STEM Origins Foundation

Annual Report 2025

Supporting STEM students and teachers at every level of the academic ladder, from Kindergarten through College.

This report covers the 2025 calendar year

In this report:

Executive Summary - *2025 Overview*

The Foundation raised over **$70k** in 2025. Of that, 66% came from corporate grants & corporate donations; 18% came from private donors; and 15% came from various fundraisers.

Our **Rising Star Scholarship** program awarded **10 GCSC Scholarships** to talented 5th graders.

This was made possible by a grant from Capital City Bank, as well as generous donations from Tech Farms, LLC and other private donors.

Our **STEM Equipment** program provided **4 grants** to BDS schools for the purchase of **103** specific in-class tools & equipment. We also provided STEM Equipment and Tuition for STEM Camp to students in the **Bay Base** Program.

This was made possible by grants from St. Joe Community Foundation, Lucy Collins, Esq, and Mark Kincade State Farm Agency, as well as private donors.

Our **Student of the Month** program recognized **7** Students for their academic excellence in STEM areas.

And our **STEM mentor** program supported the **Invention Convention** program and visited several schools providing a variety of hands-on demonstrations and career discussions.

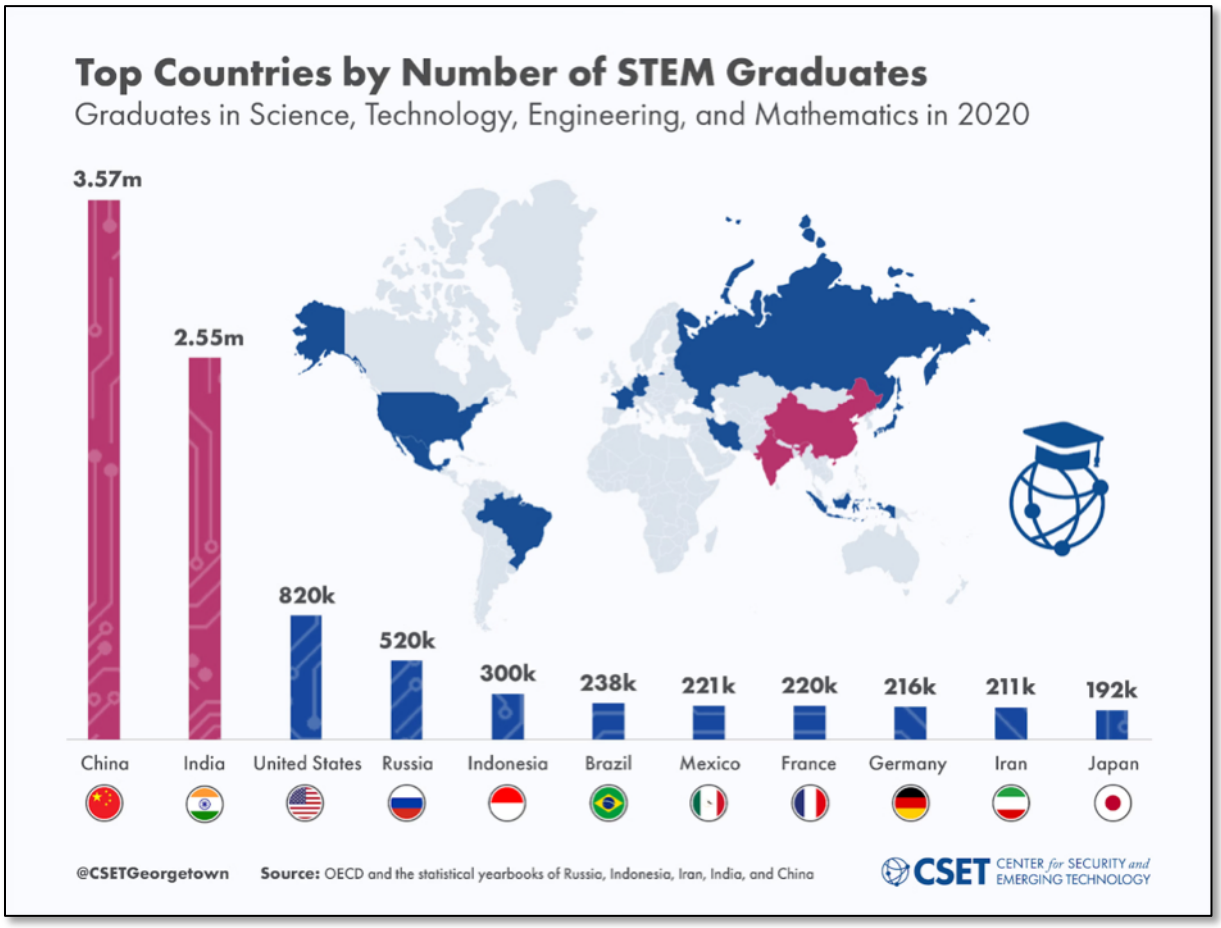
Why STEM?

US Worldwide Test Score Rankings 2022[1,2]

- US ranked as ***18th out of 81*** countries overall
- US Ranked **#16 in Science**
- US Ranked **#34 in Math**

US Falling Behind Key Competitors:

- US **behind China, Japan, and Europe** in Science & Math scores
- US also **behind countries like Vietnam & Latvia** in Math
- Combined **China and India** produce **7.5x** more STEM professionals than the US
- These trends pose a **significant threat** to future US national and economic security



[1] https://www.oecd.org/en/publications/pisa-2022-results-volume-v_c2e44201-en/full-report.html

[2] https://www.datapandas.org/ranking/pisa-scores-by-country

Systemic Challenges

Studies have shown a significant number of US students lose interest in STEM fields in 6th grade, and that decline continues through high school. In addition to the general lack of awareness and declining interest in STEM topics as the students mature, there are also factors that affect women and minorities more than others. For example, the majority of women and minorities who leave the STEM educational pipeline do so in the 6th grade. Academic literature[3][4][5] generally agrees that the **6th grade** is a "perfect storm" for three specific reasons:

Factors of Attrition	Description
Stereotype Threat	At age 11, girls become more aware of the "male-centric" stereotype of STEM.
Identity Conflict	Transitioning to middle school involves a shift toward social belonging; STEM is often seen as "socially isolating."
Pedagogical Shift	Science moves **from hands-on** (elementary) **to abstract** (middle school), causing a "confidence gap."

