Starter Kit

Everything you need to know to launch Technovation in your area!
About Technovation

Technovation is the world’s largest and longest-running tech competition for girls. In Technovation, teams of young women identify a problem, create an app to solve it, code the app, build a company to launch the app in the market, and pitch their plan to experts — all in 3 months. Technovation’s applied, project-based computer science and entrepreneurship curriculum reinforces algorithmic thinking and emphasizes the societal impact of information and technology. It also teaches girls life skills such as how to identify a problem, design and test a solution, collaborate with a team, and communicate to different audiences. Teams pitch and submit their ideas (through video) and participate in regional competitions (varies by location).

Anuranjita Tewary, Ph.D., founded Technovation after attending Startup Weekend and noticing the dearth of female participants—she wanted to offer young women the opportunity to become high-tech entrepreneurs early in their careers. In 2010 Dr. Tewary partnered with Iridescent to pilot the first Technovation program in Mountain View, California. Since that very first cohort of 50 girls in 2010, Technovation has grown into a global competition that has reached almost 3000 girls in 26 countries.

Technovation 2015 Theme: Solve a Problem in Your Local Community
For the 2015 challenge, teams have to develop an app that solves a problem in their local community. Please check out our 2014 app gallery for examples of past years’ work.
Eligibility & Deliverables for Technovation Competition

Eligibility Guidelines:

- Teams consist of up to 5 young women
- Team members are of primary school age (10 and up) or secondary school age (14 and up). However, elementary school students with the maturity necessary to complete the program are encouraged to participate – some of our youngest participants have been in 4th grade.
- Teams must register officially with Technovation: [https://my.technovationchallenge.org/users/sign_up](https://my.technovationchallenge.org/users/sign_up)
- Recommended start date **mid-September, 2015**
- To compete, teams must submit project deliverables by **mid-December, 2015**

Recommendations:

- We recommend that each team have a female mentor to support and act as a role model for the team. If you are not able to find a mentor in your area, consider connecting with a virtual mentor who can meet with your team via Skype or G+ hangout. Virtual mentorship may open your team’s network outside of your state or even country if no local option is available.
- A classroom teacher can support teams as a coach at his/her school site. Alternatively, teams can meet in an after-school setting, such as Girl Scouts, YMCA, or other youth centers where another adult fills the role of a coach.

Project Deliverables—each team must submit by mid-December, 2015:

- App source code (can be developed in Android, iOS, or Windows)
- Up to 4-minute video pitch (upload to YouTube or Vimeo and share the link)
- Up to 2-minute app demo video (upload to YouTube or Vimeo and share the link)
- Business plan (pdf)
- Team photo (with mentor and teacher included, if possible) for each team
- 100-word app description
- Completion of post-survey

Program and Project Overview:

- Lesson 1: Introduction to Technovation and App Inventor
- Lesson 2: Defining the Issue – What problem are you going to solve?
- Lesson 3: Brainstorming Solutions - How will you solve that issue?
- Lesson 4: User-Centered Design – Making sure your app is easy to use
- Lesson 5: Competitive Analysis – What makes your app better than the others that are out there?
- Lesson 6: Branding and Promotion – Develop a strategy for promoting your app
- Lesson 7: Potential Revenue – Determining how to price your app and how to generate income
- Lesson 8: Pitch Guidelines – Telling the story of your app and pitching your company
- Lesson 9: Demo Guidelines – Making and uploading the demo video of your app in action
- Lesson 10: User Feedback – What do people think of your app?
- Lesson 11: Video Editing – Get feedback on your videos--what is and isn’t working well?
- Lesson 12: Submission – Make any final edits to your business plan; reflect on your project; wrap-up loose ends; and complete the Post-Survey

Last updated 05/18/2015
Resources to Start Technovation

Whether you are a student, teacher, parent, or mentor, you can start Technovation anywhere in the world.

Suggested resources to help you launch Technovation:

Students → at least one team of 1-5 young women

We suggest that a team of young women have 3-5 members, but highly motivated teams with less than 3 students are also eligible -- each school can have multiple teams. A school group of 20+ young women (4+ teams) creates a critical mass and sense of community among students. No prior knowledge of programming needed. Learn more about the expectations of students in “Student Responsibilities” (p. 9).

Coach → at least one per school or after school program

Teachers or coaches can be male or female, and can teach any subject. Their main role is to recruit students, arrange a place to meet, and support students as they create their apps by leading lessons provided by Technovation. Resources such as videos, PowerPoints, handouts, and articles will be available through the course to help coaches lead teams through Technovation. Learn more about the role of a teacher in “Coach Responsibilities” (p. 11).

Mentor → at least one per team (ideal but not required)

A woman working in a STEM or business field acts as a role model for her team. We encourage mentors to act as a project manager who keeps the team focused, on track, and participating. Mentors do not need to be programmers or app developers. Resources such as videos, PowerPoints, handouts, and articles will be available through the course to help mentors lead teams through Technovation. Learn more about the role of a mentor in “Mentor Responsibilities” (p. 10). Get ideas on how to recruit a mentor here.

Technology → 1-2 computers per team

We suggest that each team have access to at least one or two computers (PC or Mac) to program their apps and write their business plans. Ideally, computers will have webcams installed for teams with virtual mentors.

We also suggest that teams have access to mobile devices (phones or tablets) to test their apps during development. If teams are using App Inventor, the mobile devices must be Android. Mobile devices connect with App Inventor using WiFi or a USB cable. If a mobile device is not available, students may use the emulator (virtual phone) provided by App Inventor, though this software is unstable and slated to be discontinued.

We encourage advanced teams already familiar with App Inventor to try a new programming language to build their app. View this document for a comparison between different languages and for resources.

Corporate Partner (ideal but not required)

In an ideal scenario, your Technovation program would secure a local partner who would:

● Provide funding (to cover event costs, provide equipment, etc.)
● Recruit mentors for your teams

Last updated 05/18/2015
Host a day-long field trip for the girls to see what goes on behind-the-scenes at a technology company

**University Partner (ideal but not required)**

If your team is located near a university with a computer science department, we suggest connecting with them to host a Girls Make Apps Workshop before the start of the 12-week program. During the workshop, teams can learn the basics of App Inventor through completing tutorials with the help of college students studying computer science at the university. Both mentors and teachers attend the workshop with their team. Alternatively, a teacher or mentor can lead the teams through the App Inventor tutorials at their school or other convenient location.
Fall 2015 Timeline

1. Register:
Once a team is formed please register here.

2. Recruit Additional Mentors:
Ideally each school will have several mentors (one for each team). Mentors may be able to reach out to their contacts on Facebook, LinkedIn, and within their company to find more mentors to volunteer. Please join our Technovation LinkedIn group for further networking.

3. Recruit Students:
Once the teacher and mentors have connected, they can work together to recruit students. See “Technovation Recruiting Tips” for details (p.8).

4. Review Applications & Select Teams (Optional):
This step is applicable to coaches who can only facilitate the program for a small number of students and are looking for a way to select the strongest candidates. After distributing the applications to all interested students (see p.26-27), coaches collect and review them to select the students most suitable for the program. These students should show a high level of commitment to Technovation and an interest in learning about technology, but do not need any programming experience. The most critical factor is a student’s demonstration of commitment to the program, not grades and other measures.

5. Student Paperwork:
Once teachers have selected students, consent forms need to be signed through the registration website or should be scanned and emailed to info@technovationchallenge.org. Subject lines must formatted as "Technovation consent form: ‘Student Name/DOB/Location’." We recommend that all students start the curriculum by mid-September, 2015.

6. Begin Technovation Curriculum:
The curriculum will be online at http://2015course.technovationchallenge.org. The hard copies of the materials can also be downloaded from http://www.technovationchallenge.org/additional-resources. Coaches and mentors present each lesson and keep their team on track. The curriculum includes all materials and resources necessary to lead the weekly discussions with the teams.

7. Field Trip to Tech Company (Optional):
Teams can kick off the program with a field trip to a technology company in their area. Mentors can help arrange a field trip at their own company or find another suitable venue. In this field trip, students learn about what happens “behind the scenes,” get hands-on experience, and meet top-level women. Teams can also complete virtual tours of tech companies through videos on the Technovation Course if they are interested in learning about more companies, or if they are not able to attend an in-person field trip.

8. Schedule Girls Make Apps Workshop before October: We suggest reaching out to a local university with a computer science department to schedule a Hack Day for the girls to learn App Inventor with the help of college student volunteers. Another idea is to reach out to local technology focused women’s groups in the area or hacker-spaces. Students, mentors, and teachers all attend a workshop. Workshops can also be held at schools, community centers, companies or other convenient locations. Learn more about the workshop here.

9. Submit Final Projects:
All program deliverables are due by Mid-December, 2015. Complete list is on (p. 4)

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Technovation Recruiting Tips

Suggested strategies to recruit students:

1. Find two enthusiastic Student Ambassadors to help recruit students for the program. Teams can create T-shirts (our design or create your own), table at lunch, and give presentations in classes and after school clubs.

2. Enlist the help of other teachers. At schools where colleagues know students individually, work together to generate a list of 20-30 students to target directly.

3. Run a Girls Make Apps Workshop. Talk to a local company and see if they have some volunteers who can run an afternoon event to get girls started on App Inventor. It’s much more engaging and powerful for the girls to get their first taste of programming first-hand.


5. Mentor career panel. Mentors can visit the school site for a “career panel,” where each mentor shares a few minutes about her career in front of an assembly of students. Mentors can discuss their path entering the tech field if relevant, and encourage students to join Technovation so they can get a taste of what it is like to work in STEM and create new products.

6. Pass out applications (Optional) During presentations, pass out copies of the student application (see appendix p. 26-27) for girls to fill out and return to teacher’s classroom by a specified deadline. Teachers can follow up with interested students and continue to promote the program through the school newsletter, announcements, bulletins, fliers around the school, etc. This step is optional. It is included to help those coaches who can only facilitate the program for a small number of students. If you are not limited in this way, or not interested in the application process, you do not need to complete this step.

7. Present the program both in your own classes and in other classes (science/math classes, and/or classes with a high number of female students).

8. If possible, offer extra credit (or better yet, course credit as the DSST Middle School has!) for students who participate.

9. Reach out to parents individually, through a group such as the PTA, or in the school newsletter.

10. Present the program to student groups, such as:

- Robotics or technology club
- Math club
- Art/design club
- Student Council

11. Ask your principal to present Technovation at an all-school meeting or faculty meeting.
12. Ask guidance **counselors** to recommend students and encourage them to join.

13. **Host an “App Challenge”** where you invite students into your room after school or during lunch to work in teams to develop an app idea. Have each team make a poster to showcase it, and pitch it to their classmates to be voted on. Give the winning team a small prize, and then encourage everyone to sign up for Technovation, where they will actually get to build apps!

## Technovation Student Guidelines

As a Technovation student, you will be responsible for the following:

<table>
<thead>
<tr>
<th>Month</th>
<th>Task</th>
<th>Time Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>May - Sept.</td>
<td>If applicable, complete your Technovation application and turn it into your teacher.</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td><strong>All students</strong> must submit signed consent forms in order to be eligible to participate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>These forms are part of the online registration process. (More details <a href="#">here</a>.)</td>
<td></td>
</tr>
<tr>
<td>Aug. - Oct.</td>
<td>Attend a field trip with your coach to a local technology company to kick off the program,</td>
<td>One Weekday (e.g. 9am-3pm)</td>
</tr>
<tr>
<td>(Optional)</td>
<td>learn about what happens inside of a tech company, and meet the company’s top women executives. Ask questions and begin brainstorming your app idea.</td>
<td></td>
</tr>
<tr>
<td>Aug. - Sept.</td>
<td>Attend a Girls Make Apps Workshop with your coach in which you will learn how to use App Inventor to create apps. Take notes on what you learn so that you will be prepared to create your own app.</td>
<td>One Saturday (e.g. 10am-4pm)</td>
</tr>
<tr>
<td>(Optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept. - Dec.</td>
<td>You will work with your team after school on the project.</td>
<td>4 hours/week for 12 weeks</td>
</tr>
<tr>
<td>December</td>
<td>Submit your video pitch (4 minutes, uploaded to YouTube), business plan, and other deliverables by the final deadline.</td>
<td>Approx. 3 hours</td>
</tr>
</tbody>
</table>

**Total time commitment:**

50-65 hours over the course of a year. With this substantial time commitment you will create a new product.

**Final Deliverables (due mid-December, 2015):**

App source code, business plan, video pitch, video demo, team photo, 100-word app summary, and post-survey.

Last updated 05/18/2015
# Technovation Mentor Guidelines

As a Technovation mentor, you will be responsible for the following:

<table>
<thead>
<tr>
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<th>Time Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>May - Sept. (Optional)</td>
<td>Speak on a panel during a school-wide assembly to share about your career and recruit girls to join Technovation.</td>
<td>2 hours</td>
</tr>
<tr>
<td>May - Sept. (Optional)</td>
<td>Organize a company field trip (with the help of other mentors) for your team to kick off the program and learn about what happens inside your company. Arrange a meet-and-greet with the company’s top women executives if possible.</td>
<td>One Weekday (e.g. 9am-3pm)</td>
</tr>
<tr>
<td>May - Sept.</td>
<td>With your coach and other local groups, organize and attend a Girls Make App Workshop with your students where you will all learn how to use the App Inventor programming language. Local universities and companies are great places for hosting.</td>
<td>One Saturday (e.g. 10am-4pm)</td>
</tr>
<tr>
<td>Sept. - Dec.</td>
<td>Meet with your team of five girls at least once per week for two hours. Lead 12-minute introductions on entrepreneurship and product development topics at the beginning of each meeting at the school site. For the remainder of the session, act as a project manager for your team, helping them to a) develop an app, b) write a business plan, and c) plan the perfect pitch to promote their app on video for the regional pitch competition.</td>
<td>Once per week for 12 weeks, (e.g. 5-7pm)</td>
</tr>
<tr>
<td>Dec.</td>
<td>Create a 4-minute pitch video with your students (you will upload this on Vimeo/YouTube and send us the link) and submit along with other deliverables by mid-December, 2015.</td>
<td>3 hours</td>
</tr>
<tr>
<td>Every month throughout the year (Optional)</td>
<td>Attend a meet-up with other Technovation mentors, to a) share best practices for teaching your girls, b) gain professional development in project management and communication skills for your career, and c) network and mingle with women from your tech community. (If you would like to get involved with coordinating a meet-up please contact: <a href="mailto:info@technovationchallenge.org">info@technovationchallenge.org</a> )</td>
<td>2 hours/month</td>
</tr>
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</table>

**Total time commitment:**

50-65 hours over the course of a year. With this substantial time commitment you will be able to change the lives of the girls on your team and inspire them to create a new product.

You may choose to share the above responsibilities with another mentor. You and your co-mentor can take turns meeting with your team, so that you each only attend six sessions. You may also want to arrange virtual sessions through Skype or Google hangouts for remote teams or for times that are you are traveling.
Technovation Coach Guidelines

As a Technovation Coach, you will be responsible for the following:

<table>
<thead>
<tr>
<th>Month</th>
<th>Task</th>
<th>Time Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>May - Sept.</td>
<td>Recruit and register students in teams. Course begins mid-September, 2015.</td>
<td>Varies</td>
</tr>
<tr>
<td>May - Sept.</td>
<td>With your team and other local groups, organize and attend a Girls Make Apps Workshop with your students at a local university or company office in which you will all learn how to use the App Inventor programming language while supported by undergraduate and graduate computer scientists, Technovation alumni, or technology professionals.</td>
<td>One Saturday (e.g. 10am-4pm)</td>
</tr>
<tr>
<td>Sept.</td>
<td>Get acquainted with the curriculum. (<a href="http://2015course.technovationchallenge.org/course">http://2015course.technovationchallenge.org/course</a>)</td>
<td>10 hours</td>
</tr>
<tr>
<td>Sept. - Dec.</td>
<td>Teachers should collaborate with mentors before lessons and keep teams on task with their deliverables.</td>
<td>4 hours/week for 12 weeks</td>
</tr>
<tr>
<td>December</td>
<td>Create and upload a 4-minute pitch video onto YouTube. Submit other deliverables by mid-December, 2015.</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Total time commitment:

In total, you may devote between 50-65 hours over the course of a year. A significant percentage of the hours will involve the girls working and troubleshooting on their own.

With this level of collective support we can dramatically change the leaders and inventors of the next decade. We need your help and support to provide a powerful experience that will change the lives of your students and inspire them to create something they will be proud of forever.

To reduce the load, you can share the above responsibilities with another coach at your school or organization. Additionally, if there are tech companies in your area, then you can reach out to that company to recruit female mentors who could also support your team.
What is the Ideal Profile of a Technovation Coach?

When considering whether you are a good fit to be a Technovation coach, ask yourself the following questions:

- Are you a primary- or secondary-school teacher, after-school program coordinator, or dedicated youth leader?
- Do you enjoy learning new things?
- Are you passionate about project-based learning?
- Are you passionate about ensuring that students have cutting-edge technology skills that will prepare them for success in their careers?
- Do you want female students to develop the confidence to tackle big problems, become comfortable with technology, and see themselves as inventors?
- Do you have good working relationships with your students?
- Would you be comfortable stepping through an online set of lessons that teach you how to program an app and develop a business plan?
- Would you be able to motivate and manage a team of primary or secondary school girls to complete the project?
- Do you have the time to really make this program a success?

…if you answered “yes” to the above questions, we encourage you to get started!

NOTE: Having this list of attributes is not absolutely required—it is simply an ideal coach profile. Use your judgment about whether you think you would be a good candidate for the role of a coach. We encourage you to learn alongside the girls, as nothing comes easily the first time!

Both male and female teachers can lead the program.

What is the Ideal Profile of a Technovation Mentor?

When considering whether you are a good fit to be a Technovation mentor, ask yourself the following questions:

- Do you like learning new things?
- Would you be comfortable stepping through an online set of lessons that teach you how to program an app and develop a business plan?
- Would you be able to motivate and manage a team of primary or secondary school girls to complete the project?
- Do you enjoy working with young people?
- Do you have the time to put into this program and really make it a success?

…if you answered “yes” to the above questions, we encourage you to get started!

NOTE: Having this list of attributes is not absolutely required—it is simply an ideal mentor profile. Use your judgment about whether you think you would be a good candidate for the role of a mentor—you can always improve with time by learning from other mentors and trying it out. We encourage you to learn alongside the girls, as nothing comes easily the first time!

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Best Practices for Mentors

Lead by example. Be an ACTIVE mentor.
You are the project manager and leader for your team. Some mentors feel nervous at first about taking charge and keeping the girls on task, but strong leadership ensures that teams are able to meet deadlines.

Manage team dynamics.
A challenge for Technovation mentors can be working with different personalities -- some students may be shy, others may be talkative. Try to establish the “three-then-me” rule where each time a person talks she listens to three other people speak before speaking again. Encourage shy students to speak up by directing questions -- they will eventually feel comfortable participating.

Stay neutral during discussion.
At times you may experience tension or arguing in the group. Manage conflicts when they occur by helping each student share her concerns and feel heard without taking sides. While girls are brainstorming ideas, encourage them to make their own decisions and decide things by consensus whenever possible.

Show off your skills.
We encourage mentors to bring their own skills and talents into the mix, even if a given topic is not in the existing curriculum. Please customize the lessons to include your own expertise and share what you do in your job with students. Exposing students to real projects helps them understand what engineers and designers do. If you are an entrepreneur, share copies of real business plans and tips on how to pitch. Whatever your skills are, please share them with your team as often as possible.

Be a role model.
As your team’s mentor, you are giving each student a window into your industry and what it is like to be a woman in that field. Get to know the girls, share your story with them, tell them about your career journey. What were your challenges? How did you overcome them? Help the girls relate to you by showing them photos of your dog, your kids, your favorite vacation spots, and telling them about your favorite hobbies. Help them understand that being a working woman does not mean working at all times -- you still have a fun and exciting life outside of work.

Provide one-on-one interaction.
One of the most important things you can do as a mentor is to get to know each girl on your team individually. Start a conversation with the shy student who is not very talkative, ask her what kind of food she likes, what she wants to be when she grows up, what her favorite classes are and why. Get to know each girl so they feel connected and supported by you.

Encourage and inspire.
Hearing encouragement and feedback about her strengths may be deeply transformative for a young woman. Hearing you notice her persistence, attention to detail, willingness to step outside her comfort zone, or ability to think critically and creatively can help support a young women from the very beginning of her experiences with programming and entrepreneurship, building an early foundation of support and community.
Suggestions for a Successful Technovation Field Trip

The following suggestions can help companies plan a successful field trip for Technovation participants. The goal of the field trip is to give girls an insider’s view of a company—for them to see exactly what goes on, who works there, and what they do. Companies can apply these tips to create an experience that is inspiring and educational for girls.

1. **Start with an ice-breaker.**

Since girls may be coming from different schools, let them take a few minutes to get to know each other at the start of the field trip. Encourage them to talk to girls they have not met yet and learn something about them. If you need a simple idea for an ice breaker, you can use the Technovation Bingo Game in the appendix. (p.28)

2. **Give a tour.**

Show off your space! Take the girls on a tour through your offices, showing them everything from the cubicles to the conference room to the recreation room. Show them that engineers have fun, too, and that working in a company is a social job with many opportunities for collaboration.

Along the tour, you can stop by various departments and introduce the girls to real engineers. Perhaps ask employees to stop working for 3 minutes and briefly talk to the girls about what they are doing, why they enjoy doing it, and what their favorite part of their job is.

3. **Ask for feedback on your products.**

Show the girls the products you work on and ask them for feedback. They can be your usability testers for the day -- ask them to tell you what they like about it and what they would improve. If you use their suggestions down the road, tell them about it!

4. **Make it hands-on.**

Let the girls play a game, do an activity, design a product, do research for you, or shadow an engineer and help her with her work for an hour.

5. **Feed them.**

If the girls will be visiting on a school day, they will need to eat lunch during the field trip. If your budget allows, it would be wonderful if the girls could eat in your cafeteria and taste the gourmet offerings you have. If you do not have a cafeteria or funding to feed the girls, make sure to tell students to bring a bag lunch.

6. **Introduce them to high-level women.**

At some point during the day, introduce the girls to a panel of top-level women executives from each department to talk with the girls. If you do not have enough top-level women, you can include men as well. If possible, invite your CEO to come and say a few words to kick things off.
These are some topics panelists can discuss:

- What do computer scientists do? What does your typical day look like? What does your job entail?
- What struggles did you face on the journey to your current job and how did you overcome them? Be sure to highlight any shortcomings you had, bad grades you got, and mistakes you made in your academic or professional career. This information will help girls feel they can relate to you and empowers them to overcome challenges just as you did.
- What do you love about working in tech? What makes you excited to come to work each day?
- What problems are you trying to solve?
- What advice do you have for the girls?

Keep each speaker’s time short (2-3 minutes) to allow plenty of time for questions, while keeping the total time of the panel to approximately 30 minutes. Students will start to lose focus and get bored from sitting and listening for too long.

Panelists can bring something tangible that represents their job to pass around as they talk to keep the girls engaged and give them a visual. It can be a photograph, a design notebook, or a product they created.

7. **Encourage questions.**

Pass out post-it notes and pens for girls to write questions for the panelists during the panel (and throughout the field trip). Even if all the questions are not answered, the process of writing questions will keep the girls focused and might spark their curiosity to pursue the answers later.

Once each panelist has spoken for 2-3 minutes, ask the girls to turn to a partner and share the questions that came up for them. After 30 seconds or so, allow girls to raise their hands and share their questions with the panel. This will help shy students formulate their question and practice asking it with a partner before having to raise their hand and share it with the group.

Often, the adults in the room (teachers and mentors) will be more enthusiastic about asking questions during a panel than students will. Try to encourage questions from the girls instead.

8. **Give them advice and encouragement.**

Throughout the day, make a point of interacting with the students individually and offering them encouragement to consider a career in STEM. This field trip may be their first exposure to this industry, and we want them to feel welcome in it. Hearing directly from speakers that they love their careers and enjoy what they do will go a long way for them to believe they can do it too.
How to Host a Local Regional Pitch Event

In order to provide an enhanced experience for Technovation participants, all Technovation Ambassadors are encouraged to plan a Technovation Pitch Events for teams in a given region. Since Technovation regions vary (more participants in larger metro areas), there are a few different formats by which Technovation Ambassadors (or even teachers!) can plan for teams to present their projects. These are suggestions to go about planning, not hard guidelines.

Legalities:
- Release forms and photo waivers need to be signed by all volunteers
- All Intellectual Property of the project presentations belongs to the teams presenting
- Run background checks on volunteers

Volunteer dress code:
All volunteers will wear a Technovation t-shirt and nametag.

Categories for prizes:
- Most Innovative solution
- Best User Interface Design
- Best Poster board
- Best presentation
- Most broadly applicable solution

Community contributions:
- donations at the end as people are exiting to “vote” for their favorite app
- donations can be used to purchase tablets for the receiving teams
- winner receives the contributions and is awarded “community favorite” prize

Where to find hosting space:
- local schools or community centers
- local companies
- local government spaces

Provided by Technovation:
- T-shirts

Budgeting (costs to consider):
- Space (if not donated)
- Parking/transit for attendees
- Security/crowd control (necessary for >300 attendees)
- Setup/cleanup fees
- Furniture rental (tables, chairs, etc)
- Food/snacks
- Prizes/certificates/giveaways

Last updated 05/18/2015
Official Regional Pitch Events (greater than 10 teams):

In a few regions around the world where Technovation Ambassadors are engaging more than 50 girls, they will be supported to organize Official Regional Pitch events (through a partial grant). Judges for these Official Regional Pitch events will submit their scores to the global Technovation website, and the winner(s) of these official events will automatically advance to the Semifinal Round.

