

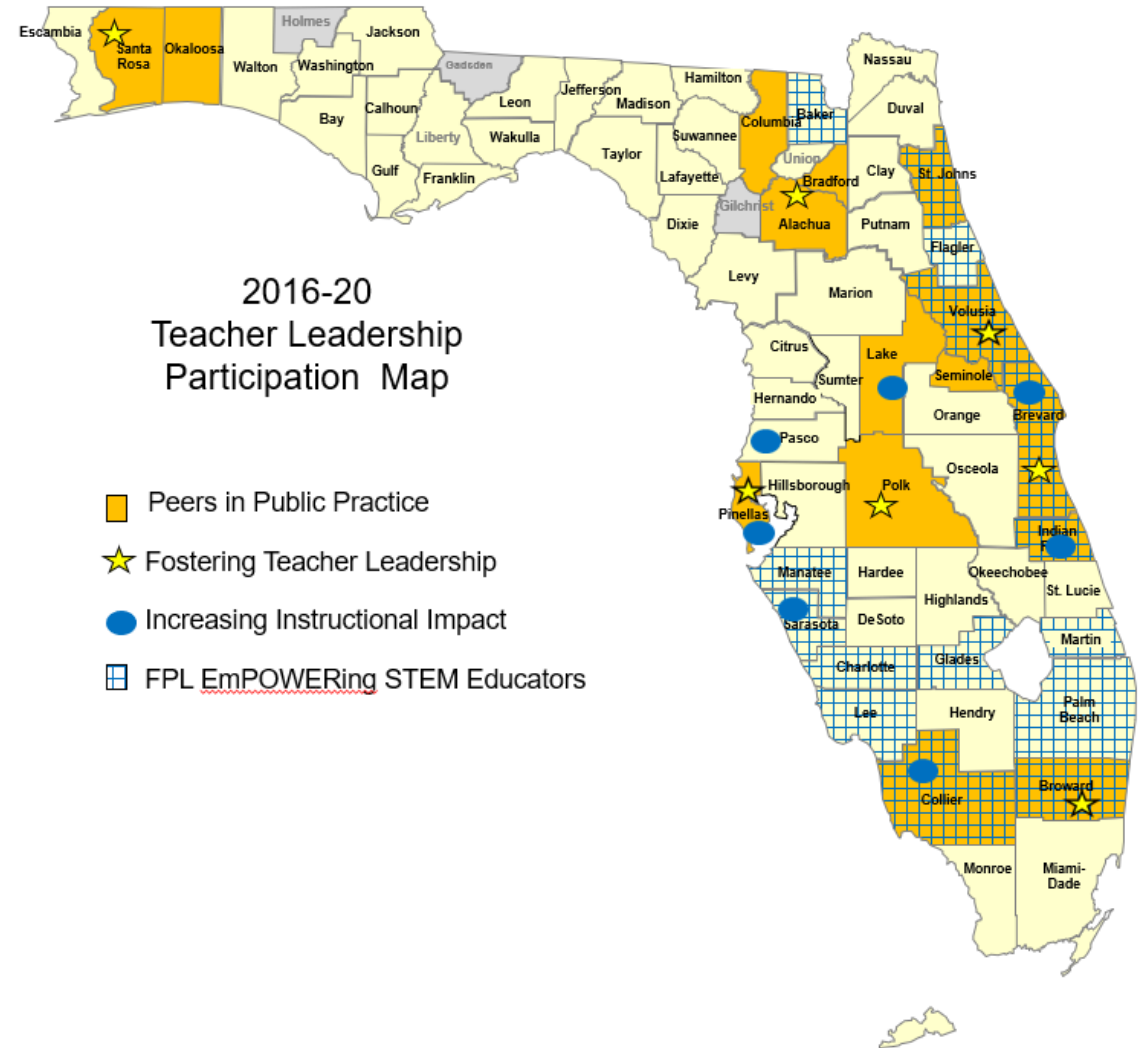


CONSORTIUM  
OF FLORIDA EDUCATION  
FOUNDATIONS

# FPL EmPOWERing STEM Educators: Project Review & Lessons Learned

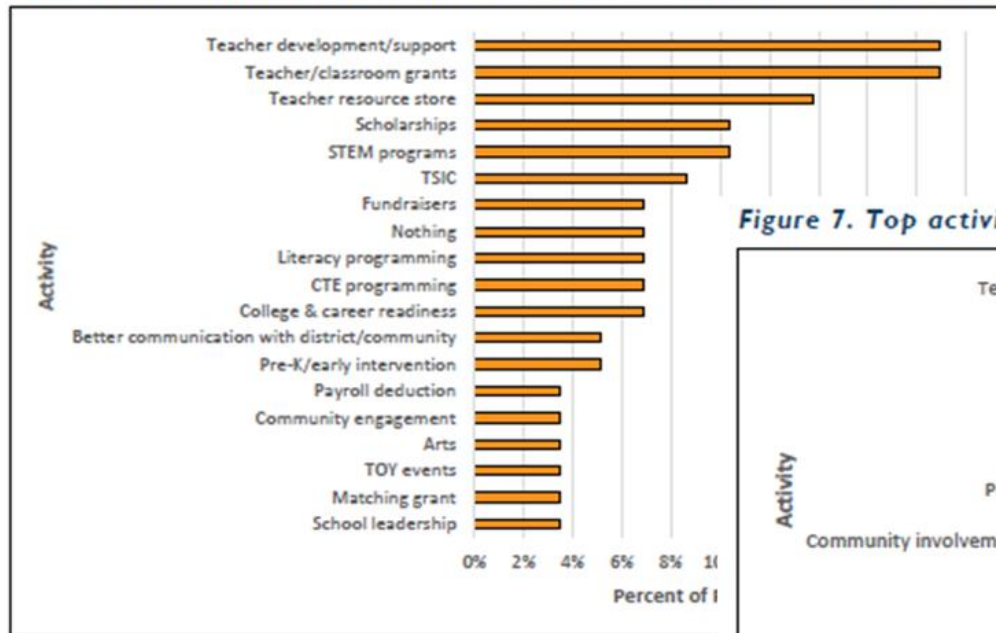
June 3, 2020

We have many participants in this presentation.  
Thank you for placing your phone on MUTE until it is your turn to present or you have a question.

