2021-22 CHALLENGE SEASON





TABLE OF CONTENTS

CHAPTER 1: Introduction	7
Welcome to the Year of the Comeback!	7
About Roadmap	9
Using Roadmap	10
Destination Imagination Pedagogy	11
About the Creative Process	12
Stages of the Creative Process	13
- Stage One: Recognize	13
Stage Two: Imagine	13
Stage Three: Collaborate & Initiate	13
Stage Four: Assess	13
Stage Five: Evaluate & Celebrate	13
CHAPTER 2: Career/College/Future Readiness and Destination Imagination	14
Project-Based Learning	15
What are the 7 elements of Gold Standard Project-Based Learning?	15
21st Century Learning	19
Social and Emotional Learning	20
Optimistic Thinking	20
Self-Awareness	21
Self-Management	21
Social Awareness	22
Relationship Skills	22
Goal-Directed Behavior	23
Personal Responsibility	23
Decision Making	24
Project Management Overview	25
Example Challenge	26
Challenge Requirements Identification Worksheet	27
Challenge Requirements Identification Worksheet	28
Challenge Requirements Identification Worksheet	29
CHAPTER 3: Team Manager Skills and Knowledge	30
Understanding the Destination Imagination Challenge Experience	30
The Team Challenge	31
Instant Challenge	32
Roadmap	32
Rules Of The Road	33
Resource Area	33
Destination Imagination Volunteer Training	33
Understanding the Team Manager Role	34
Roles of a Team Manager	34
Creativity Catalyst	34

Educator	34
Challenge Expert	35
Interference Deflector	35
Chief Safety Officer	36
Facilitator	36
Managing the Questions	37
Clarifications	38
Published Clarifications	38
Asking For A Team Clarification	38
What Is Interference?	39
Interference Quiz	41
Answers to the Interference Quiz	42
Interference Contract	43
What does a Destination Imagination solution look like?	44
Instant Challenge and Teamwork Activities Supply Box	45
CHAPTER 4: Solving the Challenge	46
Planning Team Meetings	46
Team Benchmarks	47
Early Challenge Requirement Identification & Planning (Meetings 1- 6)	47
Finalizing Planning and Beginning to Create the Solution (Meetings 3 – 10)	48
Working on a Solution (Meetings $6 - 14$)	49
Preparing for Presentation at a Tournament or Showcase (Meetings 9 – 20)	49
Reflecting on the Team's DI Challenge Experience	50
Meeting Agenda Templates	51
Agendas for Experienced Team Managers	51
General Team Meeting Agenda	52
Parent Meeting Agenda	53
Helping Your Team Decide on a Challenge (1 to 4 meetings)	54
Initial Team Meeting	54
Challenge Decision Team Meetings (2 to 3 meetings)	55
Working on a Solution (4 to 8 meetings)	57
Preparing for the Team's Presentation (2 to 4 Meetings)	58
Reviewing and Reflecting on the DI Challenge Experience (1 To 2 Meetings)	59
Example Meeting Agendas for a 16-Meeting Season	60
New Team Managers	60
Meeting 1	61
Meeting 2	62
Meeting 3	63
Meeting 4	64
Meeting 5	65
Meeting 6	66
Meeting 7	67
Meeting 8 - 11	68
Meetings 12 - 14	69

Finalizing The Solution	70
Last Meeting Before Tournament	71
8-week Meeting Agendas	72
Week 1: Parent Meeting	72
Challenge Decision Meeting	73
Week 2: Challenge Theme And Challenge Element Planning	74
Week 3: Challenge Element Planning And Beginning To Create Solution	75
Weeks 4 - 7: Completing The Solution	76
Week 8: Getting Ready For Tournament	77
Reflection Questions and Activities	78
Reflection Questions To Ask Your Team:	78
Reflection Activity	79
Getting Ready for a Tournament	79
Create a Tournament Toolkit	80
Toolkit Worksheet	80
CHAPTER 5: Instant Challenge	81
Instant Challenge General Practice Procedure	81
Reflection/Processing Questions	82
Team Roles for Instant Challenge	83
Project Management Tool for Instant Challenge	84
Instant Challenge Project Management Practice Tool	85
Idea Generating/Focusing for Instant Challenge	86
Developmental Instant Challenges	87
Let's Hear It	87
Did You Hear That?	87
Pestilence	88
Being A Good Sport	88
Materials Matter	89
Mini-Challenge Blitz: Understanding Materials	90
Spaghetti Structure	92
Practice Instant Challenge: Invisible Props	93
Invisible Props	94
On the Banks	95
Peppy Puppies	96
Odd Jobs	97
Odd Jobs (cont'd)	98
One of Each	99
Outside In	100
Rewind	100
Rewind (cont'd)	102
Time Capsule	103
Paper Thin	103
Fetch and Stretch	105

Chapter 6: Creative and Critical Thinking Skills	107
Skills and Tools for Idea Generating and Focusing	107
Creative Thinking	108
Idea Creation	108
Critical Thinking	109
Tools and Practice	110
Tool: Race For Fluency	110
Tool: Decision Making Matrix	111
Blank Decision Making Matrix	112
Tool: Idea Generating Chart	113
Blank Idea Generation Chart	114
Tool: ABC Brainstorming	115
Blank ABC Brainstorming Grid	116
Tool: Mix And Match	117
Tool: Hits And Hotspots	119
Tool: KWL (Know, Want to Know, Learned) Chart	120
Tool: WWWH	120
Tool: Choice Helper	121
Tool: Paired Choice Analysis	122
Paired Choice Analysis Worksheets - Blank	124
Team Manager Tally Sheet	125
Chapter 7: Facilitating for Successful Teamwork	126
Team Development	126
Successful Teamwork	128
Activities To Develop Trust	129
Catch the Ball	130
All Aboard	131
Helium Stick	131
Common Goals & Purpose	132
Activities to Develop Common Goals & Purpose	132
Open-Ended Questions	132
Create Situations for the Team To Meet a Common Goal	133
Team Interest Inventory	133
Good Communication	138
Activities to Develop Communication Skills	139
Improv Games	139
Listening Games	140
Respect for People and Ideas	142
Activities to Develop Respect for People & Ideas	143
Shape Up	143
Getting to Know You	143
Other People's Ideas	144
Three Things	145
Conflict	145

Chapter 8: Working with a Team Member with Differing Abilities	146
Everyone benefits from inclusion	146
Resources to help	146
Chapter 9: Creating a Complete Project Plan using PMI Tools, Forms, and Examples	147
Project Management	147
Project Management Steps	148
Creative Process/Project Management Steps	150
Planning A Solution To A Team Challenge	151
Step 1: Identifying and Understanding Challenge Requirements	151
Step 2: Defining the Team's Project Deliverables (Mini-Projects or Tasks)	151
Example Challenge	152
Deliverable Requirements Planning Chart (Example 1)	153
Deliverable Requirements Planning Chart (Example 2)	154
Step 3: Team Challenge Project Plan	155
Team Project Goals Worksheet (Example)	156
Resources, Constraints, and Assumptions	156
Resources, Constraints, and Assumptions Worksheet (Example)	157
Scope	158
Project Management Roles	159
Team Roles And Responsibilities (Example)	159
Sequencing, Scheduling, and Milestones	159
Milestones and Tasks Sequencing Worksheet (Example)	160
Resource Planning Worksheet (Example)	161
Risk Management Worksheet (example)	162
STEP 4: Review Project	163
Group Reflection: Line Up!	163
Pass the Ball	164
Blank Project Plan Documents	165
Deliverable Requirements Planning Chart	165
Team Project Goals Worksheet	166
Resources, Constraints, and Assumptions Worksheet	167
Deliverables and Dependencies	168
Team Roles and Responsibilities	169
Milestones and Tasks Sequencing Worksheet	170
Resource Planning Worksheet	171
Risk Management Worksheet	172
Appendix	173

CHAPTER 1: Introduction

Welcome to the Year of the Comeback!

