



THREE-YEAR STEAM STUDY

at Santa Rosa County District Schools demonstrates impact of Discovery Education Professional Learning

Extensive professional learning in STEAM results in **increased effectiveness of inquiry- and problem-based teaching practices** at Santa Rosa County District Schools, according to a recent report.

A three-year study of 29 schools in Santa Rosa County, FL showed significant improvement in teacher practice and perceptions after participating in Discovery Education's STEAM Innovate Program. The program is part of a five-year transformation and partnership with Discovery Education, featuring intensive professional learning, job-embedded coaching, and use of Discovery Education Techbook for Science, Math, and Social Studies.

POSITIVE PROFESSIONAL LEARNING OUTCOMES

Educator feedback from pre- and post-assessments in the study shows a significant decrease in pedagogical discontentment between 2015–2017, showing that STEAM professional development was effective for teachers and instructional staff.

Teachers' inquiry-based learning implementation levels*



*Percentage change from pre- to post-assessments in readiness and attitudes toward inquiry-based learning focused on STEAM.

YEAR 1: Teachers had a positive attitude as they embarked on the new initiatives.

YEAR 2: Teachers indicated STEAM approaches were helping to prepare students as problem-solvers and collaborators for a global society.

YEAR 3: STEAM teachers are now “fully embracing STEAM approaches.”



CLASSROOM OBSERVATIONS

More than 1,000 classroom observations were conducted in 18 elementary schools, 6 middle schools and 5 high schools during the three-year study.

YEAR 1: 3/4 of the classrooms rated Descriptive or Emerging, a strong baseline representing a positive beginning for the first year.

YEAR 2: Substantial increases in Emerging levels of activities and lower levels of Descriptive classrooms. A sustained effort to accelerate "math and science, promoting STEAM and problem-based learning, and using centers-based STEAM lab classroom configurations."

YEAR 3: More than 90% of the classrooms incorporated an innovative appropriate classroom arrangement for teaching STEAM. As well as a "more focused approach for creating engaged personalized learning within classrooms than the observed data reports from Years One and Two."

COACHING

Teachers reported a high level of satisfaction with the coaching component of the STEAM initiative, with respondents reporting that coaches were accessible, approachable, supportive, encouraging, demonstrated professional integrity, and provided constructive feedback.

Teachers valued the interactive feedback they received in one-on-one discussions with coaches and innovators. They also valued their coach and mentee relationship. One participant indicated that "the available resources provided with one-on-one discussions of coaches and innovators are fantastic assistance for STEAM teachers."

Percentage of STEAM Teachers positively assessed their coaching support



What Santa Rosa's educators are saying about the STEAM professional learning offered by Discovery Education:

"My motivation level for teaching STEAM is off the charts! I feel this approach is going to help me become the teacher I always wanted to be."

"I am super excited—I have always taught interdisciplinary and I am glad to have the resources and the support to be successful."

"Our brand is all about equitable access to world-class instruction and moving our school system from good to great. What we are doing with STEAM is the most important transformative work we have ever done in this county."

MIKE THORPE

Director, Inservice and Instructional Technology, Santa Rosa County Schools

"The resources that Discovery brought to my school district were just powerful. They brought to us that repertoire of skills and insight that comes from vast experience at different schools and school districts. Bringing that to our district, it made us better. We started this journey as a five-year plan, but it's going to be forever. I just can't see it ending."

TIM WYROSDICK

Superintendent, Santa Rosa County District Schools

STEM Leader Corps

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STEM Leader Corps is a three-year system for professional learning and leadership intentionally designed to build and sustain a culture of STEM teaching and learning.

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