DISCOVER ENGINEERING

EVENT TOOLKIT

Your Step-by-Step Guide to Hosting Engaging Engineering events

About the Toolkit

Welcome to your guide for planning an exciting engineering event for students and families!

Use this toolkit to:

- Inspire young minds
- Promote STEM careers
- Build students' confidence in their STEM skills

Event Overview

What is a Discover Engineering Event?

- Opportunity to introduce K-8 students to engineering
- Hosted at schools, afterschool programs, museums, libraries, colleges, companies or community centers
- Can be any size! A small workshop for 10 kids or a large event for hundreds of students and their families

Event Examples

- A large public event with multiple activity stations at an area museum
- An invitation-only event featuring a mix of activities and engaging speakers
- An engineering family night at a school with facilitated activities
- A drop-in event at a public library featuring a STEM-themed book display and a hands-on activity

**** See more examples of event formats at:***
discovere.org/resources/sample-events/

Toolkit Overview

This toolkit outlines how to create your own event, including:

- Planning Ahead: Event Timeline (8-12 weeks)
- Reaching Out to Partners for Planning Committee
- Exploring Event Formats and Activities
- Recruiting Volunteers
- Promoting Your Event
- Setting Up on Event Day
- Planning for Post-Event

Planning Timeline

8 - 12 Weeks Before

- Form a planning committee to:
  - Select venue and date
  - Determine event format, agenda and budget
  - Identify event participants
  - Brainstorm additional partners who may be able to help with select tasks but aren't on the planning committee

Planning Timeline

6 - 8 Weeks Before

- Finalize event agenda and activities
- Make supplies & materials list
  - Determine quantity
  - Source where to purchase or who can donate
- Create event roles and optimal number
  - For example: How many volunteers are needed to help facilitate activity, staff welcome table, set up, photographer, clean up etc.
- Recruit volunteers
- Promote event or send invitations

Planning Timeline

2 - 4 Weeks Before

- Finish collecting supplies (purchased or donated)
- Organize/pack up supplies
- Confirm volunteers and their roles

1 Week Before

- Confirm event logistics with stakeholders: Venue host, volunteers, participants
- Print signage and name tags

Planning Timeline

Day Of

- Arrive early for set up
- Instruct and position volunteers at welcome table, activity stations or as floaters
- Take photos and/or video!
- Collect participant feedback

Planning Timeline

After

- Thank your team, including volunteers, sponsors and partners
- Share a few photos with your team
- Report outcomes to partners/sponsors

Event Tips

Check out the rest of this toolkit for tips you can use throughout your planning to help your event run smoothly!

The Power of Partners

Contact potential partners and ask:

- Will you serve on the planning committee to help with:
  - Selecting the activities
  - Recruiting volunteers
  - Providing activity materials
  - Setting up and breaking down full event
  - Promoting the event
  - Fundraising efforts
- What resources might you be able to provide?
- Who else should we invite to partner with us?

Sponsorships

Reach out to local organizations including:

- Engineering firms
- Community businesses (Banks, Car Dealerships, Grocery stores)
- Engineering society chapters (ASCE, ASME, IEEE, NSBE, SHPE, SWE, etc.)

Sample Planning Meeting Agenda

- Select date and venue
- Determine event format and agenda
  - Will you provide hands-on activities?
  - How long will the event last?
  - What is the budget?
  - What does success look like?
- Identify event participants
  - Who is the target audience?
  - What is the age range?
  - Will they already be at the venue or will you need to invite them?
  - Consider if you need to provide transportation
- Discuss who can help with promotion and/or fundraising efforts?
- Brainstorm additional partners who may be able to help with select tasks but aren't on the planning committee

Choosing a Date

- We encourage you to hold your event during Engineers Week (February 21-27, 2027) to leverage the excitement around this annual celebration.
- But engineering events are great anytime of year! Choose a date that works best for your community.

DISCOVER ENGINEERS WEEK®

FEBRUARY 21–27, 2027

Tip: Try to avoid conflicts with major school or community events. Collaborate with existing STEM efforts when possible.

Venue & Logistics

Great Venue Options:

- Schools/afterschool programs
- Museums
- Libraries
- Community Centers
- Local companies / colleges

Ask Your Venue:

- Can they donate space?
- Will they provide tables, chairs, easels, trash cans, internet?
- Are staff available to help coordinate?

