

**2022-23 FPL EmPOWERing STEM Educators  
Project Summaries**

COUNTY	FOUNDATION	PROJECT TITLE	SCHOOLS IMPACTED	SUMMARY
Brevard	Brevard Schools Foundation	Increasing Science Literacy- Science Is a Verb	Elementary Lead Schools: Columbia, South Lake, and Saturn Secondary: Satellite High, Rockledge High, Viera High, Kennedy Middle and Hoover Middle	Teacher feedback from multiple professional development opportunities from the last few years specifically request and celebrate teacher-led professional development. With many new teachers new to STEM content, teachers need peer-to-peer mentoring for content knowledge and pedagogy. This project will impact 22 K-12 STEM teachers and approximately 2,000 more students beyond those impacted in previous years. The project will allow for multiple observation sessions and debrief sessions with multiple observing teachers working with lead teachers to allow for further collaboration between peers, and to reestablish the peer-to-peer professional relationships lost due to Covid-19.
Broward	Broward Education Foundation	Supercharging SECME	Two Teacher Observers from each of the three regions: north, central, and south, will be selected based on their expertise with SECME events. The teacher observers will be paired within their region for observing each other and using their observations and reflections to prepare educative materials that will be used districtwide during monthly PLC meetings to guide new teachers in best practices for STEM / SECME integration.	STEM teachers are often some of the loneliest teachers in their building, and due to the broad nature of STEM, they are often asked to take on any new program. They also jump at the chance to bring the latest new and innovative programs to the school. STEM teacher peer-to-peer learning opportunities provide teachers the time to reflect and connect their teaching and learning to content standards and stretch well beyond the confines of standard STEM instruction.  This project will expand to the entire district using SECME, a national competition with a variety of competition areas, as the vehicle for learning. Teachers will develop plans for the integration of math and science concepts appropriate to their grade level. While our district has competed in SECME for many years, the impact of COVID has hit STEM-related endeavors hard, participation has severely dropped off, and not all students in all schools have equitable access to the opportunity. This project will allow our Teacher Observers to energize, engage, and lead other district educators so opportunities to compete in even one category is provided to all schools.
Collier	Champions for Learning (Collier)	EmPOWERing Educators through School Partners	Within Collier County Public Schools, there will be 6 – 8 schools total (E, M, H) at which observations will take place.	Champions For Learning has implemented four previous peer learning projects, two as part of FPL's EmPOWERing STEM Educators program. In all four projects, we partnered with Collier County Public Schools to observe and share exemplary teaching strategies across the district.  This year's project is focused on science teachers, providing the opportunity for teachers in their 1st–3rd year of teaching to observe veteran teachers presenting the same content. For the teachers in their 2nd or 3rd year, they may have begun their career with virtual instruction due to COVID protocols, and are now having to learn how to adjust to direct instruction in the live classroom. Having the opportunity to observe these veteran teachers in real time, and debrief what they see, will be a tremendous support to the less experienced teachers.
DeSoto	DeSoto County Education Foundation	Empowering STEM Teachers	Memorial Elementary, West Elementary, and Nocatee Elementary	Our district needs to build capacity among STEAM teachers to be intentional and proficient in developing lessons based on the Florida standards to support instruction in math and science at each grade level. In our schools, STEAM is a specials class that students visit once a week. This project will allow students to participate in hands-on activities that meet the rigor of the grade level standards. For two hours each month, STEAM teachers will work with the academic coaches to plan lessons that meet the math and science standards for each grade level. Close attention will be given to the depth of knowledge for each standard and what the student is expected to know and be able to do. Quarterly, STEAM teachers will be able to visit the other schools, observe each other, along with the coach, to see the implementation at each school. During the observations, STEAM teachers and the coach will complete the locally developed observation form which highlights best practices, standards alignment, celebrations and areas for growth. The observation forms will be collected and the data will be presented collectively at each of the debrief sessions.
Flagler	Flagler County Education Foundation	FPL (Flagler Peer Learning).	Flagler County Schools	This peer-to-peer learning opportunity will allow our 4th-8th grade teacher participants to spend time solely focused on the 3rd-8th grade state science standards. The hope is that this opportunity will allow our ten Teacher Leaders to facilitate a session in which they share their lesson plans with the Teacher Observers. As a part of their lesson, each Teacher Leaders will have a supply/material packet they will provide to each Teacher Observer. This will allow our teachers to take the lesson back to their class and use it immediately. We currently have math and science coaches at every elementary school and instructional coaches at the middle schools that assist in facilitating professional learning opportunities in math and science standards. This additional project will allow specific highly-effective teachers to share their craft with other like-minded individuals.

