICIPATING IN THE SUPPLEMENTAL EDUCATIONAL SERVICES (SES) PROGRAM AT BUSBEE, GREENDALE, AND NORTH AIKEN ELEMENTARY SCHOOLS DEMONSTRATED GAINS IN MATHEMATICS AS MEASURED BY THE PLATO ACHIEVE NOW PROGRESS TEST. THE STUDENTS IN GRADES 4 AND 5 DEMONSTRATED AVERAGE GAINS OF 15 (p=.257) PERCENTAGE POINTS IN NUMBER SENSE AND NUMERATION AND 15 (p=.032) PERCENTAGE POINTS IN COMPUTATION AND OPERATIONS ON THE PLATO ACHIEVE NOW™ PROGRESS TEST IN MATHEMATICS.

IN TERMS OF AVERAGE PERCENTAGE CHANGE, THE STUDENTS IN GRADES 4 AND 5 MADE INCREASES OF 56% IN NUMBER SENSE AND NUMERATION AND 36% IN COMPUTATION AND OPERATIONS ON THE PLATO ACHIEVE NOW PROGRESS TEST IN 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 READING/LANGUAGE ARTS AND MATHEMATICS.

STUDENTS IN GRADES K-3 WERE ASSESSED USING THE EARLY READING PROGRAM ASSESSMENTS AND STUDENTS IN GRADES 4 AND 5 WERE ASSESSED USING THE PLATO ACHIEVE NOW PROGRESS TESTS IN MATHEMATICS AT THE BEGINNING AND END OF THE SES PROGRAM. TEST RESULTS ARE REPORTED BY GRADE LEVEL.

## SCHOOL IMPLEMENTATION PROGRESS

**Standards:** Cyril B. Busbee, Greendale, and North Aiken Elementary Schools in Aiken County offered Supplemental Educational Services after being identified as Schools In Need of Improvement by the South Carolina Department of Education. These three schools offered parents and students the choice of participating in an after-school program provided by a vendor outside of the school system. These parents were offered choices of service providers and chose The PLATO Achieve Now skill-and-content model to increase student achievement.

**Curriculum and Instruction:** The PLATO Achieve Now interactive curriculum was integrated into the instruction for students in grades K through 5 during the 10-week after-school program. The model included PLATO consultant staff working with tutoring program staff to identify individual learning needs and develop a Student Tutorial Plan that addressed the achievement needs of each student. The Student Tutorial Plan, designed to

address skill gaps and learning needs included: assessments to monitor progress, learning activities that were engaging and supported student progress over time, and individual and small group instruction. Students attended 2 days a week for 1.5 hours each day during the 10-week program. Individual student progress was continually assessed in order for tutors to tailor both the instructional strategies and curriculum to meet the needs of each student.

**Assessment/Evaluation:** Various assessments were used to monitor student progress throughout the ten-week period. These included the Achieve Now Progress Tests, Achieve Now Progress Checks, classroom checklists, and observations. A comparison of the individual students' Early Reading Program Assessments and Achieve Now pretest and post test scores are included in this evaluation report.

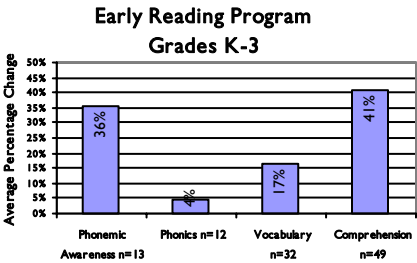
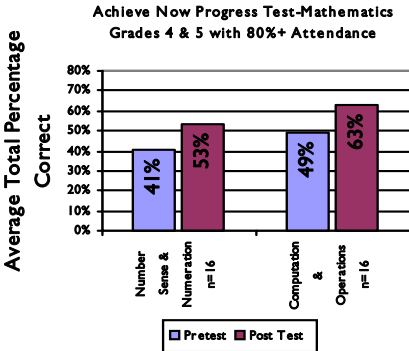
**Professional Development:** A PLATO SES Consultant and Lead Tutor were assigned to this program to monitor progress of students and assist tutors as needed. Professional development sessions were customized to meet the needs of both tutors and students. These sessions included training in how to integrate PLATO Achieve Now into the after-school program, curriculum alignment, modeling, and other best practices. Consultants also assisted with creating individualized Student Tutorial Plans, tutoring, lesson planning, and family communication.

**Parental Involvement:** Parents were invited to attend a family workshop at the beginning and end of the program. Parent Reports, which included student progress information, were sent home on a weekly basis.

## Students in grades K-3 realized gains in Reading

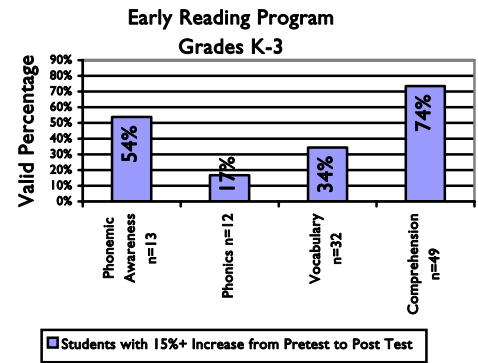
Students in grades K through 3 in the SES program at Greendale, Busbee, and North Aiken Elementary Schools using PLATO Achieve Now realized average gains of 17 (p=.031) percentage points in Phonemic Awareness, 1 (p=.812) percentage point in Phonics, 7 (p=.043) percentage points in Vocabulary, and 20 (p<.001) percentage points in Comprehension on the Early Reading Program (ERP) Assessments. The gains in Phonemic Awareness, Vocabulary, and Comprehension are statistically significant.