Selecting Hands-on Activities

Ask yourself:

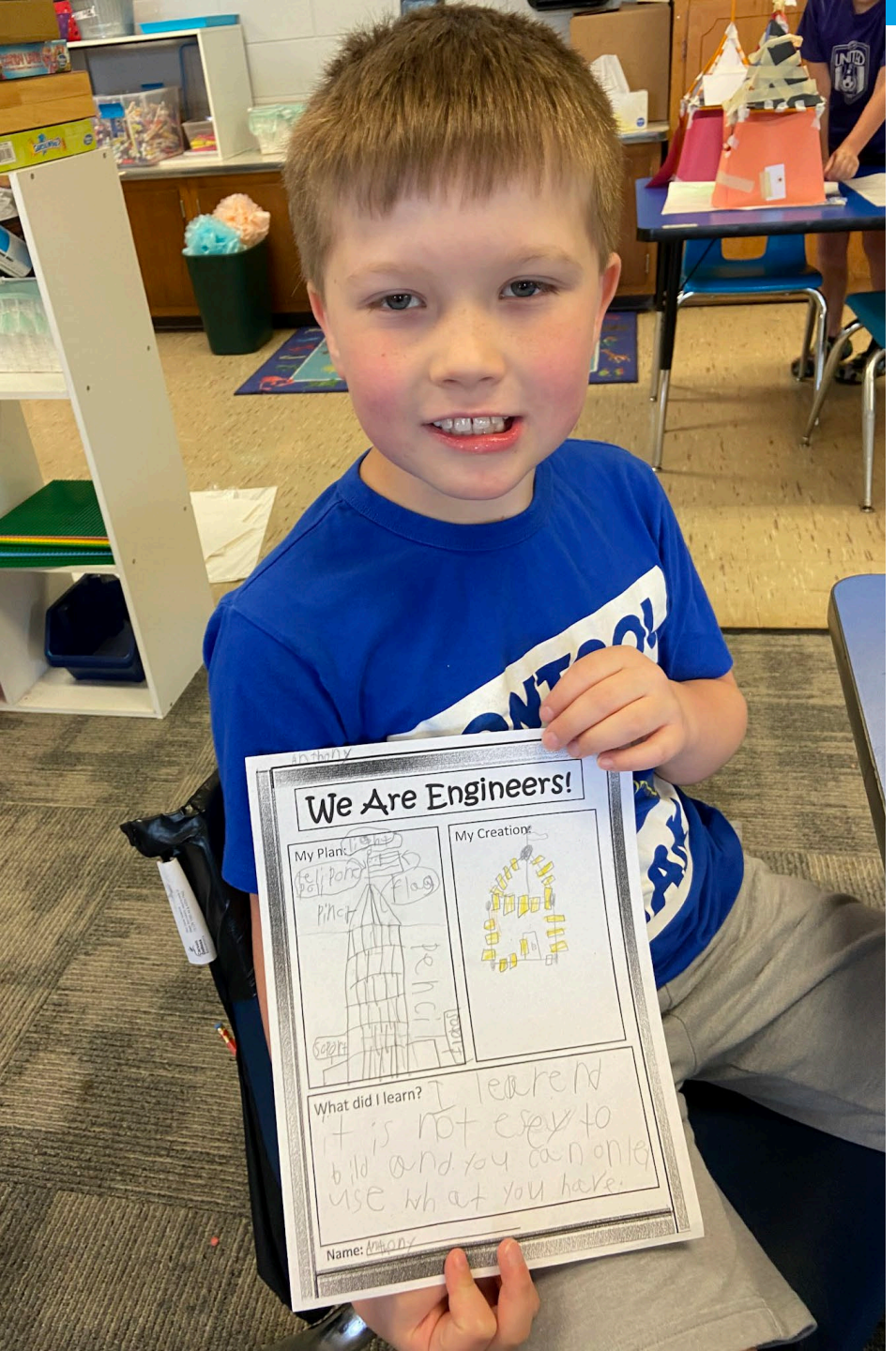
- Is it age-appropriate for your target audience?
- Is it a large event with limited volunteers? Suggestion: Pick activities that are easy to complete in 5–10 minutes.
- Will the activity be facilitated by a volunteer for a smaller group? If yes, you can choose a more in-depth activity with detailed instructions.

Selecting Hands-on Activities

Top 5 Picks for Events:

- Build a Bridge (Civil)
- Puff Mobiles (Mechanical)
- Launch It (Aerospace)
- Foil Boats (Materials Science)
- Tallest Cup Tower (Civil)

Tip: Find more event-friendly activities at DiscoverE.org/engineering-activities. Many have short corresponding videos of real engineers or students issuing the challenge!



