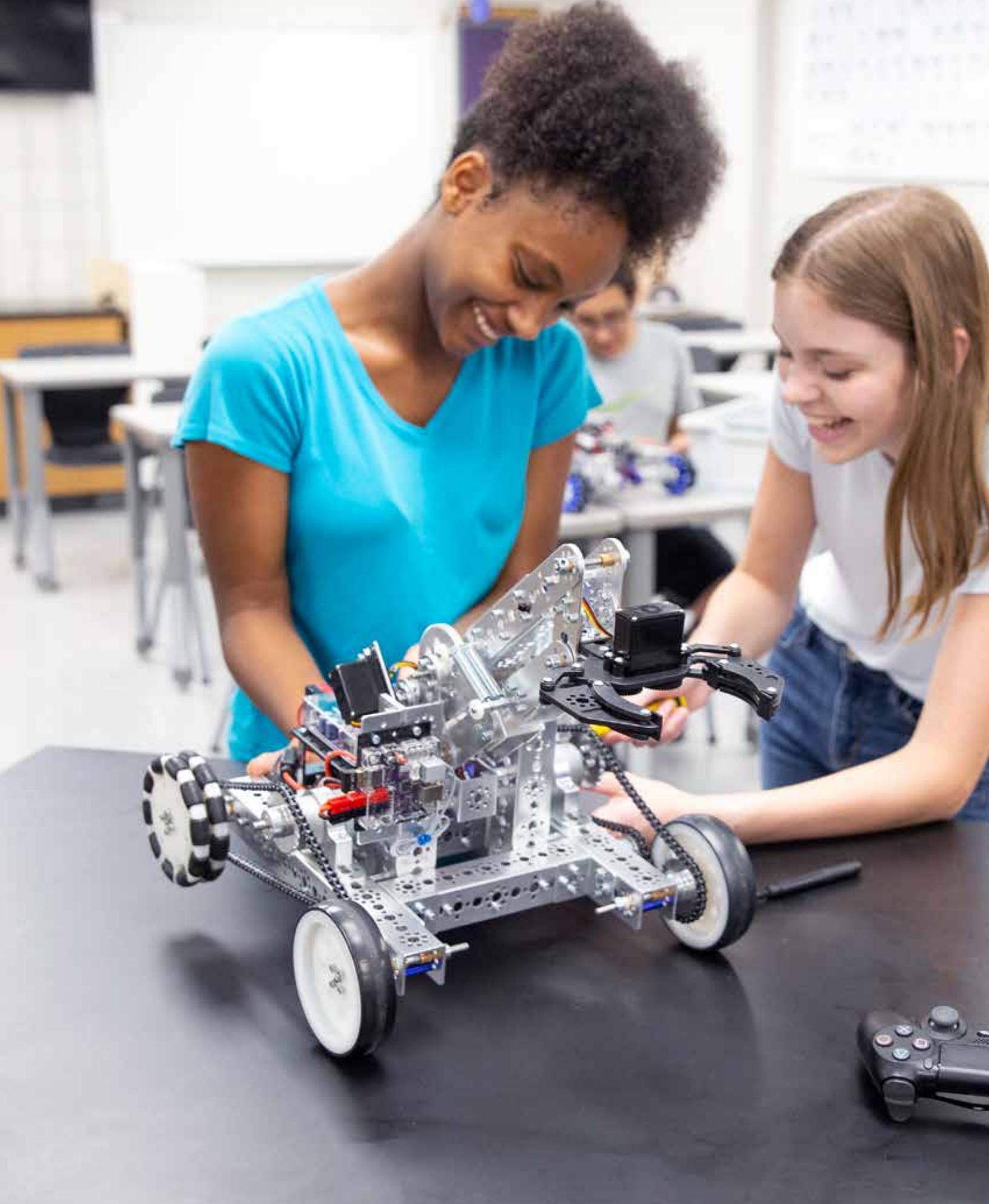




PITSCO EDUCATION

# GRANTS GUIDE







You have a vision for serving your students and need the funds to make it happen. School and department budgets aren't always sufficient. Fortunately, state and federal agencies, corporate foundations, nonprofits, and other philanthropic organizations are eager to commit funds to projects that advance STEM education.