Subsequent studies have probed deeper into the psychological reasons behind the “Stereotype Threat” and “Identity Conflict” and found the student’s sense of identity, confidence, and belonging are fundamental causes.

Psychological Factor	Primary Academic Source	Focus
Identity	Kim, Sinatra, & Seyranian (2018)[6]	How social pressure in 6th grade conflicts with STEM interest.
Confidence	Archambault & Eccles (2010)[7]	The measurable drop in self-perception at age 11-12.
Belonging	Master, Cheryan, & Meltzoff (2016)[8]	How stereotypes make 6th-grade girls feel they "don't fit" in STEM.

[3] Microsoft. (2017). Closing the STEM Gap: Why STEM classes and careers still lack girls and what we can do about it. **Microsoft Philanthropies**.

[4] Hinkelman, L. (2017). The Girls' Index: New Insights into the Complex World of Today's Girls. Ruling Our eXperiences (ROX). *The Girls' Index™: **Girls & STEM Impact Report***.

[5] Girl Scout Research Institute. (2012). Generation STEM: What girls say about science, technology, engineering, and math. **Girl Scouts of the USA**.

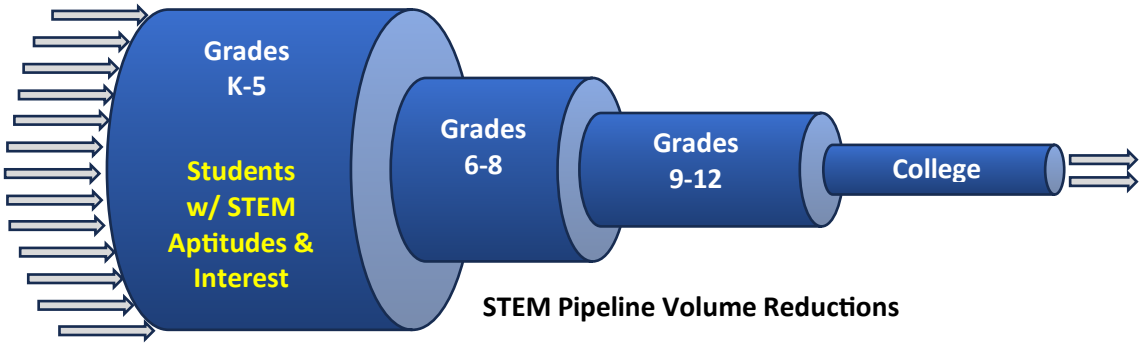
[6] Kim, A. Y., Sinatra, G. M., & Seyranian, V. (2018). *Developing a STEM Identity Among Young Women: A Social Identity Perspective.* **Review of Educational Research.**

[7] Archambault, I., Eccles, J. S., & Vida, M. N. (2010). *Ability self-perceptions and subjective task values in STEM and non-STEM domains.* **Journal of Educational Psychology.**

[8] Master, A., Cheryan, S., & Meltzoff, A. N. (2016). *Computing whether she belongs: Stereotypes undermine girls’ interest and sense of belonging in computer science.* **Journal of Educational Psychology.**

Systematically Addressing the Problem

All of these attrition factors combine to result in a significant drop in student interest in 6th grade with more lost every year thereafter. The net result is a tremendous reduction in volume of students pursuing STEM fields after high school graduation.