Suggested Time frame: 10am – 3pm

*Have coffee/orange juice/water in the morning*
9:00am – arrival and check-in of participants
9:30am – audience members begin arriving
10:00am – welcome message from Technovation Ambassador, congratulations
10:10am – keynote speaker
10:30am – poster board sessions, judges will go to teams for pitches
12:00pm – intermission, audience members and students go to get lunch, lunch provided for judges while they deliberate, audience members can vote for their favorite app ideas with donations.
1:00pm – prizes are awarded for the categories, winners present on stage
2:30pm – wrap up, congratulations, thank you

Type of space needed:
Larger open floor plan with the ability to set up a small stage and seating

Tech support needed:
A/V for projecting the powerpoint slides for the girls
Cameras to document the event

Volunteer positions needed:
- Check-in table for students (2)
- Ticket collection for audience members (3)
- Ushers to show students where their tables and seats are (2 for every 10 teams)
- Emcee
- Keynote speaker
- Judges (3 per every 10 teams)
- A/V technician (1)
- Cleanup crew (1 per every 4 teams)
Informal Regional Pitch Events

In some communities, Technovation Ambassadors will organize informal Regional Pitch events. These events will give the girls an opportunity to practice public speaking as they present their apps to their local communities. Your region’s Ambassador(s) may solicit local sponsors to provide prizes for these local events, or they may not. Any winners of these events should feel extremely proud of their great accomplishment, and we encourage local press coverage of such high achievers.

Winners of the informal Regional Pitch Events will not necessarily advance to the Global Semifinal Round. Instead, their eligibility for the Semifinal Round will be entirely determined by the team’s performance in their Virtual Pitch Group.

Virtual Pitch Groups: all teams who submit their apps by the deadline and who are not scheduled to participate in an Official Regional Pitch event will be automatically assigned to a “Virtual Pitch Group” with other teams from their division, and then scored by a panel of judges through the Technovation website. The winner(s) from each Virtual Pitch Group will move on to the Semifinal Round. Teams who have been selected to advance to the Semifinal Round will be notified around early January 2016.

Informal Regional Pitch events are not supported through grants by Technovation.

Suggested Time frame: 10am – 1pm

Have coffee/orange juice/water in the morning
9:15am – arrival and check-in of participants
9:30am – audience members begin arriving
10:00am – welcome message from Technovation Ambassador, congratulations
10:10am – keynote speaker
10:30am – teams begin delivering pitches
11:30am – intermission with snacks/drinks, audience members can look at poster boards and ask teams questions directly, make donations to their favorite ideas, team with most donations wins “community favorite” prize
12:30pm – prizes are awarded

Type of space needed:
Auditorium with side room for poster board session
OR Larger open floor plan with the ability to set up a small stage and seating

Tech support needed:
A/V for projecting the powerpoint slides for the girls
Cameras to document the event

Volunteer positions needed:
- Check-in table for students (2)
- Ticket collection for audience members (3)
- Ushers to show students where their tables and seats are (2)
- Emcee
- Keynote speaker
- Judges (3)
- A/V technician (1)
- Cleanup crew (4)

Last updated 05/18/2015
Frequently Asked Questions

1. What is the deadline to sign up to participate?
The sooner you sign up, the sooner you can connect with a team, coach, or mentor. Register at https://my.technovationchallenge.org. For students, the process will look like this:
   1. Students sign up at https://my.technovationchallenge.org, entering their contact information, and their parent/guardian contact information.
   2. Parents/Guardians receive notice, and sign the consent form online. Coaches can also send home paper copy of the consent form, which must be returned, scanned and sent to info@technovationchallenge.org
   3. Students will take the pre-program survey (available on the platform) and join or create a team.

    Mentors and Coaches also sign up at https://my.technovationchallenge.org, and can create their own profiles as well as teams.

2. What are the important deadlines in Technovation?
The fall program runs from mid-September to mid-December, 2015. Teams must register by mid-September. All projects must be submitted by mid-December.

3. Who can join the Technovation? Are there any prerequisite skills or courses students have to take in order to be eligible?
The Technovation curriculum is designed for girls in primary school (10 and up) and secondary school (14 and up). There is no University-level division as of 2015. However, elementary school girls that have the maturity and drive necessary to complete the program can also create Technovation teams and participate. No prior programming experience is expected or required to participate in Technovation. The program is designed to fit students of all experience levels.

4. Do students have to be part of a team to join Technovation, or can one student build an app on her own?
Technovation teaches girls about collaboration and teamwork, important skills in the technology industry. We encourage teams of 4-5 girls.

5. Do I have to use App Inventor to make my app?
No, we encourage you to use any platform you are comfortable with or would like to learn. At this time, our Technovation curriculum uses App Inventor for creating Android apps. If you are already familiar with App Inventor and are interested in learning a new language, or already know a different language and would like to build an app with it, go for it! View this document for a comparison between different languages, and for resources that can help you learn them.

6. Can a school have more than one team of girls participate?
Absolutely! There is no limit to the number of teams who can participate from one school.

7. How much does Technovation cost?
The Technovation curriculum is FREE. All you need is five secondary school or primary school girls, a safe place to meet, a laptop with internet. Teams may purchase smartphones to test the apps they create, but this can also be done in a limited way through a web-based phone emulator on App Inventor. Regional winners will need to cover the costs of their travel and lodging to and from the Technovation World Pitch event. If you are unable to fundraise or pursue sponsorship from a local company to cover these costs, contact us and we will explore other options through our partners.

