

Spiraling to Success in Science with Study Island in Okaloosa, Florida

Okaloosa County School District - Okaloosa, Florida



Tami Ellis, District Science Curriculum Specialist Gina Emery, Science Department Chair & Science Teacher, Niceville High School



33,015 students Grades pre-K to 12



16% ESE
65% White
12% Black
10% Hispanic
48% free/reduced lunch
30% military
dependent

The Challenge:

Stretching 936 square miles from Alabama to the Gulf of Mexico, Okaloosa County School District (OCSD) is home to three major military facilities located in the heart of the Florida panhandle. As anyone could guess, with more than 30 percent of the student population military dependent, OCSD is constantly faced with the challenge of how to meet the needs of the diverse backgrounds that come with students from military families.

Tami Ellis, science curriculum specialist for OCSD, is no stranger to this challenge, particularly when it comes to preparing students for the Statewide Science Assessment (SSA). The state of Florida uses the SSA to measure student achievement in science in grades 5 and 8 and with a Biology EOC exam in high school.

"The State of Florida assesses its students over three years of material at once," explained Ms. Ellis. "In 5th grade, students are tested on grades 3 through 5 standards. 8th graders are tested on grades 6 through 8 standards. For this reason, it's important for our teachers to have a tool that can support both the review of previously taught standards and support instruction of current-year standards."

To help students with the long-term mastery of standards and concepts they will be tested on, especially in years between testing, teachers at OCSD use spiraling—a method in which curriculum is constantly interweaving background knowledge with new knowledge—to prepare students.

So, when it came to boosting SSA scores, what the district needed was a program that could support what teachers were already doing in their science classrooms. And, when Ms. Ellis assumed her role managing the science curricula for the district, she felt Edmentum's practice and assessment preparation program Study Island would be just the right fit.

To better prepare students for the Statewide Science Assessment, Okaloosa County School District found that by spiraling science curriculum, it could reinforce learning and key concepts continually for students, even between testing years. The district needed an additional resource to help support its approach to science and found that Edmentum's practice and assessment preparation program, Study Island, gave it exactly the right tools and flexibility to drive science mastery across the district.

How They Did It:

Before coming to the district office, Ms. Ellis said she became of a fan of Study Island after she saw almost double-digit increases in the test scores of her 8th grade science class while using the program. At the time of her appointment as district science specialist, she felt Study Island was a good fit for OCSD because it works well as a practice and preparation tool for the SSA, and it is well-suited to supporting instruction throughout the district.

"Study Island science fills this gap, this need, because of the way our state tests in science," Ms. Ellis reported. "There's huge, huge amounts of content knowledge that kids are expected to have learned for these tests. And, Study Island helps to review that constantly in those three years between assessments."

Since Study Island was introduced to OCSD at the district level in 2016, Ms. Ellis has played an important role in guiding best practices, including hosting training for teachers throughout the school year and formally suggesting that teachers have students practice one or two lessons for 30 minutes a week, depending on grade level. She also makes a point to provide teachers with guided support four to five weeks before testing begins.

"I send out a recommended review right before testing—kind of a bootcamp if you will—using Study Island," Ms. Ellis explained. "It's really cool because you can do it one of two ways: You can either wipe out their grades and do this bootcamp and get completely fresh data to see where they are, which is what I would do. Or, if students have already tested proficient on that, I would tell teachers to increase the proficiency. So, instead of 70 percent, make it 90 percent. I love in Study Island how there's a variety of ways to differentiate. And that's really important for our students in Okaloosa County."

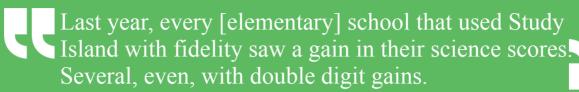
At the classroom level, teachers utilize Study Island's flexibility to tailor the program to their needs. One OCSD educator, Gina Emery, science department chair and biology teacher at Niceville High School, is a self-proclaimed Study Island advocate who has found a way to make the program work in her classroom to support students in preparation for the Biology EOC exam.