In terms of percentage change, students in grades K-3 made average increases of 36% in Phonemic Awareness, 4% in Phonics, 17% in Vocabulary, and 41% in Comprehension on the ERP Assessments. Students who took Phonemic Awareness, Phonics, Vocabulary, and Comprehension tests had average attendances of 26.8, 26.2, 27.5, and 27.0 hours, respectively.



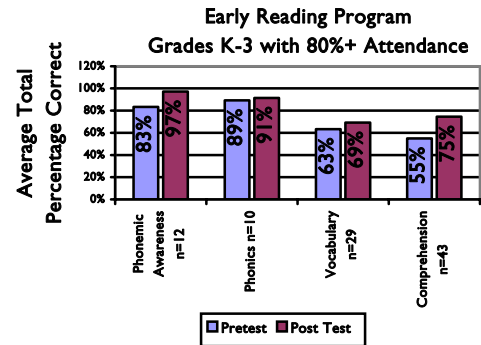
## Some students in grades K-3 posted gains of 15% or more in Reading

On the ERP Assessments, 54% of students in grades K-3 posted an increase of 15% or more in Phonemic Awareness. In Phonics, 17% of students posted a gain of 15% or more. 34% of students posted an increase of 15% or more in Vocabulary. In Comprehension, 74% of students posted a gain of 15% or more.

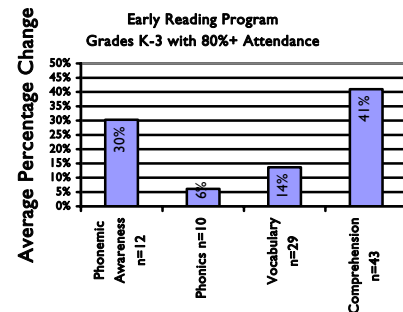


## Students with high attendance demonstrated gains in Reading

Students in grades K through 3 in the SES program, who attended 80% or more of the sessions, demonstrated average gains of 14 (p=.064) percentage points in Phonemic Awareness, 2 (p=.722) percentage points in Phonics, 6 (p=.108) percentage points in Vocabulary, and 20 (p<.001) percentage points in Comprehension on the ERP Assessments. The gain in Comprehension is statistically significant.

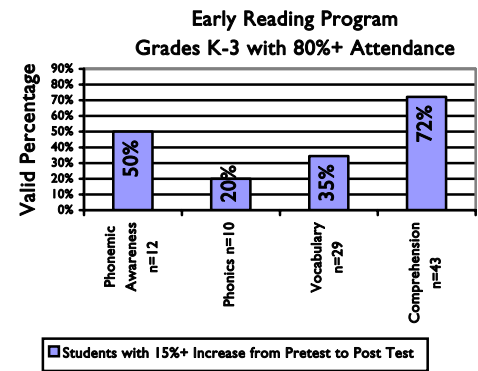


In terms of percentage change, students in grades K-3, who attended 80% or more of the sessions, made average gains of 30% in Phonemic Awareness, 6% in Phonics, 14% in Vocabulary, and 41% in Comprehension. Students who took Phonemic Awareness, Phonics, Vocabulary, and Comprehension had average attendances of 27.1, 28.8, 28.2, and 28.2 hours, respectively.



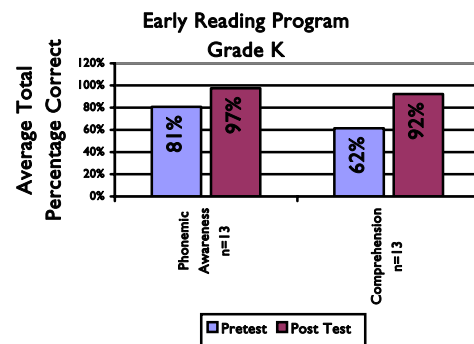
## Some students with high attendance reached gains of 15% or more in Reading

On the ERP Assessments, 50% of students in grades K-3, who attended 80% or more of the tutoring sessions attained a gain of 15% or more in Phonemic Awareness. In Phonics, 20% of students reached an increase of 15% or more. 35% of students reached a gain of 15% or more in Vocabulary. In Comprehension, 72% of students reached an increase of 15% or more.

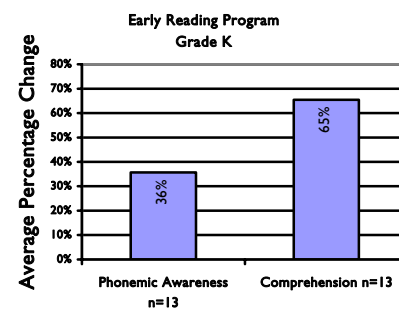


## Kindergarten students achieved gains in Reading

Students in kindergarten who attended the Aiken County SES program achieved average gains of 17 (p=.031) percentage points in Phonemic Awareness and 31 (p<.001) percentage points in Comprehension on the ERP Assessments. Both of the gains are statistically significant.