Welcome from our Executive Director, Michele Tuck-Ponder

Just like seasons of the year, so are there seasons for Destination Imagination (DI) and we are now reopening to the DI season we used to know. In 2021-2022, you will find the same solid experience for DI teams around the world, with dedicated volunteers and a tradition of hosting a spectacular international tournament. DI is flexing its potential for growth and the promise of heightening its profile and reputation in the global educational community.

Less than two years ago, an unimaginable worldwide pandemic scuttled our plans. We all felt painful and temporarily disabling effects, but the crisis was not fatal for DI. Destination Imagination embarked upon a new frontier—operating our business operations and educational experiences in a virtual space. In 2020, under tremendous pressure, DI put together a virtual Global Finals event in order to provide our teams with an opportunity to participate in a year-end activity. We are proud of our work and are grateful for the continued loyalty of our participants, both students and volunteers. But both you and I know, it wasn't the same.

In 2020-2021, the pandemic was still with us, but DIHQ and the DI community perfected the art of the pivot. Pivoting required the implementation of Plan B: Virtual Challenges at all levels of tournaments and Global Finals 2021 held virtually. Volunteers stepped up across the globe and using technology, Instant Challenges were back and team solutions were appraised and ranked at every tournament level. New and exciting opportunities were introduced at Global Finals 2021, including the Fast Flex Challenge and the opportunity to watch team solutions from around the world. When the curtain came down on the 2020-2021 DI season, we all applauded the success of the teams, volunteers, and DIHQ staff!

So, gather your team and come and join DI for what we hope will be the reopening of an exciting in-person season! Engaging Team Challenges are awaiting teams to take and make them their own with wildly creative solutions. Instant Challenge is back in full force with quick thinking on your feet opportunities for teams to excel. Our goal is the same as it has been in every season of DI—to bring the best learning experiences possible to DI teams everywhere!

Welcome as we reopen with an exciting in-person season for 2021-2022!

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Welcome from our Director of Education, Johnny Wells

Welcome to a new season and, with the reopening of in-person experiences, to what feels like the past becoming new! Even with it feeling new and fresh being back in person with the teams, Team Managers can still count on Destination Imagination (DI) delivering the same high-quality educational experiences they have for the past twenty years. We are delighted to see you here and ready to begin what is going to be life-changing for you as a Team Manager and for the team of students you will mentor and help to grow.

As you begin this adventure, get ready to ask your team to own the experience as they shape learning in their personal and unique ways. As you help the team practice independent thinking, they may lack much needed skills. Those skills may range from what appears to be academically simple to something more daunting such as how to use a power tool. Step up and help them learn those skills, but step aside and give your team members the opportunity to take full ownership of their Challenge solution. That ownership is a vital element of the DI experience and vital to helping individuals grow into self-directed, lifelong learners. As you manage the team, be sure to use the creative process effectively and often as you solidify how maneuvering the process will be forever useful. Every DI season is filled with new and exciting opportunities to explore and learn.

Neither you nor the team members will be the same after this season whether it is your first season or your tenth! We are grateful for the time and effort that you are volunteering, and the team members will be forever thankful that you have given them the opportunity to learn and experience the creative process from imagination to innovation. Welcome to a new season of DI and a life-altering experience for you and your team of learners!

Enjoy this 2021-2022 season!

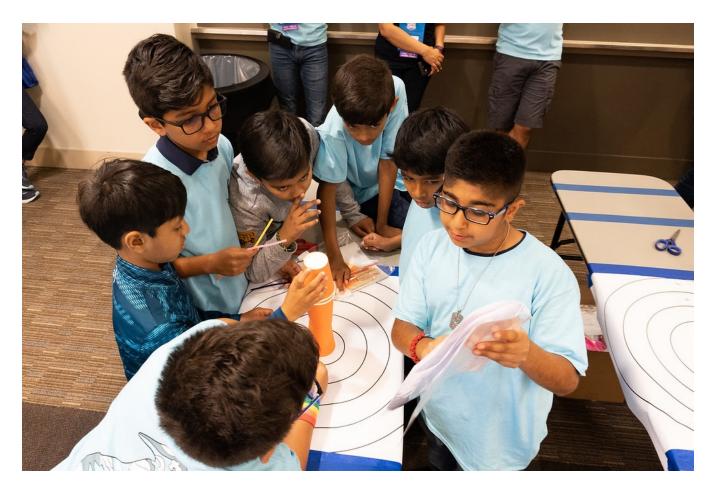
Johnny C. Well

About Roadmap

Roadmap is a guide to help you manage your team members as they design and execute a Destination Imagination (DI) Challenge solution together. Roadmap is designed to help you teach the creative process and the additional skills that team members need to complete their solution to a DI Challenge. As a Team Manager, you are essentially the team's tour guide. You will facilitate, organize, and position the team members to develop skills that will not only help them be successful in solving their Challenge, but will shape their futures and set them on a path to becoming the next generation of creative thinkers, innovators, and leaders. In Roadmap, you will find suggestions, activities, and questions to better guide teams toward more focused planning and execution of a solution. Throughout Roadmap, look for Team Manager Tips for practical ideas that will connect you and the team with Destination Imagination's learning outcomes.

Roadmap is organized into sections to better help you with the task of managing a team. The Guiding Your Team section will guide you through the Destination Imagination Challenge Experience. The other sections contain resources that can be used as needed throughout the season.

You will know your team the best! Familiarize yourself with Roadmap before the season begins. Then select appropriate resources and suggestions from Roadmap to help you meet your team's needs and shape a great DI season for your team.



Using Roadmap

- 1. Look over the Introduction. Reviewing the foundations of the creative process and the DI Pedagogy will be helpful in understanding the unique components of DI's educational offerings.
- 2. Prepare your team members for their futures by focusing on the Career/College/Future Readiness and Destination Imagination chapter. You will learn about the benefits of project-based learning, how DI impacts social-emotional learning, and how project management skills can be vital to your team.
- 3. Learn the skills and knowledge you need to have to be an effective Team Manager. Understand Interference, Team Challenge, Instant Challenge and the resources that are available to help you in your role as a Team Manager.
- 4. Dive into the Guiding Your Team section to shape a meaningful experience for your team. Selecting from some of the Roadmap resources can help to create a successful plan for meeting the team's needs as the team develops and works on a solution to a DI Challenge.
- 5. Incorporate an Instant Challenge into each session with your team. Practice makes perfect and Instant Challenge is a great way to teach thinking and teamwork and introduce project management. Practicing Instant Challenge shows team members how rewarding solving issues and problems in a short time can be. Many of life's challenges occur instantaneously, so teach your team how to meet those challenges head on with quick problem-solving skills and practice.
- 6. Use the Skills for Creative and Critical Thinking section when you develop meeting agendas for your team. Brainstorming, prioritizing, focusing, and developing ideas can be a tough journey without the proper vehicles for finding the right team solution. Offer your team more efficient ways to a solution by having your team members try several tools for generating and focusing. These tools may help them find the perfect fit as they work toward a solution.
- 7. Facilitate for Successful Teamwork. Every team can improve to become an even better team. Assist your team in growing individually and collectively by monitoring the team. Use activities to maneuver the "bumps" along the way to understanding a collaborative work environment.
- 8. Accommodate all of your team members' learning needs. Gain some tips to help you guide a team member with differing abilities.
- 9. Instill good Project Management skills. Good project-based learning utilizes the tools of project management. Take advantage of the PMIEF project management tools as you train your team in Instant Challenge, as you teach good management skills for the team's work on a Team Challenge solution, and as you show the team how project management skills translate to the real workplace. Help your team members prepare for a more successful future with project management skills!

