



# STEM Event Planning Guide



## Audience: All Texas EcoSYSTEM Network

**Purpose:** The STEM Event Planning Guide is a tool that can be used to assist in the planning and implementation of STEM events in a variety of settings. The guide provides an overview of considerations for planning a STEM Event. This is a general guide for STEM event planning and will need to be adapted for specific events and formats.

## Event Examples

- STEM Family Night (An after-school event that engages students and their families in STEM learning experiences)
- STEM Carnival (Students engage in the creation of STEM-based carnival games and are provided the opportunity to facilitate/lead their games with other students, family, and community members.)
- STEM Project Exhibitions (Students display and/or demonstrate STEM projects.)
  - Other names: STEM-a-thon, STEM Fest, STEM Expo, STEM Summit
- STEM Open House (Family and community members informally gather at a venue i.e. school, to meet and talk with STEM educators, STEM partners, learn about STEM resources and programs, and view student work or projects.)
- Family Coding Night (Students and their families come together to engage in coding activities.)
- Community or School Maker Fair (A family-friendly showcase of invention, creativity and resourcefulness based on the Maker Movement. Participants show what they are making and share what they are learning.)
- Science and Engineering Fair (e.g. Science Fair, Invention Convention)
- STEM Informational Meeting (A meeting that brings together STEM advocates, educators, STEM EcoSYSTEM partners, to inform and discuss with the public (including local school stakeholders) of STEM-related issues, programs, and events.)
- STEM Escape Rooms (Participants use problem-solving skills to tackle and solve STEM-related challenges in order to escape out of a room or unlock breakout boxes...)
- STEM Competitions (e.g. coding, robotics, design challenges, etc.) are events where districts can compete against one another.
- STEM Camps (Summer, after-school, or weekend camps that engage students, adults, or educators in STEM related activities (e.g. coding, engineering, science, and math, etc.)
- STEM Career Fair (A career fair focused on STEM fields that provides opportunities for students to engage with and learn from STEM professionals and learn about educational pathways to STEM careers.)
- STEM Day (A STEM day-long event hosted by a Texas EcoSYSTEM partner that engages students and/or families in STEM-related activities or events at a school, ~university, community organization, or industry partner.
- Texas EcoSYSTEM Resource Fair (An event that brings together the local Texas EcoSYSTEM community to promote and provide informational resources to the community. This can easily be combined with other events.)
- STEM Professional Development Conference (STEM Educators engage in learning sessions about a variety of STEM education topics, instructional strategies, and resources.)



## STEM EVENT PLANNING GUIDE

### RESEARCH

Event Component	Things to think about:	Notes
<b>Purpose</b>	<p><b>What is the goal of the event? What do you hope the event will accomplish?</b></p> <p><i>Examples: Family engagement, enrichment, promoting STEM in the community, increase STEM with a certain population, Texas EcosySTEM collaboration</i></p>	
<b>Need</b>	<p><b>Why is the STEM event being held?</b></p> <p><i>Examples: Increase community support, increase participation of a certain population, increase family understanding of STEM, promote a STEM program at the campus.</i></p>	
<b>Audience</b>	<p><b>Who is the target audience?</b></p> <p><b>Who else will be attending?</b></p> <p><i>Examples: Students, families, siblings, teachers/staff, incoming students, community members, Texas EcosySTEM partners, sponsors.</i></p>	
<b>Event Value</b>	<p><b>How will this event accomplish your stated goals?</b></p> <p><b>How will this event meet the audience need or offer an enhancement to their experience?</b></p> <p><b>How will this event complement STEM learning in the classroom?</b></p> <p><b>How will this event impact the local Texas EcosySTEM?</b></p>	
<b>Format</b>	<p><b>Will your event be face-to-face, virtual, or a hybrid format?</b></p> <p><b>Will your event be during school, after-school, in the summer, a one-time event, multi-day event, conference or informational meeting?</b></p>	
<b>Budget and Available Resources</b>	<p><b>What event resources do you have access to?</b></p> <ul style="list-style-type: none"> <li>• Funding/budget</li> <li>• Locations/spaces</li> <li>• Human capital</li> <li>• Equipment, supplies and materials</li> <li>• Food/Beverages (if applicable)</li> <li>• Wi-Fi and internet connection</li> </ul> <p><b>Do you need to solicit additional resources?</b></p> <ul style="list-style-type: none"> <li>• Soliciting donations</li> <li>• Grant writing</li> </ul>	


