For over 24 years, TGR Foundation has been redefining what it means to be a champion.

VISION

A world where opportunity is universal and potential is limitless.

MISSION

Empowering students to pursue their passions through education.
STEM Enrichment Programming
The TGR Learning Labs allow students to discover personal interests, develop self-confidence and strengthen academic skills.

Scholarship Program
In 2006, the Earl Woods Scholar Program was created to provide high-potential, low-income students with the resources to get into and through college.

Educator Professional Learning
TGR EDU: Create is a teacher training program incorporating interdisciplinary approaches with inquiry-based, student-centered content focused on STEM, college access and career connections.

Global Professional Learning
TGR EDU: Global engages a network of educators and business leaders around the world to pursue excellence in STEM education, social entrepreneurship and workforce readiness.
Free Online Education for Students, Educators and Families

Launched in partnership with Discovery Education in 2017, TGR EDU: Explore is a digital version of our TGR Learning Lab, offering access to STEM curricula and college-access programming.

Available at no cost, the platform offers interactive lessons and video trainings in:

- **STEM subjects**, from robotics and biotechnology to city planning, biomimicry and more
- **College application process**
- **Financial aid process**
Following Nature’s Lead
(20 minutes / grades 6-8)

Students will learn about the important concept of biomimicry—when physicists, chemists and biologists use their knowledge of organisms’ structures and functions to build the foundation of innovation. Along the way, they will match animal habitats and animals to human inventions and designs, learning which human innovations have been inspired by termite mounds, dolphins, pigeons and more.

Robots to the Rescue
(20 minutes / grades 6-8)

Through a guided interactive experience, students will examine how robotic technologies help respond to natural hazards by aiding in a rescue and reconnaissance mission. Along the way they will be challenged to use block coding to program a rescue robot to aid in a rescue and reconnaissance mission.
Tracing Life’s Roots
(30 minutes / grades 6-12)

Students will act as zoologists to investigate common ancestry. They will obtain information about four different species to determine which two animal species are the most closely related. Along the way, students will compare embryotic development stages, anatomical evidence and genetic evidence to support their conclusion.

To Our Solar System and Back
(30 minutes / grades 6-12)

Students will act as planetary scientists who have been tasked with conducting a sample return mission. They will investigate the future of reusable launch systems and the STEM behind both a successful launch and landing to obtain and return their sample. Finally, students will examine the diverse range of careers in the aerospace industry.
Interdisciplinary Learning: Making Connections
Coming Soon!

The next learning module will focus on **interdisciplinary learning** and how to effectively implement interdisciplinary teaching into your practice. Throughout the module, you will learn what interdisciplinary learning is, how it **benefits** students and sets them up for success in the **global workforce**, and tools, strategies, and resources to begin implementation right away!

(Re)Defining STEM
(40 minutes / grades 3-12)

In this learning module, called (Re)Defining STEM, learn how to view STEM **education** with an updated lens, understand the principles for effective STEM teaching and learning, and come away with concrete **strategies** and activities that can **transform student learning** no matter the discipline.
**City Planning for Biodiversity and Our Future (6-12)**

Students will define *biodiversity* and brainstorm how cities can have an impact on the biodiversity in a particular area. They will then calculate a biodiversity index and discover why a high biodiversity index is important for an *ecosystem*. Finally, they will take on the role of *city planners* to create and present a unique model that incorporates biodiversity.

**Beating Mosquitoes at Their Own Game (9-12)**

In this lesson, students will investigate how humans, through *biotechnology*, can influence the characteristics of organisms in order to ultimately take a stance on the best way to combat an *outbreak* of Zika-infected mosquitos in their community.
Geometric Building Design (6-8)

In this lesson, students will study how 2-D shapes convert to 3-D shapes and how that impacts surface area and volume. In doing so, they will design and engineer a building that meets certain design requirements, creating a presentation to deliver to a mock City Council to approve their building design.

Magnetic Migration (6-8)

Students will work together to investigate the claim that animals use Earth’s magnetic field to navigate. First, students will rotate through stations that build their understanding of magnetic forces and properties. Next, they will apply this new understanding as they explore Earth’s magnetic field by building a compass and considering how magnetic fields extend through space. Students will then divide into research teams and focus on if/how magnetism affects the migration of birds, sea turtles, and sharks.
Rethinking Failure
Through quotes, anecdotes and dialogue this Digital Lesson Bundle challenges students to rethink their attitudes toward and assumptions about failure. Students will examine the meaning of failure, explore why failure is an important part of the learning process, and discover how to develop a growth mindset to turn failure into a catalyst for future success.

Career Path
Your students will visualize, organize and illustrate their future pathways and translate this information into goals for themselves, with written action plans for achievement.

Find Your Passion
In this activity, students will identify the things they love doing and brainstorm their “wildest dreams” for the future in order to discover their passion(s) and set themselves on a path to achieve their goals. They will create mind maps to help them visualize, organize and illustrate their future pathways.
Take a virtual field trip with TGR Foundation and Discovery Education to the Facebook headquarters in Menlo Park, Calif. as we showcase some of the innovative careers that fuel this Silicon Valley powerhouse. Facebook builds products to make the world more open and connected and this means drawing from a team that understands and reflects a broad range of experience, thought, geography, age and background. Hear from experts in software and infrastructure engineering, product design and data security to learn how hands-on work in the classroom can lead to engaging careers that create positive change.
STEM Family Design Challenges

- 20 different STEM design challenges, available in both English and Spanish
- Each challenge requires materials commonly found around the home
- Challenges emphasize inquiry and creativity
- Appropriate for all ages!
Additional Resources for Students

STEM Unplugged Series
A series of videos for students and families to conduct engaging STEM activities at home, with materials typically found around the house.

Fitness @ Home Series
A series of videos to help students remain active during this time of distance learning. Each video will demonstrate a handful of fitness exercises to activate body and mind.

College Tidbit Series
A new series of videos for students starting the planning process for college. Topics include: freshman year college tips; exploring volunteer opportunities.

Available at TGRFoundation.org
Additional Resources for Educators

Training Videos
Short training videos demonstrating tools, resources, and strategies to support your practice and keep students engaged during distance learning.

Digital Workshops
Monthly live digital workshops (webinars) for educators. Each interactive workshop is a collaborative space to learn, share best practices, and come away with strategies to improve teaching and learning.

Join our Educator Community at TG RFoundation.org