Whether you seek to fund a robotics engineering unit, a makerspace within your school's library, a rocketry and aeronautics club, or an Expeditions lab with a focus on regional industries, this guide will give you the footing needed to take the next step toward funding that could make your dream a reality.





# FEDERAL FUNDING

Throughout the last several decades, national, bipartisan support for STEM education in schools – private, public, and charter – has grown. Policy makers recognize the importance of developing STEM programs so today’s students become tomorrow’s problem solvers. It is crucial to our national security, economic growth, and competitiveness on the world stage. To this end, various federal agencies and programs offer grants and other funding opportunities to schools and districts interested in designing, developing, and sustaining STEM initiatives.

State and federal funding opportunities for schools are made public to ensure equal opportunity for all schools and districts interested in applying. You can search for grants on websites such as Grants.gov, Sam.gov, and Federalregister.gov.

When you’ve found the right funding opportunity, it’s important to plan ahead. Applications are generally specific in their requirements and strict on deadlines. You’ll need a dedicated team to put together a strong application, but your effort could result in significant support for your STEM initiatives.

Read on for ideas on agencies and programs that are the best fit for your project.

## SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

- **National Science Foundation (NSF) Grants**  
Supports STEM curriculum development, teacher training, and student engagement in STEM fields
- **Mathematics and Science Partnerships (MSP) Program**  
Focuses on professional development for STEM teachers
- **NASA STEM Engagement Grants**  
Focuses on professional development for STEM teachers
- **Department of Defense (DoD) STEM Education Consortium (DSEC)**  
Enhances STEAM learning opportunities, specifically in areas such as national security and defense
- **Department of Energy STEM Grants**  
Funds clean energy, sustainability, and STEM workforce development projects

## CAREER AND TECHNICAL EDUCATION (CTE)

- **Perkins Career and Technical Education Act (Perkins V)**  
Supports career readiness programs, including those integrating STEM, in K-12 and postsecondary institutions
- **YouthBuild (Department of Labor)**  
Provides funding for STEM and CTE pathways with an emphasis on career readiness
- **Apprenticeship Grants (Department of Labor)**  
Encourages work-based learning opportunities, including CTE-focused apprenticeships



**TIP:** When pursuing federal grants, promptness is important. Limited funds are available, as allotted by the relevant laws and the budgets approved for the granting agencies. And, as the adage goes, the early bird gets the worm.

## EQUITY, ACCESS, AND INCLUSION

- **Title I, Part A (Improving Basic Programs)**  
Provides financial assistance to schools with high numbers of students from low-income families
- **Magnet Schools Assistance Program**  
Supports innovative academic programs to reduce minority group isolation
- **English Language Acquisition Grants (Title III)**  
Supports students with limited English proficiency
- **Individuals with Disabilities Education Act (IDEA) Grants**  
Supports STEM and CTE programs for students with disabilities

## TECHNOLOGY AND INNOVATION

- **Education Innovation and Research (EIR) Grants**  
Supports innovative educational practices, including technology-based learning



- **E-Rate Program (FCC)**

Provides discounts on telecommunications, Internet access, and related equipment for schools

- **Computer Science for All (CSforALL) Initiative**

Promotes federal- and state-level programs for K-12 computer science education

## **RURAL AND UNDERSERVED SCHOOLS**

- **Small, Rural School Achievement Program (SRSA)**

Provides funds to rural districts for operational and programmatic needs

- **Rural and Low-Income School Program (RLIS)**

Targets rural, low-income schools to improve academic achievement

- **Impact Aid (DoD/ED)**

Supports districts financially affected by federal activities (e.g., military installations, tribal lands)

## **AFTER-SCHOOL AND ENRICHMENT PROGRAMS**

- **21st Century Community Learning Centers Program**

Funds after-school programs focusing on academic enrichment and family involvement