The logo for Peers in Public Practice features two stylized blue smiley faces with white eyes and mouths. The faces are connected by a circular arrow, indicating a cycle or process. Below the faces is the text 'P3' in a large, bold, white font, and at the bottom, the words 'Peers in Public Practice' are written in a smaller, white, sans-serif font.

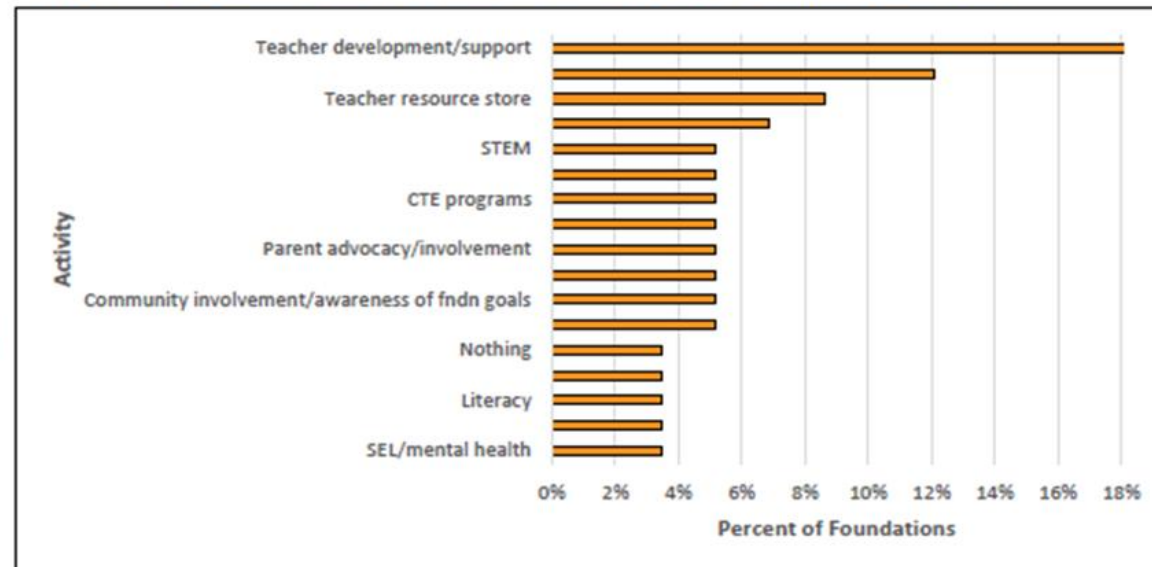
# Foundations & Teacher PD

Figure 5. Top activities respondents are doing MORE of than five years ago, 2020



Source: 2020 CFEF Membership Survey

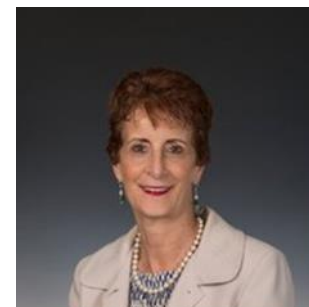
Figure 7. Top activities respondents WANT to be doing in five years, 2020



Source: 2020 CFEF Membership Survey



# FPL EmPOWERing STEM Educators



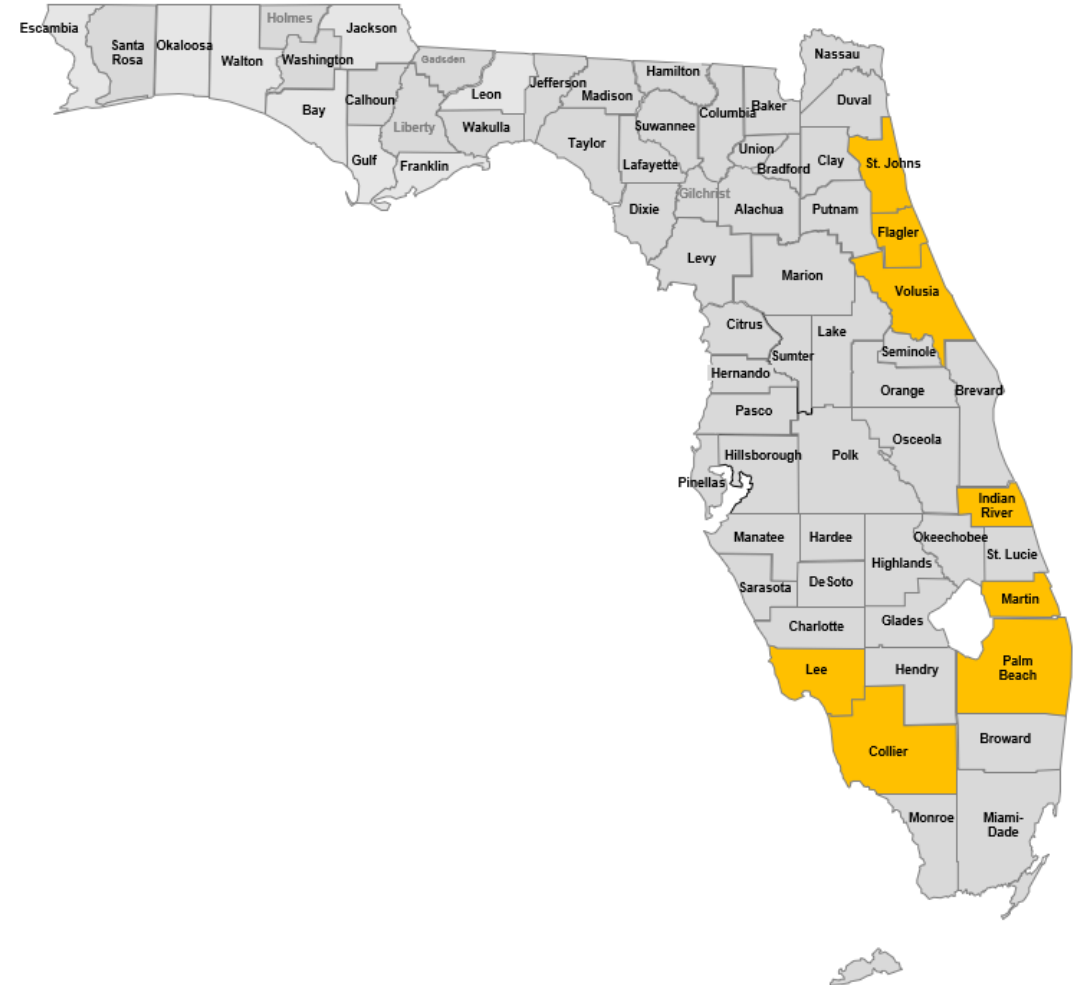
**Maureen Wilt**  
*Senior Education Program Manager*  
Florida Power and Light Company



# FPL EmPOWERing STEM Educators

## Program Purpose:

- Increase teacher knowledge of effective math and science instructional practices
- Alignment with Florida Standards
- Peer-to-peer teacher learning
- Best-practice sharing





# FPL EmPOWERing STEM Educators

## EmPOWERing Educators Through School Partnerships

*Veronica Mamone, Elementary Science Coordinator, Collier County Schools*

*Ryan Westberry, Secondary Science Coordinator, Collier County Schools*

*Amy Snyder, Director of Educator Programs, Champions for Learning*

- This project paired new teachers (up to 3 years teaching) with experienced teachers practicing solid science instructional techniques.
- Challenges:
  - Schedule that would match observing teachers with appropriate teacher in order to improve upon certain skill
  - Schedule that allowed observed teachers to participate in debrief





# FPL EmPOWERing STEM Educators

## EmPOWERing Educators Through School Partnerships

*Veronica Mamone, Elementary Science Coordinator, Collier County Schools*

*Ryan Westberry, Secondary Science Coordinator, Collier County Schools*

*Amy Snyder, Director of Educator Programs, Champions for Learning*



ChampionsForLearning @Champs4Learning · Jan 29  
Another great day of peer learning with @insideFPL EmPOWERing STEM Educators. Thanks @AVEDragonStrong and @LPEPanthers for hosting! @collierschools @CollierScience @FlaEduFoundtns



- Lessons learned:
  - Principals involved in intro and debrief provided insight
  - Observed techniques implemented immediately
  - New relationships and best practice sharing began immediately
  - Mentors for new teachers is powerful PD
- Project modifications:
  - Debriefs held same day as observations
  - Final debrief not held

*"I would [recommend the observation and reflection framework] because it was AMAZING and we had some of the best and most constructive conversations I have ever had as a professional. :-)"*





# FPL EmPOWERing STEM Educators

## Flagler Peer Learning

*Heidi Alves, K-12 Science Curriculum Specialist, Flagler County Schools*

*Shelley Wheeler, Operations and Data Specialist, Flagler County Education Foundation*



- Peer to peer learning for 4<sup>th</sup> and 5<sup>th</sup> grade teachers
- Challenge:
  - Timing of the event
- Lessons Learned:
  - Kit for each teacher to take away supplies
  - Dozens of teachers interested if continued next year

*"It is core in becoming and growing into a master teacher. Only by watching others and then reflecting on how you can incorporate these ideas into your classroom do you grow as an educator."*





# FPL EmPOWERing STEM Educators

## EmPOWERing Our Secondary Educators

*Becky Teske, Science Specialist, Indian River County Schools*

*Douglas Herron, Executive Director, Education Foundation of Indian River County*



- A collaborative peer-to-peer learning model which allowed teachers time to establish common STEM goals, plan instruction for a blended model, observe and share resources, and monitor student progress toward mastery of the STEM standards.
- Challenges:
  - COVID required a restructuring of planned activities, virtual sessions





# FPL EmPOWERing STEM Educators

## EmPOWERing Our Secondary Educators

*Becky Teske, Science Specialist, Indian River County Schools*

*Douglas Herron, Executive Director, Education Foundation of Indian River County*



- Lesson Learned:
  - Remote technologies can be effective tools for learning when conditions prevent more traditional (face-to-face) activities
- Project Modifications:
  - Additional planning sessions were possible and very beneficial to the learning of the participating teachers. These planning sessions were held using remote meeting technologies.





# FPL EmPOWERing STEM Educators

## Go with the FLOW

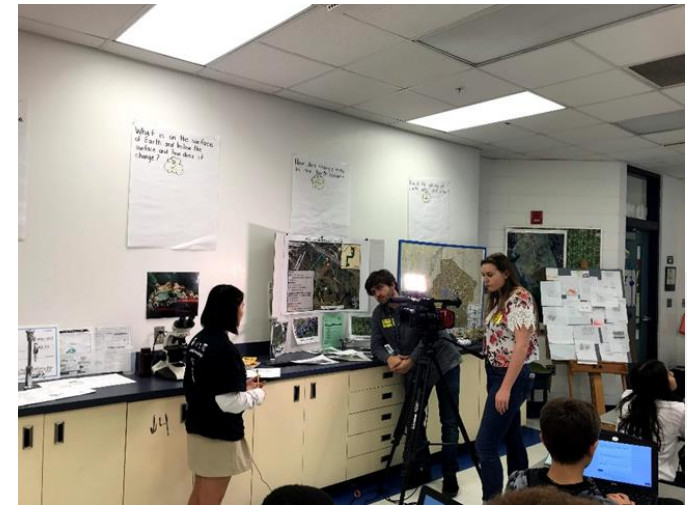
*Susie Hassett, Teacher Environmental Education, Lee County Schools*