"It's a wonderful tool and a great preparation for our state-written, end-of-the-course exam," reported Ms. Emery. "The first thing I do at the very beginning of the year, I assign Study Island units. I go through all of the units on Study Island throughout the year, ending with ecology. Then, I spiral back."

To review, Ms. Emery will go though and delete all of her students' sessions in Study Island, and then reassign topics. She said she's found it useful not only for supporting her daily instruction but also for keeping concepts and lessons from past units fresh for her students as she works through her curriculum.

"Biology builds on itself; what you've learned in chemistry, you're going to use in biochemistry. What you learn in biochemistry, you're going to use in cells," Ms. Emery clarified. "Kids forget. They're very

good at memorizing and dumping. This keeps it fresh. I use [Study Island] throughout my course, and then I go back and use it as a spiraling tool and as a review tool."



Tami Ellis District Science Curriculum Specialist

Success:

Success in the Okaloosa County School District comes in all shapes and sizes. While the district won't receive its SSA scores until June, Ms. Ellis is optimistic given the scores on last year's exams.

"Last year, every [elementary] school that used Study Island with fidelity saw a gain in their science scores," Ms. Ellis reported. "Several, even, with double digit gains."

However, she recognizes that teachers are what really make the difference when it comes to student success with Study Island in OCSD.

"The teachers are the ones that will make it or break it," Ms. Ellis explained. "I have teachers who have a Blue Ribbon bulletin board, and they make a big deal out of [student achievement]. . . . They truly motivate students"

Ms. Ellis described, "Through Study Island, students are self-assessing their own areas of strength and needs, weekly. This is very effective in increasing student proficiency in science standards. We have rock star teachers who use positive incentives, communication with parents, and solid teaching strategies that help take Study Island implementation from good to amazing."

At Niceville High School, Ms. Emery says she's seen Study Island work. She's extremely proud of her students and the hard work she sees her classes put in year after year.

"It's been a long time since I had less than 100 percent pass rate," Ms. Emery said. "I attribute that partly to, at least, my use of Study Island. I honestly do."

Student success is also reflected in Ms. Emery's class Biology EOC scores. In Florida, standardized EOC assessment results account for 30 percent of a student's final course grade, meaning the exam is heavily weighted. In addition to her 100 percent class pass rate, last year, more than half of Ms. Emery's students scored "mastery" level, or "highly likely to excel in the next grade," on their EOC Biology exams as measured by the state.

"I had 60 percent of my students score level five. Five's as high as you can get," Ms. Emery said. "You have to have a score of three to pass. So, 60 percent level five is pretty good too."

She feels that Study Island's online interface not only mirrors exam questions but also helps students get comfortable taking a computer-based assessment.

"I'm very glad that Study Island is out there and that we have a tool that can supplement what we do in the classroom to help our students master standards and perform well on high-stakes, statewide assessments," Ms. Emery said. "It's absolutely a good resource."

And, she has the student feedback to prove it. Ms. Emery admits that, while some of her high schoolers may grumble about having to do work, they are grateful for the extra practice and challenging questions they encountered by the time the course is finished.

"At the end of the year, I let them do an anonymous critique of the course," Ms. Emery elaborated. "What did you like, what didn't you like, what helped you the most, what did you think didn't help you at all?' I let it be anonymous, so I feel like the kids will be more honest. And, I get back Study Island helped them. I know it does."

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Gina Emery Science Department Chair & Science Teacher, Niceville High School

The Future:

Moving forward, Ms. Ellis plans to continue supporting the Okaloosa County School District's teachers so that they can continue to drive student success.

"We're trying to just offer the best support for administrators and teachers to make Study Island a priority in the classroom," Ms. Ellis said. "We hope to increase our teacher's ability to feel comfortable using it and helping motivate students to use it—and using it to drive instruction."

Ms. Ellis says that she is primarily focused on answering the question: "Now that we've got our kids using it, how are we changing our instruction to match what the data tells us from Study Island?"

For more infomation: