

# AT&T FULL STEAM AHEAD FOR FLORIDA'S FUTURE YEAR END REPORT

2022-2023



**AT&T**

**FINAL GRANT REPORT  
SUBMITTED TO AT&T  
JULY 2023**



**CONSORTIUM  
OF FLORIDA EDUCATION  
FOUNDATIONS**

# FOR 13 YEARS FLORIDA STUDENTS HAVE BENEFITED FROM AT&T INVESTMENT

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For the 13th consecutive year, AT&T has partnered with the Consortium of Florida Education Foundations to support hands-on learning opportunities. This program funded opportunities that re-engaged students who have gotten behind in academics and/or are in underserved communities through hands-on STEM enrichment activities, student-led digital divide support, or increasing CTE certification completion.

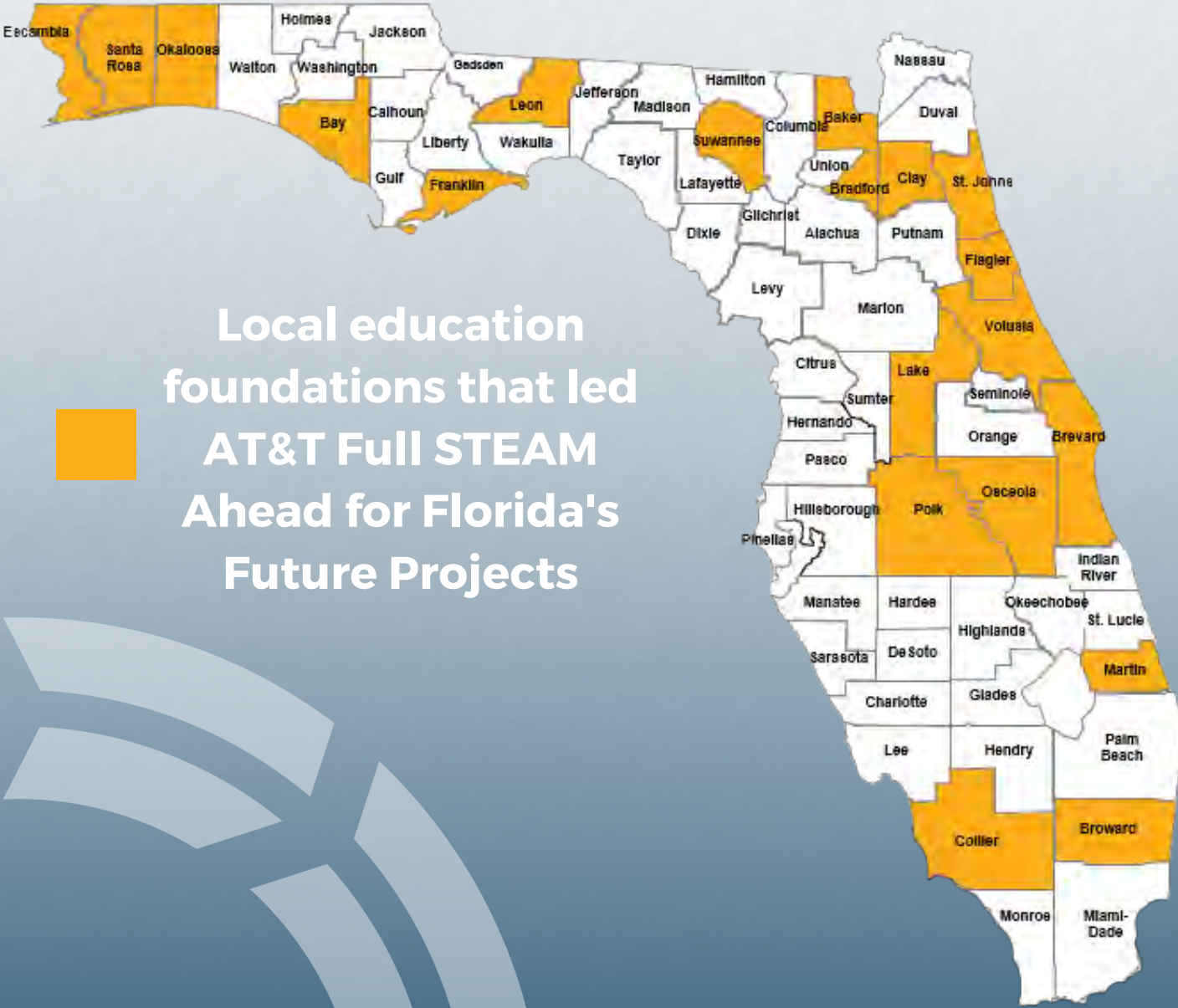
To date, a total of \$1,245,450 of AT&T funding has had the following impact:

- 508 projects
- 91,012 students impacted

Whether saving monarch butterflies, earning entrepreneurship credentials, or designing with digital canvas, each project varied depending on the goals and students' needs. AT&T funds were used to provide supplies, equipment, and transportation to make each classroom vision a reality.

In the 2022-2023 school year, 20 local education foundations provided creative hands-on learning opportunities for underserved students related to STEAM curriculum and career pathways.

# 2022-2023 PROJECTS



Local education foundations that led AT&T Full STEAM Ahead for Florida's Future Projects



# PROJECT HIGHLIGHTS

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**44%**

of participating students increased interest in taking STEAM classes in the future

**75%**

of student participants completed a CTE certification

**36%**

of participating students indicate increased interest in applying for a STEAM program in college

**66%**

of primary students demonstrated sense of perseverance in problem-solving

## **In 2022-2023, AT&T Full STEAM Ahead impacted:**

- 20 School Districts
- 3,892 Students in 15 STEAM Enrichment Projects
- 647 Students in 5 Career and Technical Education Certification Projects

\*\*The full student impact survey summary is appended to this report

# PROVIDING STUDENTS AN EGG-CELLENT VIEW

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**Baker County Education Foundation**

**350 Students  
Grade 7**



Through this project students were able to attain mastery of 7th grade life science concepts related to reproduction. Students participated in hands-on microscope labs where they viewed and identified the different stages of mitosis and meiosis. Students hatched chicks in order to view and understand the role of genetics and environmental factors in the development of organisms. This hands-on approach allowed students to create educational connections through experience rather than simply reading the material in a text book. Students used discovery to make connections to their reading and learning.

**Outcome Highlight: 86% of students scored proficient on related End of Course Assessment**

# BUILDING CYBERSECURITY FOR TOMORROW THROUGH EXPLORING CTE TODAY

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**Bay Education Foundation**

**184 Students  
Grades 6-12**



The goal of this project was to increase student interest in the areas of cybersecurity and information technology through engaging events where students were introduced to basic IT concepts such as developing web pages, exploring IT, and computer science opportunities. Students engaged through a series of STEM workshops focused on hands-on experiences and group activities presented by FSU PC and the ASCENT program. One workshop included a STEM challenge to build a catapult using only rubber bands and popsicle sticks! There were also labs on these topics: Cybersecurity, Computer Science, Aerospace Engineering, Chemical and Process Engineering, Estuaries & Conservation, Survival Skills, and Green Jobs.

**Outcome Highlight:** Nearly 75% of our students said they were more interested in CTE after the workshop.

# INTRODUCING THE STEM EXPERIENCE TO BRADFORD 8TH GRADERS

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**Bradford County Education Foundation**

**420 Students  
Grade 8**



During visits to the CADE Museum, staff, educators, and students worked on hands-on and interactive STEAM projects centered on the solar system and aligned with state standards.

The majority of participating students had little experience outside of Bradford County and exposure to other educational services other than public schools.

**Outcome Highlight:** Reading scores improved by 6% and science scores increased by 4%.

# CTE & ELEVATE BREVARD

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## Brevard Schools Foundation

**109 Students**  
**Grades 9-12**



This project aimed to increase access to postsecondary education opportunities and CTE by connecting students at the district's only Title I school to resources, programs, and mentors in the district's Elevate Brevard initiative. Project activities included onboarding industry mentors, pairing mentors with students and presentations by local CTE industry representatives to encourage participation in CTE programs. Industry partners also provided internships, externships, and shadowing opportunities for students. Students also participated in a day at the University of Florida College of Engineering where they engaged in interactive STEM activities. CTE completion rates were not available at the time of this report.



**Outcome Highlight: 90% student completion rate in related OSHA/HAZMAT/Construction/Safety Courses.**



# THREE, TWO, ONE! GETTING STUDENT CAREERS TO LIFTOFF

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## Broward Education Foundation

**160 Students**  
**Grades 9-11**



The project purpose was to increase the number of student completions of Fusion 360 Mechanical Design and Computer Aided Manufacturing certifications through hands on activities. The students completed projects using Computer Aided Design and Computer Aided Manufacturing software such as Fusion 360/Solidworks and then created designs on either a 3D printer, Laser Cutter or CNC (Computer Numerical Control) Machines. The projects include Solid Fuel Rocket and Water Bottle Rockets. As the students progressed through the project activities, their mastery of Computer Aided Design and Computer Aided Manufacturing software increased as they create their virtual designs and applied them to physical models. The students tested their prototypes through simulation and real-world tests.



**Outcome Highlight: 70% of participating students passed the Fusion 360 certification exam.**

# ANIMATION STATION: STEAM IN 3D

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## Clay Education Foundation

**300 Students**  
**Grades K-5**



Through this project, students engaged in hands-on learning in a relatable, fun way. The Animation Level I Kit introduced students to video editing and stop-motion movie-making through different software options. Students had an opportunity to create multiple types of animations, including their names in playdough and pages for a digital animal alphabet book that displayed letters as animals. Through their understanding of the elements of a story, they worked in groups to write and animate their own stories with defined characters, a setting, and a plot that contains a beginning, middle, and end. At the end of each module, student-created videos were shared with the class.



**Outcome Highlight:** 8% increase in number of students wanting to take more math and science classes.

# STEAM STARTERS

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## Champions for Learning (Collier)

**100 Students**  
**Grades K-5**



This project has made a difference for the students, teachers, and staff at Golden Gate Elementary School through the creation of Steam Starter challenges. These activities included one relating to the classic story “The Three Little Pigs.” Students were tasked with building a house for the pigs and were able to test its durability against the wind with a fan (simulating the wolf’s breath from the story). Students were also able to build pig snouts, houses using playing cards and code paths for the three little pigs to follow using Ozobots, smart robots that can follow lines or roam around freely, detect colors, and can be programmed using visual codes.

Another challenge was an end of the year Carnival where students created carnival games as their take-home challenges. In school, they were able to build popcorn containers (and fill them with popcorn to snack on) and a roller coaster made from card stock. They were also able to play each other’s completed carnival games.