*Beverly Burke, Director of Programs, The Foundation for Lee County Schools*



- Project-based curriculum developed with Florida Gulf Coast University; teachers developed argument-driven inquiry lessons
- Challenges:
  - Interruption of school due to COVID-19

*"It was valuable to have an objective observer to help modify my lessons to make them more effective. Glad to have compatriots to help support me as I grow as a leader in my field."*





# FPL EmPOWERing STEM Educators

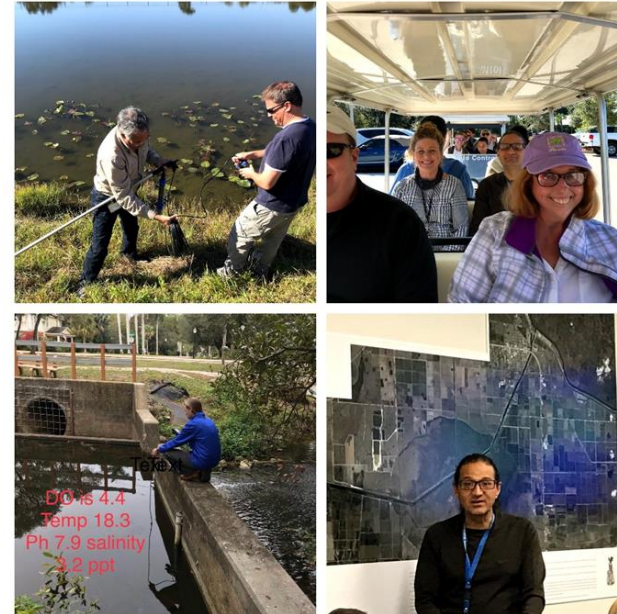
## Go with the FLOW

*Susie Hassett, Teacher Environmental Education, Lee County Schools*

*Beverly Burke, Director of Programs, The Foundation for Lee County Schools*



- Lessons Learned:
  - Teacher confidence rose when working with other teachers and FGCU
  - Timing of outside project-based lessons was difficult
  - Increase in community support for teachers (DEP, Ding Darling National Wildlife Refuge, etc.)
- Project Modifications:
  - Decrease in teacher participation due to transition to distance learning
  - Participation of teachers from more schools





# FPL EmPOWERing STEM Educators

## Peers in Public Practice: Bringing STEM to Life (Take 2)

*Danielle Farrell, District Instructional Coach, Martin County Schools*

*Lisa Rhodes, Executive Director, The Education Foundation of Martin County*



- New teacher teams (less than three years teaching or new to teaching STEM subject material) at the elementary, middle and high school level participated in peer to peer cohorts to grow in their understanding and practice of various instructional strategies.
- Challenges:
  - Scheduling
  - Securing Substitutes
  - COVID-19

*"I would recommend the observation and reflection framework because it allows you to receive feedback from peers in a way that is supportive and does not feel like you are being judged or critiqued but rather celebrated."*





# FPL EmPOWERing STEM Educators

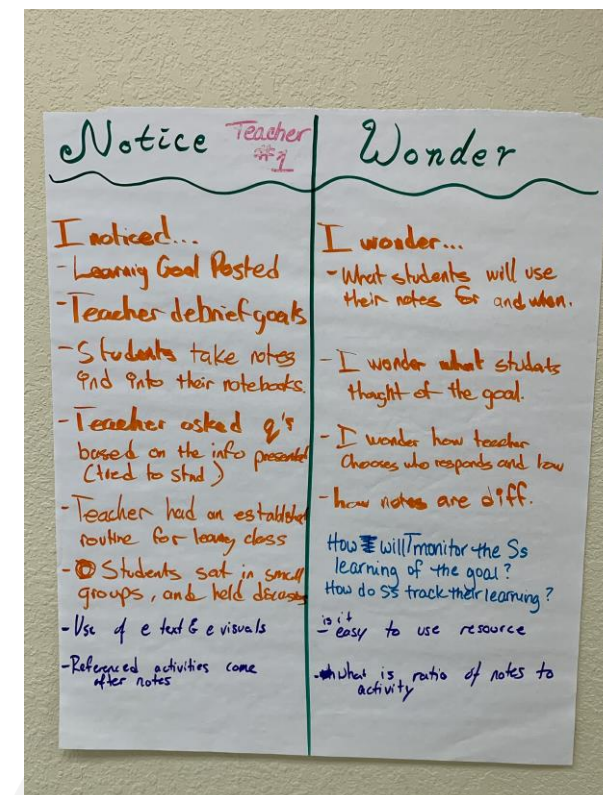
## Peers in Public Practice: Bringing STEM to Life (Take 2)

*Danielle Farrell, District Instructional Coach, Martin County Schools*

*Lisa Rhodes, Executive Director, The Education Foundation of Martin County*



- Lessons Learned:
  - Opportunity for lead teachers to reflect on the “whys” of their instructional practices
  - Opportunity for new teachers to learn from their experienced and high performing colleagues and the new materials to allow them to replicate lessons learned
  - Schedule extra observational time from the start
  - New science teachers would like to observe and meet with ELA (English Language Arts) teachers on best practices for teaching vocabulary.
- Project Modifications:
  - Final observations cancelled
  - Final debrief via Zoom
  - Application process if continued next year





# FPL EmPOWERing STEM Educators

## EmPOWERing STEM Educators in Palm Beach!

*Eva Cwynar, K-12 Science, Mathematics, STEM Manager, Palm Beach County Schools*

*Julia Mate, K-12 STEM Program Planner, Palm Beach County Schools*

*Jennifer Ethridge, Director of Programs and Grants, Education Foundation of Palm Beach County*



EDUCATION  
FOUNDATION  
OF PALM BEACH COUNTY

- Modeling of a cross-disciplinary approach to teaching and learning
- Challenges:
  - Timeline
  - Scheduling
  - COVID-19 / Remote Learning





# FPL EmPOWERing STEM Educators

## EmPOWERing STEM Educators in Palm Beach!

*Eva Cwynar, K-12 Science, Mathematics, STEM Manager, Palm Beach County Schools*

*Julia Mate, K-12 STEM Program Planner, Palm Beach County Schools*

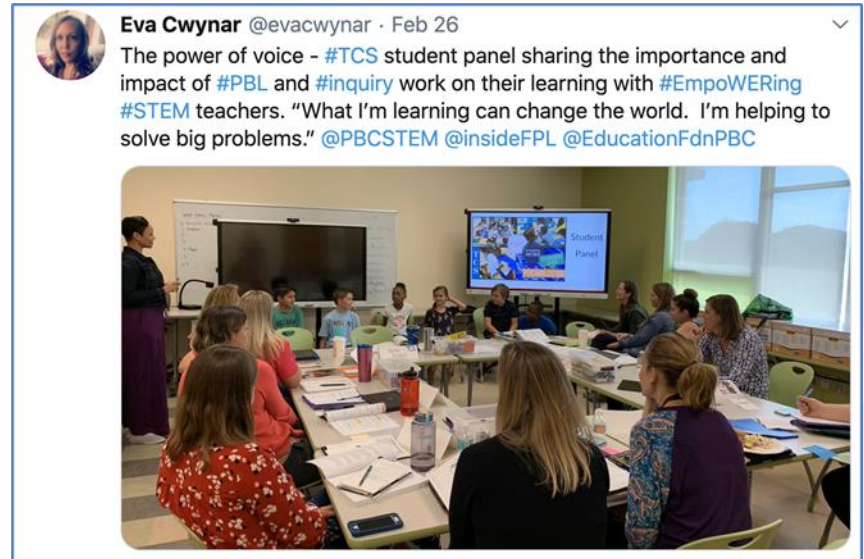
*Jennifer Ethridge, Director of Programs and Grants, Education Foundation of Palm Beach County*



EDUCATION  
FOUNDATION  
OF PALM BEACH COUNTY

- Lessons Learned:
  - Expect the Unexpected
  - “The only constant in life is change” -Heraclitus
- Project Modifications:
  - Teacher implementation due to COVID-19

*“The value in collaborating with other educational professionals to produce STEM curriculum to meet the needs of our students is priceless. Specific to the STEM field, the opportunity to witness student engagement at different levels and interacting with content differently, transfers to creating lesson plans to meet our students needs and increase student achievement.”*





# FPL EmPOWERing STEM Educators

## Improving Instruction and Learning Through STEM

*Marna Fox, Secondary Science Specialist, St. Johns County Schools*

*Donna Soncrant, Secondary Math Specialist, St. Johns County Schools*

*Kim Wuellner, K – 12 Mathematics Coordinator, St. Johns County Schools*

*Donna Lueders, Executive Director, Investing in Kids! (ink!)*



STEM lesson study with 6<sup>th</sup> grade math and 8<sup>th</sup> grade science teachers

- Challenges:
  - Some lessons were taught during distance learning in quarter 4, due to COVID 19
  - Rigor during distance learning was difficult to maintain
  - Some lessons could not be taught during distance learning
  - Depth of understanding standards seems less, but engagement was greater
  - Availability of materials for lessons during distance learning
  - Creating lessons is time consuming

*"I would recommend the observation to other educational professionals. Observing STEM in a functioning classroom is very helpful in overcoming the fear factor and realizing the actual simplicity and effectiveness of a STEM lesson and how the students enjoy the learning and discovery approach to learning and applying their knowledge."*





# FPL EmPOWERing STEM Educators

## Improving Instruction and Learning Through STEM

*Marna Fox, Secondary Science Specialist, St. Johns County Schools*

*Donna Soncrant, Secondary Math Specialist, St. Johns County Schools*

*Kim Wuellner, K – 12 Mathematics Coordinator, St. Johns County Schools*

*Donna Lueders, Executive Director, Investing in Kids! (ink!)*



- Lessons Learned:
  - Teacher collaboration was successful
  - Student engagement was higher than in traditional lessons
  - STEM lessons can replace traditional lessons, they don't need to be in addition
  - Connections must be made as to why STEM lesson is being used
  - STEM lessons/projects can be a form of assessment
  - Classroom management is essential for the lesson to be successful
  - STEM lessons must be planned
- Project Modifications:
  - None, other than shift to distance learning





# FPL EmPOWERing STEM Educators

## EmPOWERing STEM Educators in Volusia

*Amy Monahan, STEM Specialist, Volusia County Schools*



- In this project, 4-12 grade teachers worked with local college professors to deepen understanding of STEM education
- Challenges:
  - Needed more events
  - Final workshop was cancelled due to COVID



*"It was really entertaining and informative. I enjoyed meeting new teachers in an educational setting. I loved how we learned things in a hands on matter and discussed everything as a team. I would recommend this to anyone! "*