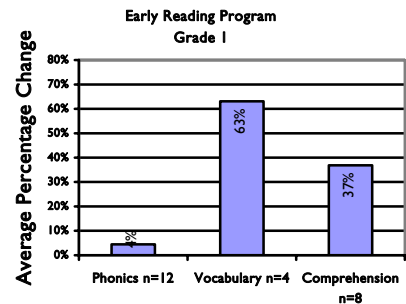
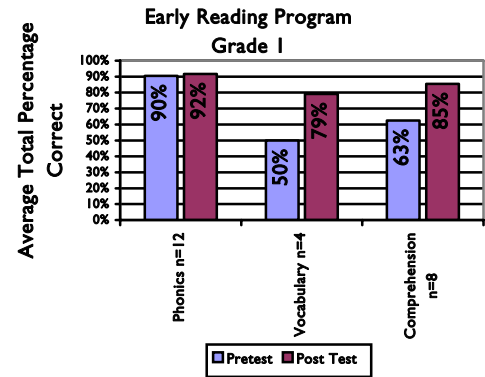
In terms of percentage change, Kindergarten students made increases of 36% in Phonemic Awareness and 65% in Comprehension. The average attendance for students with both pre- and post-test scores was 26.8 hours.



## First-grade students displayed gains in Reading

Students in first grade who attended the Aiken County SES program displayed average gains of 1 (p=.812) percentage point in Phonics, 29 (p=.035) percentage points in Vocabulary, and 23 (p=.005) percentage points in Comprehension on the ERP Assessments. The gains in Vocabulary and Comprehension are statistically significant.

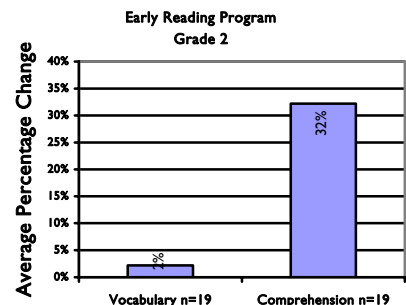
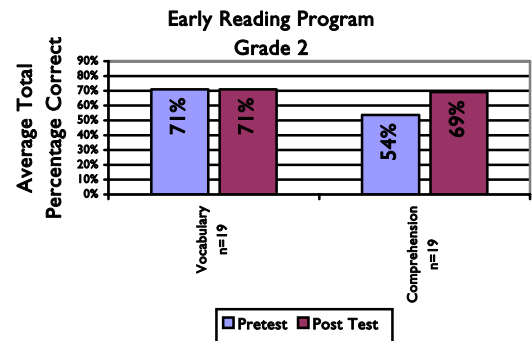
In terms of percentage change, first-grade students posted gains of 4% in Phonics, 63% in Vocabulary, and 37% in Comprehension. Students who took Phonics, Vocabulary, and Comprehension had average attendances of 26.2, 27.3, and 25.7 hours, respectively.



## Second-grade students showed gains in Reading

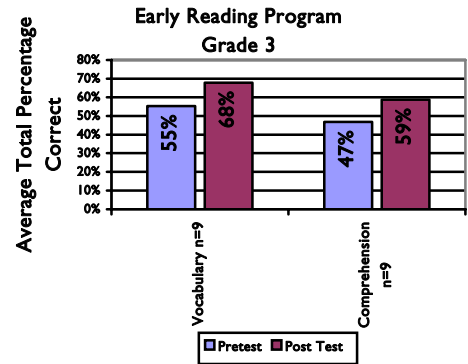
Students in second grade who attended the Aiken County SES program showed average gains of less than 1 (p=1.000) percentage point in Vocabulary and 15 (p=.002) percentage points in Comprehension on the ERP test. The gain in Comprehension is statistically significant.

In terms of percentage change, second-grade students made gains of 2% in Vocabulary and 32% in Comprehension. The average attendance for students with both pre- and post-test scores was 27.9 hours.

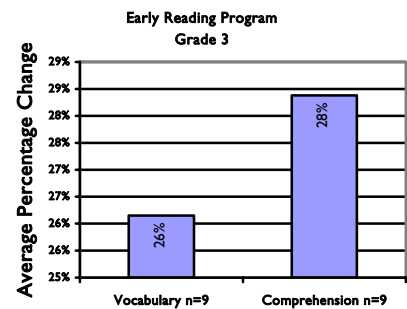


## Third-grade students exhibited gains in Reading

Students in third grade who attended the Aiken County SES program exhibited average gains of 13 (p=.038) percentage points in Vocabulary and 12 (p=.056) percentage points in Comprehension on the ERP Assessments. The gain in Vocabulary is statistically significant.

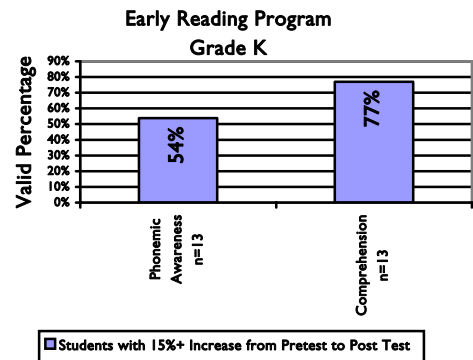


In terms of percentage change, third-grade students showed gains of 26% in Vocabulary and 28% in Comprehension. The average attendance for students with both pre- and post-test scores was 26.5 hours.



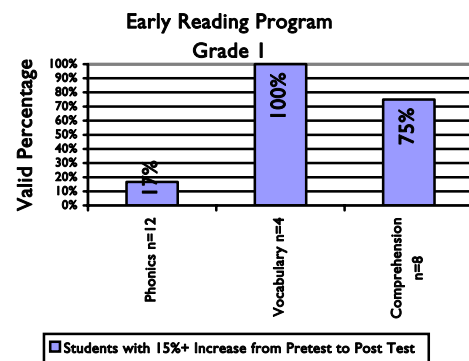
## Kindergarten students earned increases in Reading

On the ERP Assessments, 54% of students in Kindergarten earned an increase of 15% or more in Phonemic Awareness. In Comprehension, 77% of students in Kindergarten earned an increase of 15% or more.