**Outcome Highlight:** Increase in parent involvement in STEAM Starter events.

# OUR FUTURE IS BRIGHT WITH CAREER AND TECHNICAL EDUCATION

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## Escambia County Public Schools Foundation

**125 Students**  
**Grade 5**



Matching students with adults in the community helped students identify career pathways of interest, find guidance and mentorship through program completion, and find jobs post-high school graduation! Career Coaches utilized a Foundation created "roadmap" to help students identify interests, personality traits, and possible career pathways. "Classroom to Careers" field trips, technical school tours, "Intern for a Day" trips were all key program highlights.

**Outcome Highlight:** 40% increase in student knowledge of available CTE opportunities in the district.

# TOOLING UP IN A DIGITAL WORLD

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## Flagler County Education Foundation

**115 Students  
Grades 6-8**



The intent of the project was to prepare students for entry-level credentials to become proficient in their ability to utilize the Google Suite of productivity tools, one of the largest deficient skill sets outlined by local business and industry leaders. Along with their ability to complete the curriculum and earn the certificate in the productivity suite, students were exposed to the technical skills that prepare them to understand the basics of writing code for a website and the skills for understanding the need for cybersecurity. Eighth-grade students expanded their knowledge beyond the productivity suite and dove deeper into the use of Social Media tools. This focus helped students learn how to create social media campaigns and, more importantly, highlighted the acceptable utilization of these platforms in today's society.

**Outcome Highlight: 91% of students earned the Social Media Strategist Industry Certification.**

# CERTIFIABLY YOURS

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## Franklin County Education Foundation

**123 Students  
Grades 8-12**



Students in Unmanned Vehicles, Welding Technology, Building Trades & Construction Design, and Culinary Arts were provided assistance via tutoring, enrichment activities, guest speakers/lecturers, and online support in efforts to bolster CAPE certification attainment. Activities included focused study in each program area through online and face-to-face instruction, as well as extensive exam review and practice in each program as provided by the certifying agency. Guest speakers provided practical knowledge and experience related to the certification being studied. An end of the year recognition and award activity was held to recognize all students who have earned a certification.



**Outcome Highlight:** 19% increase in CAPE certifications earned.

# ENRICHMENT FULL STEAM AHEAD

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**Education Foundation of Lake County**

**250 Students  
Grades 4-5**



The intention of this project was to provide students with opportunities to reinforce their core learning through hands-on projects with a practical application: landing on and exploring the moon. Students designed and tested a lunar lander, created a 'Welcome to the Moon' sign and created an astronaut helmet. Students applied what they learned about gravity and terms, such as drag, to design a landing device that would preserve the 'people' (ping pong balls) from bouncing out. The 'Welcome to the Moon' sign enabled students to experiment with circuits as they used LEDs and batteries to add a lighted element to their sign. This was coupled with tower building to reinforce teamwork and collaboration. Students were highly engaged throughout all of these activities and excited to apply what they had learned in math, science, and reading to collaborate on various tasks that a real-life mission would need to complete to be successful.

**Outcome Highlight: Increase in critical thinking skills of participating students.**

# PUTTING THE A IN STEM

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## Foundation for Leon County Schools

**300 Students**  
**Grades 3-5**



This project incorporated digital arts into STEM subject areas in the classroom. Wixie digital canvas was used within lessons to combine text, images, and voice narration to share design ideas, explain thinking and share real world solutions. Lesson areas included: Scientific Cycles; Design; Create a Creature; Making Comparisons; Inform; Raise Awareness and Change Behavior; Infographics; and Comics. In addition, students went to the Gadsden Art Center & Museum's Marvelocity: The Art of Alex Ross exhibit. Ross is considered one of the greatest artists in comic books and the exhibit included his preliminary sketches, childhood drawings, life-sized head busts, and illustrated covers he designed.

**Outcome Highlight:** 70%+ of participating 4th and 5th graders successfully completed a Digital Arts Certification.



# CONNECTED SCIENCE

## Martin County Education Foundation

101 Students  
Grade 5



Through this project, all 5th-grade students at Bessey Creek Elementary School participated in a series of hands-on science experiments on concepts and standards covered in 3rd, 4th, and 5th grades. Students had the opportunity to experiment in real time with a scientist at their own lab station while using all of the same materials the scientist was using. In addition to the concepts they learned in the lab, they identified parts of investigations and experiments such as what the control is, what the independent and dependent variables for the lab are, and even the observations they are making. The goal was to foster a love of science and boost science scores on the 5th grade Florida Standards Science Assessment.

**Outcome Highlight:** Increase in statewide science assessment pass rate by 7% to 77%, 26 percentage points above state average.

# TO THE MOON AND BEYOND: GROWING OUR FUTURE

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## Okaloosa Public Schools Foundation

**100 Students**  
**Grades K-12**



The goal of this project was to help students and families become more engaged, excited, and enthusiastic about STEAM projects. At the STEAM Science Fair, eight hands-on stations were available for students and family members to work together in solving STEAM challenges. During the STEAM Science Night event, participants moved through three art activities, a physics demonstration, a solar system necklace station, and looking through telescopes at Mars, Venus, and Jupiter. At these stations, participants learned about Bernoulli's Principle, gravity, plant life cycles, and astronomy. In the spring, a two-day Moon Exploration event showcased four moon-themed activities with parent volunteers. In May, the entire student body participated in STEAM Field Day where seven hands-on science stations were set up around campus by NASA, the Air Force Association, Civil Air Patrol, and the Houston Space Center.



**Outcome Highlight:** Volunteer participation in school events increased by over 50%

# OBA YOUNG ENTREPRENEUR SUCCESS (YES)

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## Education Foundation for Osceola County

140 Students  
Grades 9-12



Through this project, students learned entrepreneurial basic skills, design thinking, and how to mold ideas into clear business plans. With an emphasis on personal development and academic rigor, this programming incorporated practical, hands-on experiences to help build 21st Century Workforce skills and unleash the entrepreneurial spirit of innovation. Students created Lean Business Canvas and participated in several pitch deck competitions and had the opportunity to obtain related credentials of value. Furthermore, the parent academy allowed parents to certify in Microsoft Office, increasing the student-led Digital Divide support for peers and families of our school.

**Outcome Highlight: 70% of participating students passed ESB certification exam**

# ALL "HANDS-ON" DECK FOR STEAM LEARNING!

## Polk Education Foundation

228 Students  
Grades 1-4



Through this project, Berkley Charter 1st and 2nd-grade classes participated in weekly differentiated centers using BeeBots. Students who struggle academically in content areas were excited to practice reading and math simply because they were also getting to use BeeBots. Students in 3rd and 4th grade participated in STEaM centers using Lego WeDo kits and STEaM Challenge task cards. Having these highly engaging activities was not only a motivating factor in instruction for reluctant students, but also allowed repetition and practice for students in core areas of instruction in order to help build their mastery of this content. Students had multiple opportunities to practice important skills, such as critical thinking and perseverance, in memorable ways.

**Outcome Highlight:** 1st and 2nd grade students showed 33 point growth in math.

# CODE NINJAS' SUMMER STEAM SATURDAYS

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## Santa Rosa Education Foundation

**70 Students  
Grades 4-5**



The purpose of this project was to engage 5th- and 6th-grade students performing lower than their peers in math and science in Saturday STEAM camps. During the one-day camp, students worked together to design, build, and test code. Using a project-based learning framework, students analyzed, problem-solved, learned how to operate as a team, experienced conflict resolution, and applied standards in math and science. The camps served as a unique opportunity for students and families to address learning loss due to COVID for rising 4th and 5th graders. The camps impacted students at multiple intermediate schools and created opportunities for lower-performing students to re-engage in math and science. In addition, students gained confidence in coding, applied mathematics, logic, and reasoning through rigorous, yet fun, STEAM instruction.

**Outcome Highlight: Students gained confidence in coding, applied mathematics, logic, and reasoning.**

# PROJECT PARENTING

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## Investing In Kids! (St. Johns)

### 150 Students Grades 9-12

Through this project, students at the Creekside Future Teachers Academy explored the physical, cognitive, and social-emotional development across human lifespans, including more exposure to positive ways to take care of infants, as well as the dangers of mistreating an infant, all prerequisites for completing the academy. Students also practiced new technology skills, such as designing a website, editing videos, and creating a YouTube channel for the academy. Ninth-grade students were engaged in seeing the STEAM connections in the academy. By getting the freshmen excited about working with the RealCare babies more students opted to stay in the academy for their upcoming sophomore year. Because of this, enrollment for the academy next year will be 150 students.



**Outcome Highlight:** 50% increase in academy enrollment for 2023-24.

# PINEVIEW BUTTER-FLY-WAY

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## Suwannee Education Foundation

**414 Students**  
**Grades K, 3-5, 9**



Butter-fly-way is a national effort to save the monarch butterfly by creating “highways” to raise, release and track migration through technology through a connection to Wild Green Futures, a national nonprofit that is a strategic partner in the initiative. The goal of this project was to decrease absenteeism and increase engagement in learning through an innovative outdoor learning lab and through the use of video and digital art technology. In this project, students rotated through various teams to explore technology applications and science while practicing team building. Teachers worked with students to nurture leadership capacity and prepared students for working in various teams.



**Outcome Highlight:** 5th grade math proficiency scores increased by 7%.

# K5 STEM+D PD

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## FUTURES Foundation for Volusia County Schools

800 Students  
Grades K-5



The purpose of this project was to provide professional learning to teachers about what STEM really is and how it benefits student learning. STEM teachers received professional development on what STEM should be in Volusia County, which opened the dialogue to have a more engaged discussion of what can be provided in elementary STEM classrooms. This discussion and continued PD created a guideline for teachers to use in the STEM classroom as a series of do's and don'ts when starting a STEM classroom in elementary schools. Lessons were created with science and math standards/ benchmarks and cataloged for use in all STEM classrooms. Equipment needed for the lessons was purchased and indexed for teachers in the future.

**Outcome Highlight:** Participating teachers increased their understanding of STEM classroom expectations.



# **PUBLICITY AND ADDITIONAL PROJECT MATERIALS**

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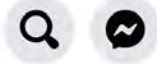
- Social Media spotlights
- Website Exposure
- Press Releases and Media Coverage
- Foundation Forum Articles (Audience 6,000+)
- Member Minute Articles (Internal 400+)

# SOCIAL MEDIA SPOTLIGHTS

11:01



facebook



Clay Education Foundation

11h · 🌐

Through a partnership with the [Consortium of Florida Education Foundations](#) and AT&T, we were able to present Ms. Lowans of [Clay Hill Elementary School](#) with a [WOZ ED, K-12 Animation kit](#) through AT&T's "Full STEAM Ahead" grant program. Her STEM classes will use these materials to learn about video editing and stop-motion movie-making!