# FPL EmPOWERing STEM Educators

## EmPOWERing STEM Educators in Volusia

*Amy Monahan, STEM Specialist, Volusia County Schools*



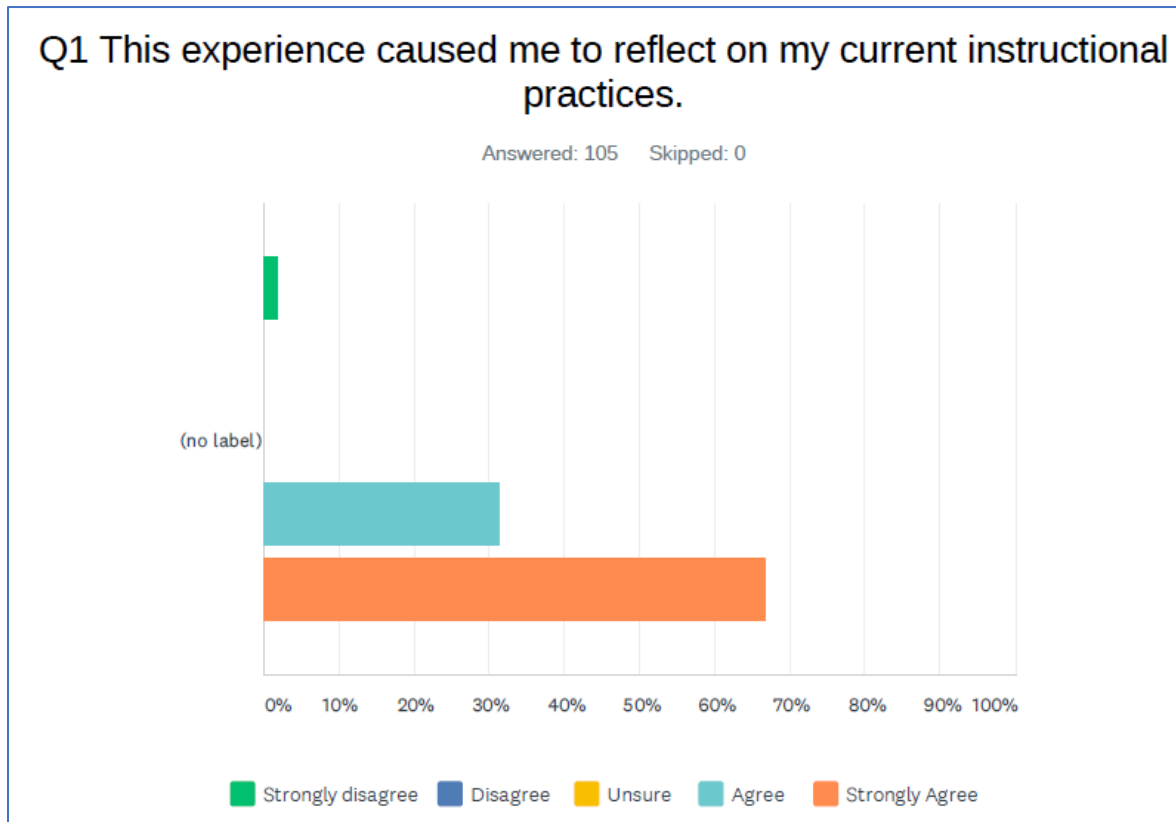
- Lessons and Successes:
  - Saturdays work
  - Include local universities to take the learning further (but careful to help with engagement)
  - What STEM truly is; still not common knowledge
  - Modeling is a great strategy to allow participants to understand HOW to deliver STEM content
  - “Aha” on teaching strategies
  - Facilitators can follow up in fall
- Project Modifications:
  - Makey Makey purchased for classrooms
  - Teachers created an event for students