- **Arts in Education Program (National Endowment for the Arts)**

Supports arts integration into the curriculum and extracurricular programs

## **SPECIALIZED AND GIFTED EDUCATION**

- **Gifted and Talented Students (Javits Program)**

Funds programs for gifted students from underserved populations

- **Charter Schools Program (CSP)**

Develops and enhances charter schools using grants to expand access to quality education

## **ENVIRONMENTAL AND SUSTAINABILITY EDUCATION**

- **Environmental Education Grants (EPA)**

Funds STEM-based environmental and sustainability projects

- **NOAA Bay Watershed Education and Training (BWET) Program**

Supports environmental science education with a STEM focus

## **GENERAL EDUCATIONAL SUPPORT**

- **Title II, Part A (Supporting Effective Instruction)**

Supports teacher and principal professional development

- **Title IV, Part A (Student Support and Academic Enrichment)**

Funds well-rounded education, safe and healthy schools, and technology integration

- **Innovative Education State Grants (Legacy Title VI)**

Supports innovative programs and practices broadly at the state level



**TIP:** Remember, a grantee and a grant maker are entering into a mutually beneficial arrangement. When making your approach, be mindful of how your project will benefit the organization as well. It is not uncommon to have a plan for securing positive media coverage of a successfully funded project.



# NONFEDERAL FUNDING

## CORPORATIONS

It's not uncommon for private sector corporations to establish corporate foundations to offer funding and support to projects and programs that align with their industry's goals. This is sometimes referred to as corporate social responsibility, or CSR. Often, CSR efforts target school and district projects in the vicinity of headquarters or other areas where corporations have a large footprint. In order to secure a future workforce, funds are set aside to help grow that workforce.

**TIP:** Consider companies from STEM industries, such as healthcare, tech, pharmacy, auto, and so on whose headquarters or offices are in your state. Check their websites for CSR pages and grant information.

## CHARITIES

Nonprofit organizations often receive funds from large organizations with the goal of distributing those funds to schools and districts in need of financial support to build and sustain STEM programs. By acting as an intermediary, these charitable organizations can help ensure educational entities receive the funds they need and they are used as the donors intended.

**TIP:** Look for nonprofits in education whose mission and goals align with your own. Look for grant opportunities on their websites, or reach out to see if there are opportunities to partner.

## FOUNDATIONS

Family foundations are often interested in supporting initiatives that align with passions and lifework of those at the head of the foundation. Securing funding from a foundation is more of a long game than other grant opportunities but can result in deep and lasting partnerships that will support your STEM programs for years to come.

**TIP:** Search for foundations whose goals align with those of your program. Use tools such as Guidestar or Foundation Directory to search through legally established foundations as a starting point.



**SUBMIT AN  
APPLICATION**



## **PAYING IT FORWARD:**

### Pitsco Monthly Educator and Student Competition Team Grants

#### **\$350 EDUCATOR GRANT**

Pitsco Education appreciates everything educators do to positively affect learners. We also know that funding enriching learning opportunities for students can be difficult. Pitsco is proud to offer a \$350 grant each month to assist with making hands-on learning possible. This grant is awarded in the form of a voucher that may be used to purchase hands-on STEM products, curriculum, and more on our website.

#### **\$150 TEAM GRANT**

We love seeing collaboration and connection at play and want to help make more of that happen! This grant is open to K-12 competitive teams [i.e., *FIRST*®, SkillsUSA® Robotics: Urban Search & Rescue, SkillsUSA Commercial sUAS (Drone) Competition, KidWind teams, and so on] within the continental United States and Hawaii. Pitsco is proud to offer a \$150 grant in the form of a voucher that may be used to purchase competition supplies and materials from our website.