👍❤️ 16

4 shares



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Polk Education Foundation  
January 10 at 2:57 PM · 🌐

As part of AT&T's "Full STEAM Ahead!" grant program, Berkley Elementary School received \$5,000 today from @AT&T for their project "All Hands on Deck for Learning! their project will increase Hands-On learning experiences in science and math for struggling students. students will have different opportunities to engage in stem-related subjects activities will work to bridge the learning gap, boosting student confidence for success with stem. Thank you Matt Mucci and @AT&T for s... See more



👍❤️ You, Melony Bell State Representative District 49 and 6 others

1 share



Suwannee Education Foundation  
Published by Lori Robinson Evans · April 21 · 🌐

Suwannee Pineview Elementary is building #LAT #STEAM SEF is proud to support innovative learning with our partners Consortium of Florida Education Foundations AT&T and Florida Power & Light



+12

Thank you AT&T and CFEF for the wonderful grant that allowed the Foundation for Leon County Schools to send 300 students to the Gadsden Art Museum to view the Ross Marvelocity exhibit. The kids had a great time.



Thanks to a grant that we received from AT&T we were able to take 300 students from WT Moore Elementary see the Marvelocity exhibit at the Gadsden Art Museum. These students will also be learning to use Wixie to make their own comics. #ATT #CFEF



Exciting news! Our Bay County member and partners at AT&T have teamed up to provide students with the tools and experiences they need to succeed in the 21st century workforce. Students will explore cybersecurity and IT concepts through fun, hands-on events.

[Bay Education Foundation](#)



👍❤️ 571

68 comments 21 shares

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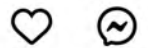
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2h · ⚙️

A Creekside teacher recently received a Full STEAM Ahead grant made possible by a partnership between AT&T Florida, the... See more



Instagram ▾



seffoundation · Original a...

#STEM #L4T



**Suwannee Education Foundation**  
Published by Lori Robinson Evans · 40m · 🌐

Big shout out to [AT&T Consortium of Florida Education Foundations](#) & Beaver's along with our volunteers and students from [Suwannee High School: Official SCSB Site](#) and [Branford High School: Official SCSB Site](#) for supporting the #STEAM project at [Suwannee Pineview Elementary!](#)



**Consortium of Florida Education Foundations**  
368 followers  
1mo · 🌐

The Consortium is proud to partner with [AT&T](#) to provide hands-on STEAM experiences to Bradford County students through the "Full STEAM Ahead" program.

The Bradford County Education Foundation took students to the CADE Museum for exploration and discovery!



**Consortium of Florida Education Foundations**  
368 followers  
1d · 🌐

Thanks to the [Broward Education Foundation](#) and [AT&T's "Full STEAM Ahead"](#) program, students are exploring the world of STEAM and discovering new passions and interests. With access to cutting-edge technology and immersive experience we're helping our students prepare for the careers of the future.



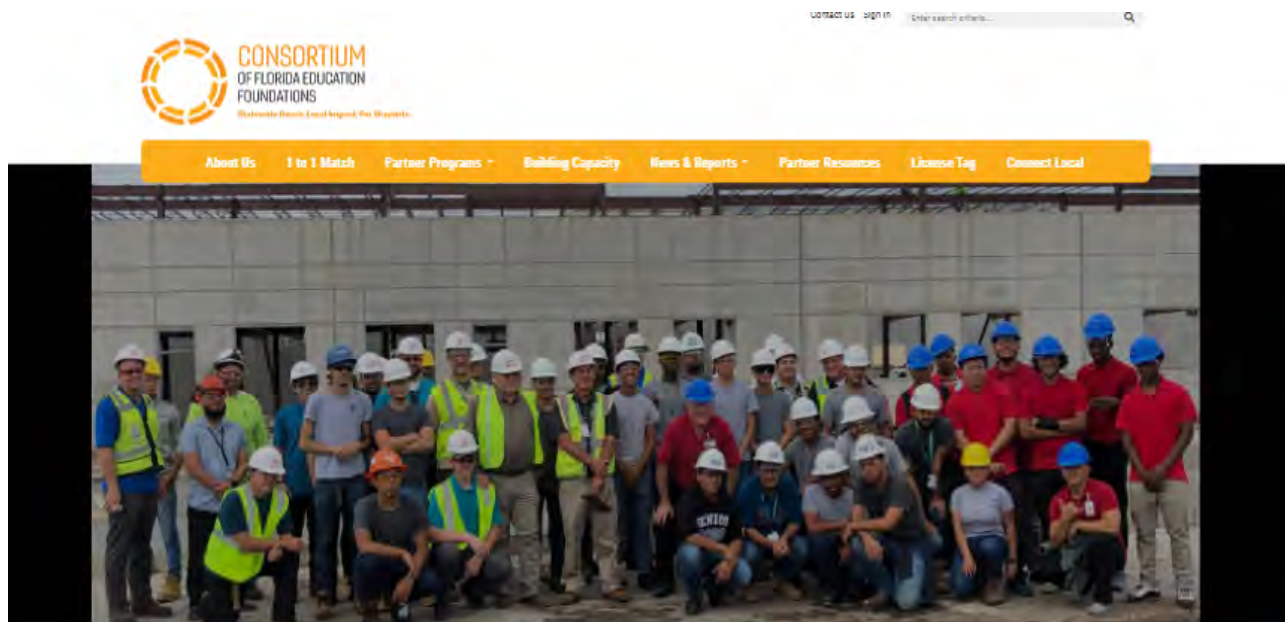
**Suwannee Education Foundation**  
June 24 at 5:13 PM · 🌐

We are so proud of our students and teachers at [Suwannee Pineview Elementary](#) - principals too! 🙌 Amazing hands on STEAM projects and outdoor learning labs.

[Consortium of Florida Education Foundations AT&T Florida Power & Light](#)



# WEBSITE EXPOSURE SAMPLE



## AT&T FULL STEAM AHEAD

"When will I ever use this?" is the age-old question from students struggling to grasp challenging math and science concepts in the classroom.

"Why aren't we getting more qualified applicants for our science and technology jobs?" is a too-common refrain from Florida workforce leaders who often struggle to fill positions that require strong foundational skills in STEM - science, technology, engineering and math.

For twelve years, AT&T Florida has partnered with the Consortium to support hands-on STEM-career related learning opportunities. In the wake of the pandemic, they have a particular focus on engaging students who may have fallen behind during the pandemic as well as those in underserved communities and high school students seeking to jump start their STEM careers through industry certifications.

## IMPACT BY THE NUMBERS

Since 2010, annual grants have been leveraged by the Consortium for impressive impact:

- 488 projects
- 86,473 students directly impacted throughout state
- 954 local workplace partners engaged
- \$1,140,450 total investment

## CONNECTING CLASSROOMS TO STEM JOBS

From engineering human-powered submarines to creating sustainable aquaponics farming systems, each project varies depending on the goals and workplace partners involved. AT&T funds are used to provide supplies, equipment and transportation to eliminate barriers to learning beyond the classroom and make a teacher's vision a reality.



[CHECK OUT THIS YEAR'S PROJECTS!](#)

[DOWNLOAD LAST YEAR'S IMPACT REPORT](#)



"This program has shown me all the STEM job opportunities available that I didn't even know about."

*Lee County High School Student*



## FULL STEAM AHEAD

AT&T invests \$100,000 to support student government and workplace readiness.

[Learn More](#)

# MEDIA COVERAGE SAMPLES

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**Local teacher receives Full STEAM Ahead! grant for a *RealCare* baby from INK!, Consortium of Florida Education Foundations, and AT&T**

**Local students receive honors from Florida Future Educators of America (FFEA)**

St. Augustine, Fla. – February 6, 2023 –AT&T, through the Consortium of Florida Education Foundations (CFEF) and administered through [Investing in Kids \(INK!\)](#), recently helped fund a local teacher with a grant to start ‘Project Parenting’, a hands-on science, technology, engineering, arts, and mathematics (STEAM) enrichment project to increase student understanding through experiential learning. According to Regan Ashker, an English II Honors educator at Creekside High School Teaching Academy and advisor for Florida Future Educators of America, activities include student work with a *RealCare* baby.

The infant simulator helps with instruction and practice in parenting skill development at the school’s Future Teachers Academy. “We currently have simulators for 106 academy students to share. Our department has doubled this year. The grant will help add another *RealCare* simulator to help more students gain hands-on experience,” said Ashker.

Creekside’s Future Teachers Academy is a program of study that follows the Florida Department of Education (FLDOE) in ninth through twelfth grade. Students who stay in the program for four years of high school take one elective class each year. The first-year course is *Introduction to the Teaching Profession*, the second elective is *Development*, the third-year class is *Foundations of Curriculum and Instruction*, and the fourth-year course is *Principles of Teaching Internship*.

Another goal of “Project Parenting” is for students to improve their technical skills. Using various online platforms to showcase their *RealCare* infant simulator design, research skills, and creating a Canva infographic will help to do this through simulation. Collaboration with classmates is also included to do this where each student shares a valuable piece of advice about the “Project

For immediate release 2/1/2023:

For more information contact:

Susan Copeland 863-534-0519

Mary Chance 352-338-0250 or [marychance@cfef.net](mailto:marychance@cfef.net)

**Polk Education Foundation Receives AT&T Full STEAM Ahead for Florida’s Future Grant to Fund Learning Innovation**

Students at Berkley Charter School will benefit from a statewide investment by AT&T this year, one that seeks to engage students who may have fallen behind during the COVID-19 pandemic as well as those in underserved communities, and high school students seeking to jump start their STEM careers through industry certifications.

For the 13<sup>th</sup> consecutive year, AT&T is working with the [Consortium of Florida Education Foundations](#) (Consortium) to support hands-on learning opportunities. 19 separate projects organized and funded through Consortium member local education foundations will re-engage students who have gotten behind in academics and/or are in underserved communities through hands-on STEAM enrichment activities or increasing CTE certification completion.

Berkley Charter’s program, *All “Hands-On” Deck for Learning*, is designed to increase the hands-on learning experiences in science and math for students who are in the bottom 25% academically. Providing opportunities to engage in STEM related subjects in a positive, engaging way will help bridge the learning gap with participating students and boost their academic confidence. Classrooms have set time aside each day for structured centers that are differentiated to meet the specific needs of students. During this time, teachers use the opportunity to work with students one on one, or in small group instruction. Teachers remediate or enrich students in specific content, whichever is needed.

Students who are the bottom 25% are students generally struggling with traditional instruction, therefore we want to provide multiple opportunities for them to grasp the concepts. We especially want to provide hands-on experiences so their mind and body are engaged in learning, and so they will be more likely to understand and retain the content. Activities are targeted. Kindergarten and first grade students will experience BeeBots – Child friendly robots that can be programmed by students and used to practice a variety of content. Third and fourth grade students will experience STEAM challenge tasks including Lego WeDo kits. Students will

## Local teacher receives Full STEAM Ahead! grant for a RealCare baby from INK!

AT&T, through the Consortium of Florida Education Foundations (CFEF) and administered through Investing in Kids (INK!), recently helped fund a local teacher with a grant to start "Project Parenting".

By: Investing in Kids (INK!)

ST. AUGUSTINE, Fla. - Feb. 8, 2023 - [PRLog](#) -- AT&T, through the Consortium of Florida Education Foundations (CFEF) and administered through Investing in Kids (INK!), recently helped fund a local teacher with a grant to start "Project Parenting", a hands-on science, technology, engineering, arts, and mathematics (STEAM) enrichment project to increase student understanding through experiential learning. Regan Ashker, the grant recipient, teaches three sections of English 2 Honors and three different levels of classes in the Creekside High School Teaching Academy in St. Augustine, Fla. along with serving as an advisor for Florida Future Educators of America.

Funding includes a *RealCare* baby infant simulator which helps with instruction and practice in parenting skills and learning lifespan development at the school's Future Teachers Academy. "We currently have two *RealCare* infant simulators for 106 academy students to share. Our program has doubled in size in the last year. The grant helps to add another *RealCare* simulator and help more students gain valuable hands-on experience," said Ashker.

Another goal of "Project Parenting" is for students to improve their technological skills. By using various online platforms to showcase their *RealCare* infant simulator experiences, graphic design, research skills, and creating a Canva infographic will help to demonstrate learning through simulation. Collaboration with classmates is also included to design a video tutorial where each student shares a valuable piece of advice about the "Project Parenting" process.

Additional milestones include Ashker and student recognition affiliation with an extracurricular organization, Florida Future I Creekside students recently participated in an annual state conference from throughout Florida and 50 statewide school chapters we conference was *Wild About Teaching*. Ashker's high school graduate called, *Inside Our Schools*, and one of her junior class student president. Local Academy students also received an educational PowerPoint presentation about how educators use data to make in lesson planning. "I am so proud of our award-winning student the making and I believe this is a sign of hope for our educational information, contact Donna Lueders at [Donna.Lueders@stjohns.org](mailto:Donna.Lueders@stjohns.org) website at [www.ink-stjohns.org](http://www.ink-stjohns.org).

Contact  
Donna Lueders  
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For immediate release 12/2/2022

For more information contact:

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[marychance@cfef.net](mailto:marychance@cfef.net)

### 2022-2023 AT&T Full STEAM Ahead for Florida's Future Grant to Fund Learning Innovation Throughout Florida

For the 13<sup>th</sup> consecutive year, AT&T is working with the [Consortium of Florida Education Foundations](#) (Consortium) to support hands-on learning opportunities. 19 separate projects organized and funded through Consortium member local education foundations will fund opportunities that re-engage students who have gotten behind in academics and/or are in underserved communities through hands-on STEM enrichment activities, student-led digital divide support or increasing CTE certification completion.

"We're eager to re-engage students who may have fallen behind over the past few years by providing opportunities for them to experience the relevance of STEM curriculum in the world of work, through hands-on learning and career certification programs," said Joe York, President, AT&T Florida. "We've all learned how important it is to make sure families in underserved communities have support for digital learning at home so their children have the opportunity to accelerate their education, and we're interested in supporting local efforts in that area as well."

This year's statewide grant brings the total investment by AT&T over twelve years to more than \$1 million. More than 86,000 students have been directly impacted through 488 projects.

###

#### About Philanthropy & Social Innovation at AT&T

AT&T Inc. is committed to advancing education, strengthening communities and improving lives. Through its community initiatives, AT&T has a long history of investing in projects that create learning opportunities; promote academic and economic achievement; or address community needs. The company's signature philanthropic initiative, [AT&T Aspire](#), drives innovation in education to promote student success in school and beyond. With a financial commitment of \$500 million since 2008, AT&T is leveraging technology, relationships and social innovation to help all students make their biggest dreams a reality.

#### About the Consortium of Florida Education Foundations:

The Consortium is the membership organization for Florida's school district-wide local education foundations. Established in 1987, the Consortium connects individuals, organizations, and financial resources to build the capacity and effectiveness of Florida's local education foundations. Together, Consortium members raise more than \$83 million annually for a variety of locally driven initiatives and are led by 1,200 board members, 80% of whom are local business and community leaders working in partnership with school district leaders. The Consortium manages the nation's only 1:1 legislative match for education foundation initiatives and a variety of privately funded grant programs. To learn more about the Consortium or connect with any member local education foundation, visit <https://educationfoundationsfl.org>.

# STORIES AND PHOTOS

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## Escambia student

### Agriculture/ Plants

Agriculture is growing plants. While doing agriculture we grew some tickle me plant. What I liked about this activite was The finished plant But what I did not like was the wait, it took very long. Some Schools that include agriculture are Beula middle, Ransom, Tate high and West Florida



NAME: JANAE SIMPKINS

### Engineering

Engineering is building. While engineering we built cars and Bubble machines. What i really like about it was the building part but I didnt like when it did not wor. I kept getting frustrated. Some shools that include engineering are... Beula West Florida middle



## Santa Rosa testimonials

### **Quotes from Students Who Attended Code Ninjas STEAM Camp:**

"The hide and seek coding was my favorite. I had no idea there were so many ways to decipher codes. I'm excited to try this at home this summer, and make a code for my brother to crack!"

### **Quotes from Teachers who facilitated Code Ninjas STEAM Camps:**

"Thank you for scheduling the Code Ninja program for all the students. Code Ninja's allowed students to have a productive struggle in their coding journey. All students benefited from participating individually as they worked collaboratively to learn past the surface level of coding digitally and in analog form. The students were given opportunities to communicate in subtle and not so subtle ways. Students were engaged in the instruction as they were encouraged to have creative freedom to create their own project with the new information to communicate with others." -Anna Prindle, 5th Grade Teacher





St. Johns



Collier



Brevard



Bradford



Broward



Escambia



Lake



Leon



Okaloosa



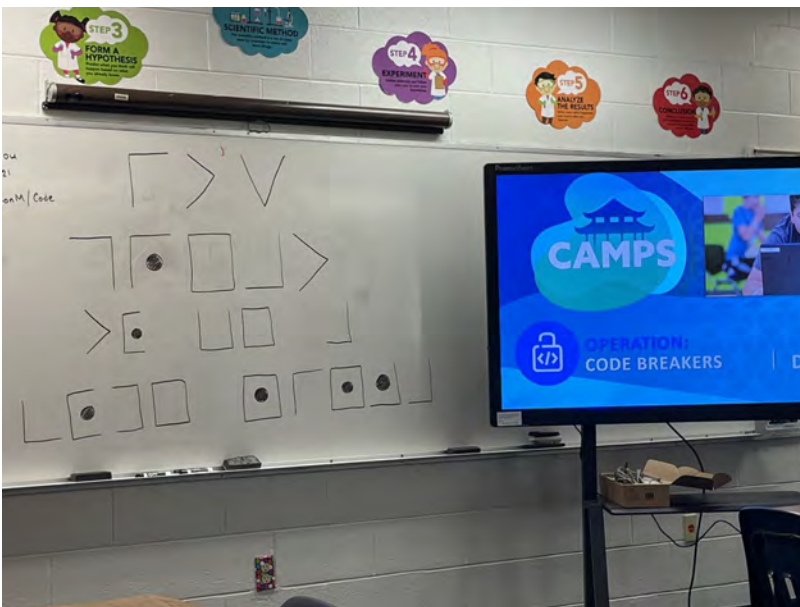
Polk



Polk



St. Johns



Santa Rosa



Suwannee

# FOUNDATION FORUM AND MEMBER MINUTE

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## AT&T Full STEAM Ahead Grants Being Accepted

Applications for the 2021-22 AT&T Full STEAM Ahead! grant program are now being accepted in the Consortium grants management platform. The deadline for submissions is 5 pm ET, November 15, 2021. Please view grant guidelines, timeline, and application template at the following links. We look forward to reviewing your grant applications! Let [Chris](#) know if you have questions. (If you missed our Informational Webinar, [here's the link.](#))

[2021-22 Project Guidelines and Timeline](#)  
[2021-22 Application Template](#)

## AT&T STEM@Work Final Report

For 11 years, AT&T has supported hands-on STEM learning opportunities for Florida students through the Consortium. Check out this year's AT&T STEM@Work projects and impact report [here](#).

## AT&T Awards \$100,000 to Help Students Move 'Full STEAM Ahead'



Longtime partner [AT&T](#) recently doubled-down to support Florida students who may have fallen behind during the pandemic as well as those in underserved communities with distance learning support and targeted career industry certification programs with a [\\$100,000 grant to the Consortium](#).

Over the last eleven years, AT&T has provided more than \$1 million in grant funds and past projects have directly impacted more than 79,000 students through 469 local education foundation projects involving 954 local workplace partners throughout Florida.

Thank you AT&T!

## Hands-On Learning Connects Kids to STEM Careers



Think back to your own school years. What learning experiences stuck with you? Think about your career. Were there "Aha Moments" when you learned about jobs you didn't know existed?

Thanks to our 11-year partnership with AT&T, more than 79,000 students have had just those types of opportunities from coast to coast!

We're proud that our local education foundations and their 57 local workplace partners persevered during the pandemic to continue STEM@Work during the 2020-21 school year.

Check out highlights of this year's program [here!](#)



**CONSORTIUM**  
OF FLORIDA EDUCATION  
FOUNDATIONS

Statewide Reach. Local Impact. For Students.

*On behalf of Florida's local education foundations, the Consortium of Florida Education Foundations thanks you for your commitment to enhancing student achievement and interest in STEAM careers with your investment in AT&T Full STEAM Ahead For Florida's Future.*

Mary Chance, President  
Consortium of Florida Education Foundations  
P.O. Box 358719  
Gainesville, FL 32635-8719  
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# FULL STEAM AHEAD

