

Benchmark Literacy

Scientifically Based Research Study

Fairfax County (VA) Public Schools

2013

The U.S. Department of Education on Scientifically Based Research

The U.S. Department of Education has stated that all schools should use instructional programs that have been proven effective in the classroom by scientific research. To that end, Benchmark Education Company took part in a scientifically-based research study during the 2011–12 and 2012–13 school years.

The Benchmark Education Scientifically Based Research Study

From September 2011 through May 2012, Benchmark Education Company participated in a scientific research study designed to determine the effects of introducing its **Benchmark Literacy** comprehensive literacy program **with on-site Professional Development** in grades K–6 classrooms.

The study was conducted in the Fairfax County (VA) Public Schools by Main Street Academix, an independent, university-based research company. Main Street Academix designed the study, helped match the experimental and control schools, oversaw administration of pretests and posttests, made Fidelity of Implementation visits/interviews, and compiled the results.

Of the 139 elementary schools in the district, two large K–6 schools were chosen to be included in the study. These schools were matched by demographic and socioeconomic variables, one serving as the experimental school and one as the control school. The experimental school introduced **Benchmark Literacy** with On-Site Training into its K–6 literacy classrooms. The control school used literacy programs from other publishers. The results of this study, published in 2012, showed impressive statistically significant reading growth by students in the **Benchmark Literacy** school vs. the control school.

The control school's administrators then expressed interest in implementing the **Benchmark Literacy** Program during the 2012–13 school year. Benchmark Education's prior knowledge of this school and the willingness of the administration and teachers to take part in a study made the school a good candidate for this research whose results are reported below.

Benchmark Literacy Resources Used in the Study with long-term, on-site training

- **Anchor Comprehension Workshop** posters
- **Content Connections** and **Shared Reading Classics** Big Books
- **My First Reader's Theater** and **Nursery Rhymes & Songs** Lap Books and Big Books
- **Reader's Theater** nonfiction and fiction multi-leveled scripts
- **Genre and Fluency** posters
- **Benchmark Literacy precisely leveled books** (with Text-Dependent Comprehension Question Cards for each title) including:
 - **Early Explorers** leveled books
 - **Early Connections** leveled books
 - **Readers' and Writers' Genre Workshop** leveled books
 - **Navigators** leveled books
 - **Bridges** leveled books
 - **PRIME Science** and **Social Studies** leveled books

- **Benchmark Literacy Phonics** kits: StartUp, BuildUp, SpiralUp
- **Word Study & Vocabulary** kits: Start, Build, Spiral, Extend
- **Benchmark Writer's Workshop**
- **Benchmark Universe Talking e-Book, Interactive Whiteboard, and Comprehension Strategy Assessment** online resources
- **Professional Development** (Customized) — Initial product training followed by monthly on-site coaching in whole-group and small-group differentiated instruction and close reading

Assessments Used in the Study

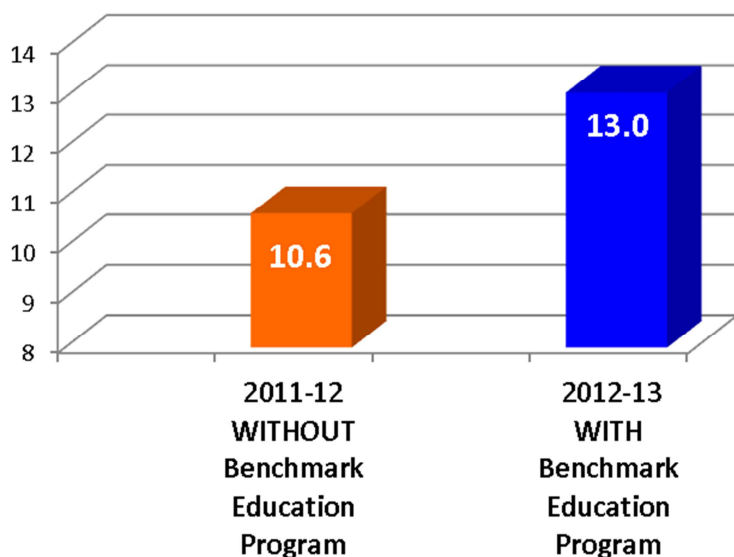
- ✓ **DRA Word Analysis—Developmental Reading Assessment®** (Pearson)
- ✓ **DRA2—Developmental Reading Assessment®, 2nd Edition** (Pearson)
- ✓ **VA State Standards of Learning (SOL) Reading Test**