Destination Imagination Pedagogy

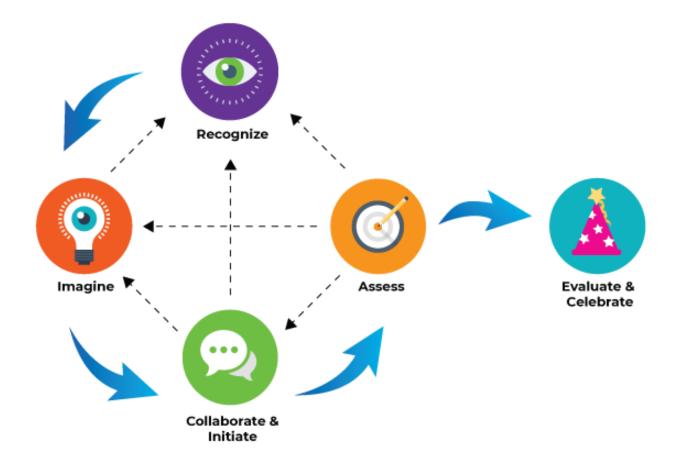
The Destination Imagination (DI) Educational Experience is a learner-centered educational opportunity built completely on the creative process. The DI Educational Experience has the capability to sit within the school setting or beyond. Because of the open-ended DI structure, learners engage in deep inquiry and research while infusing prior knowledge and learning, particularly in the areas of STEAM (science, technology, engineering, arts, and mathematics). Most aspects of learning are woven into the DI Educational Experience to prepare learners for future success in education, careers, and life in an ever-changing world. The Destination Imagination Educational Experience is founded on five primary tenets of unique pedagogy:

PEDAGOGY ELEMENT	LEARNER POINT OF VIEW	EXPLANATION
No Interference	We CAN make this happen.	Skills and knowledge may be taught, but solutions and ideas may not be provided by an outside source. Adult leaders allow learners to find the answers on their own while developing new skills and exploring areas of STEAM.
Resource Awareness	We recognize the value of everything in our solution.	Learners use all of the resources available to them, including materials, strengths of team members, research, and experts. They learn to work within the constraints of a budget and within the requirements and guidelines of a Challenge.
Clarifying Questions	We ask important, critical questions for clarity.	Learners use questions to ensure understanding and to analyze all potential ideas and solutions. The questioning process allows learner- centric exploration and experimentation. Adult leaders use questions to deepen learning and understanding and to push learners beyond their assumed limitations. The DI Challenge Experience offers a Clarification system that allows for questions about the Challenge requirements and provides answers from International Challenge Masters, our Challenge experts.
Rapid Ideation and Implementation	We process and produce quickly and recognize that success can come from failure.	Adult leaders encourage learners to practice quick, creative, and critical thinking. Time constraints require fast idea generation, implementation, possible failure, and an immediate move to another possible solution for success.
Authentic Self-Expression	We purposefully express who we are through our innovative solutions.	Learners express individual and team creativity and belief systems while working collaboratively to solve a Challenge. Solutions are expected to include elements that express individual and team talents, strengths, and skills.

About the Creative Process

Our goal at Destination Imagination is to give students the chance to learn and engage with the creative process from imagination to innovation. Team members who develop an understanding of the creative process can more effectively approach problems and take solutions to an innovative level. Below are the components of the creative process that our participants experience while solving our Team Challenges and Instant Challenges. The process integrates Bloom's Taxonomy, the scientific method, 21st century skills, collaborative problem-solving, the stages of practical inquiry, and whole child education.

Remember that the creative process isn't a straight and linear path, but one that is circular, often looping back from one stage to a previous stage or stages. In Instant Challenge, the process is condensed into a short time frame and must happen rapidly. At times, the process may feel messy, but you can help your team members move from one stage to another as they create their amazing and innovative solutions.



Stages of the Creative Process

Stage One: Recognize

- Becoming aware of the Challenge
- Gaining an in-depth understanding of the Challenge

Stage Two: Imagine

- Generating ideas
- Focusing on promising ideas
- Creating a project timeline

Stage Three: Collaborate & Initiate

- Researching, exploring, and experimenting
- Committing to options
- Building and completing all requirements

Stage Four: Assess

- Assessing progress
- Reworking or reimagining ideas
- Practicing presenting the solution

Stage Five: Evaluate & Celebrate

- Presenting at a tournament or submitting a video solution
- Reflecting on and celebrating the experience

More information about the creative process is available on the DI Learning Management System in the Getting Started as a Team Manager course.

CHAPTER 2: Career/College/Future Readiness and Destination Imagination

Destination Imagination prepares students of all ages for their futures, whether their future includes heading to trade-school, apprenticeships, college, or directly into the workforce. DI participants learn how to manage projects, work on a team, think critically and creatively, communicate, and persist until they complete their goals.



Project-Based Learning

The Destination Imagination Educational Experience utilizes the components of project-based learning (PBL). Team Managers should familiarize themselves with the components of PBL and look for ways to connect the Destination Imagination Challenges to college readiness, careers, and lifelong learning. We use the PBLworks.org Gold Standard definition of project-based learning.

Gold Standard Project-Based Learning projects are centered around learning goals. Each DI Challenge is written with certain learning goals in mind. You can find those learning goals in each Challenge. In addition to those more general standards, your team members will meet additional educational standards depending on what they choose to learn while they create their solution.

What are the 7 elements of Gold Standard Project-Based Learning?

A Challenging Problem or Question

"The project is framed by a meaningful problem to be solved or a question to answer, at the appropriate level of challenge." - PBLworks.org

In Destination Imagination, the meaningful problem (Challenge) and the level of rigor or difficulty of the problem (Challenge) are designed and determined by the team members. DI Challenges are a framework of requirements that team members need to include in their solutions. Team members determine the project tasks and deliverables that will meet those requirements thus creating their own project plan for their solution.

No matter which Challenge a team chooses, after they decide how they are going to solve the Challenge, the team will have a driving question that will guide them as they create and build their solution. For example, an Engineering team used the elements of the solution to their Challenge to explain how a family copes when their child is diagnosed with leukemia. Their driving question might have been, "how do we show how a family handles a diagnosis of leukemia?" Another team used the Fine Arts Challenge to drive home the point that no one should try drugs, not even once. Their driving question might have been "how do we convince our audience that no one should try illicit drugs?" Each team's driving question will be unique to the team. The driving question does not have to be about a cause; it could be as simple as "how might our team explore making a technical device to operate autonomously using two different scientific methods?" or "how do we make our backdrops artistically beautiful?" Helping the team stay focused on their driving question or reason for their solution will keep the solution belonging to the team.

Team Manager Tip: As your team is planning their solution, introduce the concept of a driving question. Ask them what they hope to learn or change with their solution. Have team members work together to decide on the defining question or driving reason behind the solution they are creating. Once the team has decided, write it down on a large piece of paper and display it at team meetings.

Sustained Inquiry

"Students engage in a rigorous, extended process of posing questions, finding resources, and applying information." -PBLworks.org

Your team members will research potential resources and try applying the information to many potential solutions to their chosen Challenge. Team members will work together to evaluate resources and information and decide which resources and information will be included in their solution.