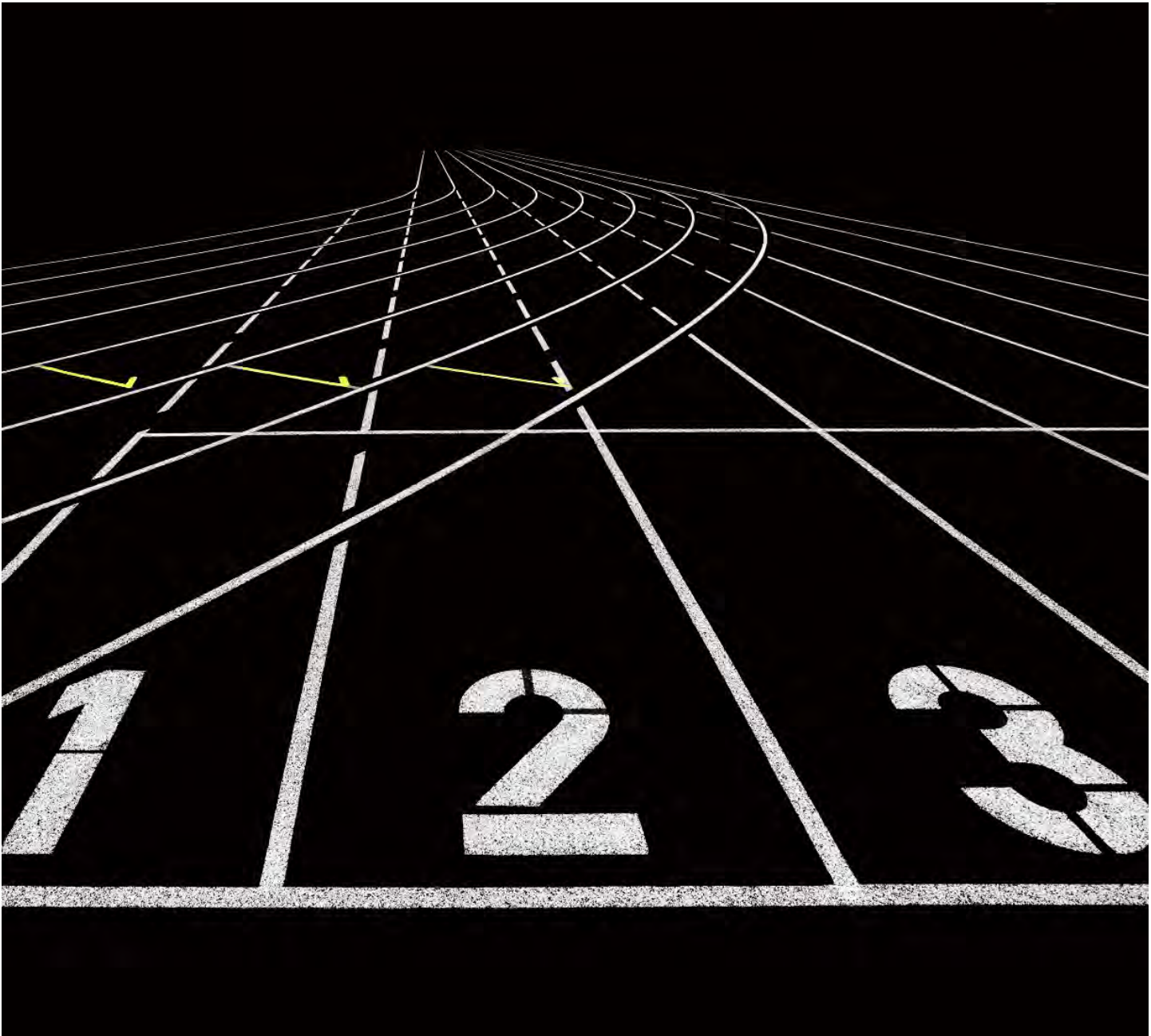
2022-23 GRANT OUTCOMES

ADMINISTERED BY THE CONSORTIUM OF  
FLORIDA EDUCATION FOUNDATIONS



CONSORTIUM  
OF FLORIDA EDUCATION  
FOUNDATIONS





## PREPARED BY THE STEM2 HUB

The Northeast Florida Regional STEM2 Hub is pleased to partner with the Consortium of Florida Education Foundations to measure the impact of STEM programs across the state. We are pleased to present our findings on the outcomes of the AT&T Full STEAM Ahead! Grant administered by the Consortium. For questions regarding the report, please contact Dr. Kathleen Schofield, Executive Director, at [kathleen@stem2hub.org](mailto:kathleen@stem2hub.org)



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# BACKGROUND

## The Importance of K-12 Exposure to STEAM Education for Career Thinking

Engaging K-12 students in STEM (Science, Technology, Engineering, and Mathematics) programs is of paramount importance in cultivating a strong interest in STEM careers and nurturing a skilled, diverse workforce for the future. Early exposure to these fields bridges the gap between theoretical learning and real-world problem-solving, allowing students to grasp the practical applications of STEM concepts (Tai et al., 2006). As a result, their attitudes towards STEAM subjects become more positive, increasing the likelihood of pursuing STEM careers later in life.

An integral aspect of promoting a robust STEM workforce lies in fostering diversity within STEAM programs. Encouraging participation from students of all backgrounds, including underrepresented minorities and girls, contributes to a more inclusive and innovative STEM community (National Academy of Sciences et al., 2011). Diverse perspectives lead to a broader range of ideas and solutions, enriching the dynamism and effectiveness of STEM fields.

Incorporating hands-on learning and interactive projects into STEAM programs sparks excitement and relevance for students. Engaging in practical experiments and problem-solving activities showcases the real-world applications of STEM concepts. This active learning approach nurtures critical thinking, creativity, and teamwork skills, all of which are vital for success in STEM careers and beyond (Pedersen & Liu, 2003).

Furthermore, involvement in STEAM programs affords students the opportunity to explore a multitude of STEM career paths. Interacting with professionals and experts in STEM fields provides valuable insights into the various roles and opportunities available (Olson & Labov, 2010). Early career exploration empowers students to make informed decisions about their educational and professional paths, ultimately increasing their chances of pursuing fulfilling and successful careers in STEM.

Research indicates that students engaged in STEAM programs often exhibit improved academic performance not only in STEM subjects but also across other disciplines (Sirin, 2012). The hands-on and practical nature of STEAM education enhances their understanding and retention of complex concepts, leading to better academic achievements overall.

K-12 STEAM programs play a pivotal role in nurturing the interest and proficiency of students in STEM fields. By providing early exposure, promoting diversity, offering hands-on learning experiences, and encouraging career exploration, these programs prepare the next generation of professionals to tackle complex challenges, drive technological advancements, and contribute to the growth and development of STEM industries. As a result, they are instrumental in shaping a bright and innovative future for our society.

### Grant Awards

Awards were made to the local education foundations in each of the following Florida School Districts: Baker, Bay, Bradford, Brevard, Broward, Clay, Collier, Escambia, Flagler, Franklin, Lake, Leon, Martin, Okaloosa, Osceola, Polk, Santa Rosa, St. Johns, Suwannee, and Volusia.

## Data Collection

Data were collected at the conclusion of the program using a retrospective survey where students were asked to think about how they felt compared to the start of the program. Survey questions were based upon a modified version of the PEAR Institute's Retrospective Survey created in partnership with the University of North Florida.

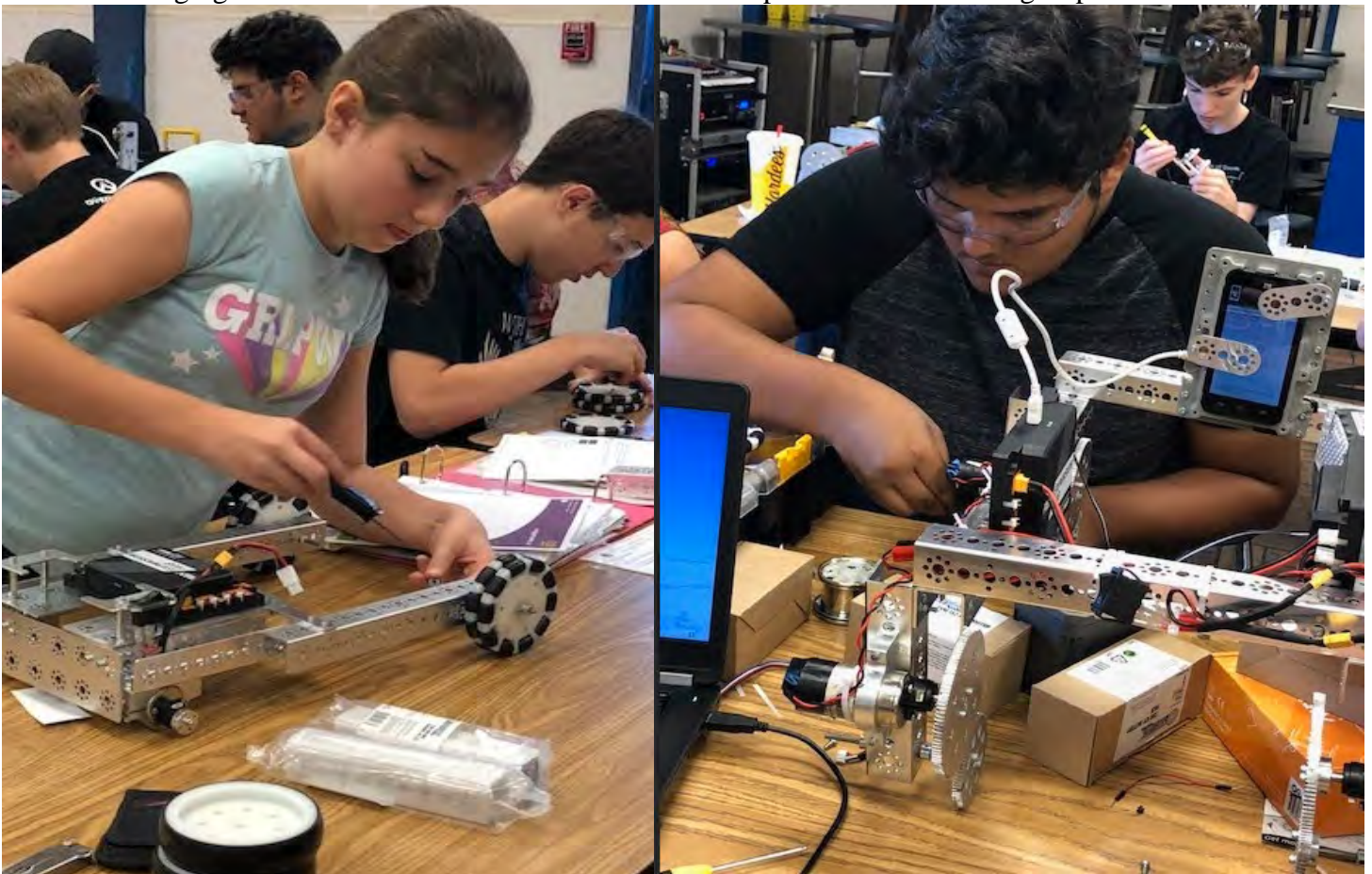
## Participants

A total of 1,453 students participated in the survey. The survey was designed to accommodate primary aged (PK-3) students, as well as all students, K-12. The primary-aged version of the survey was designed following a Likert-like design and utilizing images instead of text for pre-readers or emergent readers. Primary teachers used their discretion when deciding which version of the survey to administer.

## Goals

The goal of the survey was to determine student interest in and sense of belonging in STEAM. Student interest was gauged with relation to taking additional STEAM classes, taking a STEAM program in college, and/or considering a STEAM career. Self-perceived student learning outcomes were measured, as well as resiliency and problem solving, and overall engagement in school as a result of participation in the program. The survey also measured the learning environment through questions about student sense of care by the adults in the program and a measure of trust students had for the adults in the program.

Across the state, students highly enjoyed the programs that they participated in through their education foundation partners. The data revealed that leaders at the district level developed positive learning environments where students felt cared about and that they trusted the adults who worked with them. Programmatic outcomes were positive for all subgroups with regard to enjoyment, perseverance in problem solving, self-efficacy and a sense of belonging in STEAM. Positive outcomes were accomplished across all subgroups.