Activity Set Up and Materials

- Plan for 1/3 of total attendance per station (e.g. 300 visitors = 100/station)
- Print colorful station signs using DiscoverE branding!
  - Download signs (2 sizes: 11x17 and 8.5x11) at DiscoverE.org/downloadable-resources for 5 recommended activities
  - Plan how you will display the signs: Table-top stands? Easels?
- Bring extras: tape, scissors, tablecloths
- Do you have any giveaways? Make a handout or visit store/discovere.org for fun STEM stickers!

Building Your Audience

Is your event open to the public? Post your event in:

- School newsletters
- PTA/Community email lists
- Flyers/posters in local spaces (Use Canva for easy, eye-catching designs!)
- Social media (Instagram, Facebook, TikTok)
- On your or a partner's website

Is your event invitation-only?

- Send invites out 6 to 8 weeks advance
- Arrange for transportation if you are providing it

Volunteer Prep & Training

- Assign roles for your volunteers: Welcome table, activity stations, floaters
- Send details to volunteers: arrival time, parking, meals at least two weeks in advance
- Share tips (a brief meeting on event day is fine!):
  - Do the activity before the kids arrive. Think about what steps might be tricky for them. Remember: don't do the activity for the kids!
  - Ask *guiding* questions, like:
    - What is working well for your design?
    - What improvements could you make?
  - If kids don't have time to complete their design, ask them what they would change if they had more time.
  - For engineer volunteers: Talk about your job! (It can be a few fun facts at a busy event or an interesting project if you have more time.)

Event Day

At the entrance, set up a welcome table with:

- Giveaways
- Lost-child protocol & check-in
- Volunteer check-in station nearby with name tags
  - Assign mentors to new volunteers
  - Have floaters available for back up

Event Day

Prepare the event space:

- Cover tables with colorful cloths
- Set up each Exhibitor/Activity Station in own area:
  - Does the activity need a table or is better facilitated on the floor?
  - Make sure there is enough space between activities.
- Store extra supplies under tables

Signage & Photography

- Directional signs throughout venue
- A sponsor thank you sign
- Signs informing guests that photos will be taken (see sample to the right!)
- Assign: 1–2 volunteer photographers to capture the day

Please Note: Today's event will be photographed and filmed.

By being physically present in this program/exhibition, you hereby grant permission to your organization and DiscoverE to take photographs of yourself and family. You further understand and acknowledge that any photographic images obtained are the property of your organization and DiscoverE, for such reasonable use as your organization and DiscoverE deems appropriate. If you object to the possibility of your organization or DiscoverE using your or your child's photograph, please let the event organizer know immediately.

Capturing Your Impact

Collect Feedback:

- Use QR-coded or paper exit surveys
- Sample Questions:
  - What did you like about this event?
  - What can we improve?
  - Are you more interested in doing engineering activities or learning about STEM careers after attending this event?

Track:

- Total attendance
- Number of volunteers
- Partner/sponsor contributions

After the Event

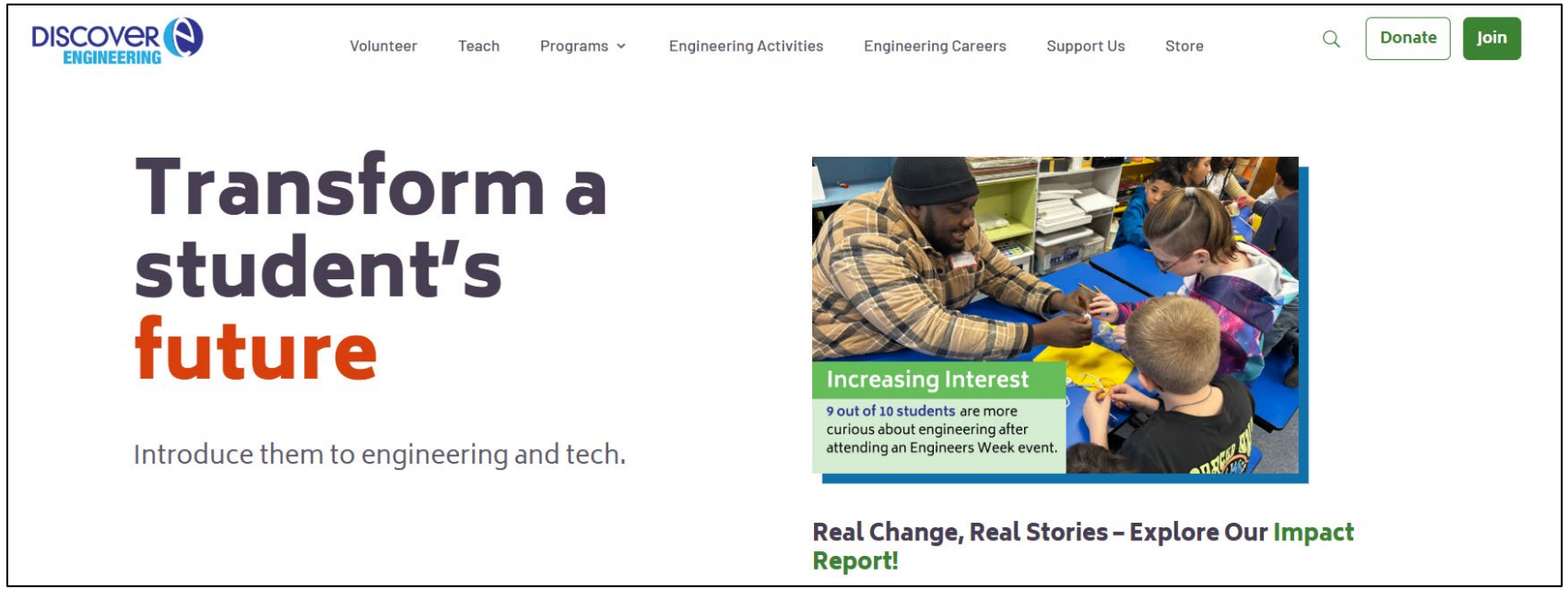
Debrief & Celebrate!