Key Fairfax Findings as reported by Main Street Academix researchers

- ❖ "Students performed slightly below (2009–2010) or similar to the state average on the SOL E/LA Assessment in 2010–2011 and 2011–2012, but considerably better than the state average in 2012–2013 after the Benchmark Education program had been implemented in the school."
- ❖ "Comparison of the [DRA2] change scores from 2011–2012 and 2012–2013 resulted in a positive effect size of almost 2/3 of a standard deviation for students in grades 1 and 2 [a 13.0 DRA level average increase compared to 10.6 the year before], and over half of a standard deviation for grades 3–5. This is admirable in the world of educational interventions. In fact, it is rare to see effect sizes over 0.3 with educational interventions, so producing an effect size twice that amount is impressive."
- ❖ "The most impressive finding was that the typically educationally disadvantaged students in grades 3–6 exhibited greater gains in DRA levels in the 2012–2013 school year compared with the educationally advantaged group. [In other words, disadvantaged students started to catch up with their classmates.] This was counter to the pattern observed in the 2011–2012 school year when the school was the control school indicating an important positive effect of this program."
 - "The students eligible for free or reduced price lunch gained approximately one-half DRA level more than students not eligible....
 - ELL students gained approximately 1.5 more DRA levels than non-ELL students....
 - Special education gained about 1.5 DRA levels more than non-special education students."
- ❖ "Conclusion: It seems clear from the DRA analyses, which are tied most closely to the goals of the Benchmark program, that the students improved their reading fluency and comprehension at a noticeably greater rate than the students enrolled in the year prior to implementing the Benchmark program. The results are corroborated from the more distal SOL analyses, which also showed greater gains for students in 2012–2013 compared with 2010–2011 and 2011–2012. More impressive than the overall score improvements were that these gains in reading achievement generalized to students typically considered at educational risk. In fact, the gains for the typically educationally at risk students were greater than for the general student population."

HIGHLIGHTS — BENCHMARK LITERACY/Fairfax CPS Research Study

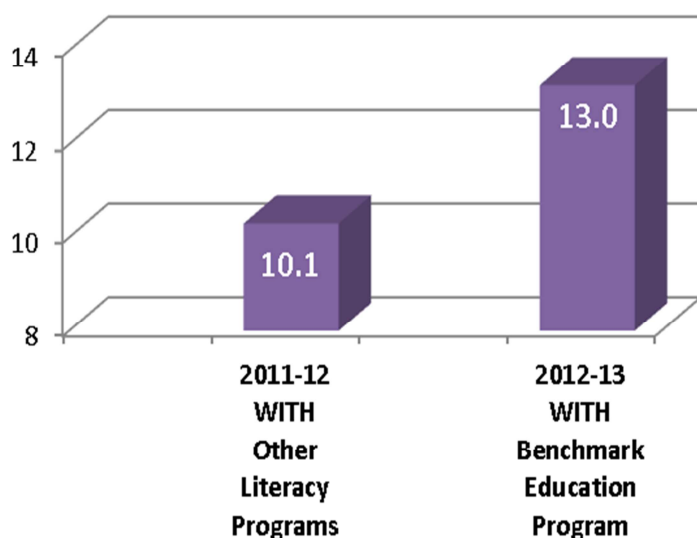
Change in DRA Levels Gr. 1-2 (Fall-Spring)



Grades 1–2 students using Benchmark Literacy showed average DRA level gains of 13.0 vs. only 10.6 the prior year using other literacy programs.

The researchers called these gains “rare” and “admirable in the world of educational interventions...with the effect size at first grade of almost 0.6 and a very impressive 0.7 at second grade.”