STEM Pipeline Volume Reductions

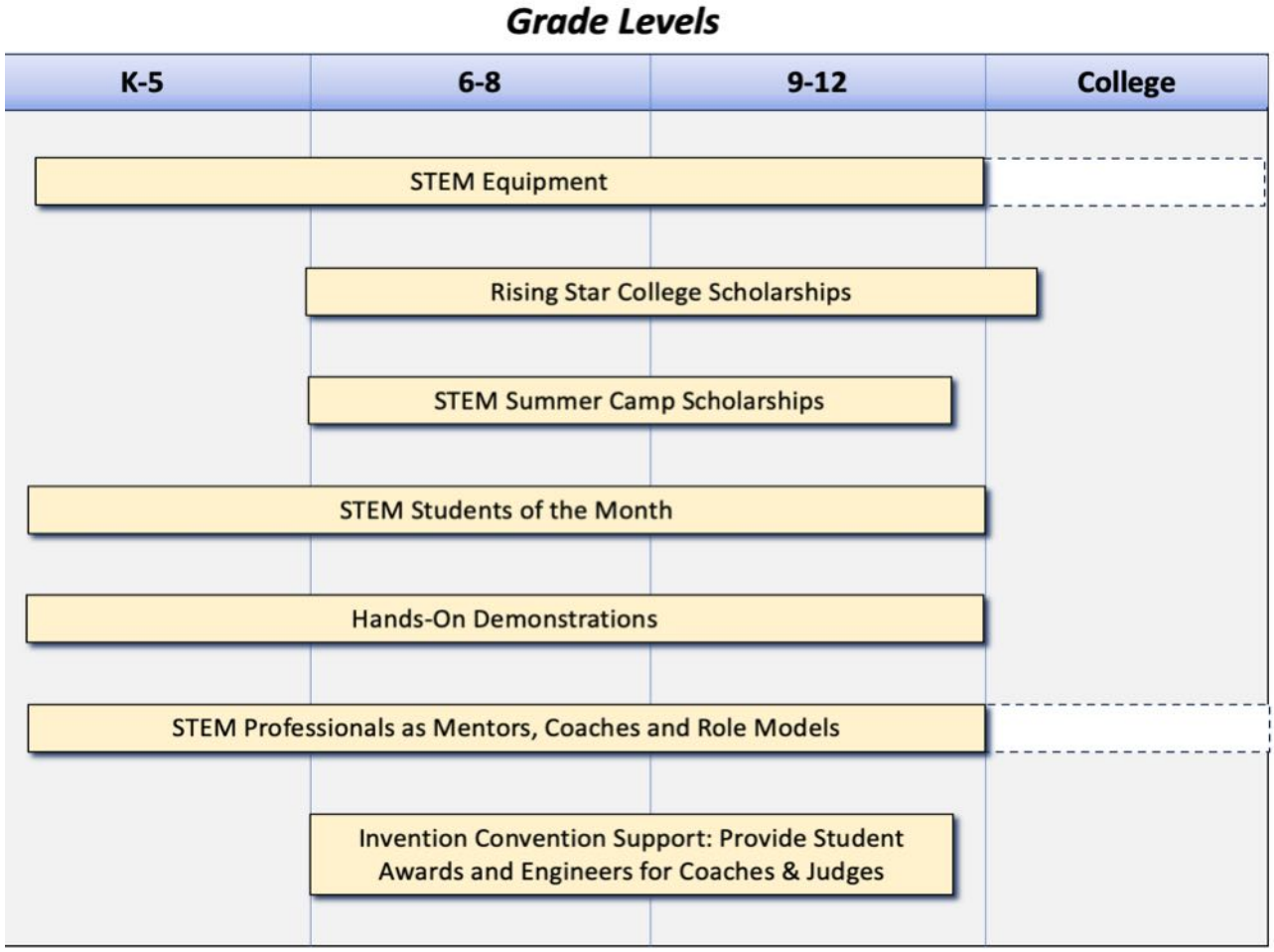
We use a multifaceted approach to address these challenges systematically. That strategy is rooted in the following 5 objectives:

1. Increase STEM Kits/Equip (K-12): Purchase STEM equipment, tools, and supplies for the Local Schools in classrooms at all levels, K-12.
2. Increase Hands-on Experiences: Support *hands-on immersive experiences* in STEM after-school programs, local STEM summer camps, and scholarships to advanced STEM camps like Space Camp, etc.
3. Increase STEM Awareness, Provide STEM Pro Mentoring & Coaching: One-on-One mentoring for Invention Convention as well as in-class panels, STEAM night participation, College Coaches, etc.
4. Breakdown Barriers, Change Stereotypes, and Perceptions: Demonstrate that anyone with passion for STEM and a baseline aptitude can achieve success in STEM careers. Recruit STEM pros from all backgrounds, races, & genders and bring them into the classroom to serve as exemplars & role models.
5. Make College a more Accessible and Viable Option for all: Strive to pull more lower income students into college STEM programs as 1st generation college students. This starts at the beginning of the STEM pipeline (K-5) by changing the "kitchen-table" conversations so that STEM field are considered viable options for their children. That perception must be reinforced across the academic ladder through a variety of activities; therefore, it is woven into the fabric of every one of our programs.

Since our long-term objective is to significantly increase the volume and quality of the students who graduate from BDS pursuing STEM fields, there are two key measures of effectiveness we can use to determine the impact of our programs:

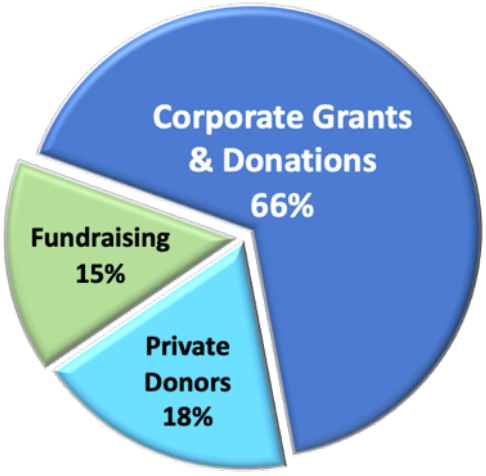
(a) Increase the number of Bay Co high school grads pursuing college STEM degrees.
(b) Increase the number of Bay Co high school grads that successfully achieve college degrees in STEM fields.

The graphic below shows how our programs are designed to reach across the various grade levels.

