

## iTech IDC Prep

iTech Explorers will begin preparing for an Innovation Design Challenge (IDC) by selecting one of four options outlined in this activity.

### ACTIVITY LIBRARY TAGS

- iTech Exploring: Required
- Life Skills: Team Building, Communication

### AGE APPROPRIATENESS

- Exploring Posts (14-20 years old)
- Exploring Clubs (10-14 years old)

### OBJECTIVES

By the end of this session, Explorers will be able to:

- Understand the purpose and significance of the iTech Innovation Design Challenge
- Practice making decisions as a group

### SUPPLIES

- **Innovation Design Challenge** handout (one per Explorer)
- **Unit Showcase Framework**
- **Presentation Content** handout
- **Presentation Delivery Tips** handout

**LEADER NOTE:** Text in italics should be read aloud to participants. As you engage your unit (club or post), in activities each week, please include comments, discussions, and feedback to the group relating to **Character**, **Leadership**, and **Ethics**. These are important attributes that make a difference in the success of youth in the workplace and in life.

### ACTIVITIES

#### Activity 1 | What is an IDC?

Share the following information with Explorers in your unit.

*Say: The Innovation Design Challenge (IDC) is unique to the iTech Exploring program. It is the capstone project of your participation in this iTech program. The adult leaders in this post/club will guide you through the process, start to finish, but you are all expected to work together as a group to make decisions along the way. Ultimately, as a group you will move an idea from concept to prototype in the form of a finished project.*

*The goal of the Innovation Design Challenge (IDC) is for Explorers to gain an understanding of the principles, processes and desired outcomes required to successfully develop an innovative product. Explorers will learn the difference between invention and innovation, and successfully utilize a project-based approach in a team setting to move an idea from concept to prototype to a finished IDC project or prototype.*

Give each Explorer a copy of the **Innovation Design Challenge** handout or project the statements from the handout on a screen. Either way, as a group read each statement out loud and ask for volunteers to fill in the blanks.

Say: The iTech Exploring Innovation Design Challenge will enable you to:

1. Engage in design-thinking and innovation strategies to develop solutions
2. Practice entrepreneurial skill development through ideation
3. Understand how to effect change through risk-taking
4. Understand how to disprove an idea
5. Practice learning to adapt quickly and efficiently
6. Employ a Maker strategy and an adaptable, innovative mindset
7. Test, assess and modify the project/prototype through trial and error
8. Showcase the IDC project to peers, the community or subject matter professionals

**Activity 2 | Reviewing and Selecting Your Unit’s IDC**

Leaders and Explorers should review the IDC formats below together and choose the best option(s) for their unit. Units and Explorers can participate in more than one option if and when they are available.

**LEADER NOTE**

During your 6<sup>th</sup> iTech post/club meeting your will elect/appoint youth leadership roles. One of those roles is the IDC Event Coordinator(s). The IDC Event Coordinator should lead their team/post/club in meeting all eligibility requirements, submitting content by stated deadlines and communicating the logistics of traveling to the event, if applicable. Share this activity outline and handouts with the IDC Event Coordinator after s/he is selected so s/he can prepare accordingly.

IDC Format Option	Description	Coordinated by Who?	How to Sign Up	Deadline to Sign Up
1 Unit Showcase	<p>1) Your unit’s participating organization defines the IDC parameters and goals within the framework provided, see <b>Unit Showcase Framework</b> handout.</p> <p>2) Set your own date/time/location to showcase your projects with family and friends or another Scouting unit or event.</p>	Unit	Determined by you!	Determined by you!
2 Maker Faire	<p>1) Your unit’s participating organization defines the IDC parameters and goals within the framework provided, see <b>Unit Showcase Framework</b> handout.</p> <p>2) iTech Exploring strongly recommends you showcase your iTech IDC prototype at a local Maker Faire event.</p>	Unit + Maker Faire	Find your nearest Maker Faire online at <a href="http://makerfaire.com/map">makerfaire.com/map</a>	Varies

3	Local iTech IDC Competition or Showcase	Your local Exploring office may or may not coordinate a local competition or showcase event.	Local Council	Contact your local Exploring representative	Contact your local Exploring representative
4	National iTech IDC Competition	iTech Exploring partners with companies and organizations to create	National Exploring Office	Browse competitions online at <a href="http://herox.com/itech">herox.com/itech</a>	May 1, annually

### Activity 3 | OPTIONAL: Designating Teams Within the Post or Club

Consider the requirements of iTech Innovation Design Challenge you have selected. Is it appropriate for a large group or smaller groups? If you have a large post or club (more than 10 or 12 active Explorers) you may want to divide the unit into smaller teams of at least 5 members. It is important that each team have a minimum of 5 active Explorers because there is a minimum of 5 youth leadership roles per team. Youth leadership roles will be reviewed and elected/appointed during your 6<sup>th</sup> meeting.

In the case of multiple teams per post/club:

1. All teams should participate in the same iTech Innovation Design Challenge selected by the entire post/club.
2. After teams are selected, each team should create their team name and take team photos.

