iTech Innovation Reflection

Explorers will reflect on their Innovation Design Challenge and their experiences.

NOTE: This activity should be facilitated AFTER the completion of the Innovation Design Challenge event.

ACTIVITY LIBRARY TAGS

- Exploring: Communications
- iTech Exploring: Required
- Life Skills: Team Building, Communication, Leadership
- US Dept of Education: Information Technology, STEM

AGE APPROPRIATENESS

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

OBJECTIVES

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

- Describe their experience during their Innovation Design Challenge
- Identify and examine successes and challenges during their experience
- Reflect on their Innovation Design Challenge project and their IDC Event
- Apply their learnings to real world situations
- Understand the next steps in their Exploring journey

SUPPLIES

- **Flip chart paper or markerboard & markers**
- **Continuing the Career Pathway Handout** (use as a reference)
- **Youth Last Day Survey** (one per student)
- **Leader Last Day Survey** (one per leader)

LEADER NOTE: Text in italics should be read aloud to participants. As you engage your Exploring 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 | Stop, Start, Continue

The goal of this activity is for Explorers to reflect and discuss their complete Innovation Design Challenge experience. You can discuss as a large group or discuss as smaller teams. Below are questions to pose to the Exploring unit as a guide during the reflection. Explorers do not need to answer all questions. It is more important that they reflect on their experience overall.

LEADER NOTE

Prepare your flip chart paper or marker board ahead of Explorers' arrival labeled with three distinct sections - STOP, START, CONTINUE – for each of the two topics.

For each of the two topics below spend about 20 minutes each discussing what the group or team would STOP doing, START doing differently, and CONTINUE doing in the future. Consider posing the questions offered below for each topic if the discussion is slow or short.

Say: Think about your experience of creating an IDC project, both as an individual and as a team. We are going to discuss the experience as a group/team. [display and/or verbalize questions]

YOUTH LEADERSHIP POSITION: Project Managers should lead their team through the following reflection questions.

Reflecting on the IDC Project:

- What was one thing you / your team learned during the creation of your IDC project?
- What was one of the most important things that you learned personally?
- What piece(s) of the project are you most proud of?
- How well did your team communicate?
- Do you think your project addressed your UN Sustainable Development Goal? Why or why not?
- Were your milestones and goals met? How much did you deviate from them (if any)?
- What do you think it means to "fail fast and often"? Why is this important when innovating?
- If you could add another piece to your project, what would it be? Why?
- What would you do differently? What worked well for your team?
- Will you continue to work on your project/idea? Why or why not?
- How do the skills that you learned apply to the "real world" and potential careers?
- Would you participate in another IDC? Why or why not?

Say: Think about your experience of presenting/showcasing/competing in the IDC Event, both as an individual and as a team. We are going to discuss the experience as a group/team. [display and/or verbalize questions]

YOUTH LEADERSHIP POSITION: IDC Event Coordinators should lead their team through the following reflection questions.

Reflecting on the IDC Event:

- What did you learn from presenting, showcasing or competing?
- What is one thing that you / your team did well during the showcase or presentation?
- For presentations – Did you practice for your presentation? How did you improve throughout your practice? What improvements could you make for next time?
- For showcases – How did you / your team interact with visitors to your display? How did you explain your experience to others? What improvements would you make for next time?
- How did you demo your project? What worked well? What would you change for next time?
- What was your favorite part of the IDC Event?
- What were some of the most interesting discoveries that you made during the IDC Event?
- Did you learn anything new about your user? How could you incorporate these findings into your project?
- Did you discover new features to include after the IDC Event? What were they? How could you have discovered these features sooner?

Activity 2 – Last Day Survey
To guage interests and measure progress both Explorers and leaders should complete the Last Day Survey online – links below.

Explorer Last Day Survey

Leader Last Day Survey

YOUTH LEADERSHIP POSITION: Design & User Feedback Managers should help leaders with the survey process.

Activity 3 | Career Opportunities & Next Steps
If there is time after the surveys, lead a group discussion about next steps and career opportunities using the **Continuing the Career Pathway Handout** as a reference.

Say: What have you learned about careers in this field? Do any of these opportunities interest you? Why or why not?

YOUTH LEADERSHIP POSITION: Research Managers should oversee this process with their team.

Explorers can also research career opportunities as individuals or small groups on their smart phones, then share their findings with their Exploring unit.

Provide materials on how to get more involved in the program and discuss next steps for the following year. If you have materials or additional information on career opportunities, provide them to the Explorers now.

LEADER NOTE
Some sample questions are below. They are designed to help the participants apply what they have learned to their own interests. You are welcome to use these questions or develop your own questions that relate to your program or specific focus area.

Content for this session provided by Kiwi Compute (kiwicompute.com).

RESOURCES
Activity 1 - Continuing the Career Pathway

As Explorers visit tech companies or IT departments, talk to them about opportunities to further their learning in technology. Encourage Explorers to ask tech professionals about their career paths as many professionals have diverse paths. Ask tech professionals to speak about how they got into technology and their career choices. Highlight for Explorers that the below options are not all-encompassing, and that each student has his or her own best path.

As a first step, encourage Explorers to get more engaged during their Exploring unit by selecting a mentor, asking about internships or stepping into a leadership role within their unit.

Bootcamps
Consider working with an Exploring unit, Boy Scout Troops, Venture Crews or the Order of the Arrow to coordinate your own bootcamp or "hackathon." This is an opportunity for Explorers to join the local Exploring Officers Association (EOA). Contact your local council to learn more. If Explorers are looking for an in-person experience to expand their knowledge of technology, bootcamps may be the right option as they differ in course offerings, cost and location. Here are a few national programs:

- Galvanize: Denver, San Francisco, Boulder, Seattle, Austin, Phoenix, NYC, Online
- Hack Reactor: San Francisco, Austin, LA, NYC, Online
- Coding Dojo: Seattle, San Francisco, LA, Silicon Valley, Chicago, Dallas, DC, etc.

Colleges & Universities
Explorers interested in pursuing a degree in technology should consider local and national institutions. Explorers that want more affordable options, they should research community colleges in their area. Whether they pursue local or national colleges, many schools provide scholarships for those that excel in technology. Encourage students to visit these schools and apply!

- Massachusetts Institute of Technology (Cambridge, MA)
- University of California - Berkeley (Berkeley, CA)
- Stanford University (Stanford, CA)
- Carnegie Mellon University (Pittsburgh, PA)
- University of Illinois (Urbana, IL)
- Cornell University (Ithaca, NY)

Careers in Technology
Within technology, careers vary based on specialty and skillset. An Explorer can pursue a career in design, app development, robotics, engineering and more. Whether a student is interested in math or design, there is a place for them! Encourage Explorers to ask tech professionals questions about these various career paths and to shadow in different areas to understand what the role entails.

As our society advances, the jobs and careers will change drastically. We need to prepare the next generation for the jobs that don't yet exist. It is important to talk to Explorers about the possibilities within technology. Read more about potential career options in the report 21 Jobs: The Road to 2028 and share with Explorers.