## CHARITIES SUPPORTING EDUCATION GROWING RAPIDLY

Nonprofits in the US that support K-12 education have grown in number through the last 20 or so years and are increasingly making up a larger percentage of all nonprofits nationwide. This means there are more opportunities than ever before to partner with institutions seeking to allocate grant funding to schools and districts whose goals align with their STEM missions.

| US K-12-FOCUSED NONPROFITS AND ALL NONPROFITS |                 |   |
|---|-----------------|---|
| YEAR  | NONPROFIT (ALL) | PERCENT OF NONPROFIT WORK FOCUSED ON K-12 EDUCATION |
| early 2000s                                   | 1.26 million    | 13.8%   |
| 2023  | 2 million       | 16.2%   |

**Source:** [zippia.com/advice/nonprofit-statistics](https://zippia.com/advice/nonprofit-statistics) | [statista.com/statistics/189245/number-of-non-profit-organizations-in-the-united-states-since-1998](https://statista.com/statistics/189245/number-of-non-profit-organizations-in-the-united-states-since-1998)

## PROFESSIONAL ORGANIZATIONS

If you are a member of any professional organization, this might be an excellent place to search for funding for your project. Both scholarships and grants may be offered to dues-paying members. Again, study the criteria and giving philosophy of the organization.

- National Education Association
- American Federation of Teachers
- Rotary Club
- Kiwanis International

**TIP:** Local organizations have a built-in incentive to improve their communities. Local Education Foundations (LEFs) and other community foundations receive donations from area businesses and individuals and earmark these funds for awards to suitable projects. It is worth hitting the pavement to learn of nearby opportunities. You might even wish to develop an idea to suit their funding priorities.



**TIP:** If you have a great idea, don't be afraid to aim big. Teacher Vic Worthington had never written a grant before, but he believed in his STEM visions, which incorporated Pitsco materials. He applied for three grants (from Monsanto and Farmers Insurance) and found success with all three. His funds totaled \$135,000!

## Crowdfunding

In one sense, crowdfunding offers the most open-ended form of funding search. The concept is simple. You make a pitch, and anyone who feels compelled (or anyone you invite) to fund your project may do so. There is less requirement to fit within a predefined agenda. But, at the same time, there can be considerations and restrictions not present with other funding sources. For example, the platform you choose may impose certain restrictions on how or where money can be spent. Make sure you read all the terms and conditions.

## DonorsChoose.org

This platform strives to help educators find funding for projects and programs outside of school funding.

## Kickstarter.com

Perhaps the most well-known crowdfunding platform, Kickstarter funds creative projects of all types.

## GoFundMe.com

According to the site, education is the platform's fastest-growing category.

## Indiegogo.com

In the words of one of the site's creators, the platform is "all about allowing anybody to raise money for any idea."



### **Adoptaclassroom.org**

(provides funding for classroom supplies)

### **Classwish.org**

(helps schools and teachers get supplies they need)

### **Gofundme Education**

(crowdfunding platform used by educators to fund classroom projects)

### **PledgeCents.com**

(for schools and teachers to raise funds)

### **EducationBlueprint.org**

(platform to connect teachers with funding opportunities)

### **FundRazr.com**

(crowdfunding for education-related initiatives)

### **EducationFoundationpb.org/Red-Apple-Supplies**

(supplies for teachers in under-funded schools)

### **DigitalWish.com**

(helps teacher acquire tech for their classrooms)

### **SnapRaise.com**

(helps schools raise funds for extracurriculars)

### **Classful.com**


(crowdfunding platform just for teachers)


## **DONORSCHOOSE: AN INCREASINGLY POPULAR FUNDING SOURCE**


81% 

of all the public schools in America have at least one teacher who has posted a project on DonorsChoose.org

 62%  
of projects are fully funded

Average donation size for new donors:  
 \$54

 83%  
of schools where half or more of students are from low-income households have participated in DonorsChoose.org

74% 

of funded projects are from schools where half or more of students are from low-income households

Average cost of a funded project:  
 \$551

Source: Donorschoose.org/impact. Accurate as of May 14, 2019.



## **\$41K FOR DEDICATED STEM GRANT SEEKER**

Teacher Carrie Herndon of Metro East Montessori School in Granite City, Illinois, had to be resourceful when funding her dream program, so she began applying for grants and crossing her fingers. A 13-year veteran of teaching science and STEM, she targeted the Innovative Technology Education Fund that supports schools in the St. Louis, Missouri, area. Her efforts paid off when Metro East was awarded a grant for \$41,000 to fund the STEM program and activities she envisioned.