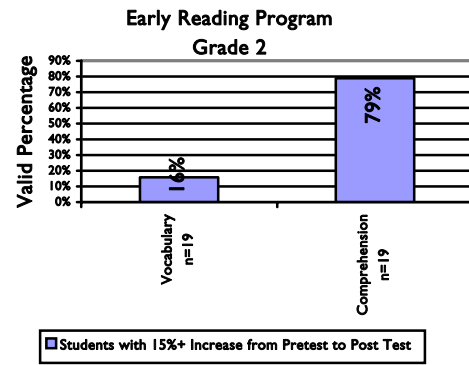
## First graders attained increases in Reading

On the ERP Assessments, 17% of students in first grade attained an increase of 15% or more in Phonics. 100% of students in grade I attained an increase of 15% or more in Vocabulary. In Comprehension, 75% of first graders attained a gain of 15% or more.



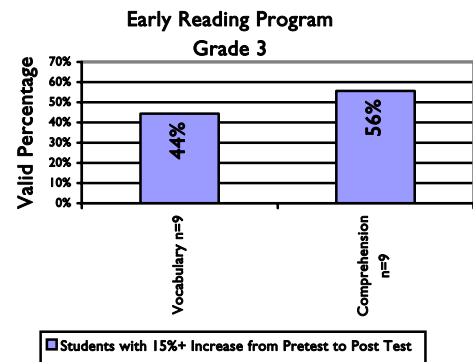
## Second graders experienced gains in Reading

On the ERP Assessments, 16% of students in second grade experienced an increase of 15% or more in Vocabulary. In Comprehension, 79% of second graders experienced a gain of 15% or more.



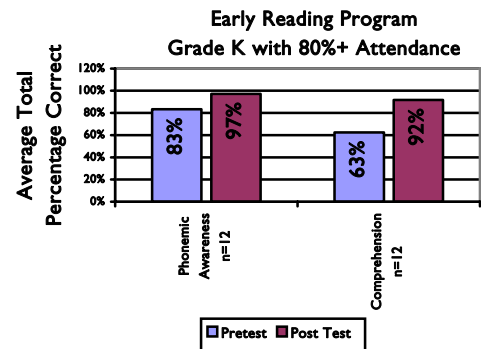
## Third graders obtained gains in Reading

On the ERP Assessments, 44% of students in third grade obtained an increase of 15% or more in Vocabulary. In Comprehension, 56% of third graders obtained a gain of 15% or more.

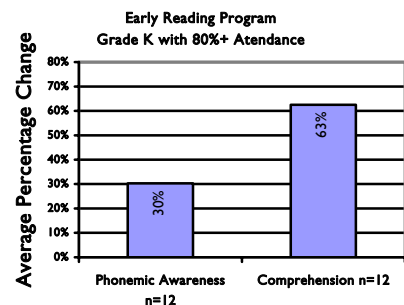


## Students in Kindergarten with high attendance revealed gains in Reading

Students in Kindergarten, who attended 80% or more of the sessions in the SES program achieved average gains of 14 (p=.064) percentage points in Phonemic Awareness and 29 (p=.001) percentage points in Comprehension on the ERP Assessments. The gain in Comprehension is statistically significant.



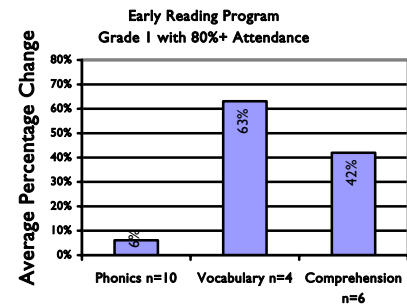
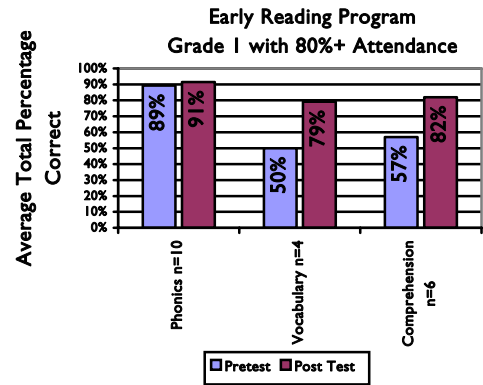
In terms of percentage change, Kindergarten students with high attendance made increases of 30% in Phonemic Awareness and 63% in Comprehension. The average attendance for students with both pre- and post-test scores was 27.1 hours.



## Students in Grade 1 with high attendance acquired gains in Reading

Students in Grade 1, who attended 80% or more of the sessions in the SES program, acquired average gains of 2 (p=.722) percentage points in Phonics, 29 (p=.035) percentage points in Vocabulary, and 25 (p=.017) percentage points in Comprehension on the ERP Assessments. The gains in Vocabulary and Comprehension are statistically significant.

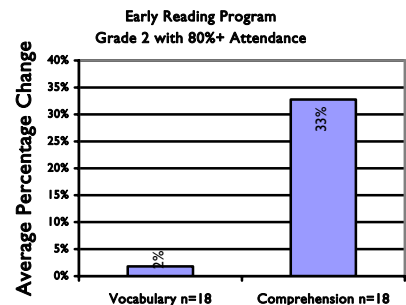
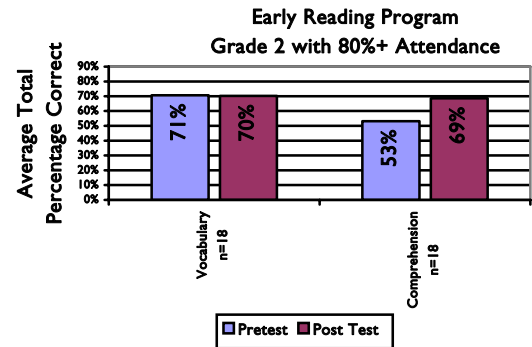
In terms of percentage change, first-grade students with high attendance posted gains of 6% in Phonics, 63% in Vocabulary, and 42% in Comprehension. Students who took Phonics, Vocabulary, and Comprehension had average attendances of 28.8, 27.3, and 29.8 hours, respectively.