#### LEADER NOTE

Once Explorers have completed the IDC Event, they will reflect on their experience in the *Innovation Reflection* activity in the Exploring Activity Library at [www.exploring.org/activity-library-category/itech](http://www.exploring.org/activity-library-category/itech).

Content for this session provided by Kiwi Compute ([kiwicompute.com](http://kiwicompute.com)).

Links to other websites are provided for your convenience and information only. When you click on a link to another website, you will be leaving this website. The fact that we provide links to other websites does not mean that we endorse, authorize, or sponsor the linked website, or that we are affiliated with that website's owners or sponsors. Unless otherwise indicated, the linked sites are not under our control and we are not responsible for and assume no liability for the content or presentation of any linked site or any link contained in a linked site, or any changes or updates to such sites. Your use of a linked site and its content is at your sole risk and may be subject to restrictions and/or limitations. Always take care to abide by the linked site's terms of use, including any permission requirements/guidelines.

## RESOURCES

### Activity 1 | Innovation Design Challenge

As a group read each statement out loud and volunteer to fill in the blanks.

The iTech Exploring Innovation Design Challenge will enable you to:

1. Engage in design-thinking and innovation strategies to develop \_\_\_\_\_.
2. Practice entrepreneurial skill development through \_\_\_\_\_.
3. Understand how to effect change through \_\_\_\_\_-taking.
4. Understand how to \_\_\_\_\_ an idea.
5. Practice learning to \_\_\_\_\_ quickly and efficiently.
6. Employ a \_\_\_\_\_ strategy and an adaptable, innovative mindset.
7. Test, assess and \_\_\_\_\_ the project/prototype through trial and error.
8. \_\_\_\_\_ the IDC project to peers, the community or subject matter professionals.

## Activity 2 Handout | Unit Showcase Framework



### What is an IDC?

The Innovation Design Challenge (IDC) is unique to the iTech Exploring program. It is the capstone project of youth participation in your organization's iTech Exploring program. The adult leaders in your iTech post/club will guide Explorers through the process, start to finish. However, Explorers are expected to work together as a group to make decisions along the way. Ultimately, as a group Explorers will move an idea from concept to prototype in the form of a finished project.

The iTech Exploring Innovation Design Challenge will enable Explorers to:

1. Engage in design-thinking and innovation strategies to develop solutions
2. Practice entrepreneurial skill development through ideation
3. Understand how to effect change through risk-taking
4. Understand how to disprove an idea
5. Practice learning to adapt quickly and efficiently
6. Employ a Maker strategy and an adaptable, innovative mindset
7. Test, assess and modify the project/prototype through trial and error
8. Showcase the IDC project to peers, the community or subject matter professionals

### Organizing Your Unit's IDC

Your organization has the option to create its own iTech Exploring Innovation Design Challenge – see format descriptions 1 and 2 in the chart on the following page. If your organization chooses to create its own IDC, follow these steps to get started.

1. Define parameters for your IDC. What are the boundaries and/or limitations that Explorers will be allowed to work within to complete their IDC?
  - a) Budget
  - b) Prototype size
  - c) Number of people served
  - d) Platform/method by which the public would use the product/service
  - e) Prize for winner(s), examples include cash, scholarship, lunch with the CEO, recognition in front of the company's board, etc.
  - f) Define a timeline for your IDC that includes the following dates:
    - Date of your post's/club's 4<sup>th</sup> meeting after the open house. This is the date you will share the IDC parameters with your Explorers.
    - Date by which Explorer submissions are due.
    - Date on which Explorers will present their submissions to a panel of subject matter experts.
    - Date(s) by which winners are notified and announced.
2. Allow Explorers to review and select one of the 17 [UN Sustainable Development](http://www.un.org/sustainabledevelopment/sustainable-development-goals) goals that most aligns with the mission and purpose of your organization or business.  
([www.un.org/sustainabledevelopment/sustainable-development-goals](http://www.un.org/sustainabledevelopment/sustainable-development-goals))
3. Explorers should write the purpose of their IDC project in a single sentence.
  - EXAMPLE 1: The purpose of *Company Name's* iTech Exploring Innovation Design Challenge is to build a device that saves \$10,000 per year on non-recyclable office supplies.
  - EXAMPLE 2: The purpose of *Company Name's* iTech Exploring Innovation Design Challenge is to create a mobile app that teaches the public how they can utilize our *product/service* to increase their own "green" score.
4. Select 3-5 subject matter experts to serve on the review panel to which Explorers will present their IDC submissions.