- Hold a quick team debrief
- Send thank you notes and 1-2 photos to volunteers, partners and sponsors
- Share photos and videos on social media
- Consider drafting an impact report for major partners

Free Resources

DiscoverE.org

- Activities & instructions
- Volunteer training tips
- Discover Engineering logos and signage



The Engineering Navigator

- Developed in partnership with ASEE Commission on PK-12 Engineering Education
- Navigator uses generative AI to search the internet, extract program details, and organize them into a centralized, user-friendly platform. Delivering:
  - One-stop resource for discovering engineering-related learning experiences
  - The first-ever real-time picture of STEM programming
- In beta since Feb 2026

Navigator.DiscoverE.org

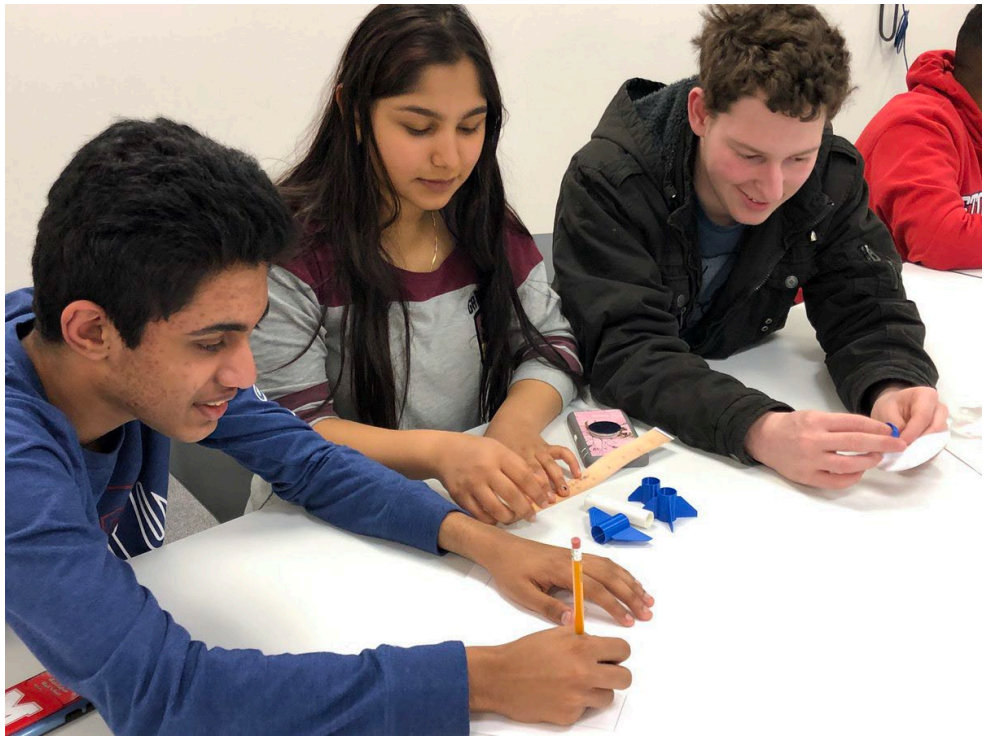
Questions?

Contact the DiscoverE team:
info@discovere.org

Share Your Results!

Post photos and videos on social media and tag us at @DiscoverEorg #Eweek2027

Thank you for bringing engineering to life in your community!



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