Gr. 1-2 Change in DRA Levels Male Students (Fall-Spring)

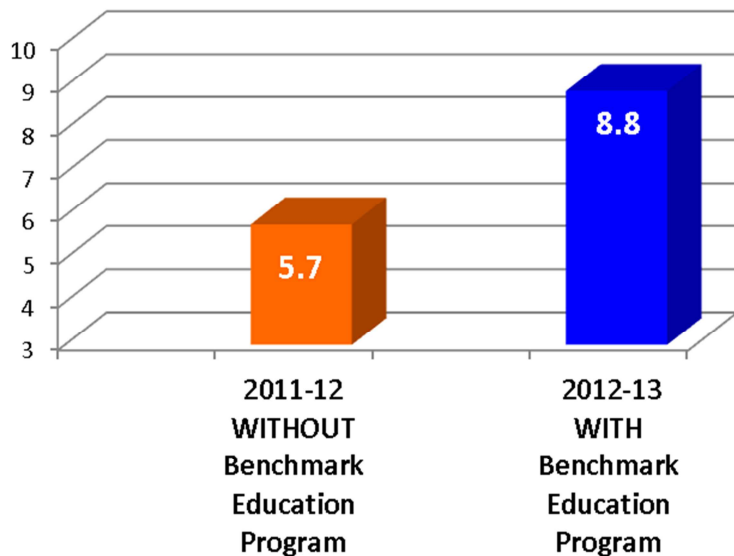


Grades 1–2 male students using Benchmark Literacy achieved DRA level gains of 13.0 vs. only 10.1 the previous year using other literacy programs.

Unlike the previous year where male reading growth lagged female DRA reading growth by 10.1 to 11.0, after using Benchmark Literacy the boys’ reading gains accelerated to virtually equal the girls’ gains: 13.0 vs. 13.1.

HIGHLIGHTS — BENCHMARK LITERACY/Fairfax CPS Research Study

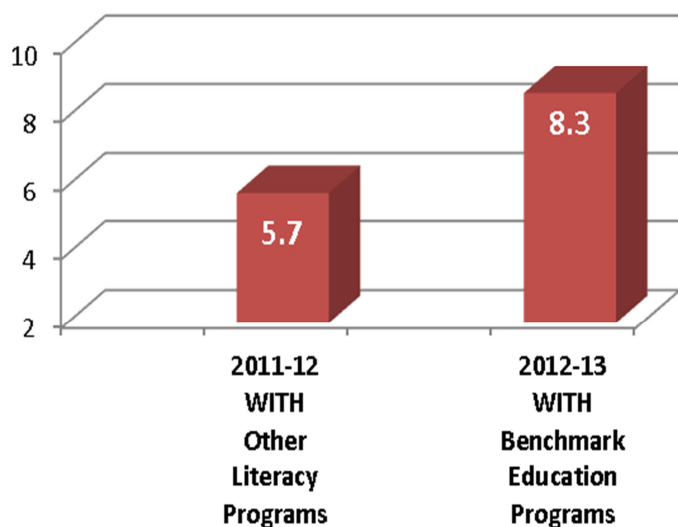
Change in DRA Levels Gr. 3-6 (Fall-Spring)



Grades 3–6 students using Benchmark Literacy gained an average of 8.8 DRA levels vs. only 5.7 levels by Grades 3–6 students using other literacy programs the previous year—54% greater growth.

The researchers: “It is rare to see effect sizes over 1/3 of a standard deviation with educational interventions...so effect sizes of .7 and .73 at fourth and fifth grades are very impressive.”

Gr. 3-6 Change in DRA Levels Male Students (Fall-Spring)