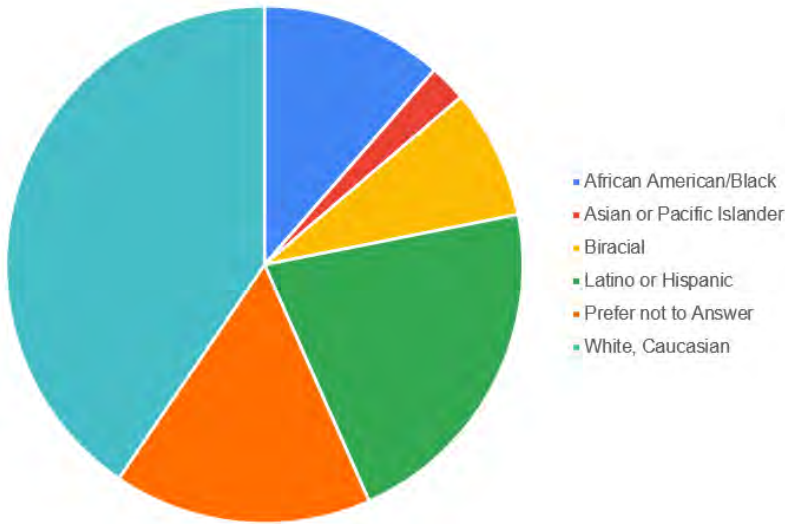


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# POPULATION SURVEYED

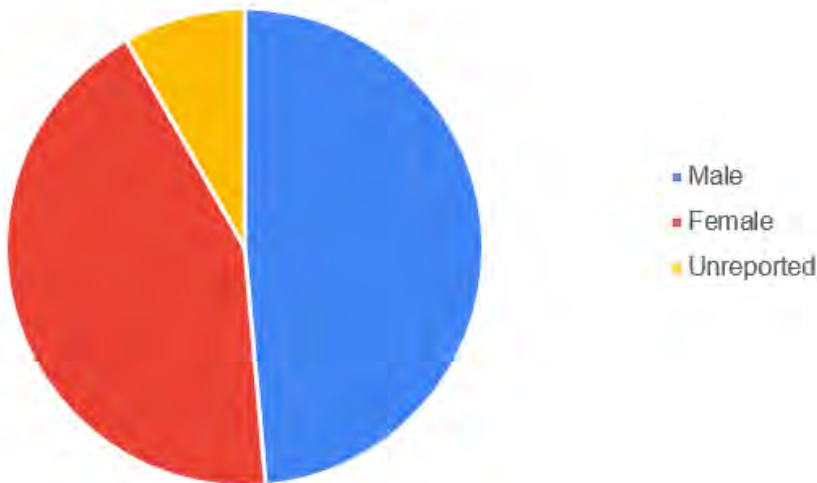
## Ethnicity

Demographic data was self-reported on the survey. The population served, as measured by participation in the survey consisted of Caucasian (40%); African American (11%); Latino or Hispanic (21%); and Asian/Pacific Islander (2%). 8% of participants identified as Biracial and 16% chose not to disclose their ethnicity.



## Gender

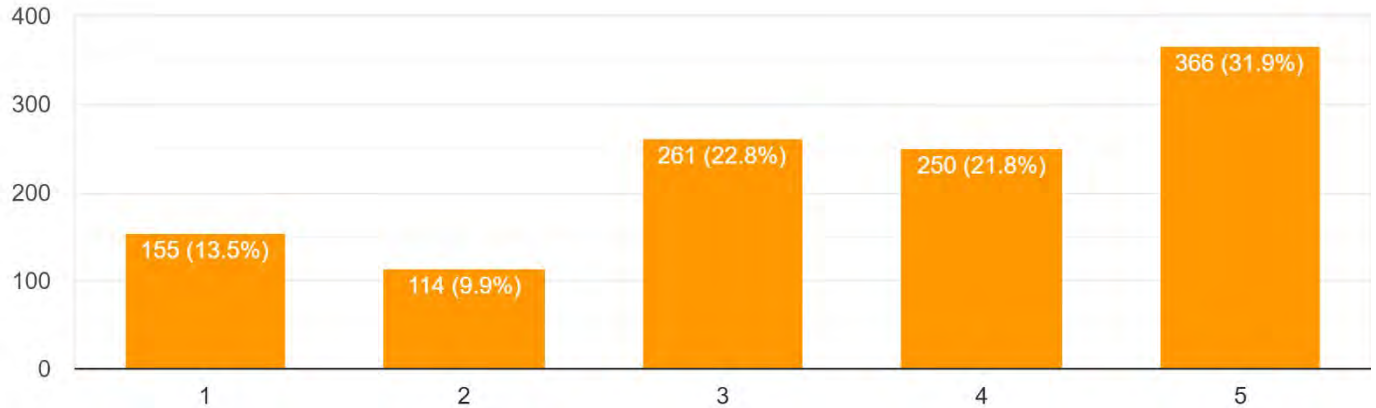
Approximately 49% of students served were males and 43% were female. The remaining 8% of students chose not to disclose their gender. Students in all grade levels, K-12, were served by the program.



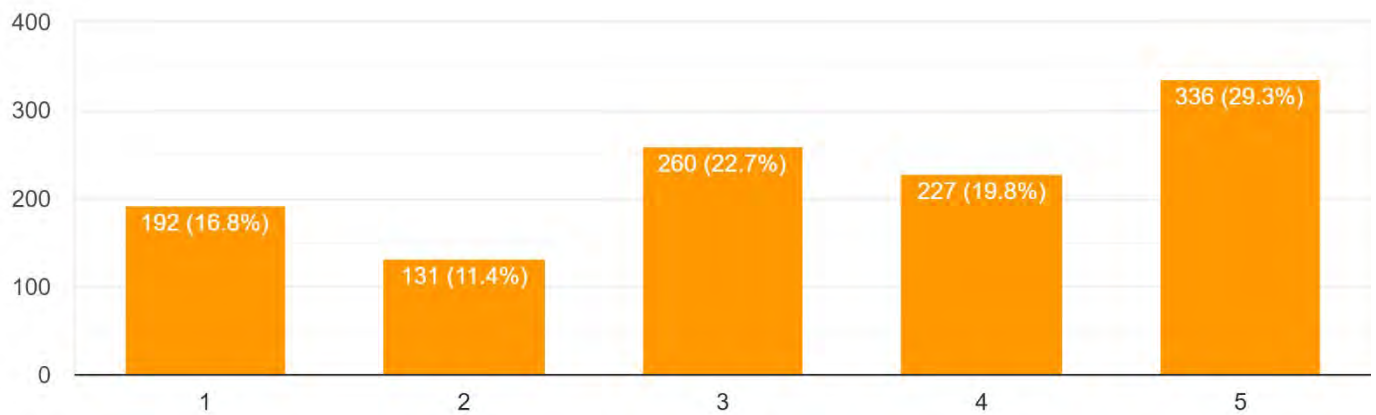
# Program Ratings

Students were asked to respond to the following questions rating on a 5-point Likert-like scale.

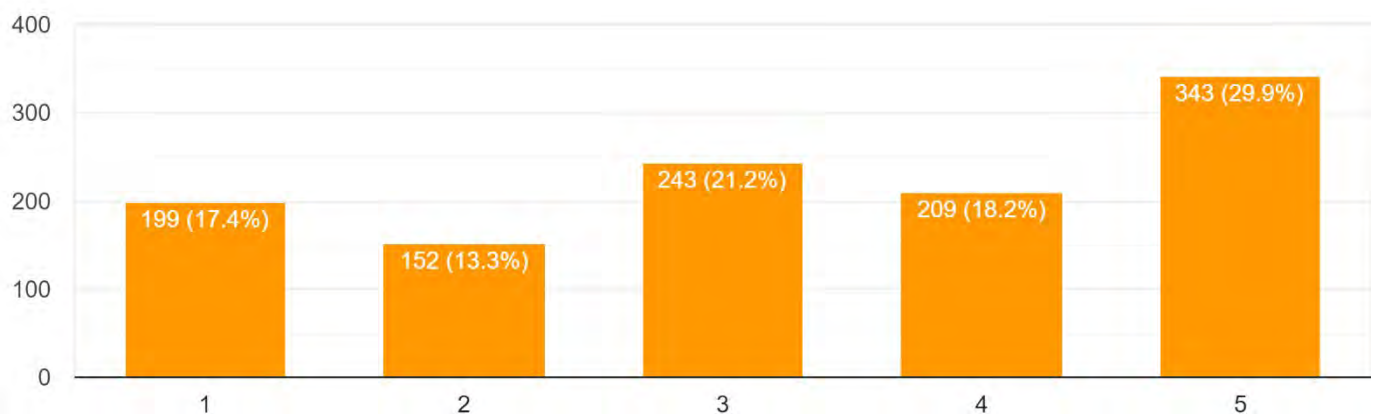
Enjoyment: I enjoyed this program.



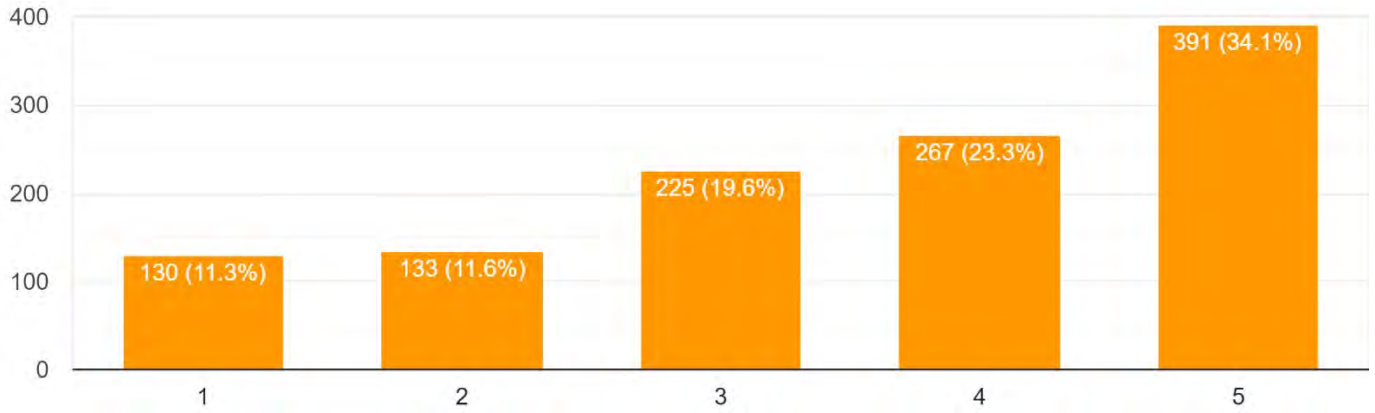
Challenging: This program challenged me to do things I could not think I could do.