## EARLY PLANNING

Event Component	Things to think about:	Notes
<b>Develop a Master Plan and Project Timeline</b>	<b>Develop a master plan and a project timeline that identifies what should happen throughout the planning time.</b> This will guide the planning team through all event details and logistics.	
<b>Cost Estimates</b>	<b>Obtain cost estimates.</b> If applicable, consider: <ul style="list-style-type: none"> <li>• Venue/event space</li> <li>• Food and beverage</li> <li>• Equipment and supplies</li> <li>• Speaker fees</li> <li>• Safety and custodial services</li> <li>• Technology</li> <li>• Branding and marketing</li> </ul>	
<b>Task List</b>	<p><b>Think about everything that needs to be accomplished and make a list.</b>  <i>Examples: Form planning and implementation teams, develop goals for the event, acquire district/school permissions, reserve event spaces, develop, branding/marketing plan, arrange sponsorships and speakers, develop learning activities, recruit/train volunteers, gather materials, coordinate with event suppliers, food/beverage plan, coordinate with custodial and building and grounds services, develop a transportation and parking plan, develop a safety plan, identify communication strategies during event, plan for documenting attendance, assessment plan, plan for signage and event navigation, ADA Compliance, investigate need for any special permits, licenses, insurance, etc.</i></p> <ul style="list-style-type: none"> <li>• Determine roles and responsibilities. For each item on the list, identify who is accountable (A), who is responsible(R), who needs to be consulted(C), and who needs to be informed (I).</li> <li>• Set timelines to accomplish tasks based on the amount of time until the event.</li> <li>• Have regular check-ins with planning and implementation team members to assure everything is on track, identify problem areas, and adjust as needed.</li> </ul>	
<b>Timeframe</b>	<b>How long will the event be, and will it be repeated?</b> ... hours, days, monthly, quarterly, annually?	

## EARLY PLANNING

Event Component	Things to think about:	Notes
Date and Location	<p><b>If the event will be at a unique venue, reserve the space and set the date accordingly.</b> Secure your date a year in advance to allow adequate time for planning. Check the school calendar and holiday dates for conflicts.</p> <p>If the event is going to be held outside, reserve a backup date or location in case of inclement weather.</p>	
Recruit Team	<p><b>Think about who could help with the event.</b>  <i>Examples: Students, parents/guardians, teachers and retired teachers, former students/alumni, district/regional administrators, business/industry partners, university/college faculty, staff and students, informal education partners, any other Texas EcosySTEM partners, keynote speakers.</i></p> <p><b>How many volunteers are needed? What skills do they need to possess? What strategies can be used to recruit volunteers?</b>  <i>Examples: email, phone calls to specific volunteers, flyers or letters, announcements at other school events, verbal communication during informal conversations, utilize a parent or community liaison, work with Texas EcosySTEM partners, etc.</i></p>	
Schedule	<p><b>Consider the context and the timeframe for the event and how many learning experiences you want your attendees to have while at the event.</b></p> <ul style="list-style-type: none"> <li>• Sessions (e.g. 4 during the event)</li> <li>• Stations (e.g. 20 during an event)</li> <li>• Large Meeting</li> <li>• Open house</li> </ul>	

## EARLY PLANNING

Event Component	Things to think about:	Notes
<b>Activities</b>	<p><b>Create plans for event/learning activities.</b> Think about ways to include and utilize STEM student leaders in the planning process and during the event.</p> <p><i>Examples: Hands-on learning stations, demonstrations, keynote speaker(s), break-out session activities, exhibition or competition areas, informational meeting, information/resource booths.</i></p> <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• purpose/value of each activity</li> <li>• space(s) needed or the need to be near specific areas (e.g. sink for water)</li> <li>• confirm speakers, presenters</li> <li>• supplies/tech needed</li> <li>• # of volunteers needed</li> <li>• timing/duration of each activity</li> <li>• logistics during each activity and transitions</li> <li>• safety considerations</li> <li>• ADA compliance and accommodations for specific needs</li> <li>• assessment (documenting engagement and learning)</li> </ul>	