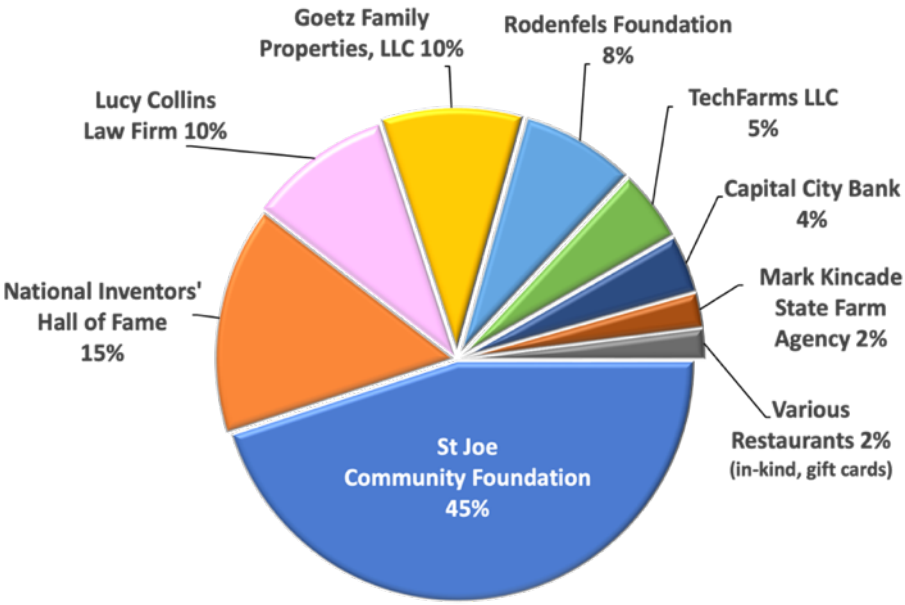


Revenue Summary

The STEM Origins Foundation was created in December of 2024 and started operations in January 2025 with IRS certification as a 501.c.3. In its first year of operation, the Foundation raised over **$70k** from a variety of sources. Of that, 66% came from corporate grants & corporate donations; 18% came from private donors; and 15% came from various fundraisers we conducted, as shown in the pie chart to the right.



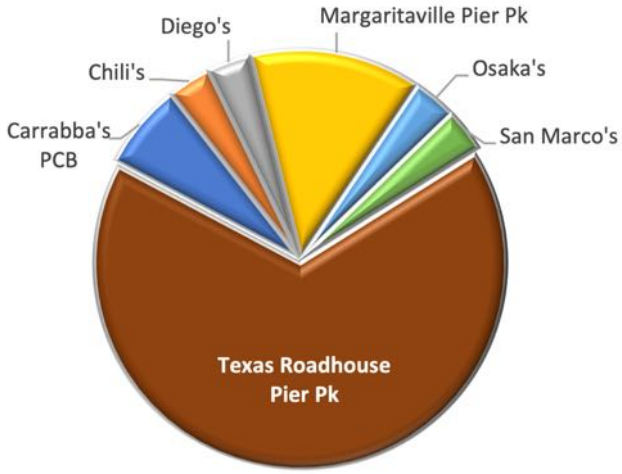
Revenue by major category



Corporate Grants & Donations Breakout

This second pie chart shows the breakout of all the corporate grants and donations received. We were blessed to attract the support of so many public and private organizations, and we are truly grateful for all their contributions.

We are also grateful to all the restaurants who provided gift certificates for us to use in our Student of the Month program, and we are overwhelmed with the generosity of the Texas Roadhouse restaurant in Pier Park, which provided 2/3 of all the gift certificates we received. These certificates are used to provide one to each student of the month as well as the teacher(s) that nominated them.



Restaurant Gift Certificates (in-kind donations)

Finally, we are very thankful for our grassroots supporters who participate in our various fundraising activities as well as providing direct private donations. Collectively, dedicated donors provided about 1/3 of our revenue for 2025.

We were so moved by the level of private & corporate support that we felt compelled to create a donor recognition structure. The table below shows that structure along with the number and types of donors/grantors aligned with each level.

2025 Donor Recognition Structure						
Level	**Title of Recognition Level**	**Threshold ($)**	**Description**	**Types**		
				Private Donors	**Nonprofits**	**Corporate**
1	**Cornerstone**	$500-$2499	Core supporters who provide the all-important foundation upon which the mission is built.	6		1
2	**Catalyst**	$2500-$4999	Donors who spark momentum and serve as catalysts for the expansion of our existing programs		1	1
3	**Forerunner**	$5000-$7499	Frontrunners who lead with speed and clarity — donors whose actions have immediate impact on existing and new initiatives			2
4	**Trailblazer**	$7500-$9,999	Bold leaders who empower us to forge new paths and expand the mission's reach.	1	1	
5	**Visionary**	$10,000-$1499	Forward-thinkers who enable us to imagine possibilities and invest in future impact in focused areas.			
6	**Luminary**	$15000-19,999	Guiding lights whose influence significantly inspires and illuminates new opportunities for greater impact.			
7	**Vanguard**	$20,000-29,999	Bold leaders who enable us to dramatically push the boundaries of what's possible while also stabilizing new initiatives long term		1	

Impacts & Activities

Rising Star Scholarship Program:

We have partnered with the Gulf Coast State College (GCSC) Foundation to create a very special scholarship program aimed at 5th graders. This program selects high-aptitude 5th grade students (aka ***Rising Stars***) and establishes a $500 college scholarship for their use at Gulf Coast State College (GCSC) when they graduate high school. The underlying objective of providing these scholarships in advance is to promote and sustain the students' interest in STEM as they climb the academic ladder from elementary school through high school.

The GCSC Foundation has a history with this type of scholarship and found it to be an incredibly powerful way of encouraging students to pursue college education as they mature and move upward in the academic grades.

These scholarships give these students a 7-year goal to strive for and a destination to reach after high school. It also provides significant external validation that these students have strong aptitudes for STEM and should be encouraged to develop them further. This can significantly change the "kitchen-table" conversation about each student's future for next 7 years-- and potentially change the course of their lives.

By engaging in the 5th grade year with a prize attached to college, we hope to counter the Attrition Factors that cause so many students to leave the STEM Pipeline during those very consequential years, as described on page 3 above.