## Students in Grade 2 with high attendance made gain in Reading

Students in Grade 2, who attended 80% or more of the sessions in the SES program made an average gain of 15 (p=.003) percentage points in Comprehension on the ERP Assessments. The students made a decline of less than 1 (p=.928) percentage point in Vocabulary. The gain in Comprehension is statistically significant.

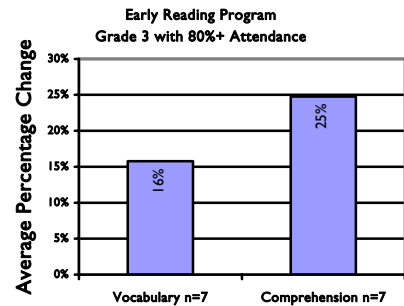
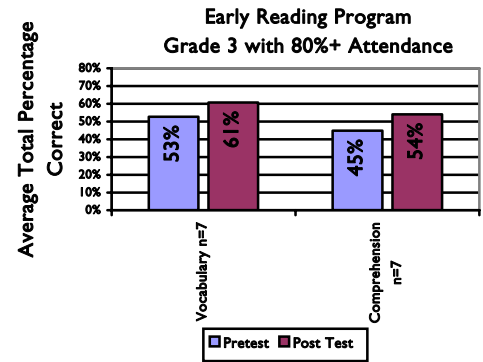
In terms of percentage change, second-grade students with high attendance made gains of 2% in Vocabulary and 33% in Comprehension. The average attendance for students with both pre- and post-test scores was 28.5 hours.



## Students in Grade 3 with high attendance demonstrated increases in Reading

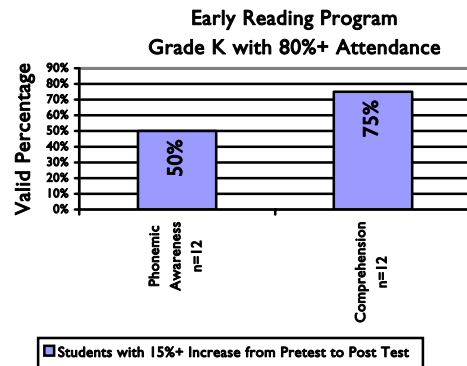
Students in Grade 3, who attended 80% or more of the sessions in the SES program, demonstrated average increases of 8 (p=.022) percentage points in Vocabulary and 9 (p=.200) percentage points in Comprehension on the ERP Assessments. The gain in Vocabulary is statistically significant.

In terms of percentage change, third-grade students with high attendance showed gains of 16% in Vocabulary and 25% in Comprehension. The average attendance for students with both pre- and post-test scores was 27.9 hours.



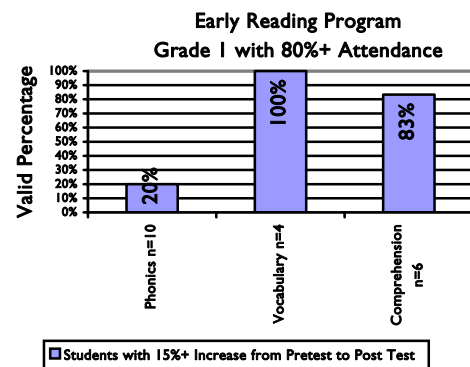
## Some Kindergarten students with high attendance obtained gains of 15% or more in Reading

On the ERP Assessments, 50% of students in Kindergarten with high attendance obtained an increase of 15% or more in Phonemic Awareness. In Comprehension, 75% of students in Kindergarten obtained an increase of 15% or more.



## Some first-grade students with high attendance experienced gains of 15% or more in Reading

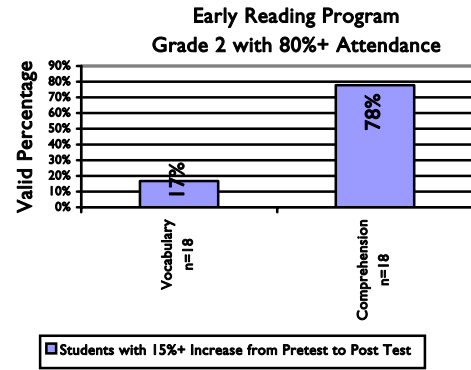
On the ERP Assessments, 20% of students in first grade with high attendance experienced an increase of 15% or more in Phonics. 100% of students in grade 1 experienced an increase of 15% or more in Vocabulary. In Comprehension, 83% of first graders experienced a



gain of 15% or more.

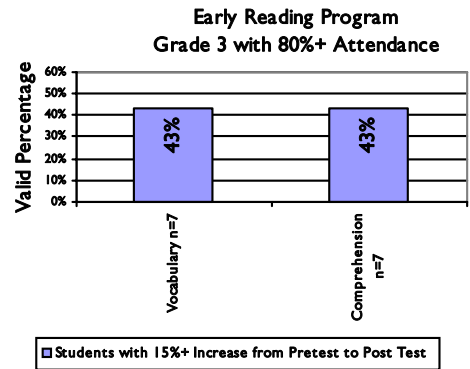
## Some second-grade students with high attendance earned gains of 15% or more in Reading

On the ERP Assessments, 17% of students in second grade with high attendance earned an increase of 15% or more in Vocabulary. In Comprehension, 78% of second graders earned a gain of 15% or more.