## iTech Exploring Innovation Design Challenge Formats

IDC Format Option	Description	Coordinated by Who?	How to Sign Up	Deadline to Sign Up
1 Unit Showcase	<p><b>1) Your unit's participating organization defines the IDC parameters and goals within the framework provided.</b></p> <p>2) Set your own date/time/location to showcase your unit's/teams' IDC prototypes with family and friends.</p>	Unit	Determined by you!	Determined by you!
2 Maker Faire	<p><b>1) Your unit's participating organization defines the IDC parameters and goals within the framework provided.</b></p> <p>2) iTech Exploring strongly recommends you showcase your iTech IDC prototype at a local Maker Faire event.</p>	Unit + Maker Faire	Find your nearest Maker Faire online at <a href="http://makerfaire.com/map">makerfaire.com/map</a>	Varies
3 Local iTech IDC Competition or Showcase	Your local Exploring office may or may not coordinate a local competition or showcase event.	Local Council	Contact your local Exploring representative	Contact your local Exploring representative
4 National iTech IDC Competition	iTech Exploring partners with companies and organizations to create	National Exploring Office	Browse competitions online at <a href="http://herox.com/itech">herox.com/itech</a>	March 1, annually

## For the IDC Event Coordinator Youth Leader | Presentation Content

This is a suggested outline for a structured or timed presentation. Your Exploring unit can choose to deviate from this outline or adjust based on what works best with your presentation format. Explorers should review this outline and practice their presentation to ensure that they feel comfortable on the day of the event.

Each Explorer on a team should have a chance to share during the presentation. Teams should discuss each member's presentation responsibility prior to the event and practice together.

- Project Name and Team Members
- Problem & Solution:
  - Discuss the Problem – What problem are you trying to solve? Why is this problem important to your team?
  - Solution: Provide a simple and concise overview of your solution.
  - Social Impact – How will your project benefit your community (local, national or global)?
- Market Research & Innovation:
  - How did your team ensure that your solution creates value?
  - What did your team discover through market research?
  - What did you learn about user through research?
  - Explain how your team went through the Ideation and Exploration phase of Innovation.
- Prototyping:
  - Discuss your process for prototyping. What was important to your team in the first version?
  - What feedback did you receive about your prototype? What changes did you make based on this feedback?
  - Why was it important to create a prototype?
  - Show some examples of your drawn-out prototype.
- Project Demo:
  - Walk through your project and explain the important aspects of the project.
  - Showcase various features and how your project will be used.
- Discuss the Team's Experience:
  - What was your team's experience in building the project?
  - How did user feedback help to shape your project?
  - What worked well for your team when implementing? What would you do differently?
  - What challenges did your team face? How did you overcome them?
  - What are your biggest takeaways after completing this project?

## For the IDC Event Coordinator Youth Leader | Presentation Delivery Tips

Below are suggestions for presenting professionally. Practice these tips prior to your presentation and get feedback from friends or family. Take the time to practice and your presentation will only improve.

- 1. Plan Your Presentation.** Your presentation should be strategically planned. Before you start practicing, you need to understand what message you want to convey, how you want to convey it and in what order. Create a list of what want to cover and practice different sequences to see what feels best.
- 2. Visual Aids.** Incorporate signs, samples, flip charts, etc as often as you can. Refer to your visual aids throughout the presentation.
- 3. Practice Frequently.** A week before your presentation, start practicing out loud by yourself. You should practice as though you are presenting. Pay attention to your posture, eye contact, filler words and pace. Once you feel comfortable practicing alone, ask a friend or family member to listen to your presentation. They should provide constructive feedback that will help you to improve.
- 4. Dress Professionally.** On the day of your presentation, dress for success. You should wear something that makes you feel confident and comfortable. Ask your leader for suggestions on what to wear and how professionally you should dress.
- 5. Interact with your Audience.** During your presentation, use visual aids and engage with your audience. Show off your project and ask them questions. If you interact with your audience, they will remember your presentation and be more focused on you throughout.
- 6. Maintain Eye Contact.** Ensure that you keep eye contact with the audience. You will want to make eye contact with different members of the audience for a few seconds. It should feel natural, as though you are having a conversation with them. Practice eye contact before the day of your presentation.
- 7. Stand Confidently.** You will need to maintain good posture and stand confidently. This takes practice and it's often difficult to realize if you have good posture. Prior to your presentation, practice your posture and ask for feedback from friends or family. Keep your feet firmly planted, walk intentionally if you do move around and avoid fidgeting. Practice these good habits if they are difficult for you.
- 8. Use Your Hands Intentionally.** Your hands are a great tool for emphasizing a point or conveying an emotion. However, we often forget to use them wisely. It is important to use them for specific reasons. When not using them to emphasize a point, keep them resting in front or behind your back. If you struggle with this, ask friend or family member to help you practice.
- 9. Eliminate Filler Words.** When presenting, it is common to fill the empty space with a filler word. Filler words can be anything that is unintentionally said to fill the space, including words like "uh", "um", "like", "so", "and", etc. It is important to practice your presentation, so you feel comfortable and know what you are going to say. Different people use different filler words. Recognize what your filler words are and be aware of when you use them.
- 10. Maintain a Natural Pace.** It is normal to be nervous while you present. When this happens, you tend to increase or decrease the speed in which we present. Be mindful of this and practice a pace that feels conversational. The more you practice, the better you will be during your presentation.
- 11. Avoid the Screen.** It may feel natural to look at the screen for guidance. It is okay to do occasionally but avoid doing this frequently. It gives off the appearance that the presenter is not prepared. Practice your presentation without looking at the screen and it will be much easier during your presentation.
- 12. Questions.** At the end of your presentation, the audience may ask questions or request more details. Think about what the audience may ask and practice answering them before your presentation.