



Leveling Up Science Success: Transforming Challenges into Triumphs

Penda Science Helps Flagler County Schools Boost Scores on Florida State Science Assessments (SSA)

Flagler County, Florida boasts uncrowded beaches, an "Old Florida feel," and a commitment to graduating socially responsible citizens with the skills necessary to reach their maximum potential. Yet, like many districts nationwide, Flagler Schools face persistent challenges with teacher shortages, student engagement, and differentiating instruction, particularly in the aftermath of the pandemic.

In the area of science, Flagler Schools has been able to address many of these challenges with <u>Penda Science</u>, a gamified intervention solution for grades 3–biology with activities hand-crafted to Florida standards and aligned to the district's unique scope and sequence.

Flagler Schools first piloted Penda from January to June 2022 and quickly discovered the program's potential to move the needle on science achievement. Penda was rolled out to 9 schools across the district for the 2022–23 school year.

While teachers use Penda during the school day to support instruction, Penda use is encouraged outside of school hours so that students gain valuable practice with science concepts. One way in which students are motivated to login to Penda and learn is with challenges, including during Spring and Winter Breaks, Halloween, and Thanksgiving. Penda's online platform includes gamification elements like customizable avatars, badges, points, leaderboards, and mastery levels that make learning fun and engaging.

> Schools that used Penda the most in the spring were the schools that had the greatest gains during the spring 2022 science assessments. All in all, the product is great, but another important point is that students LOVED it. **It really is the total package.**"

~ Heidi Alves, Science & Curriculum Specialist, Flagler County Schools

Snapshot of Penda Use in Flagler County

Nine schools use Penda, including all 5 Title I schools

- 5 elementary
- 2 middle schools
- 2 high schools

Implementation Grade Span: Grades 5–Biology

6,500 students used Penda — 41% are classified as minority students

Penda pilot: Spring Semester, 2022

Penda district-wide implementation: 2022–23 school year





IMPACT REPORT

Penda Use Takes Statewide Scores to New Heights

The district saw an increase in Statewide Science Assessment (SSA) scores for the 2022–23 school year, its first full year using Penda.

- Students who took the grade 5 SSA who used Penda had an average score of 204 2.5% greater than the statewide average score of 199.
- Students who took the grade 8 SSA who used Penda had an average score of 207 4.5% greater than the statewide average score of 198.





Penda has been a beneficial supplement to the 8th grade science curriculum. It has provided valuable resources that have allowed teachers to help fill in gaps with learners due to the pandemic. Our 8th grade FSA scores increased 8% from last year."

~ Dawn H., 8th Grade Teacher, Indian Trails Middle School, Flagler County Public Schools



Penda Mastery Leads to Strong SSA Scores

Student scores on SSA increased based on the number of Penda activities they mastered (defined as achieving a score of 80% or greater on an activity).

- Students who mastered Penda activities scored on average 5.7% greater on the grade 5 SSA than the statewide mean scale score of 199.
- Students who mastered Penda activities scored on average 9.97% greater on the grade 8 SSA than the statewide mean scale score of 198.

My students loved using Penda ... they were super excited to create their character and discover new worlds. I loved having so many topics and assignments to choose from to make sure my students were practicing current standards, but also reviewing for the state assessment."

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 Jessica S., 5th Grade Teacher, Old Kings Elementary School, Flagler County Public Schools