Last updated 05/18/2015
8. What support and resources are available for mentors, teachers, and students?
The Technovation online community is designed to allow mentors, students, and teachers to ask and answer one another’s questions. Mentors can arrange and connect with one another through monthly mixers, where they can learn from one another and share best practices that will help prepare them to support their teams. Resources such as videos, PowerPoints, handouts, and articles will be available through the course.

Teachers and mentors also have the option of partnering with other teachers and mentors to share the responsibilities.

9. How are participants selected?
Any girl or young woman interested in Technovation is eligible to compete, as long as she creates or joins a team on our online platform, has a signed parental consent form (which includes a photo waiver), and completes a pre-program survey. In some cases, potential participants may be asked to fill out an application by their coach -- this process takes place at the discretion of the coach.

10. How does the competition work? What deliverables do teams submit?
Each team submits a video pitch, app source code, business plan, and other materials by the submission deadline. Technovation judges review all submissions and choose one winning team from each region.

11. What do the Technovation champions win?
The winning team will receive $10,000 (secondary school division) or $10,000 (primary school division) in funding and support to develop their app and distribute it on the mobile market. You can view finalists’ apps from previous seasons for inspiration.
In addition, all students participating in Technovation will receive a certificate of completion.

12. What happens after the app gets developed? Who owns it?
The girls own the intellectual property (IP) and can collect all profits from it. We simply ask that they credit Technovation for funding and sponsoring the project. We encourage girls to share their ideas and collaborate to contribute to the Open Source Movement, as this will eventually benefit them and the public.

13. Can boys participate in the program?
No, the Technovation program is girls-only. Women are highly underrepresented in the technology fields, and especially women of color. Research shows that women are more enthusiastic and engaged in STEM courses when they are in an all-girls environment because they feel comfortable participating and asking questions. We aim to provide that safe environment and provide the girls with role models so they can see themselves in a technology career. Other technology and entrepreneurship initiatives are co-educational, such as FIRST, SMASH, and BUILD, but Technovation is girls-only. However, our curriculum is free and open-source -- we encourage anyone to use it to learn, but boys will not be considered eligible to compete in the full program.

14. Is having a mentor a requirement to participate? Why aren’t men able to be mentors?
A teacher or mentor can lead teams through the Technovation 12-week course. Teams can meet with mentors virtually or face-to-face. Virtual sessions allow teams in remote areas to participate, as well as draw in mentors who have not participated because of the logistical challenges of in-person meetings. Providing girls with role models they can relate to allows them to see themselves as having a career in technology someday. Learn more about the role of female mentors here. We encourage men who want to support our
program to help in other ways, such as recruiting female mentors, facilitating hack days, fundraising, and securing corporate sponsorships.

15. What happens after Technovation is over?
After the Technovation program is over, you can still be engaged in several ways. You can continue to have discussions and collaborate with other Technovation alumni. In addition, you can start developing other apps using App Inventor, or maybe try a different development platform. Here is a document with some of the options available for you, and a comparison between them to help you take the next step.

16. Can we print t-shirts for our teams?
Yes! Printing t-shirts can help unify student teams. You can use our t-shirt design and print shirts at a local printing shop, or you can design your own.

17. Who funds Technovation?
Technovation is funded by a combination of government grants and corporate sponsorships. It is a program of Iridescent (a 501c3 non-profit educational organization).

Technovation receives sponsorships from technology companies who want to support the work we are doing to engage women in computer science. Companies and organizations including Google, Microsoft, Twitter, LinkedIn, IBM, Fleishman Hillard, Frey Scientific, Ask.com, Givezooks!, Knewton, NYC Cares, Ideeli, Adobe, Morgan Stanley, ESPN/Disney, State Farm, and Salesforce have contributed to Technovation by donating funds, equipment, event space, and/or prizes to the program. To learn about how you or your company can contribute to Technovation, visit us online.
Helpful Resources

The following resources may be helpful to you as you set up a Technovation club:

Women in Computing

- NCWIT (National Center for Women in Information Technology)  
  http://www.ncwit.org/resources?field_audiences_tid%5B%5D=1
- SWE (Society of Women Engineers)—find your local chapter: www.swe.org/
- Anita Borg Institute for Women in Technology http://anitaborg.org/

App Inventor

- Main website: http://appinventor.mit.edu/
- Dave Wolber (USF) site for teaching App Inventor: http://www.appinventor.org/
- Video Tutorials (search for App Inventor): www.youtube.com

Technovation

- Main website: www.technovationchallenge.org
- Online course and community: http://2015course.technovationchallenge.org/course
- Promotional Video
- Facebook: www.Facebook/TecChal
- LinkedIn: Technovation
- Twitter: @technovation

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Appendix

Don’t forget to download and distribute consent forms for the students.

Email template for reaching out to schools ................................................................. 25

Email template for reaching out to companies ........................................................... 26

Student Application ..................................................................................................... 27-28

Sample Ice Breaker for Field Trip ............................................................................... 29
Sample email template for reaching out to local schools to start a club in your area (for mentors):

Dear Principal __________ and Staff,

Hello! I'm a volunteer mentor with Technovation, a nonprofit dedicated to inspiring women in technology and entrepreneurship. In the program, primary and secondary school girls work in teams to develop mobile apps, conduct market research, write business plans, and create a “pitch” for funding. Each team works with both a classroom teacher at their school and a female mentor/role model from the technology industry.