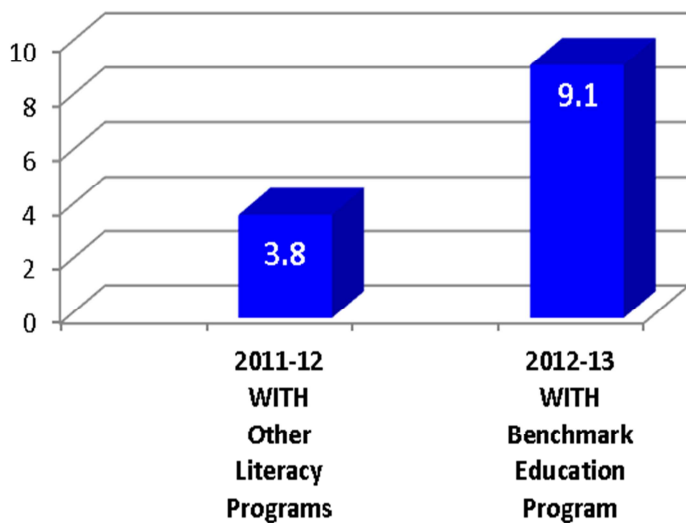


Grades 3–6 male students using Benchmark Literacy gained an average of 8.3 DRA levels vs. only 5.7 levels by Grades 3–6 males using other literacy programs the previous year.

This represents 46% greater growth when using Benchmark Literacy plus on-site professional development.

HIGHLIGHTS – BENCHMARK LITERACY/Fairfax CPS Research Study

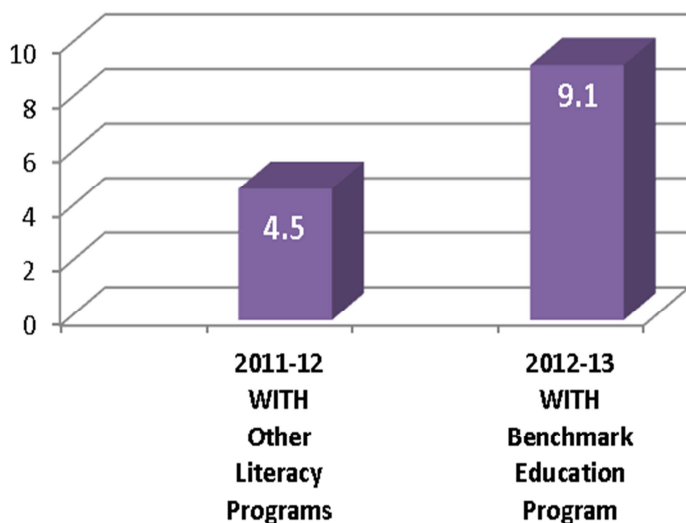
Gr. 3-6 Change in DRA Levels African-Americans (Fall-Spring)



African-American students in Gr. 3–6 gained an average of 9.1 DRA levels using Benchmark Literacy vs. only 3.8 levels the prior school year using other literacy programs.

This 9.1 average DRA-level gain represented the greatest school-year reading growth of any ethnic cohort

Gr. 3-6 Change in DRA Levels Title I Students (Fall-Spring)

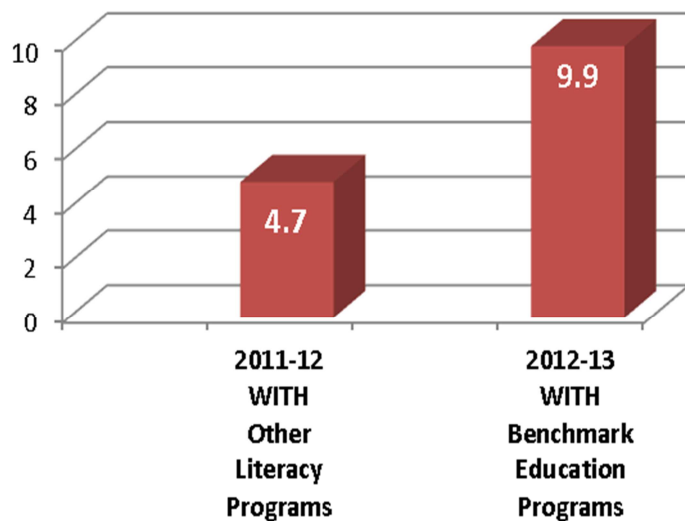


Title I students using Benchmark Literacy achieved more than double the average increase in DRA reading levels compared to the previous year.

The researchers commented: “The most impressive finding was that the typically educationally disadvantaged students exhibited greater gains than the more advantaged students.”