## EARLY PLANNING

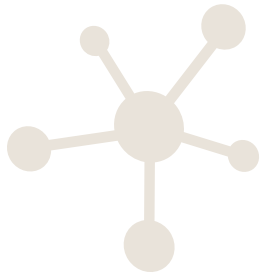
Event Component	Things to think about:	Notes
Logistics	<p><b>Who will lead logistical aspects during the event?</b></p> <p><b>When will event set-up take place?</b></p> <p><b>Will attendees be able to come and go at their leisure throughout the duration of the event or does the event require the them to the attend during certain times?</b></p> <p><b>How will attendance be tracked?</b> <i>Examples: Sign-in sheets, QR codes, or tickets.</i></p> <p><b>Is it an open invitation event, do attendees need to register or RSVP, is it a ticketed event with limited capacity?</b></p> <p><b>What is the transportation and/or parking plan?</b></p> <p><b>How will attendees navigate to designated spaces? How will this be communicated to attendees during the event?</b> <i>Examples: An event packet/bag with a map of the event space, an activity passport with information about each activity, an event app, an opening meeting, an agenda/schedule, use of signage, etc.</i></p> <p><b>How will event leaders communicate to one another and with attendees during the event?</b> <i>Examples might include walkie-talkies, personal cell phones, PA System, Mic/Speaker system(s), or event app.</i></p> <p><b>What clean-up procedures need to be in place during and after the event?</b></p> <p><b>If the event duration is over several days, how will materials and equipment be securely stored each night?</b></p>	
Safety and Security	<p><b>How will the safety of volunteers and attendees be ensured?</b></p> <p><i>Examples: School resource officer or police presence, monitors at doors, clearly marked exits, emergency plans/strategies, first aid station, etc.</i></p>	
ADA Compliance	<p><b>Think about all aspects of the event that need to be in compliance with ADA regulations.</b></p> <p>The Americans with Disabilities Act (ADA), requires state and local governments, businesses, and non-profit organizations to provide goods, services, and programs to people with disabilities on an equal basis with the rest of the public. Considerations:</p> <ul style="list-style-type: none"> <li>• accessibility of approach and entrance</li> <li>• access to goods and services, access to restrooms</li> <li>• access to other items such as water fountains and seating.</li> <li>• nondiscriminatory policies for the provision of auxiliary aids and services.</li> </ul>	

## EARLY PLANNING

Event Component	Things to think about:	Notes
<b>Event Branding and Marketing</b>	<p>Properly representing your brand and shaping how your participants, partners and sponsors remember it are absolutely critical to the growth of your event and potential engagement in future STEM initiatives. While your event brand should reflect your organization's brand, it can (and should) have a brand of its own.</p> <p><b>Think about the focus of the event and how it needs to be branded in order to communicate the message that you want to convey. Consider the following:</b></p> <ul style="list-style-type: none"> <li>• Event theme or tagline</li> <li>• Event title</li> <li>• Colors, fonts, graphics</li> <li>• Fonts</li> <li>• Logo and hashtag(s)</li> </ul> <p><b>Marketing tools and strategies</b></p> <ul style="list-style-type: none"> <li>• Offsite marketing examples: School/event website, flyers or newsletters, email, mobile event app, social media, video/commercial, word of mouth, post-event follow-up.</li> <li>• Onsite marketing examples: Signage, banners or posters, décor, T-shirts for volunteers to wear, swag – free branded giveaways.</li> </ul> <p><b>Publicity Plan Examples:</b></p> <ul style="list-style-type: none"> <li>• Develop draft program</li> <li>• Create draft event script (e.g., MC, speaker introductions, thanks, closing, etc.)</li> <li>• Develop offsite and onsite marketing tools</li> <li>• Request logos from partnering sponsors for online and printed materials</li> <li>• Develop and produce invitations, programs, posters, tickets, etc.</li> <li>• Develop media list &amp; prepare news release</li> <li>• Create event page or website</li> <li>• Enable/create email notifications</li> <li>• Create a Facebook event page</li> <li>• Develop a promo video and post on YouTube, Facebook, or other social media avenue.</li> <li>• Register your event on a variety of online event calendars</li> <li>• Create some buzz on your blog or member forums</li> <li>• Determine VIPs and create invitation &amp; tracking document (e.g., spreadsheet)</li> <li>• Order any desired event swag</li> </ul>	

## EARLY PLANNING

Event Component	Things to think about:	Notes
Documentation and Media	<p><b>Think about how the event can be documented.</b> Will participants need to sign a waiver allowing for photos or videos to be taken during the event? How many volunteers are needed? What needs to be documented? How will this documentation be used? (e.g. for event assessment and evaluation, follow-up, and future publicity).</p> <p><b>If using larger media channels (news station, local newspaper, etc.), how will they be attended to and integrated into the event?</b></p>	
Evaluating Success	<p><b>How will you know if the event accomplished the goals?</b> Identify and develop assessment tools/strategies to gather information and feedback from attendees, sponsors, volunteers, etc. to evaluate the success of the event based on goals and to gather feedback to assist in improving future events.</p> <p><i>Examples: documenting the number and type of attendees (e.g. student, parent, community member, etc.), documentation of engagement and learning during specific activities, on-site survey, follow-up survey, comment box, etc.</i></p>	