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Indian River	Education Foundation of Indian River County	EmPOWERing Students to Reach 60% Proficiency by 6th Grade	Citrus Elementary, Dodgertown Elementary, Fellsmere Elementary, Glendale Elementary, Indian River Academy, Pelican Island Elementary, Sebastian Elementary, Treasure Coast Elementary, Vero Beach Elementary	<p>Fifth grade science proficiency, according to the Science Statewide Assessment, has declined over the last three years from 54% in 2019 to 51% in 2022, in large part due to the COVID pandemic. The areas where students are showing the lowest proficiency are in the Life Science and Nature of Science standards.</p> <p>This initiative, "60 by 6," will allow teachers to design and create innovative and engaging lessons that focus on the Nature of Science standards and incorporate them into upcoming units. In addition, the units chosen are directly related to the state standards and content that are on the statewide science assessment.</p>
Martin	Education Foundation of Martin County	Peers in Public Practice: Bringing STEM to Life	Jensen Beach Elementary will host Port Salerno Elementary. JD Parker will host Warfield Elementary. Bessey Creek Elementary will host Pinewood Elementary.	<p>The Martin County School District experienced a decline in science scores in the 2021-2022 school year. Engaging in peer-to-peer learning will empower distinguished teachers and build a cohort of highly effective teacher leaders. By focusing on science instruction, our elementary educators will observe for specific "look fors" within the teacher leaders classroom. These "look fors" will be the focus of the observations, planning and debrief sessions. Using this model, we will make the shift to include teacher participation in learning walks specific to science teaching strategies being implemented in the classroom. This project complements previous year's work by focusing on areas of greatest need in science instruction. By focusing our efforts at this level, we will set students on a positive path in science achievement and engagement through their high school years and beyond.</p>
Palm Beach	Education Foundation of Palm Beach County	EmPOWERing STEM Educators in PBC	Frontier Elementary, Jupiter Farms Elementary, Elbridge Gale Elementary, Forest Hill Elementary, Morikami Park Elementary, Addison Mizner Elementary	<p>Since COVID, the School District of Palm Beach County's Math and Science FSA scores have dropped from 3rd to 5th in their rankings of the large urban districts, demonstrating a clear and present need for additional support in elementary science. Additionally, in classroom walk-throughs when school resumed traditional brick and mortar instruction in the 2021-22 school year, administrators and curriculum staff observed very few classrooms using stations/rotations and hands-on learning experiences in their math and science blocks. This project will implement a system of classroom visits/observations followed by debrief and professional planning sessions in line with expectations of classroom practices, pedagogy and content area scheduling blocks used by the schools within our district. Additional coaching and support have also been incorporated to complement and enhance the previous model.</p>
St. Johns	Investing In Kids (St. Johns)	STEMpowering St. Johns County Educators	Gamble Rogers Middle, Murray Middle, St. Augustine High, Pedro Menendez High, Mill Creek Academy,	<p>The goal of this project is to increase teacher knowledge and broaden STEM instructional practices to engage, motivate, and educate students in the courses covered by the General Science Certification Exam: Biology, Physical Science Honors, Environmental Science, Earth Space, and middle school science courses. The lead teachers for this project are District program specialists for middle and high school Science. They have surveyed teachers in need of support and found that these teachers are typically teaching one grade level or subject (ex.: 7th grade or Environmental Science) and they are knowledge fluent in what they teach. Lead teachers will create "tutorials" in power point format, aligned to the nine competencies clearly outlined by the Department of Education. Some of the tutorials will include audio instruction to be viewed by the participants at their leisure. Brief formative assessments will support them in gauging their understanding of the topics. The lead teachers are available for questions and support at any time for those topics that don't necessitate direct teaching/interaction. As teachers complete the tutorials, they will better understand the concepts, enabling them to teach more effectively and to make connections to other areas of science within their course. Teachers will also learn effective questioning skills and appropriate activities for their classroom.</p>

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Suwannee	Suwannee Foundation for Excellence in Education	Leaders for Today: The Power of Learning & Leadership	Suwannee Pineview Elementary, Suwannee Middle School, Suwannee Opportunity School	<p>The chosen elementary school for this project is a STEM-themed school and has been migrating to a school-wide model of integrating curriculum, classroom and out-of-school activities together to promote learning in these areas through all subjects. Current achievement at the middle school in Mathematics achievement is 44% and Science 49%. Pineview Elementary Mathematics achievement – 58% and Science 51%. There is a need to not only better coordinate efforts in the elementary school but also build better connection to transition to middle school.</p> <p>Observations for this project will be handled virtually to decrease intrusion in the classroom and allow for a broader scope. Observations will first be conducted using lead teachers as the "Actor" and participants as observers. Once the participants are ready to implement, the observation will reverse to allow the participants to become actors and the lead teachers the observers. These efforts will be coordinated by the Learning and Leadership Coach. Debrief sessions will be managed by the Lead teacher using a hybrid model of in person and <u>digital access to facilitate discussions between the different schools.</u></p>
Volusia	Futures Foundation for Volusia County Schools	Back to Basics With STEM	Campbell Middle School (Daytona Beach), Holly Hill Middle School, New Smyrna Beach Middle School, Silver Sands Middle School (Port Orange)	<p>Teacher turnover is at an all-time high and the opportunities to learn from each other has been almost non-existent due to pandemic restrictions and substitute teacher shortages. As we move forward, teachers need to collaborate and understand how STEM can assist them in enhancing student engagement and deeper understanding of math and science.</p> <p>FUTURES has been involved with peer-to-peer learning projects in the past but this project expands the scope due to an upcoming district-wide change. Volusia County Schools is transitioning to teaming in the middle schools and this change requires additional training for this new mode of instruction. The project's goal is to show how we can do effective, integrated lessons where science and math teachers collaborate to demonstrate largescale STEM instruction and student learning. This requires professional development where math and science teachers work together to create classroom lessons and observe each other facilitating those lessons. Additional teachers will also be invited to observe.</p>