HIGHLIGHTS – BENCHMARK LITERACY/Fairfax CPS Research Study

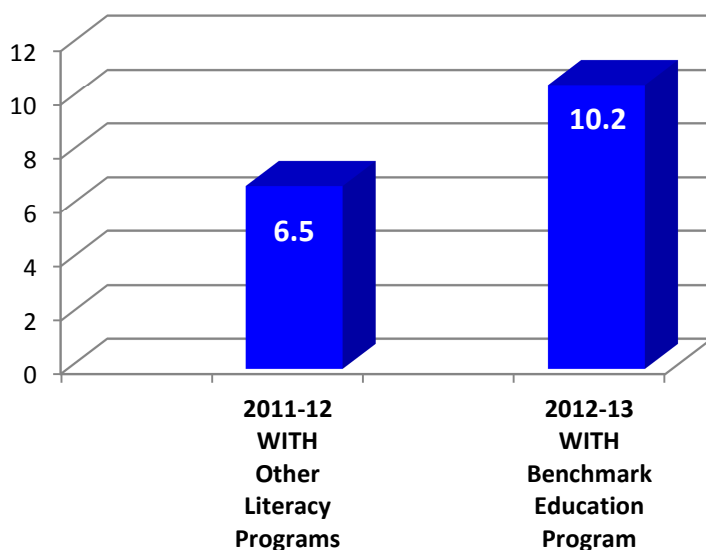
Gr. 3-6 Change in DRA Levels ELLs (Fall-Spring)



ELLs in Grades 3–6 gained an average of almost 10 DRA levels vs. only 4.7 levels by ELLs the prior school year.

This represents a 111% greater growth by ELLs receiving Benchmark Literacy with long-term, on-site professional development vs. students using other literacy programs

Gr. 3-6 Change in DRA Levels Students w/Disab. (Fall-Spring)

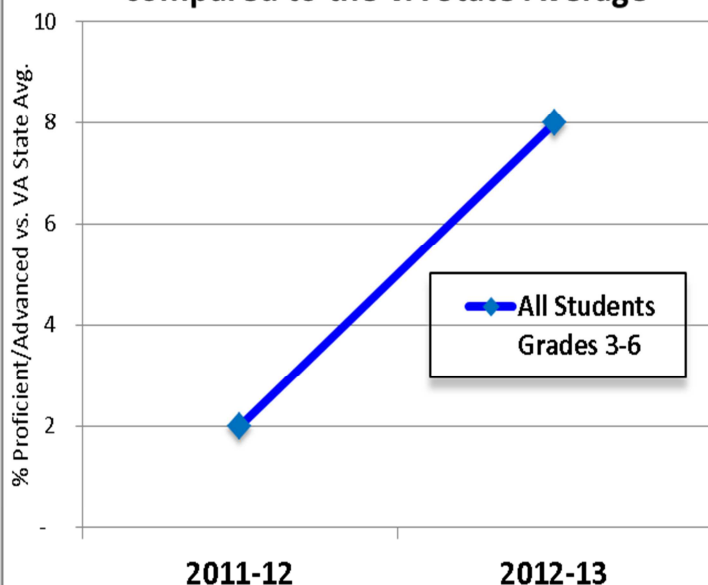


Gr. 3–6 Students with Disabilities (SWDs) using Benchmark Literacy achieved 57% greater DRA-level growth than SWDs the previous year.

Significantly, the 10.2 DRA-level increase achieved by SWDs was greater than the average increase achieved by non-SWDs in grades 3–6.

HIGHLIGHTS – BENCHMARK LITERACY/Fairfax CPS Research Study

Growth in the % of Students Scoring Proficient or Advanced on the SOL compared to the VA State Average