## PREPARATION

Event Component	Things to think about:	Notes
Implementation Team Meetings	<p><b>Consistently meet and/or touch base with leaders of the planning and implementation team.</b> Confirm all details against the Master Plan. Ensure back-up plans are developed for any situation (e.g., back-up volunteers as VIP greeters, additional volunteers for registration or set-up, etc.).</p>	
Reminders	<p><b>Send out event reminders to registered attendees, potential attendees, volunteers, or other stakeholders.</b></p>	
Organize Volunteers	<p><b>Prepare volunteers for the event.</b> Prior to the event determine how volunteers will be utilized. Provide each volunteer with information about their role(s), expectations, a contact list, what time to arrive, where to park, where to go upon arrival, and any other information aligned with their role and the event. Create name badges or T-shirts for volunteers to wear during the event.</p>	
Gather Supplies	<p><b>Acquire all needed supplies.</b> <i>Examples: supplies for learning activities, food/beverages, office supplies, signage, decorations, technology, hand-outs, name badges, clean-up supplies, etc.</i></p> <p>Identify a secure storage space for supplies until needed.</p>	
Set-Up	<p><b>Determine appropriate set-up times and recruit volunteers to assist with set-up.</b></p> <ul style="list-style-type: none"> <li>• Post signage – learning activities and event spaces are clearly marked, arrows to event spaces and restrooms, posted agenda and event locations; parking cones/signs, sponsor information.</li> <li>• Prepare learning activity areas</li> <li>• Prepare other locations – first aid station, information booth, sign-in tables, restrooms, parking lots, etc.</li> <li>• Digital and Technology Equipment</li> <li>• Sound/communication device checks</li> </ul>	
Last-Minute Walk-Through Day Before	<p><b>Complete a final walk-through of all event spaces.</b></p> <p>Meet with implementation team for a final run-through of the event. Meet with volunteers as needed.</p> <p><i>Examples: Check activity areas, registration/sign-in area, safety and security plans, communication plan, transportation and parking plan, food/beverage plan, check technology and wi-fi, ADA compliance, confirm media attendance, and any other logistical plans that are in place.</i></p>	

## EVENT IMPLEMENTATION

Event Component	Things to think about:	Notes
Event Leaders	<p><b>Ensure that event leaders have copies of all related information.</b> <i>Examples: instructions, directions, phone numbers, keys or access codes, activity area or seating charts, guest lists, emergency plans, etc.</i></p> <p><b>Circulate.</b> Circulate and check in with other event leaders, volunteers, catering personnel, etc. Assist sponsors, speakers, and other teams as needed. Greet attendees.</p>	
Volunteers	<p><b>Volunteer sign-in.</b> Set-up an area for volunteer sign-in. Check to make sure all areas needing volunteers are covered.</p> <p><b>Ensure that volunteers have copies of all related information.</b> <i>Examples: instructions, directions, phone numbers, name badge, activity area or seating charts, guest lists, emergency plans, water bottles, etc.</i></p>	
Event Activities	<b>Execute event and learning activities as planned.</b> Adjust as needed.	
On-site Assessment/ Feedback	<b>Ensure that volunteers have copies of all related information.</b> <i>Examples: instructions, directions, phone numbers, name badge, activity area or seating charts, guest lists, emergency plans, water bottles, etc.</i>	
Clean-up	<p><b>Implement clean-up procedures.</b> <i>Examples: Delegate clean-up roles/jobs to volunteers and work with custodial staff. Assist with trash removal, learning activity clean-up, taking down decorations or signage, breaking down tables/chairs, cleaning floors, transporting equipment, etc.</i></p> <p><b>Securely store all unused materials and equipment.</b></p>	

## FOLLOW UP

Event Component	Things to think about:	Notes
Offsite Surveys/ Feedback	<p><b>Conduct a post-event survey to assess what people learned through participation in the event, what they enjoyed about the event, and where there is room to improve.</b></p> <p><i>Examples: Google Form survey, Survey Monkey survey, Qualtrics survey, survey through the event app, etc.</i></p> <p>Send survey link through attendee email list, event app, event website/page, and social media.</p>	
Volunteer, Sponsor, and Attendee Appreciation	<p><b>Send thank-you and acknowledgment letters.</b></p> <ul style="list-style-type: none"> <li>• Sponsors</li> <li>• Volunteers</li> <li>• Speakers/presenters</li> <li>• Donors</li> <li>• The media</li> <li>• Any other stakeholders that deserve recognition for their engagement</li> </ul> <p>In the thank-you notes, remind the recipients of the event's success. Highlight event accomplishments like high turnout, productive dialogue, and positive feedback.</p> <p><b>Reach out to attendees.</b> Thank attendees for participating. Promote ongoing programs/events and offer suggestions for how they can support STEM education throughout the year through continued participation, volunteering or making a sustaining donation.</p>	
Post-event Publicity	<p><b>Publicize highlights from the event.</b></p> <p><i>Examples: Make a publicity reel video or photo slideshow to share highlights. Share highlights on social media and event webpage.</i></p> <p><b>Update website page to reflect that it is a past event.</b></p>	
Debrief Meeting	<p><b>Conduct a debrief meeting with the planning and implementation team/ team leaders.</b> Determine what went well and what can be improved.</p>	
Event Evaluation	<p><b>Conduct a thorough evaluation of the event.</b> Analyze survey data, comments, debrief meeting notes, and other forms of documentation. Determine the degree to which event goals were met. Finalize budget review.</p>	