Our long-term goal is to provide at least one for each BDS elementary school in the Bay District each year. However, for this year we only had funding for 10 students, as shown in the image below. Each was presented with a scholarship certificate, a custom T-shirt, and STEM Origins Special Achievement challenge coin. *Many thanks to Tech Farms, LLC for their $2500 donation (funded five scholarships), Capital City Bank for their $2000 grant (funded four scholarships), and the private donor who funded the remaining one.*

STEM Student of the Month Program:

We started this program in March of 2025 and ran through December, selecting 7 students to be recognized as our STEM Student of the Month. Students are competitively selected based on how well they exemplify our core values of Passion, Diligence, & Aptitude for STEM, and Collaboration with others. They are nominated by their teachers who are asked to describe how their student excels beyond the norm for their grade level in these areas.

This program is important because it provides strong external validation of the student's abilities while at the same time recognizing their teacher during a presentation in front of the BDS School Board. Each student is given an official certificate, a medal, and a restaurant gift card to take their family out to dinner in celebration of this achievement. The teacher is also recognized with a restaurant gift card, because we understand that outstanding teachers produce outstanding students. These outstanding students are listed in the table below:

Month	Student	School
March	**Matthew Pepper**	Tyndall Academy
April	**Nicholas Martrain**	Deere Point Elementary
May	**Landon Walls**	Walsingham Academy
September	**Ali Petersen**	Tyndall Academy
October	**Elise Kinkade**	Patronis Elementary
November	**Brock Waymire**	Patronis Elementary
December	**Ben Ennis**	Cherry Street Elementary

Core Values and Key Characteristics for Merit-based Selection (at all grades)

- **Passion**
  - Curiosity for STEM topics or the natural world in general
  - Enthusiasm for research and innovation
- **Diligence**
  - Exhibits self-discipline, persistence, patience, focus and determination
- **Aptitude for STEM**
  - Rational and objective thinking
  - Structured/logical thinking
- **Collaboration/cooperation**
  - Works well with mentors and team members
  - Contributes to a body of work, collaboratively with a team
  - Communicates ideas clearly
  - Strong work ethic

These values and characteristics will be considered for all grade levels and will be commensurate with age-appropriate development.

STEM Classroom Equipment:

Thanks to a substantial grant from the St Joe Community Foundation and the very generous corporate donations from the Law Office of Lucy Collins and Mark Kincade State Farm Agency, we were able to provide funding for Beach and Patronis Elementary schools to purchase 103 sets of STEM classroom equipment. We deeply appreciate the generosity of all three of these outstanding organizations. These investments will serve hundreds of students for many years to come. The details are provided in the table below.

Hutchison Beach Elementary School STEM Equipment

Focus Areas	Grade	Item with Link	Qty
Life Science	K-5	Aquaponics System	1
Engineering	K-5	STEM Maker Supply Cart	1
	3-5	Bristle Bots	13
Computer Science	K-5	Ozobot Magnets	6
Robotics	K-5	Angelfish ROV Kit	1
	K-5	ROV Hydraulics Kit	1
	K-5	ROV Power Supply	1

Patronis Elementary School STEM Equipment

Focus Area	Grade	Item with Link	Qty
Coding / Robotics	K-3	Indi Robot Class 8-Pack/Code Mats/Literacy Cards	1
	K-3	Indi Robot Class 8-pack (robots only)	1
	3-5	Bolt Power Pack + Coding Mat	1
	K-5	Tech Hub Storage & Charging 24 devices	1
Math and Sequential Thinking	3-5	Think Fun-Laser Maze	6
	3-5	Battleship Board Game	6
	3-5	Math Dice	10
	3-5	Think Fun-Gravity Maze	6
	3-5	Mathterpieces (book)	6
	3-5	The Grapes of Math (book)	6
	K-5	Number Line Dry Erase Boards (10 pk)	6
	3-5	Fraction War Card Game	6
	3-5	Yummy Magnetic Fractions	6
	3-5	Magnetic Fraction Tiles	5
	3-5	Geometric Solids	6
	3-5	Rush Hour	6

Bay Base STEM Pilot- *Pt 1- STEM Kits:* Thanks to grants from the St Joe Community Foundation and the National Inventors Hall of Fame (NIHF), we were able to provide STEM Kits for use in the Bay Base summer 2025 program for 100 students in grades 3-5 at two school sites (Patronis & Highland Park Elementary schools). These kits provided hands-on experiences designed to inspire curiosity and encourage creativity.

As part of this classroom STEM Pilot, each participating school received the following STEM kits from NIHF, the details for each can be found in Appendix B:

- Lost Treasure Modules (50/school)
- Robotic Pet Vet Modules (50/school).
- NIHFTY Bot Explores (50/school)
- GAMES Kits (1/school)
- BASE CAMP kits (1/school)

The Bay Base administrators and group leaders greatly appreciated the opportunities provided by the St. Joe grant through these modules. They exposed a group of children to experiences they might not otherwise encounter. However, they did not feel that these particular kits were the right fit for Bay Base. Subsequent discussions with NIHF have uncovered different STEM kits that may be more appropriate for the Bay Base environment and a follow-on pilot is planned for this summer to evaluate those kits. NIHF has agreed to provide these **70 new kits at no cost**.

In addition, University Academy has decided to conduct their own pilot test using similar NIHF STEM Kits across multiple grades and after school programs, which has now been funded by a separate grant from the St. Joe Community Foundation. Insights and lessons learned from that pilot may facilitate the broader application of these kits across the district.

Bay Base STEM Pilot- *Pt 2- STEM Camp Scholarships:* This element, also funded by a grant from St Joe Community Foundation, provided funding to allow the Bay Base program to take 30 students (4th and 5th graders) from two different Bay Base summer locations (Lynn Haven and Tyndall Elementary schools) on field experiences with Emerald & Forgotten Coast Adventures (E&FCA). This funding, provided by a grant from St Joe Community Foundation, covered the E&FCA tuition fees for each student to participate. These Field Adventures were half day programs consisting of 2.5 hours of activities, either at Tyndall Air Force Base or St. Andrews State Park, exploring the seagrass beds and diverse species that live among them. The field site location was determined by closest proximity to each respective Bay Base location. The feedback from the students and administrators was extremely positive.