# FPL EmPOWERing STEM Educators

## Teacher Follow Up Survey Results

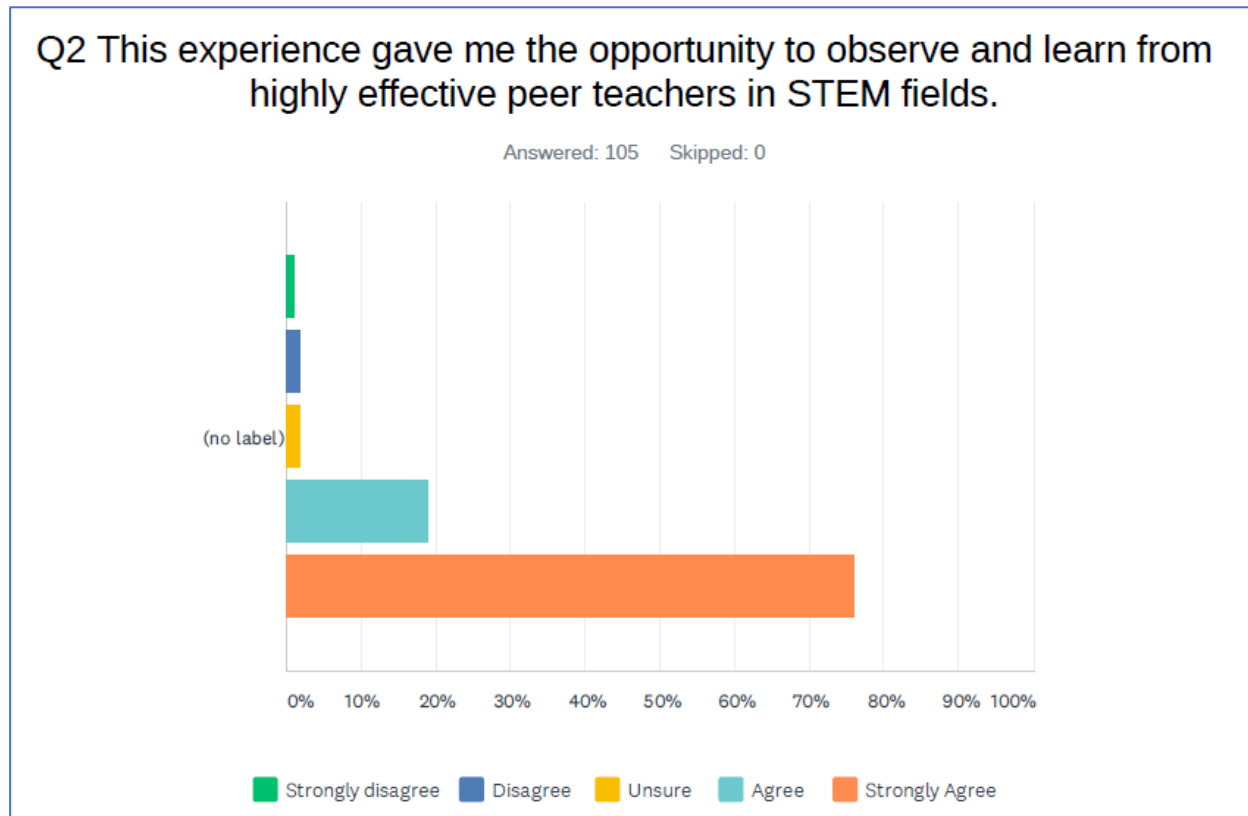


- 98.1% agreed or strongly agreed



# FPL EmPOWERing STEM Educators

## Teacher Follow Up Survey Results

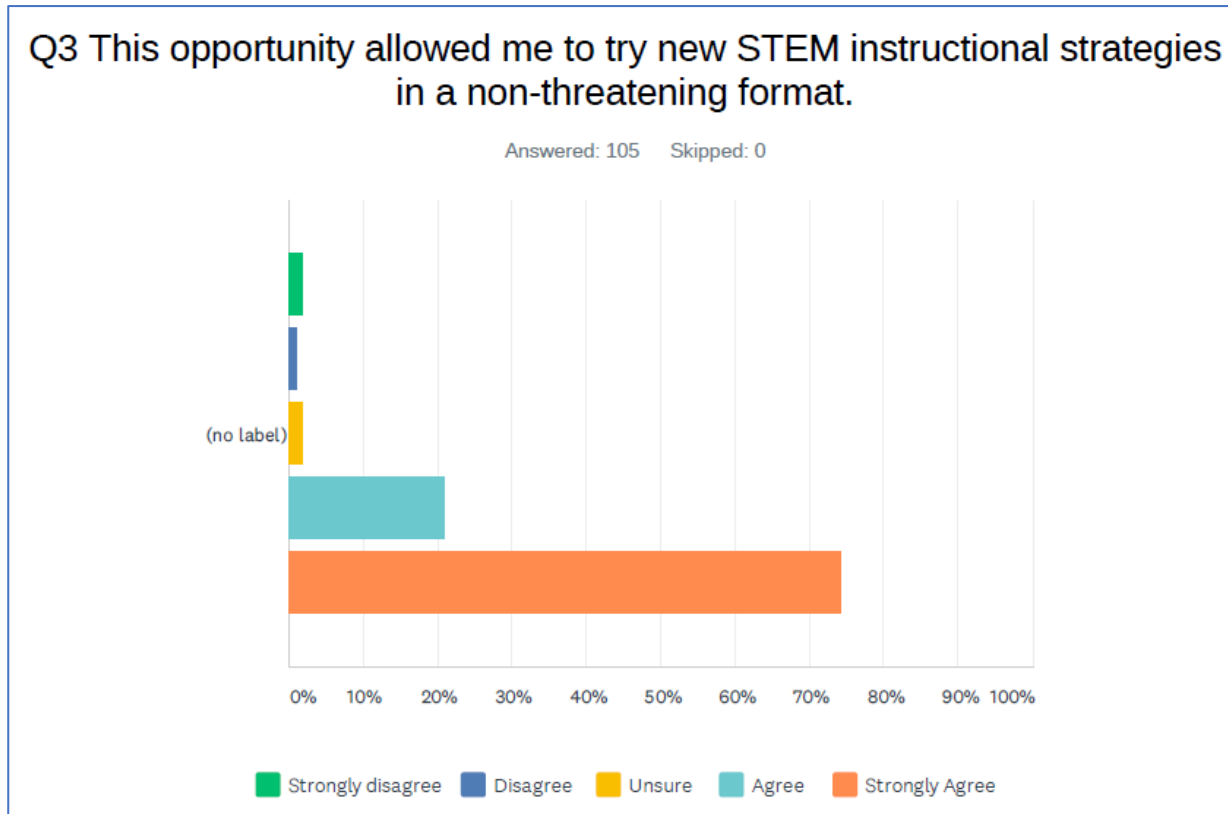


- 95.2% agreed or strongly agreed



# FPL EmPOWERing STEM Educators

## Teacher Follow Up Survey Results



- 95.2% agreed or strongly agreed

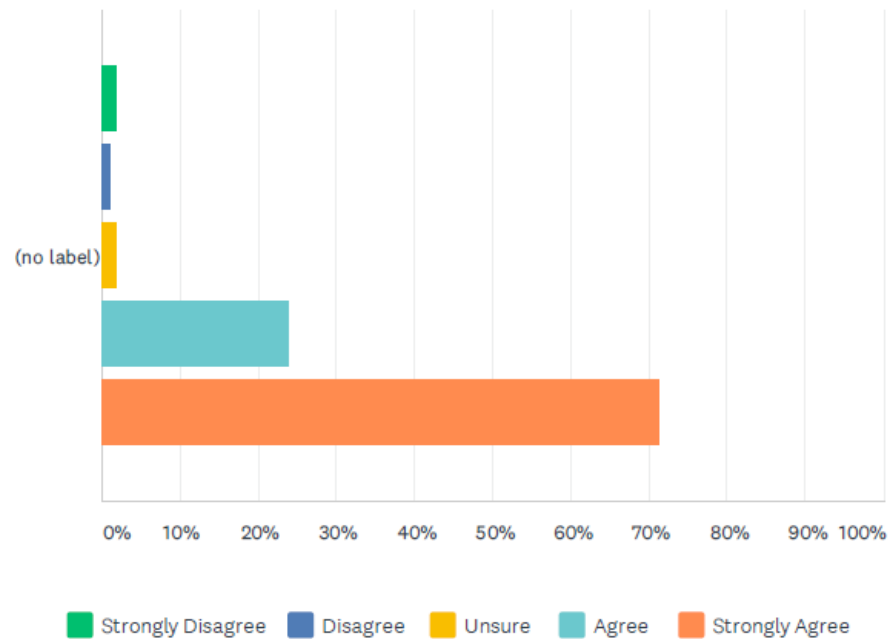


# FPL EmPOWERing STEM Educators

## Teacher Follow Up Survey Results

Q4 I have tried or will try new STEM instructional strategies in my classroom as a result of my participation in this program.