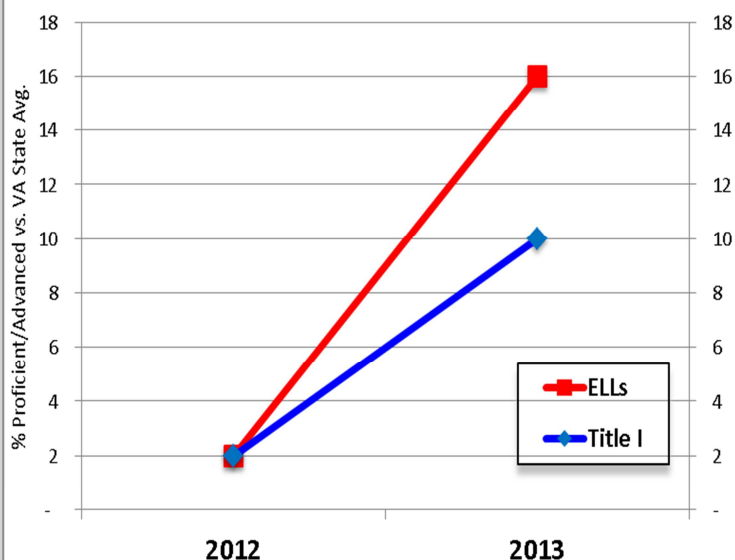


This graph shows the growth in the % of Gr. 3–6 students scoring Proficient or Advanced when compared to the VA state average. Positive numbers mean that the school outperformed the State that year.

On the 2012 VA State (SOL) Reading test, Grades 3–6 students performed slightly better than the State with 2% more students scoring Proficient or Advanced compared to the State.

On the 2013 SOL, after using Benchmark Literacy for less than a year, Grades 3–6 students performed considerably better than the State with 8% more scoring Proficient or Advanced compared to the State.

Growth in the % of ELLs and Title I Students Scoring Proficient or Advanced on the SOL Compared to the VA State Average

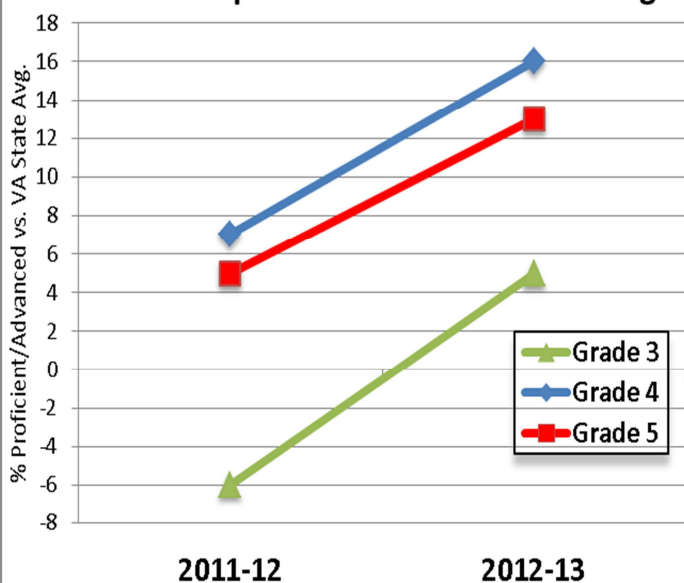


Both the ELL and Title I cohorts had 2% more Grades 3–6 students scoring Proficient or Advanced compared to the State averages for those cohorts on the 2012 SOL State Reading test.

But on the 2013 SOL, after using Benchmark Literacy for less than a year, these two cohorts performed dramatically better than the State with 16% more ELLs and 10% more Title I students scoring Proficient or Advanced compared to the State averages.