STEM Mentor Program:

Our **STEM mentor** program supported the **Invention Convention** program by providing engineers to serve as mentors & coaches to the student teams as well as judges during the actual convention. There were some very impressive inventions from local students. We selected 10 students to receive our STEM Origins Special Achievement Award. We were so impressed by one of the designs that we offered to connect the student & their family to a local small business incubator.

The winners of our Special Achievement Award at the 2025 regional invention convention were:

- Kaitlyn Bailey
- Kyle Bloomfield
- Kennedy Flores
- Obayda Hussein
- Devin Jani
- Isabella Jones
- Prescott Korol
- Abigail McCann
- Camden Sovel
- Emma Windsor

Each received a STEM Origins Certificate and our Special Achievement Challenge Coin. Congratulations to them and all the Category Winners who progressed to the National level competition.

Our mentor team was invited to attend a science class at Rutherford High School to discuss their individual STEM careers and answer questions from students. This session lasted about 90 minutes and significantly increased the students' exposure to and awareness of a variety of STEM pathways. In a similar fashion, we participated in the BDS Career Day where we spoke with a large number of high school students exploring potential careers in STEM. We also participated in STEM events at several schools as well as a Grandparent's Day event in the local community. In each event we provided hands-on demonstrations using the following STEM kits:

- Van de Graaf generator (generates static electric charge, but is completely safe)
- LCD Microscope with various samples to examine (ranging from a penny to plants & animal samples)
- Squishy Circuits kit (think conductive play doh)
- 3D Gravity Maze
- Magnetic Chess (game that's very different from regular chess),
- Levitating Spindle (using magnetic antigravity)
- Sterling Engine (using hot water)

Collaboration & Partnerships

First and foremost, our primary partner has to be the local school system we are trying to serve. In that vein, we have formalized our relationship with Bay District Schools under a signed memorandum of understanding (MOU) that brings us into a much closer, collaborative and mutually beneficial relationship for the long term. This MOU institutionalizes our relationship in a manner that will long outlast the current leadership in both organizations and is very important for the future[9].

In addition, one of our first actions in January 2025 was the formation of a Senior Advisory Board composed of key leaders in the community on STEM initiatives. The current membership of that board includes:

- BDS Supervisor of Career & Technical Education (Mr. Jonathon Moore)
- BDS K-12 Science Instructional Specialist (Ms. Jill Hansen)
- BDS Master Class STEM Instruction Experts (Ms. Julie DeFelice and Ms. Erin Brack)
- GCSC Executive Director, Community Engagement
- Navy STEM Lead, NSWCPC (Dr. Damion Dunlap)

This board helped us define and focus our initiatives to have maximum impact while implementing them in a manner minimizes the burden on the teachers and administrators. Their deep knowledge of the local community and their broad awareness of nearly all the STEM activities and programs in the region was essential to ensure our programs are novel, complementary, and non-duplicative of ongoing and planned efforts by other organizations. The importance and value of such an advisory board cannot be understated, and we are deeply grateful for their time and support.

Our organization benefited significantly from our collaboration with the GCSC Foundation in the formation of our Rising Star Scholarship program, for which they actually provided the kernel idea upon which this program was built. Their partnership is foundational to this program, and we look forward to working with them for many years to come.

As STEM Origins grew throughout the year, we developed a collaborative relationship with the Bay Education Foundation and at their request, we provided several retired STEM professionals to review and score the STEM proposals they received under their Grants for Great Ideas program. This was a wonderful initiative that provided them with much needed support and provided us with a broad insight into the various STEM initiatives they are considering for funding, which also enables us to ensure our programs are complementary and non-duplicative. In addition, because our volunteer network includes several retired teachers, we were also able to help review & score all the other categories of GGI proposals for the Bay Education Foundation. All of our volunteers enjoyed being of service in this effort and look forward to additional collaboration opportunities in the upcoming year.

Along the way, we have also developed a relationship with Florida State University's local STEM programs and have enjoyed several collaborative discussions about possible ways to work together as we go down the road. We both agree that duplication of effort is not only a waste of time & money, but is also a disservice to the students of Bay County. We look forward to continuing that collaboration and dialog as our relationship matures over time.

[9] This MOU can be found on our website's library at https://stemorigins.org/library/

Plans for 2026 & Beyond

We have ambitious goals for 2026, which include:

a) Expanding our Rising Star Scholarship program to include all elementary schools and offering paid tuition for summer STEM Camp at GCSC for the Rising Star Scholars.

b) Extending STEM Equipment program to support additional schools across the district.

c) Providing hands-on demonstrations during the 2026 Thunderbird Airshow as well as multiple in-class and after school events.

d) Exploring new ways to bring STEM experiences into the Bay Base program.

e) Continuing our support for the Invention Convention process.

f) Collaborating with the BDS CTE program to explore areas where our mentor team can be of greater service.

We have invited all Bay District schools to send us their wishlists for STEM equipment, but only 6 have responded thus far. Two of those came in early enough last year for us to be able to secure funding for them (Beach and Patronis elementary schools). Since then, we have received STEM Equipment Wishlists from the following 4 schools and we will be actively seeking funding to support their needs in 2026:

- Bozeman Elementary
- Lucille Moore Elementary
- Oscar Patterson Academy
- Walsingham Academy

We look forward to continuing our collaboration with all of our partners, and we look forward to expanding our coordination and collaboration with FSU-PC on STEM program investments in areas such as robotics, etc.