Answered: 105 Skipped: 0



- 95.2% agreed or strongly agreed

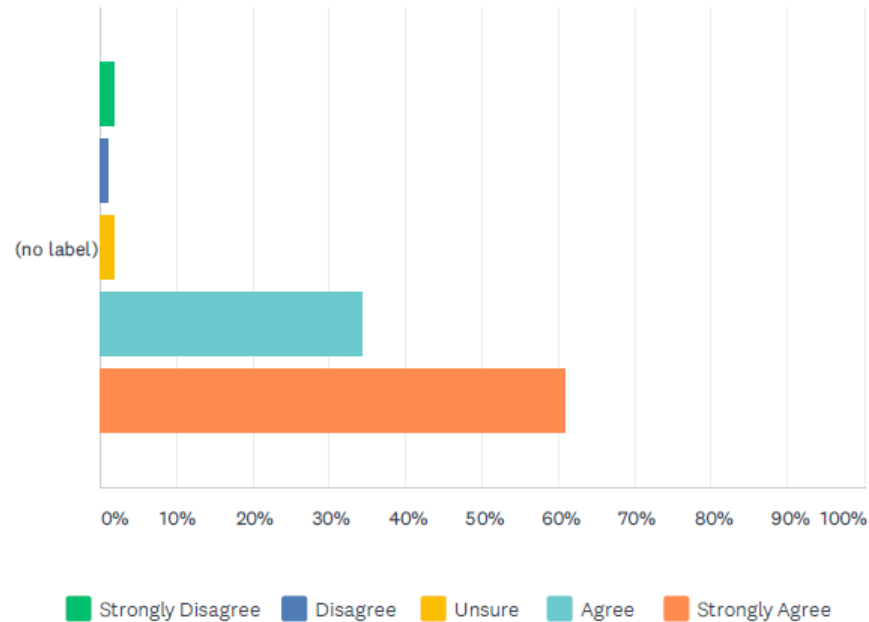


# FPL EmPOWERing STEM Educators

## Teacher Follow Up Survey Results

Q5 This opportunity has allowed me to build conscious competence in STEM standards-based instruction.

Answered: 105 Skipped: 0

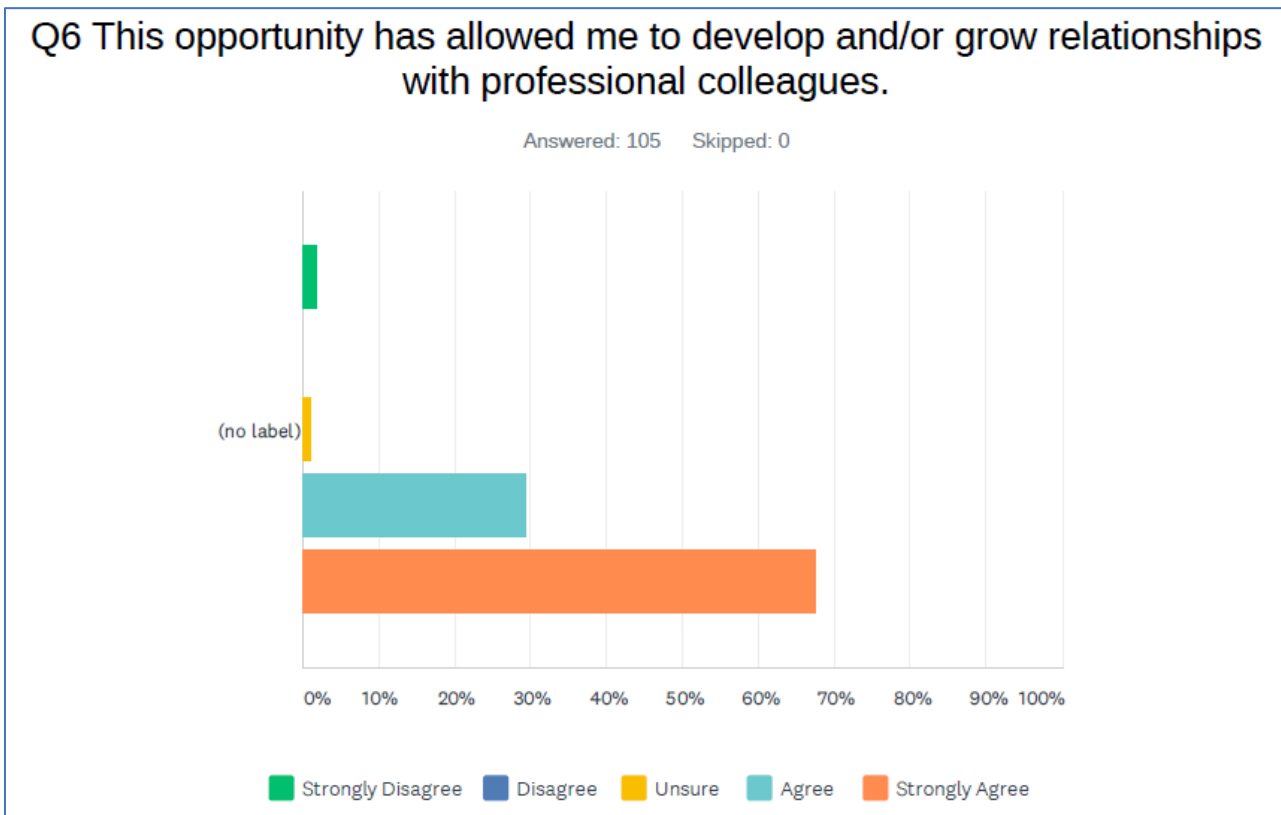


- 95.2% agreed or strongly agreed



# FPL EmPOWERing STEM Educators

## Teacher Follow Up Survey Results



- 97.1% agreed or strongly agreed



# FPL EmPOWERing STEM Educators

Questions?





# FPL EmPOWERing STEM Educators

**Article of interest:**

**[What We've Learned From Distance Learning](#)**



**CONSORTIUM**  
OF FLORIDA EDUCATION  
FOUNDATIONS

**Mary Chance**  
President  
[Marychance@cfef.net](mailto:Marychance@cfef.net)

**Tracy Burger**  
Director of Member Development  
[Tracyburger@cfef.net](mailto:Tracyburger@cfef.net)

**We work with our members and partners to connect individuals, organizations and financial resources, building the capacity and effectiveness of local education foundations.**