# **FINDING THE RIGHT SOURCES**

## **STEM/STEAM/STREAM PRODUCTS**

How do we impart 21st-century skills? The simple answer is that we let students grow these skills organically through hands-on exploration and discovery of current and emerging technology, with guidance from educators. A strong STEM/STEAM/STREAM curriculum with hands-on projects and activities increases engagement and gives students a head start on future-relevant skills.

### **American Honda Foundation**

This organization prioritizes youth education, specifically in the areas of science, technology, engineering, mathematics, the environment, job training, and literacy.

### **Dominion Energy Charitable Foundation**

Dominion Energy partners with the educational community through mentoring initiatives, philanthropic support, and other means to strengthen STEM competitiveness and help prepare students for tomorrow's workplace.



## ROBOTICS AND CODING

Robotics and coding courses are being integrated into school curricula across the nation. What began as a club or after-school activity has grown into an important part of classroom learning and for a good reason. From screen-free coding solutions such as Bee-Bot® and KUBO for elementary students to robotics kits such as TETRIX® that assemble quickly and easily in the hands of middle schoolers, robotics and coding immerse students in hands-on technology of the future.

### **Charles Lafitte Foundation**

This foundation subscribes to innovation and creativity. There is a strong investment in experiential elements for students.

### **Toyota USA Foundation**

The Toyota USA Foundation supports K-12 education with a focus on math, science, and environmental science.

## GRANTMAKER AND STREAM LAB BOTH BENEFIT

At Bridgeton Elementary School in New Bern, North Carolina, a Pitsco STREAM Missions lab was funded in part by a \$25,000 grant from Duke Energy. Both school and company benefited, as Duke Energy Government and Community Relations Manager Millie Chalk explains, “We want a workforce that can take us to the next level. And that to me is what STEM is providing us, and that is what our commitment to STEM education in North Carolina is really about. How do we build a better workforce? How do we grow our economy to be more productive and to do more and be more? That comes from a grassroots effort in education.”

## SYSTEMS

When the Friday Institute for Educational Innovation at North Carolina State University’s College of Education published a report in 2017 stating that student exposure to Pitsco STEM Expeditions® had elevated MAP science scores 20% above the scores of a control group, this finding was highly encouraging. Yet it was not surprising because this system – like all of Pitsco’s systems – is anchored in proven approaches to student success.

### **Braitmayer Foundation**

The foundation is interested in proposals utilizing innovative practices in K-12 education throughout the United States. Of particular interest are curricular and school reform initiatives.

### **Westinghouse Charitable Giving Program**

The program places emphasis on STEM programs.


**TIP:** Don’t be afraid to pick up the phone and call an organization’s program manager if you have any questions about how your project could fit in with the organization’s vision.



**TIP:** Foundations often divide proposals and letters received among their reviewers, and each reviewer might have a significant load. Anything you can do to make your communicates easy to navigate and comprehend will make your project stand out.

## COMMON APPLICATION INFORMATION

Though the grant application process can be complex and confusing, it is frequently formulaic. After you find a promising funding source, your next step is to make contact. The letter of intent and proposal guidelines given here will serve you in most instances, though the specifics will always need to be tailored to your circumstance. And, of course, the cardinal rule when making your approach is to take time to understand the needs, requirements, and expectations of any grant maker you are pursuing. If a grant-making body requests a different set of information or a different form entirely, follow their instructions.



Resist the temptation to send out “form letter” proposals to multiple grant makers with only a few words changed. If you produce thoughtful documents that show you have considered the organization’s perspective and their potential stake, you are more likely to be rewarded. Besides, grant-making bodies sometimes receive large numbers of queries. Even small diversions from the requirements can be used to cull applicants down to a manageable number.

## LETTER OF INTENT

An organization may request that you send a letter of intent (or sometimes called letter of inquiry or letter of interest – in any case, it’s abbreviated LOI) before sending a full proposal. Sometimes, you will simply see a statement that no proposals are accepted. It is appropriate to send an LOI in this case as well. A successful LOI will lead to a request for a full proposal.

### Writing the LOI

The LOI is essentially a condensed version of a proposal in the form of a business letter. Its purpose is to introduce your project and organization to the grant maker and entice them to learn more. A general rule is to keep the LOI to one or two pages.