HIGHLIGHTS – BENCHMARK LITERACY/Fairfax CPS Research Study

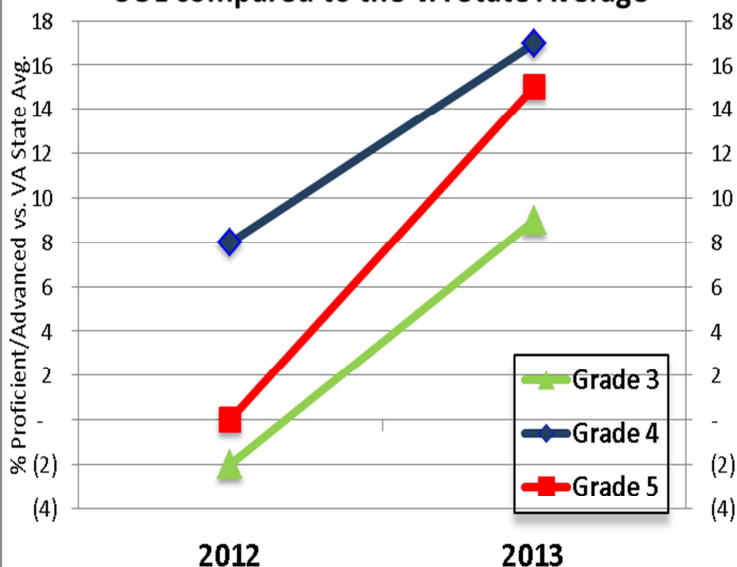
Growth in the % of Gr. 3-5 Students Scoring Proficient or Advanced on the SOL compared to the VA State Average



When examined by grade level, the performance of students improved noticeably in the intermediate grades on the 2013 Reading SOL vs. 2012.

The researchers highlighted: "This improvement was impressive for the third grade students" who jumped from scoring 6% below the State average in 2012 to 5% above it in 2013 after using Benchmark Literacy.

Growth in the % of Gr. 3-5 Male Students Scoring Proficient or Advanced on the SOL compared to the VA State Average



Male students in Grades 3-5 showed dramatic one-year improvements on the SOL. In 2012, only Grade 4 males outscored their statewide peers in % Proficient or Advanced.

After using Benchmark Literacy in 2013, males in all 3 grades scored above the State averages in % Proficient, outperforming their peers by 9, 15, and 17 percentage points.

This accelerated reading growth by boys was actually greater in all 3 grades than that of their female counterparts in regard to the % above State average.

HIGHLIGHTS – BENCHMARK LITERACY/Fairfax CPS Research Study

What Fairfax Teachers and Administrators had to say:

I have been using the books regularly and I absolutely love them. Benchmark Education has brought a new enthusiasm and excitement out in the teachers and in me. I am so excited to have guided reading groups because I am always using new, beautiful, colorful books with the children. I just love them; the kids love them; they are very engaging.

Kindergarten Teacher

Nonfiction is really hard for 1st graders and last year I didn't really do any. I like that we now have low leveled books that are nonfiction as well. They are harder, but the kids are enjoying them. They love the [comprehension] posters and seem to be responding really well to them.

1st Grade Teacher

I really like the way the way the whole-group lessons are echoed in small-group lessons. As we introduce concepts, then we can teach them in a real hands-on way. It is a struggle for a teacher to teach one strategy and find resources for all the different levels. Benchmark does that really nicely.

2nd Grade Teacher

I really like the writing. The writing that the kids produced was really high quality, so I thought it was excellent. The other thing I really loved about the writing was the mentor texts.

2nd Grade Teacher

The reading books are amazing; the kids love them. The books are a little harder than what we use for testing them with the DRA. I like that because when we test them they feel like it is easy.

3rd Grade Teacher

I really like the guided reading books and the plans that come with it. It tells you the strategy, shows you the level, and gives you everything you could ever want—so much information, it is great!

3rd Grade Teacher

They love looking at the smartboards and the resources on there, and they love the guided reading books. They like the names of the characters. We have a diverse population and they sometimes see names of their friends that they have never seen in a book before, and it is exciting to them.

3rd Grade Teacher

We have used Reader's Theater quite a bit. We have [students at] a bunch of different levels, so that's been great. The kids really enjoy it—they ask to do it, so that's wonderful.

4th Grade Teacher

I love the books. I think they are attractive to the eye and they are informative. I love all of the nonfiction text features. I like how they tie in with our social studies and our writing curriculums. The Benchmark books are more attractive than the other books I have used in other schools.

5th Grade Teacher

Teachers are excited to have so many great resources in their classrooms right at their fingertips. There is no more going to check them out in the resource room when you have your own class set.

Asst. Principal

I am surprised how much I see Benchmark [used] in the upper grades, because that is typically where guided reading just falls off the wagon. But they're very into it. Teachers enjoy the literacy approach. Almost always when I walk in, some kids are using the Benchmark materials.

Principal