Team members will ask questions of each other. You, as the Team Manager, will ask the team members open-ended questions. The team members will ask experts questions about different aspects of their solution (not how to do it, but what they need to learn to build the solution).

As the team members work through their solution, they will use sustained inquiry many times. They will need it when their idea for a prop or device doesn't work. They will need sustained inquiry as they build their story and the script that they will present to the audience. Questions and questioning are the keys to creating a solution that is unique to the team.

Team Manager Tip: Read the section on open-ended questions on Managing the Questions section of Roadmap to learn more about using questions with your team. As you are thinking about questions to ask, one of the most important things to remember is not to ask a yes or no question. Yes or no questions get you trapped in a guessing game and can easily lead you to ask a question that gives the team a suggestion or idea. For example, rather than asking, "have you thought about adding a bird to your backdrop?" ask "what is your plan for the backdrop?"

Authenticity

"The project involves real-world context, tasks and tools, quality standards, or impact, or the project speaks to personal concerns, interests, and issues in the students' lives." - PBLworks.org

All DI Challenges involve real tasks, quality standards, and because the project is actually written by the team members, the project addresses their personal interests and strengths. DI solutions are hands-on and the students are personally vested in the results.

Team Manager Tip: As the team creates their solution, help the team consider everyone's ideas and work. The project will be more authentic to everyone if each team member gives input and has a hand in creating the solution.

Student Voice and Choice

"Students make some decisions about the project, including how they work and what they create, and express their own ideas in their own voice." - PBLworks.org

In DI, students make all the decisions regarding their project within the parameters of the Challenge. Team members even decide together which of the 6 competitive Challenges they would like to solve. The DI pedagogy includes "No Interference." This means no one outside of the team is allowed to give ideas, suggestions, or solutions to the team. The team has complete ownership of the solution.

Team Manager Tip: Teach your team members to use the idea generating and focusing tools that start on Chapter 6. Those tools can help ensure that all team members have a voice in their solution.

Reflection

"Students and teachers reflect on the learning, the effectiveness of their inquiry and project activities, the quality of student work, and obstacles that arise and strategies for overcoming them." - PBLworks.org

Reflection is included in the Assess and Evaluate and Celebrate stages of the creative process. During the Assess stage, team members reflect on what they are learning and how they are working together as a team. Reflection focuses on the process of creating the solution and helps the team to ensure that all team members feel included in the process and that everyone understands the goals of the team.

In the Evaluation and Celebrate stage, teams focus on their accomplishments and decide what they might do differently should they decide to take on a new DI Challenge. Team Managers help the team members recognize how much they have learned and how much they have grown during the DI season.

Team Manager Tip: Build time for reflection into the team meeting schedule. During reflection time, ask team members what they accomplished during the meeting, what they learned, what they still need to learn, and what difficulties they may have had. You may need to help them plan to manage difficulties they are having with each other or with the project. Have them make plans for anything they need to accomplish between meetings and what plans they have for next week.

Critique and Revision

"Students give, receive, and apply feedback to improve their process and products." - PBLworks.org

Critique and evision are an integral part of the creative process. During the Assess stage, team members look at their project plans to determine whether ornot their creations meet the requirements of the Challenge and the requirements the team set for themselves. If the team members decide that the creation does not meet the team's requirements or the Challenge requirements, teams may go back to the Recognize and Imagine stages to make plans that will meet the requirements. Team members will find themselves cycling through the Recognize, Imagine, Collaborate and Initiate, and the Assess phases of the creative process many times as they create their solution.

Team Manager Tip: Help the team members track their ideas and decisions. Refer to Project Management Steps 1 & 2 in the Project Management Overview section to assist the team in determining the mini-projects that are needed to complete the Challenge solution. They can also create an entire project plan using the Project Management tool that begins on Chapter 9. Teams may wish to develop their own method of tracking their progress.

Public Product

"Students make their project work public by sharing it with and explaining or presenting it to people beyond the classroom." - PBLworks.org

Public products (presentations, artwork, posters, podcasts, videos, etc.) are built into the Destination Imagination Educational Experience. Teams present solutions before a public audience as well as to trained Appraisers. Each team has the opportunity to interact with the Appraisal Team to answer questions, provide information regarding their solution and the process in developing the solution, and share the impact of the process.

Team Manager Tip: Review Chapter 9 in Roadmap to help your team members plan their Presentation for the in-person tournament. Encourage your team members to build time for practice into their project timeline, so they are not finalizing their project the night before it is due.

21st Century Learning

Destination Imagination is committed to teaching 21st century skills through the DI Educational Experience. Roadmap is a compilation of 21st century learning best practices. Throughout every stage of the creative process, teams will learn and apply 21st century skills in multiple ways. The creative process is a natural and easy way to foster collaboration, communication, creativity, and critical thinking. The activities and skills highlighted in this resource can be used at any time to teach these skills. They will be key factors to success for today's learners as they prepare for college, careers, and global citizenship.

The deep connection that DI has with this type of learning can also be seen in our alliance with the Partnership for 21st Century Learning (P21). P21 is a network of Battelle for Kids allowing P21 to directly reach and impact thousands of school districts, schools, early-learning organizations, state departments of education, education-related nonprofits, and other educational organizations.

For more info about citizenship, collaboration, communication, creativity and innovation, critical thinking, early childhood, and self-directed learning, go to www.battelleforkids.org/networks/p21.



Social and Emotional Learning

Social-emotional skills, also known as soft skills, are vital to our students' futures. CASEL (Collaborative for Academic, Social, and Emotional Learning) defines social-emotional learning as "the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions."

The DI Educational Experience promotes social-emotional learning for our participants. Students learn to:

- Work together on a team
- Figure out their strengths
- Become responsible for their learning and their contributions to the team
- Make good decisions
- Focus on the good of the team and the solution rather than their individual wants
- Manage time, effort, and resources

Aperture Education promotes 8 SEL competencies that are based on the CASEL framework for SEL and can be observed, measured, and improved in students. The following explanations are based on information in the Aperture Education: SEL at Home project.

Optimistic Thinking

Explanation: Optimistic thinking is the belief that our efforts will result in something good. This gives us reasons to keep going. This is not magical thinking (e.g., If I put effort in, everything will go my way). It is a positive view of ourselves and our futures.

Optimistic Thinking in DI: In DI, a student will work together with teammates to create a solution that has been imagined and designed solely by their team. The solution is student-owned with no direct input from anyone outside of the DI team. Students continue to push forward with an idea even through several failed attempts. Since the idea is theirs, they believe that their efforts will result in success, and they keep trying. When a student has finished the task so that it meets their individual and team goals, they gain significant pride in their work. Even at the end of the season when the team may not advance to the next level of competition, the team members tell each other that it is alright, they will try again next year.

Team Manager Tip: During your team's reflection time be sure to have the team talk about what is going right with their solution. Reminding them of their successes will keep them feeling optimistic about their solution.

Self-Awareness

Explanation: Self-awareness is understanding both our strengths and weaknesses. Too often, the feedback our children hear focuses on what they don't do well. What the child is good at doesn't get the attention it deserves. Being able to set a path for improvement relies on the child's ability to recognize and use their strengths.

Self-Awareness and DI: As individual team members attempt solutions to the DI Challenges, they learn through trial and error what works and what doesn't. Team members try out new skills and learn what they are good at doing. They also learn which tasks they may not be great at accomplishing, and they learn about their interests.