In addition, we will be exploring the possibility of creating an Investor's Cove event that flows out of the Regional Invention Convention. The idea is to provide access to entrepreneurial investors for those students who produce novel inventions that address clear market needs and appear to be patentable. For those student prototypes selected by the Investor's Cove panel to pursue a patent, our foundation would provide the funding required to achieve the patent with the understanding that it would be sold shortly thereafter. The proceeds of the sale would be given to the student after we recoup the costs of the patent. This idea is still in its early formative stage and may take a while for it to become a reality. We estimate the average cost to obtain a patent is approximately $10k, and we aim to have enough money on hand to fund at least one patent before we officially launch the program.

Leadership Team

We are blessed to have a strong leadership team where every board member is a retired STEM professional with decades of experience, and our officer team includes career professionals in their respective areas of expertise. We are a 100% volunteer organization with no paid staff positions and no facility, which keeps our overhead costs to a minimum.

Board of Directors

Board Chair: Mr. Mark Bradshaw

Vice Chair: Ms. Pamela McCarthy

Director: Mr. Steven Pavelitz

Director: Dr. Brian Maxwell

Officers

President: Mark Bradshaw

Vice President: Pamela McCarthy

Treasurer: Ms. Lori Goetz

Secretary: Ms. Renee Wise

Communications: Ms. Melanie Smith

Mentor Team Lead: Mr. Steven Pavelitz

Newsletter Tech Editor: Mr. Clint Rodenfels

Points of Contact & Resources

- For general information or questions about volunteering please contact us at: info@stemorigins.org
- For questions on this annual report or to discuss potential partnerships please contact Mark Bradshaw at: mark.bradshaw@stemorigins.org or (850) 733-7168
- Our online library can provide access to our monthly newsletters, brochures, briefings, our founding documents, our MOU with BDS and this annual report. The link for that library is: https://stemorigins.org/library/
- Donations can be made online through our website: https://stemorigins.org/
  Or they can be directly mailed to:

The STEM Origins Foundation
8705 Sandbar Lane
Panama City Beach, FL 32413

Appendix A: Summary of Key Insights from Studies[10]

1. The "Social Identity" Perspective
This research explores why the transition to middle school (6th grade) triggers a conflict between a girl's "social self" and her "STEM self."

- **Reference:** Kim, A. Y., Sinatra, G. M., & Seyranian, V. (2018). *Developing a STEM Identity Among Young Women: A Social Identity Perspective.* **Review of Educational Research.**
- **Key Insight:** This paper discusses how the social transition into middle school causes girls to distance themselves from subjects perceived as "solitary" or "masculine" to fit into new social hierarchies.
- **Academic Application:** Use this to explain the **sociological** reason for the 6th-grade drop-off.

2. The "Competence Beliefs" Study
This longitudinal study tracked students from elementary through high school to see when the "confidence gap" actually opens.

- **Reference:** Archambault, I., Eccles, J. S., & Vida, M. N. (2010). *Ability self-perceptions and subjective task values in STEM and non-STEM domains.* **Journal of Educational Psychology.**
- **Key Insight:** The researchers found that while boys and girls have similar interest levels in 4th grade, a significant statistical divergence occurs between **ages 11 and 12**.
- **Academic Application:** This provides the **psychological** data proving that girls don't lose *ability* in 6th grade; they lose the *belief* that they are capable.

3. The "Stereotype Threat" in Middle School
This paper examines how the environment of the American middle school specifically activates gender stereotypes that were dormant in elementary school.

- **Reference:** Master, A., Cheryan, S., & Meltzoff, A. N. (2016). *Computing whether she belongs: Stereotypes undermine girls' interest and sense of belonging in computer science.* **Journal of Educational Psychology.**
- **Key Insight:** This study highlights that by age 11, girls have internalized the "geeky male" stereotype of STEM, which leads to a "reduced sense of belonging" just as they enter the 6th grade.
- **Academic Application:** Use this to argue that the **environment** of middle schools (rather than the girls themselves) is what needs to change.

[10] This summary was provided by the Google Gemini AI system

Appendix B:

NIHF Kits for Bay Base STEM Pilot


Invention Project®
FOR FLEXIBLE, YEAR-ROUND LEARNING
FOR GRADES PREK-8
A NATIONAL INVENTORS HALL OF FAME® EDUCATION PROGRAM

TRANSFORM YOUR CLASSROOMS

Invention education leverages children's natural inclination to create and guides them through the act of invention to build the mindset and skills they need to navigate life. Invention Project® is the key to bringing this transformative approach to learning into the classroom.

This flexible, innovative program adapts to fit your district's needs and your students' learning styles with equitable, developmentally appropriate instruction that aligns with national and state standards and seamlessly integrates life skills.

> "There is no shortage of creativity among young people, especially if we let them **follow their instinctive curiosity.**"
>
> **GERTRUDE ELION**, NATIONAL INVENTORS HALL OF FAME INDUCTEE

AUTHENTIC LEARNING

- Engaging, hands-on activities promote teamwork and collaboration
- Experiences that build competency in decision-making and self-management
- Opportunities to practice empathy and relationship skills

STRESS-FREE IMPLEMENTATION

- Step-by-step curriculum guide and online resources reduce prep time
- Individually packaged materials allow for hassle-free implementation
- Dedicated National Inventors Hall of Fame® support

FLEXIBLE & IMMERSIVE CURRICULUM

- 32 unique modules with six hours per module
- Instructor-led and asynchronous learning opportunities for in-school, afterschool and summer implementation
- Includes pre- and post-tests to track student progress

Learn more about Invention Project here.