## Some third-grade students with high attendance attained gains of 15% or more in Reading

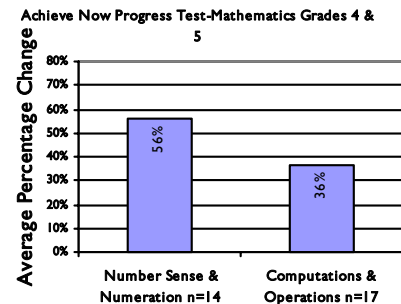
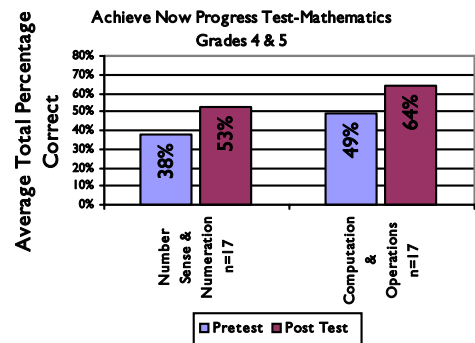
On the ERP Assessments, 43% of students in third grade with high attendance attained an increase of 15% or more in Vocabulary. In Comprehension, 43% of third graders attained a gain of 15% or more.



## Students in grades 4 and 5 realized gains in Mathematics

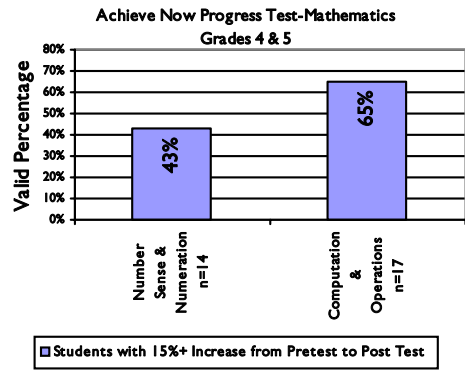
Students in grades 4 and 5 in the SES program at Greendale, Busbee, and North Aiken Elementary Schools using PLATO Achieve Now realized average gains of 15 (p=.257) percentage points in Number Sense and Numeration and 15 (p=.032) percentage points in Computation and Operations. The gain in Computation and Operations is statistically significant.

In terms of percentage change, students in grades 4 and 5 made average increases of 56% in Number Sense and Numeration and 36% in Computation and Operations. The average attendance for students with both pre- and post-test scores was 28.0 hours.



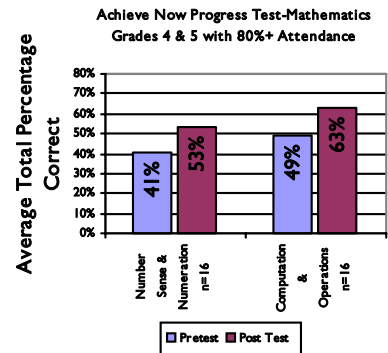
## Some students in grades 4 and 5 posted gains of 15% or more in Mathematics

On the PLATO Achieve Now Progress Test in Mathematics, 43% of students in grades 4 and 5 posted an increase of 15% or more in Number Sense and Numeration. In Computation and Operations, 65% of students posted a gain of 15% or more.

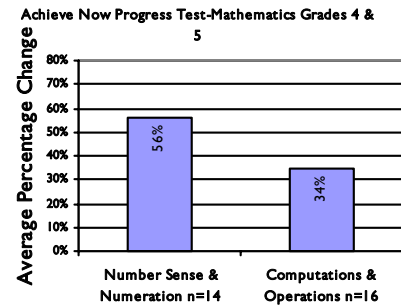


## Students with high attendance demonstrated gains in Mathematics

Students in grades 4 and 5 in the SES program, who attended 80% or more of the sessions, demonstrated average gains of 13 (p=.355) percentage points in Number Sense and Numeration and 14 (p=.052) percentage points in Computation and Operations on the PLATO Achieve Now Progress Test in Mathematics. Neither of the gains is statistically significant.

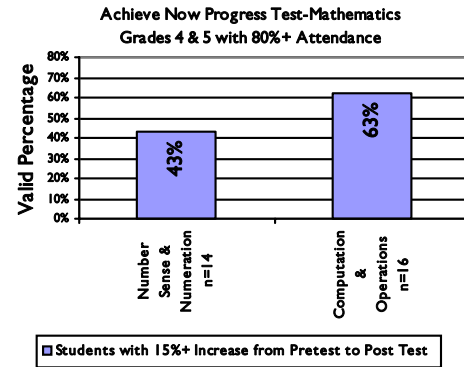


In terms of percentage change, students in grades 4 and 5, who attended 80% or more of the sessions, made average gains of 56% in Number Sense and Numeration and 34% in Computation and Operations. The average attendance for students with both pre- and post-test scores was 28.5 hours.