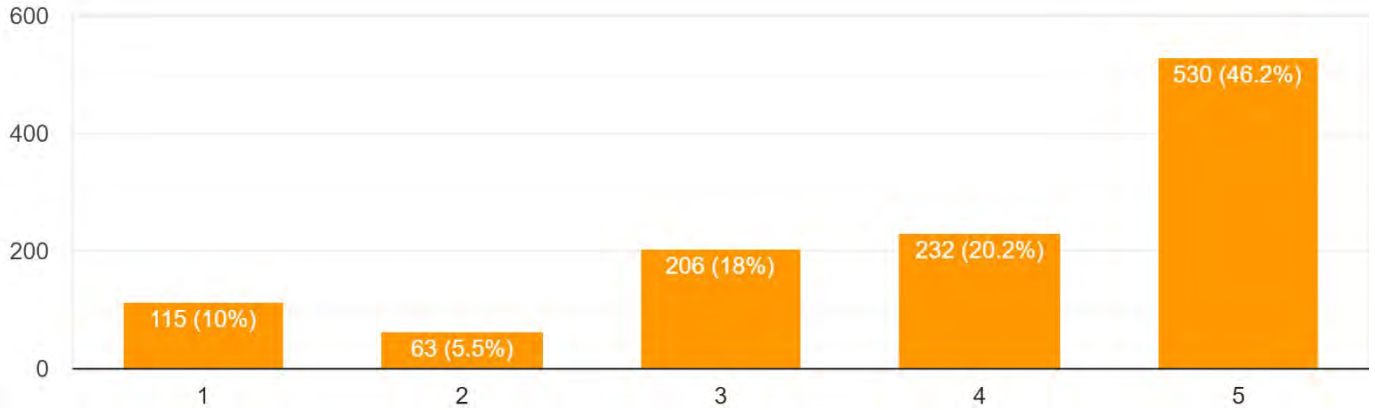
Likelihood of Recommending: I would tell my friends to join this program.



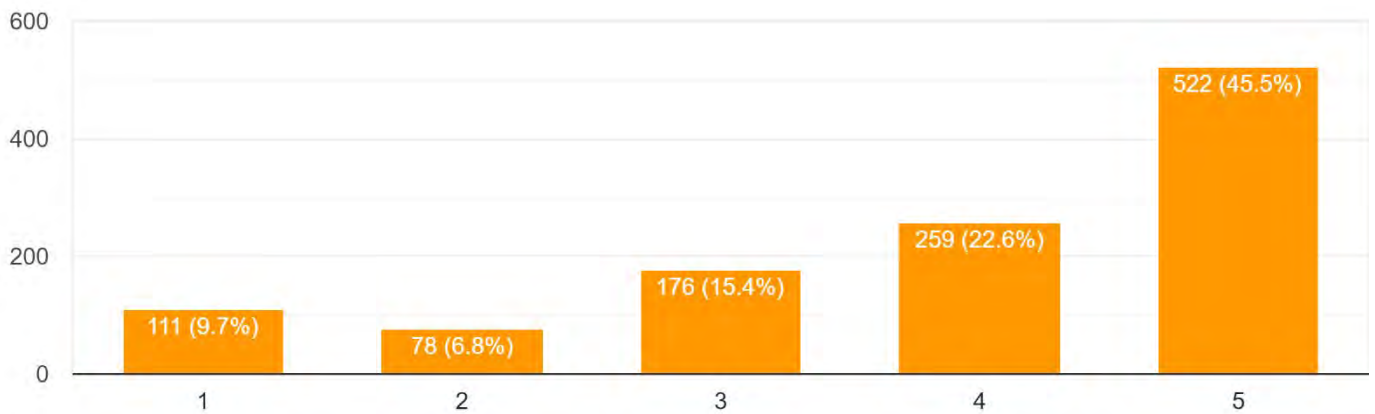
Learning: I learned a lot in this program.



Caring Adults: The adults in my program cared about me.

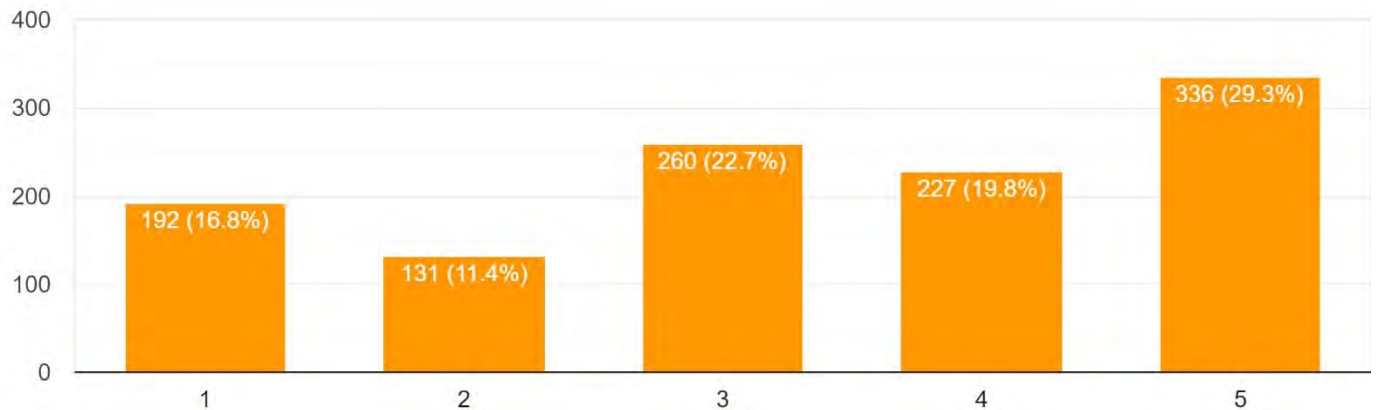


Trust: I trusted the adults in this program.



# Persistence in Problem Solving

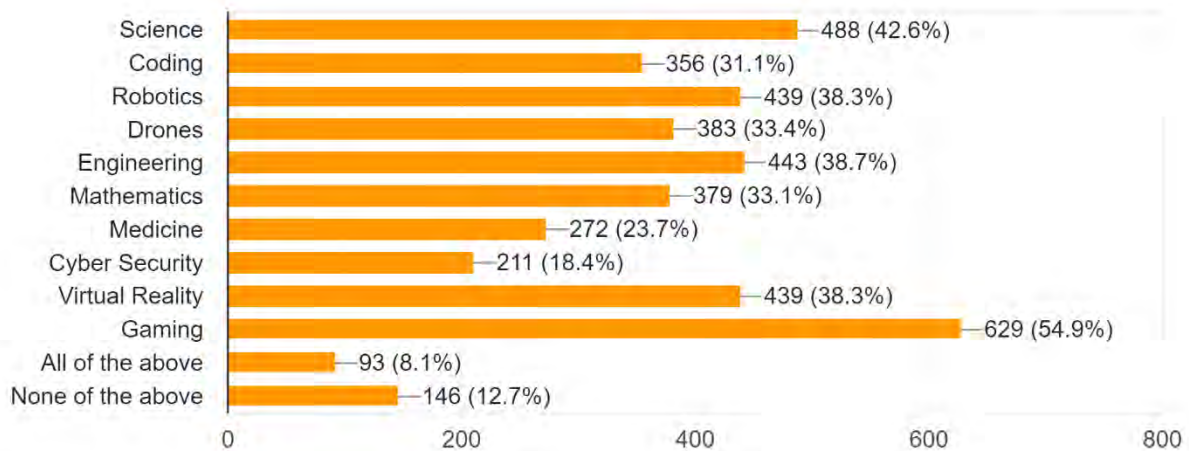
This program challenged me to do things I didn't think I could do.



## Career Interest

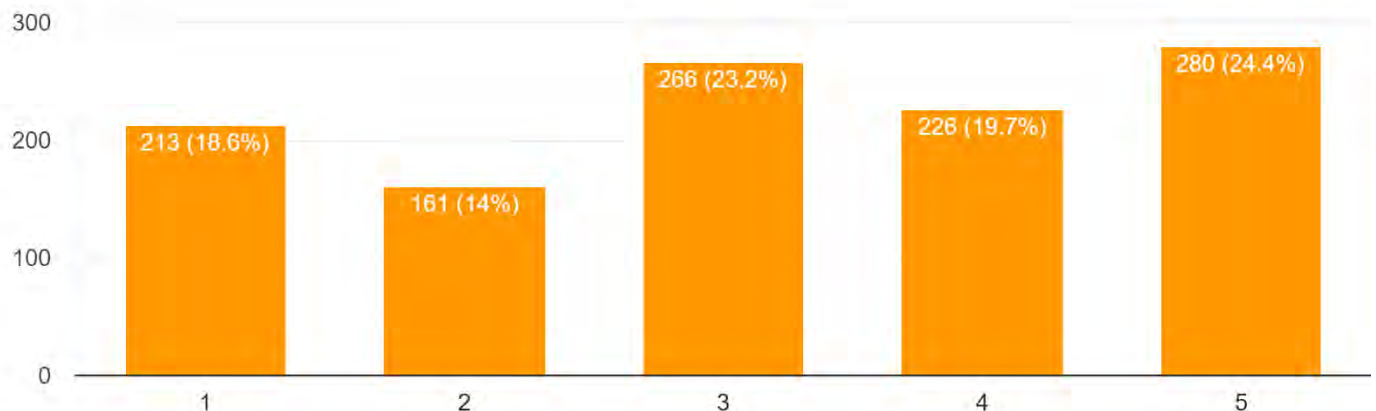
I am interested in the following career opportunities in STEAM. Check all that apply:

1,146 responses



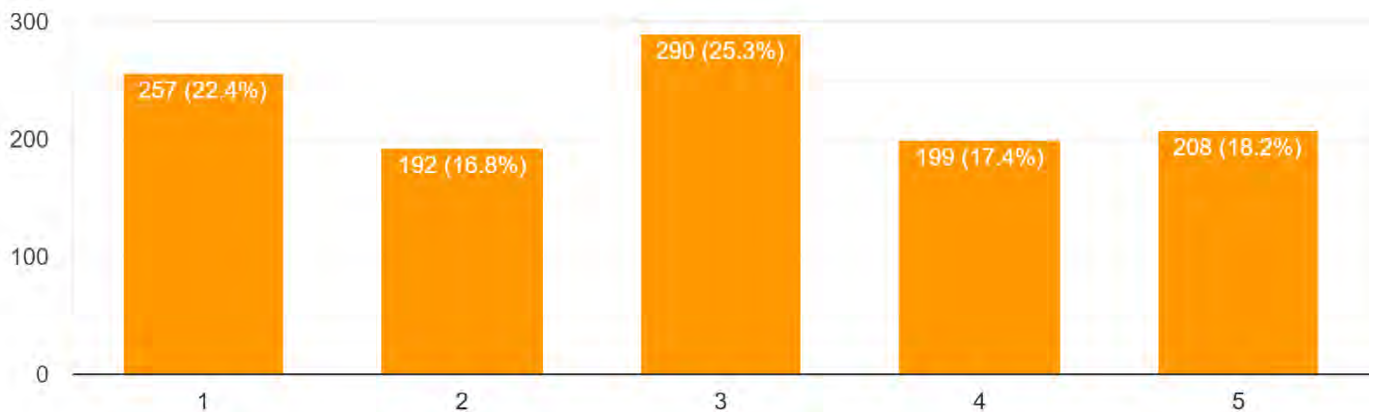
I am interested in taking STEAM classes in the future.