I CAN INVENT MINDSET

Like all National Inventors Hall of Fame® education programs, Invention Project is designed to lead students to build the I Can Invent® Mindset — a growth mindset encompassing essential skills and traits demonstrated by innovators including our Inductees. This mindset is instilled through hands-on exploration and strengthened through application.

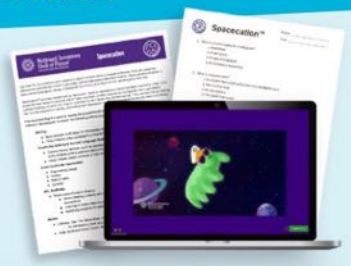
Invention Project equips educators to foster each aspect of the I Can Invent Mindset, enabling students to unlock their full potential, discover the power of their own creativity and confidently overcome challenges in any area of life.

Learn more about Invention Project here.

WHAT'S INCLUDED

EDUCATOR RESOURCES

- Step-by-step curriculum aligned to national and state standards
- Pre- and post-test to track student progress
- Curriculum supports such as videos and presentations



STUDENT RESOURCES

- Step-by-step activity guides
- Individually packaged materials
- Supplemental online resources

FIRST-CLASS CUSTOMER SERVICE

- Available 24/7 for questions that come up
- Offers a complete and customized training program to prepare for classroom implementation
- Supports submitting paperwork for grants and other state/national funding
- Will work with each district to build the right set of modules and program for them

Learn more about Invention Project here.

KEY SKILLS AND CONCEPTS

- English Language Arts (Writing)
- Earth Science
- Design Thinking
- Engineering Design
- Responsible Decision-Making

LOST TREASURE™ MODULE OVERVIEW

Children are recruited by Professor Ivana Dig-It to help find the lost treasure of Archaic Island! They must develop an exciting adventure story that will persuade investors to fund their expedition, investigate data about volcanic eruptions, build gadgets to reach fruit in trees, create a treasure map and carefully navigate challenging terrain.

CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE I CAN INVENT MINDSET:

CREATIVE PROBLEM SOLVING

Using creative problem solving to design volcano-safe protective gear.

DESIGN THINKING

Sketching and building a shelter to stay safe from island weather.

PERSISTENCE

Demonstrating persistence to complete challenges and decode a secret message.

Learn more about Invention Project here.

KEY SKILLS AND CONCEPTS

- Animal Science
- Biology
- Engineering
- Measurement and Data

ROBOTIC PET VET™ MODULE OVERVIEW

By developing their knowledge and skills in biology, physiology and circuitry to take apart and diagnose their robotic dogs, students are able to enhance their problem-solving skills. After helping their pets recover, children celebrate the homecoming of their customized robotic pet as they demonstrate design engineering concepts by constructing an interactive dog park attraction.

CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE I CAN INVENT MINDSET:

STEM

Exploring the inner workings of a robotic dog and discovering basic engineering principles.

CREATIVE PROBLEM SOLVING

Following step-by-step instructions to investigate dog anatomy to perform surgery.

CONFIDENCE

Realizing they are capable problem solvers as they fix a robotic dog.

Learn more about Invention Project here.

KEY SKILLS AND CONCEPTS

- Responsible Decision-Making
- Design Thinking
- Engineering Design
- Speaking and Listening
- Art
- Forces and Interactions

NIHFTY BOT EXPLORES™ MODULE OVERVIEW

Using their very own NIHFty Bot™ plushie, students apply STEM and creative problem-solving skills to design solutions and engineer new innovations to bring NIHFty's world to life. Combine the NIHFty Bot Explores materials with classroom materials, recycleables and creativity supplies to enhance students' designs as they create gadgets, devices, accessories and adventure items for NIHFty Bot. NIHFty Bot Explores provides six hours of hands-on content for your students.

CURRICULUM HIGHLIGHTS

NIHFTY BOT EXPLORES EMPHASIZES THESE ASPECTS OF THE I CAN INVENT MINDSET:

STEM

Exploring STEM concepts, like physics and engineering design, through hands-on activities.

CREATIVE PROBLEM SOLVING

Applying creative problem solving to create, test and recreate solutions to invention challenges.

PERSISTENCE

Building persistence to overcome fun challenges, from chain reactions to deep-sea gear.

Learn more about Invention Project here.

KEY SKILLS AND CONCEPTS

- Gross Motor Skills
- Fine Motor Skills
- Teamwork
- Creative Thinking

GAMES OVERVIEW

Games supplement our modules by giving children the opportunity to engage in more teamwork, out-of-the-box thinking and physical fun through energetic and enriching activities.

CURRICULUM HIGHLIGHTS

GAMES EMPHASIZE THESE I CAN INVENT HABITS:

CONFIDENCE

Gaining confidence and building agility through both collaboration and competition.

CREATIVE PROBLEM SOLVING

Applying creative problem solving to devise strategies in games using unusual objects and new rules.

PERSISTENCE

Building persistence to overcome fun challenges, from balloon tosses to relay races.

Learn more about Invention Project here.

KEY SKILLS AND CONCEPTS

- Gross Motor Skills
- Fine Motor Skills
- Teamwork
- Creative Thinking

BASE CAMP OVERVIEW

Base Camp fosters teamwork and nurtures creative thinking by exploring challenges that encourage children to think critically. The energetic and enriching activities set the tone for continuous learning, creating a dynamic environment.

CURRICULUM HIGHLIGHTS

BASE CAMP EMPHASIZES THESE I CAN INVENT HABITS:

STEM

Exploring STEM concepts, like physics and engineering design, through hands-on activities.

CREATIVE PROBLEM SOLVING

Applying creative problem solving to devise strategies in games using unusual objects and new rules.

PERSISTENCE

Building persistence to overcome fun challenges, from tower builds to invention trivia.

Learn more about Invention Project here.