Team Manager Tip: As you work with your team members, you will begin to notice their strengths. Take the time to point out the strengths you notice to the team members individually and as a group. You can try this exercise with your team: give each person a piece of paper and have them write their names at the top. Have the team pass the paper to the right and ask team members to write one or two strengths they see in their team members. Continue passing the paper until all team members have written on all of the papers. Share the papers with each team member and save them to pull out when the team needs reminding of their abilities.

Self-Management

Explanation: Self-management is the ability to handle emotions and actions to help get something accomplished. Learning how to calm ourselves when we are upset or angry is only part of self-management. It also involves pumping up our emotions so we can accomplish a task or activity that might be boring or difficult. Self-management is a key ability of perseverance.

Self-management in DI: Students on a DI team learn how to manage their emotions when their project is not going as they expected and to celebrate when their project is going well. A DI team member learns to ignore distraction and focus on getting the task completed. DI team members learn to support each other, ask for help from other team members when they need it, and to follow through on their promises.

Team Manager Tip: You can help your team members with self-management by asking each of them to keep a notebook where they write down what they have agreed to complete for the team. They can track the timeline and keep process notes in their notebooks.

Social Awareness

Explanation: Students with social-awareness are able to understand the thoughts, experiences, and feelings of other people around them. When you can "walk in the shoes" of another person, you are better able to work together without negative conflict and toward a common goal.

Social awareness in DI: As DI team members work together, they say things like: "You are much better at this than I am, you should do it" or "Does anyone have any ideas? John, you haven't said anything, and I know you are good at building things." DI team members become socially aware of their team members' strengths and learn to trust them to complete the task.

Many DI solutions tackle current social issues, emotional issues like families dealing with cancer, and show concern for the self-esteem of others. When we give students the responsibility for creating their own solutions, they show us how much they are aware of the world around them.

Team Manager Tip: After your team has chosen their Challenge and are beginning to plan their solution, ask the team members about their theme, message, or goals for their solution. Your team may want to work to solve or call attention to a social issue; they may want to tell a funny or sad story; or they may want to focus on their technical devices or other elements of the Challenge. Asking the question will help your team focus their ideas for their solution.

Relationship Skills

Explanation: Relationship skills are the ability to work well with others as a student makes friends, works on a project, or becomes a part of a team. These skills are necessary for future success.

Relationship skills in DI: Creating a solution to a DI Challenge can bring up powerful emotions, especially for younger students or for students who are new to DI. Team members get angry with each other at times or may not even like each other on some days. The common purpose and goals of a team can help those students overcome those differences and learn to get along. They learn to listen, to be kind, and to rely on others.

Team Manager Tip: Be sure to spend some time working on building your relationship with each team member and building relationships between team members. Intervene in disagreements before they become arguments. Help the team set team rules about how they treat and speak with each other. Schedule time for fun. Play games, go to the park, cook together, or and other activities that allow the team to have fun together and get to know each other in a variety of settings.

Goal-Directed Behavior

Explanation: Knowing how to set goals and follow up on our plans is goal-directed behavior. Goals can help us make decisions about participating in something or how to spend our money. Goals help us spend our time on what is important to us and give our lives meaning and purpose.

Goal-directed behavior in DI: DI teams set their own goals that align with the Challenge they have decided to solve. Working on goals that are team-determined allows team members to practice meeting goals without pressure from Team Managers, teachers, and parents. Team Managers guide their team members as they set goals and make their project plans. Team Managers also remind their team members of the goals and help them stay on track. However, the team members do the work and decide together if the goal needs to change. The Team Manager models what a team leader does, and the team members experience working together. In their futures, DI students will be able to join a work team and help that team determine and reach their goals.

Team Manager Tip: Help the team members set, follow, and revisit the goals they have for their Challenge solution. As their team manager, you can remind the team members of goals that they have set for themselves and encourage them to meet those goals.

Personal Responsibility

Explanation: Personal responsibility is being purposeful in our actions and keeping our promises to others. It is also owning our mistakes and doing what we can to fix them. This skill is important to our students' future careers as many employers list personal responsibility as a skill they want in their employees.

Personal responsibility in DI: DI wants team members to be lifelong learners and to do that they need to take personal responsibility for creating and sustaining a high level of responsibility. Team members collectively and individually discover what they want to know, set their own goals for their solutions, and hold themselves accountable for each step of creating and delivering that solution. Although it can be easy for a team member to make excuses for inferior work or poor performance, knowing that other team members are present, supporting, and dependent can foster a sense of personal responsibility and help keep team members on track. Working with teams of others helps build a structure of accountability and that leads to individuals accepting personal responsibility for their actions.

A former Team Manager talked about a team member who really had trouble with accepting responsibility for his actions. The Team Manager worked to build a team environment where mistakes are understood and handled without mean words or actions. While the team was solving an Instant Challenge at a tournament, a team member started jumping up and down, which caused the tower to fall. The team didn't get any points for their tower. The team member realized that he had caused the problem, apologized to the team, and vowed to pay better attention next time. His team accepted his apology and were kind to him about the mistake. The entire team learned how to accept personal responsibility and forgive each other for mistakes.

Team Manager Tip: Help your team accept that mistakes will happen and create an environment that is understanding and kind about mistakes, so team members will let their team know when they make mistakes. The chapter Facilitating for Successful Teamwork has activities and exercises that will help your team connect and learn to trust each other. When team members trust each other, they are more likely to ask for help and acknowledge their mistakes.

Decision Making

Explanation: Students with good decision-making skills are able to think about potential consequences and choose an action or response that fits their values. They use their experiences to inform their choices and learn from the effects of their decisions.

Decision making in DI: There are many decisions involved in creating a DI Challenge solution. DI participants learn to weigh their decisions against the requirements of the Challenge, the time they have available, the skills and abilities of their team members, and whether or not the decision made advances the team's goals for their solution. Team members also learn to let go of their individual idea for the good of the team. This skill gets easier as the team gains experience and they practice group decision-making. Learning to analyze the consequences of decisions and choose a path is one of the most important skills DI participants learn.

Team Manager Tip: There are several idea generation and idea focusing tools in the Creative and Critical Thinking section of Roadmap (Chapter 6). Practice using these tools with your team members. Start with something that is not part of the Challenge like a team mascot, name for your meeting space, or even a new name for a monument in your city. As the team learns to use the tools, have them use the tools to generate and choose ideas. As team manager, you can lead the team through the tools as they work on ideas for their solution. You can write down exactly what they say; you may not add any ideas that you or anyone outside of the team have.



Project Management Overview



Since the DI Challenge Experience is very similar to the process used in the workplace for project deliverables, Destination Imagination partners with the Project Management Institute Educational Foundation (PMIEF) to include project management methods and tools in our materials. You will find more information about project management in the Project Management section. Below is an overview of the process.

STEP 1: Identifying Challenge-defined requirements. The team will work to identify and understand Challenge requirements. The **Challenge Requirements** Identification worksheet is a tool to help teams complete Step 1 of the project management process for planning a Challenge solution. There is an **Example Challenge** and practice exercises to help you teach your team to create ideas for their solution.

STEP 2: Determining team-defined requirements and beginning the planning process. Once the team has identified the requirements of the Challenge, the team can begin planning the work required to solve the Challenge. The Deliverable Requirements Planning Chart aids the team in determining the Challenge requirements and the team's plan and ideas to meet those requirements. The team may also add additional team-defined requirements to enhance the solution. You can find more information about Step 2 in the **Creative Process/Project Management Steps section**. There is an example of the **Deliverable Requirements Planning Chart** in Chapter 9. The team may decide not to create a complete project plan; however, completing Step 2 will allow the team to further clarify their ideas and goals, agree on requirements, and track progress.