## Some students with high attendance reached gains of 15% or more in Mathematics

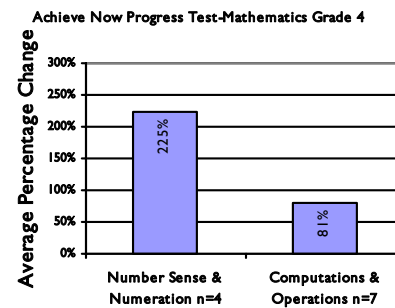
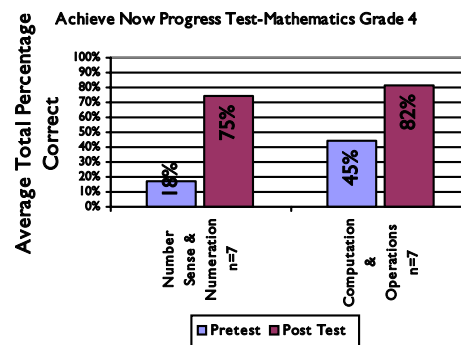
On the PLATO Achieve Now Progress Test in Mathematics, 43% of students in grades 4 and 5, who attended 80% or more of the tutoring sessions, reached a gain of 15% or more in Number Sense and Numeration. In Computation and Operations, 63% of students reached an increase of 15% or more.



## Fourth-grade students achieved gains in Mathematics

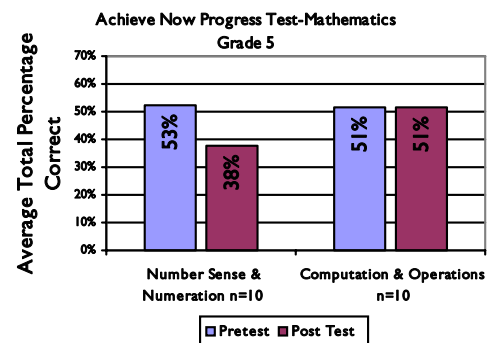
Students in fourth grade who attended the Aiken County SES program achieved average gains of 57 (p=.002) percentage points in Number Sense and Numeration and 37 (p<.001) percentage points in Computation and Operations on the PLATO Achieve Now Progress Test in Mathematics. Both of the gains are statistically significant.

In terms of percentage change, fourth-grade students made increases of 225% in Number Sense and Numeration and 81% in Computation and Operations. The average attendance for students with both pre- and post-test scores was 27.6 hours.

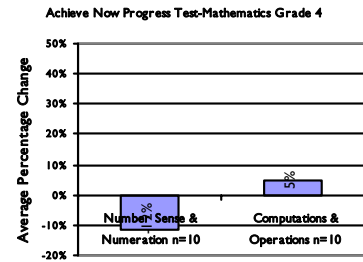


## Fifth-grade students struggle in Mathematics

Students in fifth grade who attended the Aiken County SES program showed an average decline of 15 (p=.297) percentage points in Number Sense and Numeration on the PLATO Achieve Now Progress Tests in Mathematics. The average score in Computation and Operations remained the same. Neither result is statistically significant.

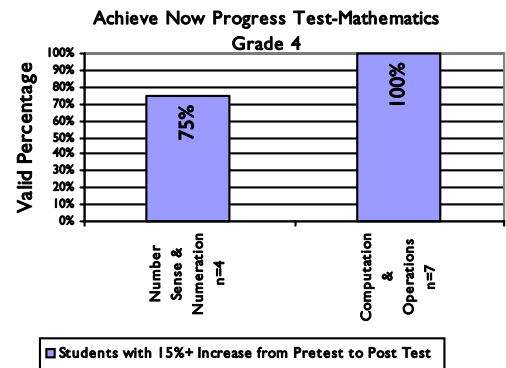


In terms of percentage change, fifth-grade students made a gain of 5% in Computation and Operations. Students made a decline of 12% in Number Sense and Numeration. The average attendance for students with both pre- and post-test scores was 28.3 hours.



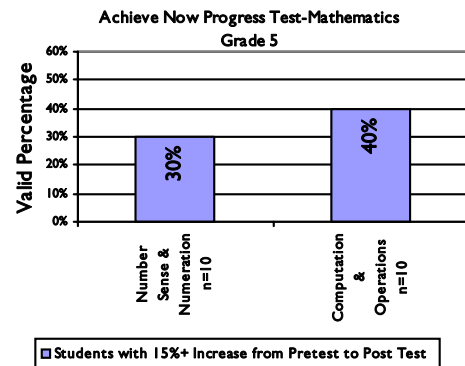
## Most students in Grade 4 earned increases of 15% or more in Mathematics

On the PLATO Achieve Now Progress Test in Mathematics, 75% of students in grade 4 earned an increase of 15% or more in Number Sense and Numeration. In Computation and Operations, 100% of students in grade 4 earned an increase of 15% or more.



## Some students in grade 5 attained increases of 15% or more in Mathematics

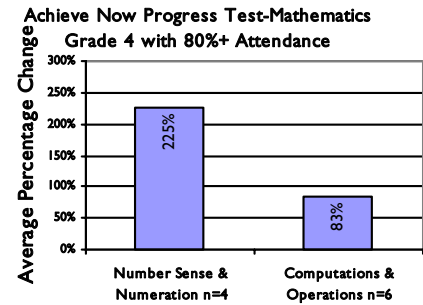
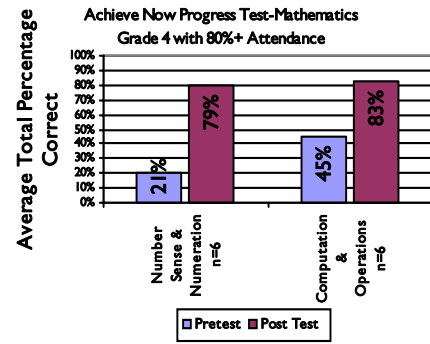
On the PLATO Achieve Now Progress Test in Mathematics, 30% of students in fifth grade attained an increase of 15% or more in Number Sense and Numeration. 40% of students in grade 5 attained an increase of 15% or more in Computation and Operations.