The goal of the program is to inspire girls to see themselves not just as users of technology, but as inventors, designers, builders and entrepreneurs. Technovation has reached over 2,000 girls across the country, and hopes to continue to grow.

I am reaching out to see if <insert school name> might be interested in working with me to start a Technovation club. I am a <insert job title> at <insert company> and I am interested in mentoring a team of girls at your school to help them learn app development. Would you be willing to chat with me for a few minutes about the program next week? I would be happy to drop by your office to talk further.

Sincerely,

<insert name>
<insert LinkedIn profile>

NOTE: Always send your initial email to the principal, but copy either:

- the lead college and career counselor
- the science/math/computer science dept. head
- the vice principal

…and if the principal does not respond, follow up with each of these folks individually. This way, the principal is made aware of the program, but the other individuals on the list above may be more likely to be in a position to help you. The principal may never respond, but counselors or vice principals usually will.
Sample email template for reaching out to local companies to recruit mentors in your area (for teachers):

Dear <insert company name>,

Hello! I am a teacher at ________ School, and I am reaching out to tell you about a nonprofit program called Technovation, which is dedicated to inspiring women in technology and entrepreneurship. I am starting a Technovation club at my school, and I am looking for women in technology to volunteer as mentors in the program. I thought I would reach out to your company to see if I could recruit some of your women employees to volunteer.

In the Technovation program, young women work in teams to develop mobile apps, conduct market research, write business plans, and create a “pitch” for funding. Each team works with both a classroom teacher at their school and a female mentor/role model from the technology industry.

The goal of the program is to inspire girls to see themselves not just as users of technology, but as inventors, designers, builders and entrepreneurs. Technovation has reached over 2,000 girls across the country, and hopes to grow this year as they continue to expand globally.

Can you direct me to the right person in your office that handles community affairs? Thank you very much for your time!

Sincerely,

<insert name>
<insert LinkedIn profile>
Technovation Student Application

Please return this completed application to your teacher by ________________.

Program Details: The Technovation program is an after school club where young women in primary and secondary school design mobile apps, gain technology and entrepreneurship skills, and work with women mentors from the tech industry. Students work in teams at their school site to build their apps with the help of a teacher and mentor who visits the school once per week. In April, each team submits their mobile app, business plan, and video pitch for their app.

Who is eligible to apply? All primary school (ages 10 and up) and secondary school (ages 14 and up) are eligible to participate in the Technovation. Past programming experience is not expected or required.

How much does the program cost? The Technovation program is free for all participants.

Class Dates: ________________________________

Class Location: ________________________________

Application:

Date: ________________________________

Name: ________________________________

Email Address: ________________________________

Street Address (including City, State and Zip): ________________________________

Phone Number: ________________________________ Alternate Phone Number: ________________________________

School: ________________________________ Grade Level: ______ Ethnicity: ________________________________

Can you commit to attending class once per week for twelve weeks? ______

ESSAY #1: Explain your level of commitment to this program. How much time are you willing to put into Technovation, and how dedicated will you be to your team’s project? If you have other commitments outside of school, please list them here and outline your plan for accommodating the additional workload of Technovation into your schedule.

ESSAY #2: Choose one of the following questions and answer it in essay format (you may use additional sheets if necessary):

a) What are some ways that you think communication will be different in ten years and why?

b) What is one new technology product that has caught your attention? If you were in charge of the development team, what would you do to improve this product?

c) Identify a problem in your community and explain how you would go about solving it through the use of technology.

Parent Signature (I have read the details of this program and will support my daughter’s participation):

__________

Parent Comments: ________________________________

____________________________________

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### Ice Breaker Activity:
**Get to know each other**

Find someone who….

<table>
<thead>
<tr>
<th>Find someone who</th>
<th>Has the same favorite class as you</th>
<th>Loves to read</th>
<th>Plays soccer</th>
<th>Fills out crosswords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was born in another country</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loves to cook</td>
<td>Built a robot</td>
<td>Has a birthday on the same day as you (any month)</td>
<td>Was born in the same state as you</td>
<td>Is left-handed</td>
</tr>
<tr>
<td>Gardens</td>
<td>Has been to another state</td>
<td>Plays Sudoku</td>
<td>Has programmed before</td>
<td>Loves to run</td>
</tr>
<tr>
<td>Has family who live in another state</td>
<td>Is on a swim team</td>
<td>Has the same favorite color as you</td>
<td>Has curly hair</td>
<td>Speaks a language other than English</td>
</tr>
<tr>
<td>Has played a computer game</td>
<td>Loves to bike</td>
<td>Is part of a service club</td>
<td>Has a dog</td>
<td>Has hair the same color as you</td>
</tr>
<tr>
<td>Is vegetarian</td>
<td>Loves puzzles</td>
<td>Has straight hair</td>
<td>Has the same favorite food as you</td>
<td>Loves Legos™</td>
</tr>
</tbody>
</table>

**Instructions:**
- Put your name at the top of the worksheet so you do not confuse it with someone else’s sheet
- You can only sign one square per worksheet
- You can sign your own worksheet once
- Shout “TECHNOVATION!” if you are the first to get all your squares filled in!