The opening paragraph should provide, with extreme brevity, the essential information about your organization and your project. Relate your project to the expressed interest of the grant-making body you are writing to. If you are responding to a request for proposal, state that here.

In the rest of your letter, expand on your intended project. State your needs clearly and describe your methods succinctly. Connect these to the outcomes you expect to achieve. Draw a picture of the benefit to your students, school, or community. It is appropriate to extol the achievements and distinctions of your organization. Though you won’t need an itemized budget, let the grant maker know your funding needs in brief and provide the total requested amount.

As with a standard business letter, conclude by thanking the grant maker for their consideration and providing contact information. Don’t forget the signature!

Though the LOI is not as robust as a proposal, it must demonstrate that you have thoroughly considered the purpose and logistics of your project.

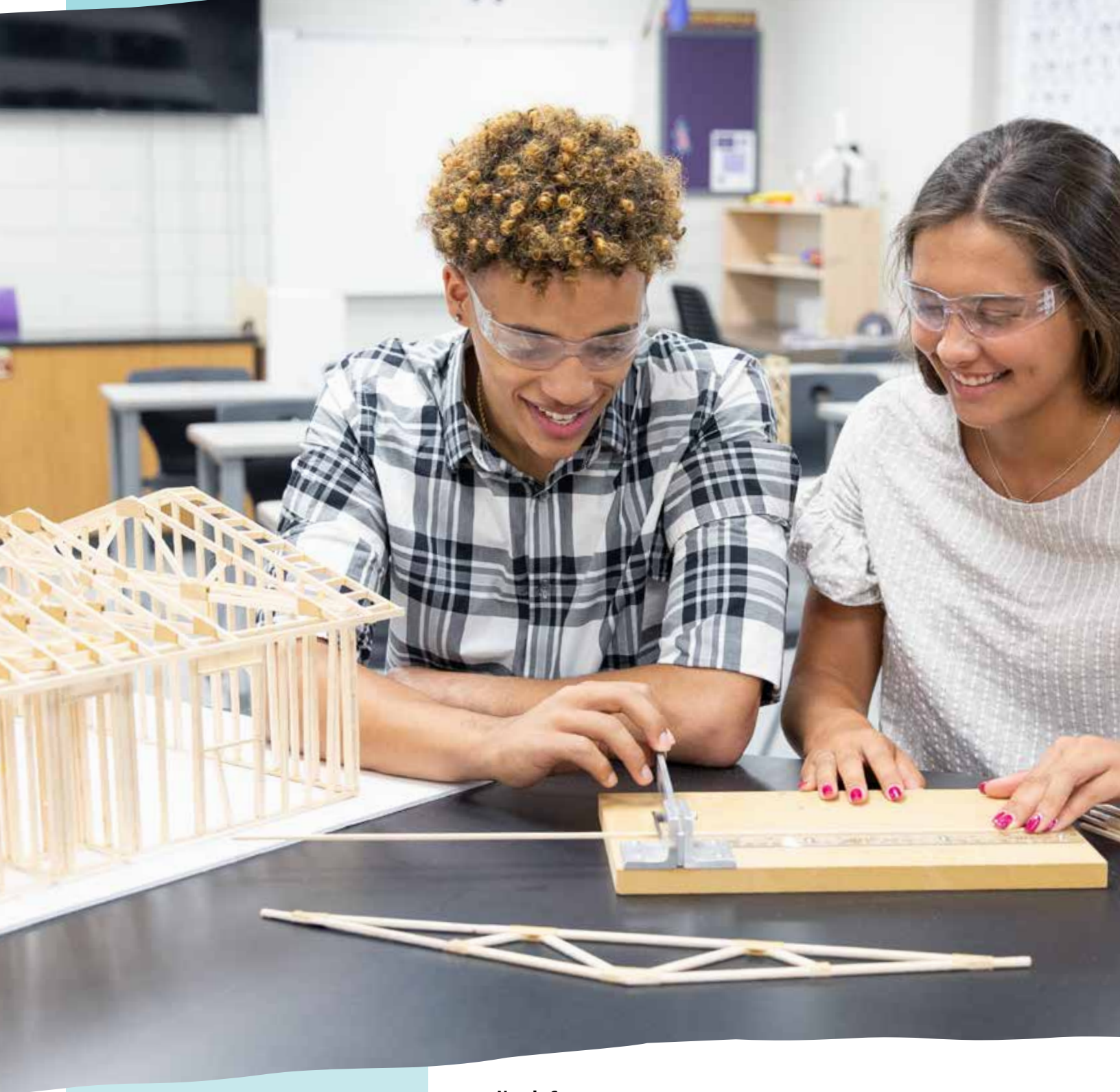
## PROPOSAL

The proposal gives the full case for your project and for the requested funding. Most proposals will follow a formulaic approach. However, every proposal should be tailored to the grant maker in question. It is better by far to reach out to only a few organizations with proposals well suited to their aims than to take a scattershot approach with a generic proposal. Attention to detail and fidelity to all requirements will be rewarded. The proposal is a thorough document that could take months to write.

### Abstract

In the space of one page or less, provide an overview of your organization, your project, and the outcomes you intend to achieve. State the cost of your project and the amount you are requesting. Include the timeline for your project.

This section is a key to the whole proposal. It should be comprehensive yet concise. But, most essentially, it must intrigue. A reviewer who reads a poor or unengaging abstract might pass on the proposal without reading the rest.



**TIP:** Aim to submit a proposal at least one week before the deadline.

### Needs Statement

Clearly state the need that your proposal seeks to address. Express the need in terms of the benefit to your students and community, not yourself or your organization. At the same time, seek to establish credibility by contextualizing the need within the larger goals or philosophy of your organization.

The more evidence, data, and research you provide to bolster the need you describe, the better. Reviewers should have no doubts in their minds that this is a real need with tangible consequences.