## Fourth graders with high attendance achieved gains in Mathematics

Students in Grade 4, who attended 80% or more of the sessions in the SES program, achieved average gains of 58 (p=.005) percentage points in Number Sense and Numeration and 38 (p=.001) percentage points in Computation and Operations on the PLATO Achieve Now Progress Test in Mathematics. Both of the gains are statistically significant.

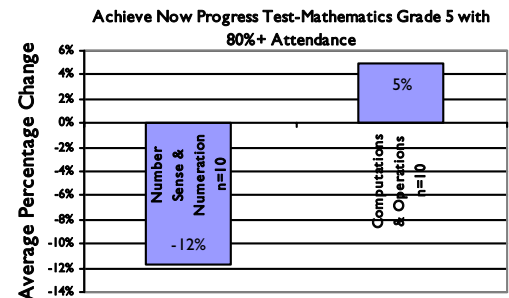
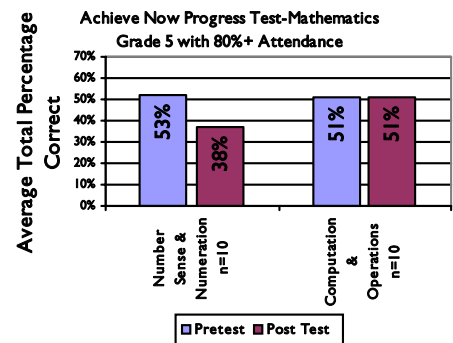
In terms of percentage change, fourth graders with high attendance made increases of 225% in Number Sense and Numeration and 83% in Computation and Operations. The average attendance for students with both pre- and post-test scores was 28.8 hours.



## Fifth graders with high attendance struggle in Mathematics

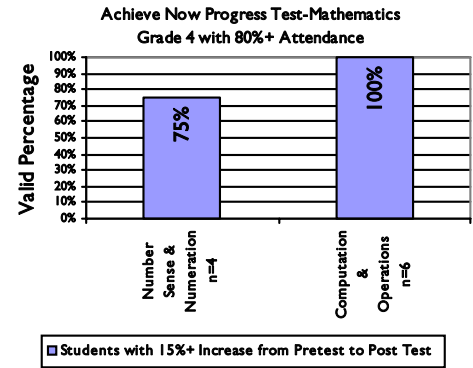
Students in grade 5, who attended 80% or more of the sessions in the SES program, saw an average decline of 15 (p=.297) percentage points in Number Sense and Numeration. The average score in Computation and Operations remained the same. Neither result is statistically significant.

In terms of percentage change, fifth graders with high attendance posted a gain of 5% in Computation and Operations and posted a decline of 12% in Number Sense and Numeration. The average attendance for students with both pre- and post-test scores was 28.3 hours.



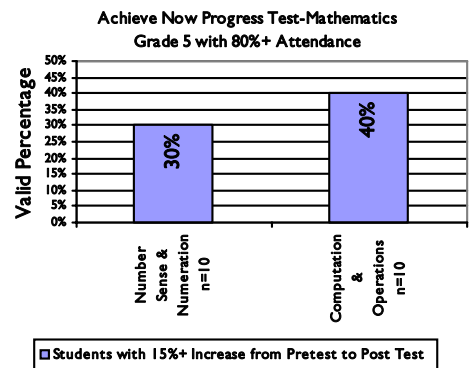
## Most fourth-grade students with high attendance obtained increases of 15% or more in Mathematics

On the PLATO Achieve Now Progress Test, 75% of fourth-grade students with high attendance obtained an increase of 15% or more in Number Sense and Numeration. In Computation and Operations, 100% of students in fourth grade obtained an increase of 15% or more.



## Some fifth-grade students with high attendance obtained increases of 15% or more in Mathematics

On the PLATO Achieve Now Progress Test, 30% of fifth-grade with high attendance experienced an increase of 15% or more in Number Sense and Numeration. 40% of students in grade 5 experienced an increase of 15% or more in Computation and Operations.



## Cyril B. Busbee Elementary School, Greendale Elementary School, and North Aiken Elementary School Program Background

In February 2005, the Aiken County School District offered parents and students the opportunity to participate in the Supplemental Educational Services (SES) after-school program at Cyril B. Busbee, Greendale, and North Aiken Elementary Schools. Cyril B. Busbee, Greendale, and North Aiken Elementary Schools are three of approximately 20 elementary schools in Aiken County.

Students were selected to participate based on parent choice. The SES after-school program served approximately 71 students grades K-5. Students were administered the appropriate PLATO Achieve Now pretest based on the Palmetto Achievement Challenge Test (PACT) scores. The pretest results in conjunction with administrator and teacher recommendations and PACT scores were used to determine specific areas of need. A Student Tutorial Plan was developed for each student that specified areas of need with the correlating CD, curriculum, and assessments identified. Parents were given the opportunity to review this Student Tutorial Plan at the initial parent meeting held in February.

Tutors were hired to work with students two afternoons each week for ten weeks. These tutors participated in professional development; learning how to use the curriculum to assist students individually as well as in small groups. Participating students worked in the areas of reading and mathematics.

Students were assessed throughout the course of the program by tutor observations and PLATO Achieve Now Progress Checks. Parents were apprised of the students' work on a weekly basis. At the end of the ten weeks, students were given the PLATO Achieve Now post test. The individual results were given to each

parent at the End-of-Program Celebration.



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