1,146 responses



I am interested in applying for a STEAM program in college.

1,146 responses



## Primary Students

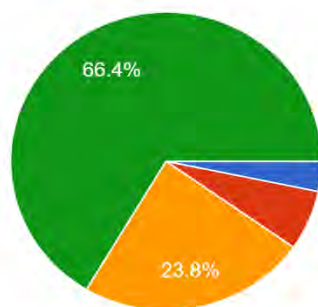
The findings revealed that even among primary students, a significant majority (over 66%) demonstrated a remarkable sense of perseverance in problem-solving. They expressed a resolute determination to persistently work on a problem until they uncover a solution, showcasing their tenacity and commitment to overcoming challenges. Only a mere 3% of primary students reported that they would give up, indicating that the vast majority were inclined to face difficulties head-on.

Interestingly, this trend of strong perseverance in problem-solving continued as the students progressed into the upper grade levels. The older students also exhibited a similar tenacity, with a substantial proportion showing the willingness to persist in their efforts to solve problems. This consistency in the pattern of perseverance throughout the different grade levels highlights the enduring nature of this valuable trait among students as they advance in their education.

Such resilience and determination in problem-solving have significant implications for their academic growth and future success. By instilling this positive mindset and approach to tackling challenges, educators and parents can further nurture students' problem-solving skills and equip them with invaluable tools to thrive in their academic journey and beyond.

If I fail to solve a problem, I will try again until I find the solution.

307 responses



- Choose this if you really will not try again until you find the solution.
- Choose this if you will not try again to find a solution.
- Choose this if you will try again to find a solution.
- Choose this if you really will try again until you find the solution.



# STEAM Activities

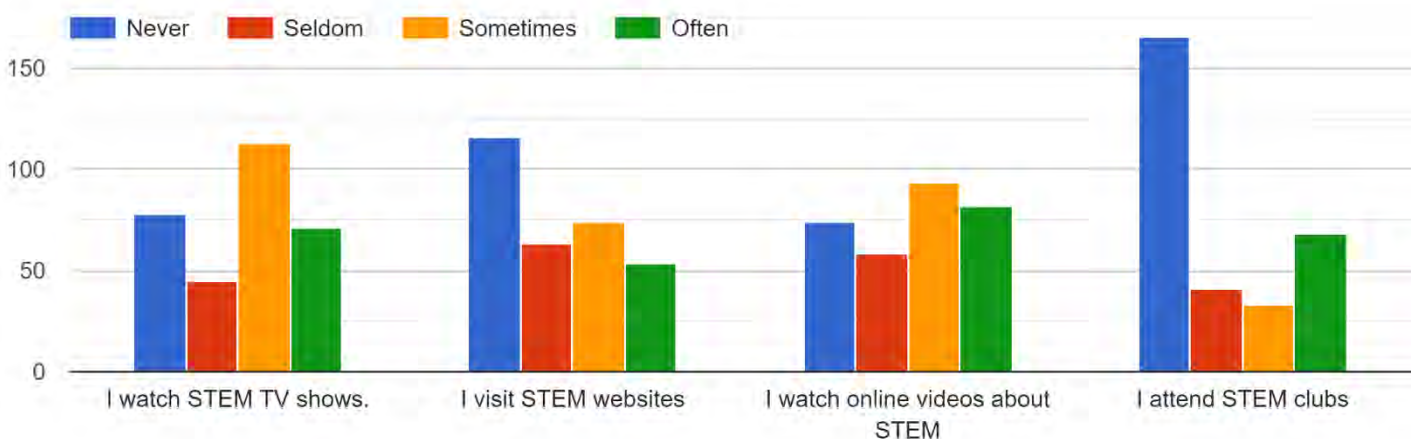
Students were asked to report on how often they participate in STEAM activities outside of school time. Overwhelmingly, across all categories, in both age groups, the students reported spending relatively little time doing “STEM Things” during out of school time.

It's not uncommon to find that students, across various age groups, may report spending relatively little time engaging in STEAM activities outside of school. There can be several reasons for this observation, including:

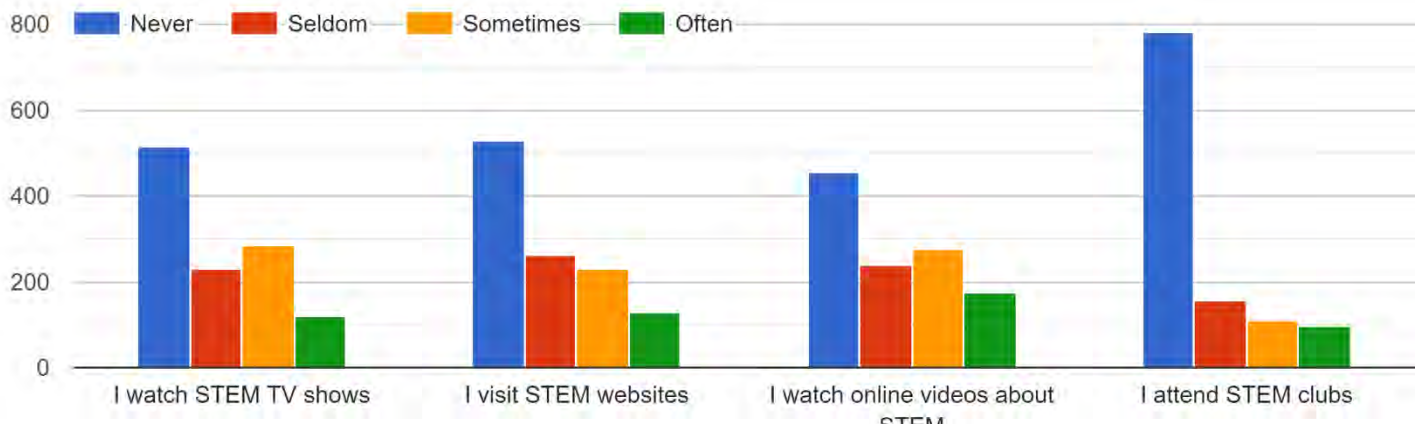
1. Limited exposure: Students might have limited exposure to STEAM activities outside of school, which could be due to the availability of such opportunities in their local community.
2. Lack of resources: Engaging in STEAM activities often requires access to resources such as science kits, electronics, or materials that some students may not have at home.
3. Time constraints: Many students have busy schedules with various extracurricular activities, family commitments, and homework, leaving them with limited time for pursuing STEM-related interests.
4. Interest and motivation: Not all students may have a strong interest or motivation in STEM fields, leading them to spend their leisure time on other hobbies or activities.
5. Perceived difficulty: Some students might perceive STEAM activities as challenging, leading them to choose more accessible and familiar leisure activities.
6. Gender and cultural stereotypes: Certain societal stereotypes and cultural norms may influence students' interests and choices regarding STEAM activities outside of school.

## Grades PreK - 3

How often do you do STEM things:



## Grades 1-12



Addressing the challenges of limited STEAM engagement outside of school necessitates a comprehensive and multi-faceted approach involving collaboration among schools, families, and the community. Schools play a critical role in promoting STEAM interest by offering a diverse array of after-school STEAM programs, clubs, and workshops, much like the initiatives supported through this program. These opportunities not only allow students to delve deeper into STEAM subjects but also foster a sense of curiosity and excitement about the possibilities in these fields.

As evidenced by the compelling data presented herein, one key aspect of this approach is changing societal perceptions regarding STEAM education. By elevating the understanding of the importance and relevance of STEM fields, we can inspire students to explore these areas with a newfound enthusiasm. Highlighting the myriad of opportunities and exciting career paths available in STEM can motivate young minds to embrace these subjects and envision a future in which they can make meaningful contributions. It is critical that teachers are empowered to bring high-quality STEAM educational curriculum and materials into the school day.

By collectively addressing these barriers, we can create an ecosystem that encourages more students to actively participate in STEAM activities outside of school. This, in turn, leads to the development of a stronger interest and proficiency in science, technology, engineering, and mathematics fields. Moreover, nurturing this interest from an early age builds a foundation for a future workforce that is skilled, diverse, and well-equipped to tackle the challenges and advancements of our rapidly evolving world. As we invest in the passion and potential of our students, we are investing in the growth and prosperity of our society as a whole.

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# CONCLUSION

The program was incredibly successful at giving students across the state foundational experiences with STEAM curriculum that were aligned to Florida standards as well as aligned to the skills needed for the high-wage, high-demand jobs that will be available for today's students. Through this program, the grant served students across the full spectrum of grade levels – kindergarten through graduation!

Participating students showed commitment to problem-solving and persevering until they reached success. This is a critical skill that will impact them in all areas of their lives, from their time as a student and into the workforce. Critical thinking and problem solving are essential for all aspects of STEAM careers. By coupling this “stick-to-it-ness” with the highly engaging projects that were implemented through this funding, students found a high level of engagement (as evidenced by their high ratings in recommending the program to a friend, as well as their high interest in continuing their exploration of STEAM programs). Students developed habits of the mind that will likely empower them to persevere in academic content on their journey through school.

Self-efficacy and a sense of identity and belonging in the STEAM fields are critical to develop early, as many subgroups lose interest in STEAM fields because they do not see themselves in the careers. Data from this survey also indicated positive outcomes for underserved groups who are underrepresented in the workforce. One indicator is a feeling of accomplishment when being challenged to do something that the student did not think they could do. In all subgroups, especially girls and African American students, the students overwhelmingly reported agreement or strong agreement with the statement, “This program challenged me to do things I did not think I could do.”

One area where the data revealed a challenge is the transfer from student enjoyment, self-confidence, and self-efficacy to pursuing a college program in STEAM and furthering themselves to the workforce. While students enjoyed their programs, felt challenged, and wanted to continue to have experiences in these areas, many did not connect these experiences to careers. To increase student interest in pursuing STEAM careers, focus should be placed on showing the experiences explored in the various programs placed in the context of the workforce.

Further exposure to STEAM programs will help students continue to build relevant skills for their future and for the economic development of our communities by building a robust STEAM talent pipeline. The work in this project exemplified a positive move in the direction of building student self-efficacy towards the careers of the future.

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# FULL STEAM AHEAD

2022-23 GRANT OUTCOMES

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## STEM2 Hub



Science | Technology | Engineering | Mathematics | Medicine