STEP 3: Creating a specific project plan. The **Project Management section** of Roadmap guides you and the team through creating a specific project plan to stay on track and complete a solution in time for the tournament or showcase. Creating a project plan involves several steps: setting goals, exploring resources and constraints, examining the scope of the project, determining team roles, resource and material acquisition, setting timelines and milestones, identifying risks, and tracking the project. A well-developed project plan will keep the team on track to completion.

Step 3 is optional, but is recommended for more experienced teams.

STEP 4: Reviewing the complete solution. The team will have compared the individual parts of the solution to the Scoring section of the Challenge throughout the creation of the solution. During the final review, the team members will look at all of their creations and compare them to their plans. Team members can make minor changes during this step before presenting the solution.

Example Challenge

The Project Management section of Roadmap and the introduction to **Project Management Overview section** use this example Challenge and a team's potential solution to highlight how to create a project plan.

A. Story

- a. Create and present a story that features an Attraction operating in an Unlikely Location.
- b. For this Challenge, the Unlikely Location may be any place, real or imaginary, where amusement park attractions are not usually found. A real or imaginary carnival, festival, arcade, theme park or amusement park is NOT a valid Unlikely Location.
- c. The story may be set in multiple locations, but only one will earn points for the Unlikely Location.
- d. The Attraction must be in the Unlikely Location during all or part of the Presentation.
- e. The story must show the impact of the Attraction, including its operation, on the Unlikely Location.
- f. The story may be set in any time period(s): past, present or future.

B. The Attraction

- a. Research and explore Scientific Concepts used in the operation of amusement park attractions. These attractions may be rides, games, shows, concessions or other activities that are typically found in an amusement park.
- b. Design and build an Attraction that operates live during the 8-minute Presentation. Dramatic simulations and pre-recorded demonstrations do NOT meet the requirements for the Attraction.
- c. For this Challenge, the Attraction is any team-created device that operates using at least 3 Scientific Concepts during the Presentation.
- d. For this Challenge, a Scientific Concept is one or more rules and/or natural laws that describe an action or mechanical process.
- e. Select two of the Scientific Concepts from the following list: Aerodynamics, Angular Momentum, Buoyancy, Electricity, Kinetic Energy, Lever/Leverage, Magnetism, Newton's Laws of Motion, Optics, Oscillation, Pneumatics/Hydraulics. Thermodynamics
- f. Your team may choose the third Scientific Concept from the list, or you may choose a different Scientific Concept not found in the Table. The third Scientific Concept may be from physics, mathematics, computer science, chemistry, biology, or any other scientific field.
- g. Your team may use more than 3 Scientific Concepts during the operation of the Attraction. However, only the 3 Scientific Concepts listed on the Tournament Data Form will receive points.

Challenge Requirements Identification Worksheet

Practice Exercise Challenge Element: Story

What must be included in this Challenge element?

• An Attraction that is operating in an Unlikely Location

- An Unlikely Location
- •
- •

What must NOT be included in this Challenge element?

- An Unlikely Location that is a standard place for A
- An Unlikely Location that is an amusement park, circus, or other place where amusement attractions are usually found.
- •
- •

Challenge Requirements Identification Worksheet

Practice Exercise Challenge Element: The Attraction

What must be included in this Challenge element?

- An Attraction that operates with at least 3 Scientific Concepts
- The Attraction must operate during the 8-minute Presentation
- -

What must NOT be included in this Challenge element?

- Dramatic simulations and pre-recorded demonstrations of the Attraction
- Attractions that do not use 3 Scientific Concepts
- •
- •

Challenge Requirements Identification Worksheet

Make copies of this form for all of the Challenge Elements. Challenge Element: _____

What must be included in this Challenge element?

•	
-	

What must NOT be included in this Challenge element?

•	
•	
•	
•	
•	
•	
•	

How will this Challenge element earn points? Points for Challenge elements can be found on the Scoring page in your Team Challenge.

CHAPTER 3: Team Manager Skills and Knowledge

Understanding the Destination Imagination Challenge Experience

Before you get started working with your team, please be sure to have access to all of the following documents as you will be using them throughout the Destination Imagination season.

The Destination Imagination Challenge Experience resources include:

- Team Challenges
- Rules of the Road
- Roadmap
- Instant Challenge Practice Set
- The Destination Imagination Resource Area for additional materials
- The Destination Imagination Learning Management System (hosted by Adobe Captivate Prime) for training courses and webinars

Destination Imagination is an educational opportunity allowing team members to learn about science, technology, engineering, math, arts, project management, collaboration, creative and critical thinking, and design thinking. Learning occurs first hand while teams complete solutions to Team Challenges and Instant Challenges. The educational offerings of DI are based on a unique pedagogy:

- No Interference Team members are solely responsible for all aspects of a solution—idea generation, solution design, and implementation. Non-team members may teach skills needed and identified by the team, answer clarifying questions regarding the Challenge, and help teams understand project management. However, they may not offer ideas contributing directly to the solution in any way.
- **Resource awareness** Team members recognize the value of resources available to them. Resources a team may use include, but are not limited to, skills and knowledge of the team, the time (both long-term and short- term) to complete the Challenge, the budget allowed in the Challenge, and the actual cost of experimenting and finding a solution that works.
- **Clarifying questions** Team members understand the power of questions to help them explore possible solutions. The DI Clarification system is a formal method for teams to ask important clarifying questions and to receive an answer from the International Challenge Masters, the experts of a particular Team Challenge.
- **Rapid ideation and implementation** Team members practice rapid thinking, design thinking, planning, and doing through solving Instant Challenges. They learn to get to the "aha" moment quickly. Rapid ideation and implementation becomes a useful tool for solving problems of all sizes.
- Authentic self-expression Learners uniquely express individual and team creativity and belief systems while working collaboratively to solve a Challenge. Solutions are expected to exhibit elements that express individual and team talents, strengths, and skills. DI Challenges include Team Choice Elements as a way to encourage and celebrate self-expression in the team solutions.

For more information about Destination Imagination and our educational philosophy, go to the Introduction section.

The Team Challenge

The Team Challenge has two parts: the Central Challenge and Team Choice Elements. (Note: The Improvisational Challenge does not require Team Choice Elements.)

- Central Challenge (240 points/300 points for Improvisational Challenge) : This is a project with a number of requirements that will take the team an extended period of time to solve.
- Team Choice Elements (60 points): Team Choice Elements allow the team to create two elements not otherwise scored in the Central Challenge and integrate the elements into their Presentation. Team Choice Elements showcase the team members' "specialties" their unique abilities, interests, skills, and/or talents. The team may choose anything to create for Team Choice Elements.

Your team will most likely spend the majority of the meeting time developing and refining the Team Challenge solution. There are seven Team Challenge types: Technical, Scientific, Fine Arts, Improvisational, Engineering, Service Learning, and Early Learning (a noncompetitive Challenge designed for preschool through second grade students).

Your team can earn up to 400 points at the tournament. The Team Challenge is worth up to 300 points. The team will also present a solution to an Instant Challenge, worth up to 100 points.



Instant Challenge

Instant Challenge accounts for one-fourth of your team's tournament score, so your team must be sure to make time to practice it! Each year, a variety of Instant Challenges are created. Instant Challenges require quick, creative, and critical thinking for fast idea generation and implementation. There are three types of Instant Challenges: Performance-Based, Task-Based, and a combination of the two. (You can tell quickly which type of Instant Challenge it is by looking for the uppercase words "PERFORMANCE" or "TASK" in the Challenge.) There is no guarantee which type of Instant Challenge the team will be asked to solve at the tournament, so your team should practice all three types.