### Goals

Provide the reviewer a clear understanding of the outcome sought. In other words, how will the situation described in the needs statement change for the better after your solution is implemented? State the intended outcomes in measurable terms. Grant-making bodies seek projects whose success can be objectively determined. Make sure that your goals are realistic.

### Program Design

This section is sometimes called Methodology or Approach. This is the part of the proposal where you describe in detail the program, procedures, and tools you will use to achieve the goals stated in the previous section.

Make a case that the program you put in place will achieve this. Cite research and relevant case studies. Describe the various activities covered and explain why they are relevant. Show that you have given thought to the practical realities of your project by including a plan and timeline for implementation. List the staff involved in the project and their qualifications.

### Budget

Lay out how you will use the requested funds. Give a full accounting of costs, including the cost of staff, materials, and transportation as well as any indirect costs or associated overhead. Include a discussion of long-term sustainability. That is to say, explain how the program will continue after the funds from the grant have been exhausted.

Provide a spreadsheet or table of budget numbers. If required, include a budget narrative. And, check your math multiple times! Go knocking on the door of your school's math teacher if needed. Be as realistic as possible. Too much guesswork could undermine your credibility with reviewers. Or, you could end up receiving funding only to discover too late that the amount is inadequate.

### Appendix

An appendix should be included only if required by the grant. List all items as they appear in the appendix. Include information on the school board, superintendent, principal, and other key players. Provide the qualifications of these key players in the form of résumés, CVs, and so forth. Include any letters of support.

**TIP:** The timeline for your project is important. Give a clear sense of the start, middle, and end point. If it will be ongoing, explain how it will be sustained.



## APPLY NOW! \$350 MONTHLY PITSCO GRANT

We are proud to offer a grant each month in the form of a gift certificate that may be used to purchase hands-on STEM products, curriculum, and more on our website.



**\$350 MONTHLY  
EDUCATOR GRANT**



**\$150 MONTHLY  
STUDENT TEAM  
GRANT**

Finding grants can be a daunting process, especially for a newcomer. Achieving liftoff for your new classroom project really can be 1% inspiration and 99% perspiration. But stay the course and don't lose heart. The impact you make in the lives of our young people is worth every effort. With experience, you will become a master.

And remember, your Pitsco Education Advisor is here to help.