Instant Challenges can be broken up into smaller subsets beyond just Performance or Task. Below is a chart to help you further categorize Instant Challenges:

PERFORMANCE	COMBINATION	ТАЅК
With Props	Any combination of Performance and Task-Based Instant Challenges	To Build: Height, Width or to Hold Weight
Without Props		To Move
With Imaginary Props		To Protect
With Team-Made Props		To Communicate
		To Change

Roadmap

Roadmap is a tool to help you, the Team Manager, guide your students to the completion of the team's solution. This section gives you an overview of the skills and knowledge necessary to be a Team Manager. Roadmap is designed to give you tools, support, and ideas as you guide your team. Team Managers are encouraged to read the entire document.

Rules Of The Road

Rules of the Road is a document that contains all of the rules, procedures, and some of the forms required to participate in the DI Challenge Experience at a tournament. It is very important for every team and Team Manager to review Rules of the Road to learn the details needed to prepare for tournaments and to make sure the team's solution to the Challenge fits within the rules.

Resource Area

The Resource Area is a password-controlled section of the Destination Imagination website. The Resource Area contains current materials and other tools to help you in managing your team. You will gain access to the Resource Area when you purchase your Team Number. The Resource Area is available throughout the year by using your email and password to log in. The Resource Area is updated with new materials regularly, so check back for new items.

Destination Imagination Volunteer Training

Destination Imagination offers both in-person and online volunteer training. In-person training is hosted by our network of Affiliate offices. Training dates are listed on your Affiliate's website, which you can find here: https://www.destinationimagination.org/challenge-program/locations.

The online volunteer training is a password-protected website hosted through Adobe Captivate Prime. Once you have registered as your team's Team Manager in the Destination Imagination registration system, you will receive an invitation to participate in our online training. The training system includes courses such as Keeping DI Participants Safe, Interference, Rules of the Road, Getting Started as a Team Manager, and Challenge-specific training. Additional topics are added throughout the year. Team Managers who participate in training are able to provide their team with a more meaningful educational experience.

DI will offer a Team Manager Certification this year. Team Managers are expected to complete the Team Manager Certification before attending their first tournament. To ensure that your team receives the best possible support from you as a Team Manager, you will want to complete the Team Manager Certification early in the DI season. The in-person and online training courses complement each other and are both strongly recommended.

Youth Protection Policy and Procedure

Destination Imagination, Inc. provides educational experiences where team members can thrive, learn, and have fun in a safe and caring environment.

Team Managers and Co-Team Managers are expected to read and abide by the Youth Protection Policy (https://www.destinationimagination.org/youth-protection-policy/), complete a background check, and complete the Keeping DI Participants Course on the DI Learning Management System.

Understanding the Team Manager Role

Roles of a Team Manager

As a Team Manager, you will serve your team in many ways. Your most important role is to guide your team to develop an independent, self-expressive solution that meets the requirements of the Challenge. Along the way, you will develop strong, personal relationships with the team members, have uplifting and frustrating moments, and get the amazing opportunity to change children's lives.

Team Managers take on many roles (mentor, friend, safe adult, bandage applier, supply purchaser, and many others) as they guide the team. The most common roles are outlined below.

Creativity Catalyst

Help team members develop and express their individual and group creativity.

- Teach the team how to use the creative process.
- Help the team learn to use idea generation and focusing tools.
- Encourage experimentation and exploration.
- Help the team become comfortable with failure and learn to move quickly to the next possible solution.
- Ask the team to make models and test the team members' theories.
- Use open-ended questions and give open-ended answers.
- Remind team members that if the Challenge doesn't say they can't do something, they can!

Educator

Guide team members as they develop teamwork, learn to use many different tools, plan and build elements of their solution, practice Instant Challenge, and learn project management skills.

- Teach your team members any skills they would like to learn that will help them solve the Challenge.
- Find outside resources that can teach any additional skills, including safe tool use.
- Use the resources in Roadmap to teach skills like teamwork (Chapter 7), project management (Chapter 9), and Instant Challenge (Chapter 5).

Challenge Expert

Serve as the team's internal expert on the Challenge and the DI rules.

- Read the Challenge several times to ensure you understand it. Read it several times with your team to ensure that all of the team members understand it.
- If your team is headed in a direction that does not meet the requirements, have your team reread the Challenge and discuss the meaning. Remember that team members may have a different solution than the one you expected. Be open to their thoughts and ideas team members are often far more creative than adults.
- Remember, you are not the final authority on the Challenge. Teach the team to use the Clarification system to ask questions of the International Challenge Masters. (Each team is allowed up to 10 Clarifications. Remember to submit only 1 question per Clarification.) You can read Published Clarifications on the Destination Imagination website under the Team Challenges tab. There, you can also click a link to ask for a Team Clarification.

Interference Deflector

Ensure that the team's solution to the Challenge is team-directed and team-developed.

- Follow the rules of Interference that are listed in Rules of the Road and on Interference section in this document.
- Teach your team members about Interference and how to avoid it. Entrust the team members with advocating for their own work and ideas.
- Remember that teaching skills, helping the team to understand the Challenge, guiding the team to be better team members, and helping team members to manage their project with project management tools are not Interference.
- Teach parents about the Interference rules and ask them to sign the Interference agreement in the Interference Contract section of this document.



Chief Safety Officer

Safeguard team members. Help the team understand personal safety, abuse prevention and recognition, safe tool use and safety guidelines, constructive conflict rules, and behavior guidelines.

- Read and understand your responsibilities outlined in the DI-Youth Protection Policy and Procedures document (available on the Destination Imagination website). Complete the Youth Protection training available in the DI Learning Management System. Share the information with your team members and team parents.
- Read, understand, and sign the Volunteer Code of Conduct. You will be required to sign it when you access the Resource Area on the Destination Imagination website.
- Guide the team to set reasonable team rules and expectations. There are suggestions in the Activities To Develop Trust section.
- Establish tool use rules and procedures. If you don't know how to use certain tools, you can ask someone experienced to teach the team members. Your local hardware store may have classes to teach safe tool use.
- Review the Safety section of Rules of the Road. This section explains what things are and are not allowed in the Presentation.
- Keep team conflict constructive. The Facilitating for Successful Teamwork section has suggestions to help you manage conflict.

Facilitator

Manage meeting space, the team calendar, meeting agendas, Presentation plans, and celebrations.

- Find a meeting space for the team. The space can be a classroom, a public space at a library or community center, or your garage or basement.
- Keep the team focused on their goals and help them move forward with their solution at each team meeting.
- Use the project management tools to help the team track their goals and progress.
- Communicate regularly with parents and guardians.
- Ask team parents for help with Instant Challenge preparation and snacks.
- Read emails from Destination Imagination headquarters and your Affiliate. These will include reminders about deadlines for tournament registration and Team Clarifications, information about Team Manager and team training opportunities, and announcements about other opportunities for your team members (including contests and scholarships).

Managing the Questions

Team ownership of the solution from inception to implementation is extremely important. Your team's solution is to be their creation alone. No one else can contribute ideas or create items to be used in the solution. However, this does not mean that the team is left without guidance and support from the Team Manager! You may ask questions—many, many questions. Your questions need to be open-ended and should not guide your team to a specific answer. Your goal is to grow a team that thinks and explores options. Below are some examples of open-ended questions that might be asked based on the example Challenge discussed earlier in the **Project Management Overview section**. Use the example questions listed below to guide you as you create your own open-ended questions that relate to the team's Challenge and the work the team members are doing at the time. These questions do not follow a specific order; you will ask them as they fit into what your team is doing. Remember, you will be asking open-ended questions at every meeting! (Replace the "Attraction" and other Challenge-specific words with words from the Challenge your team has chosen to solve.)

- What do you imagine your final solution to look like?
- Think about your life. Have you ever found something in an unexpected location?
- What do you want your audience to see or understand about your solution?
- In general, what kinds of things change?
- What is the beginning, middle, and end of your story idea?
- What do you want the Attraction to do?
- What skills or information do you need to learn to be able to build the Attraction?
- What tools will you need to build the Attraction?
- How can you learn to make the parts of the Attraction move?
- How will you build your Attraction?
- How do you want the Attraction to interact with the Unlikely Location?
- How will you transport your Attraction into the tournament?
- What does Rules of the Road say about using live animals in your story?
- What does the Challenge say about the Team Identification Sign?

As the Team Manager, you can answer questions about the Challenge and you can teach the skills team members would like to learn (or find someone from outside the team to teach the skill). Your answers need to encourage the team members to think further about their questions rather than provide them with the answers directly. For example:

Team Question: How do we sew the costume?

Appropriate Team Manager Responses:

- How do you want your costume to look?
- Has your team made a plan to create costumes?
- What are some ways to make costumes? Let me write down your ideas as you make a list.
- Have you done some research on costume making?
- Where can you go to learn more about costumes?
- Would you like to learn to sew?
- Do you know anyone who can teach you?
- Where could you go to learn to sew?

Inappropriate Team Manager Responses (Interference):

- Here is a pattern for the costume that I think would look great in your Presentation. I will cut out the pattern and then show you how to sew it.
- I don't think you can use a sewing machine, so I will show you how to use sewing glue instead.
- Let's ask your mom to make it.
- You've done it wrong. Let me do it for you.

There is more information in the **Interference section** about guiding your team without infringing on the creative process.

Clarifications

As your team members develop their solution to the Team Challenge, they may run into sections of the Challenge they find unclear or don't understand at all. Let the team know about the Clarification process and the importance of reading the Published Clarifications. You can find current Published Clarifications on the Destination Imagination website.

Published Clarifications

When the International Challenge Masters feel there is an issue about a Team Challenge or Rules of the Road that all teams should know about, a Published Clarification is released. A Published Clarification supersedes Rules of the Road and the Team Challenge, as well as a Team Clarification. Every team is expected to know the Published Clarifications. To check Published Clarifications, visit DestinationImagination.org.

Asking For A Team Clarification

If your team finds something about the Challenge unclear and they didn't find an answer in the Published Clarifications, team members can ask their Team Manager to submit a Team Clarification on their behalf. Your team may ask up to 10 questions of the International Challenge Masters (ICMs) for a Team Challenge. The ICMs will answer your team's questions and email the answers directly back to you. Team Clarifications should be submitted with your help as the Team Manager. You will need your email address and your Team Number to submit the question.

Visit the Clarifications page on DestinationImagination.org and follow instructions to ask for a Team Clarification. All Team Clarifications are kept confidential between the team and Challenge Masters. The team's ideas will not be shared with any other team. Keep in mind your team can only ask one question per Clarification request, and your team can only ask a total of 10 Clarification questions. The deadline to ask for Team Clarifications is January 31.

What Is Interference?

Imagine the self-confidence that happens when you work with a group of peers to solve a difficult challenge without any input or ideas from others. In Destination Imagination, only team members may contribute ideas and create the Team Challenge and Instant Challenge solutions. Direct assistance from non-team members—including parents, friends, and the Team Manager—is called "Interference."

Read the Interference policy in Rules of the Road, and make sure to read it with your team members as well. Interference happens when someone other than the members of the team provides ideas, creates something used in the solution, or directs the team to solve the Challenge in a certain way. All solutions in Destination Imagination need to be team-imagined, team-designed, team-developed, and team-created.

The Interference section in Rules of the Road explains Interference. However, many Team Managers are left wondering, what can they do?



Team Managers can:

- Answer questions about the Challenge and Rules of the Road. Your ultimate goal is to have the team members learn to find answers on their own. When they have a question, have your team members reread the Challenge, look up the answer in Rules of the Road, read the Published Clarifications, and/or request a Team Clarification.
- Lead the project management process for the team. This is especially important for new or younger teams. As the team gains experience, teach the team to take over the management of the project.
- Reinforce the goals and plans set by the team. Once the team members have planned a project, you can hold them to their plan and goals. At times, team members may want to give up if the original idea is not working. Encourage them to keep trying. If they want to change the plan, the change must be agreed upon by the entire team. You can help facilitate these discussions.
- Help the team learn the skills necessary to complete the solution. For example, if the team members have decided that they want to sew a costume and they want to learn how to sew, you can teach them or find someone else to teach them to sew. However, only a team member may stitch the team-created costume.
- Use Instant Challenges to teach skills and to help overcome any issues the team is having within the Team Challenge. Instant Challenges are a great way to teach stage presence, building skills, and quick decision-making. While you want your team to work hard to find solutions when practicing Instant Challenge, you can ask a question or offer a suggestion if the team is stuck. (Remember, when the team is presenting an Instant Challenge at a tournament, you cannot say a word or interact with the team in any way.)
- Guide the team through the creative process. Teach the team members to use the idea generating and focusing tools, and encourage them to build their idea lists. Younger team members will struggle to let go of their own personal ideas. Your role as the Team Manager is to help them get past this. To avoid any arguments over who gets to write down the ideas (and for the sake of time), you can write down the team's ideas, as long as the ideas are written exactly as the team states them no editing.
- Determine safety rules to ensure that the team knows how to handle tools and other materials safely. If you think the skill the team wants to learn is not safe, you can say "no." However, the team will need to figure out another way to accomplish the goal. You cannot suggest other ways to get the job done. When you say "no" for a safety reason, be sure that the suggested skill is really out of the team's ability level. Team members are often far more capable than adults believe them to be.
- Set rules for the meeting location. If the meeting is in your home, you can set rules about the use of your home. For example, you may want a rule about what can be eaten, or you may want a rule about where painting can occur. You may also need to enforce the rules of other meeting locations. For example, if the meeting place has a rule against spray paint, the team will have to find another method of painting or a different place to paint.
- Set the schedule based on your availability. If you can't be there, the team may not be able to meet. You can share the meeting responsibility with a co-Team Manager or a team parent, but the schedule should be set based on your time first and then by how often the team wishes to meet.
- Ask open-ended questions. Avoiding Interference requires Team Managers to be aware of their personal goals and biases. When you are asking questions, be sure that you are not attempting to lead a team to a specific idea or solution. Be open to the team's ideas and encourage the team to follow an independent path.

Interference Quiz

Review the following quiz with your team members to ensure everyone understands Interference. Choose all the answers that are not Interference.

- 1. A team member wishes to use welding in the solution.
 - a. The Team Manager thinks that welding is not safe for the age and ability of the team, so he or she encourages the team to generate ideas for new ways to solve the part of the Challenge that might have needed welding.
 - b. The Team Manager says, "No, use duct tape instead."
 - c. The Team Manager asks, "Do you know how to weld?" or "How can you learn to weld safely?"
- 2. After the team has left the meeting, the Team Manager breaks a prop.
 - a. The Team Manager fixes the prop before the next meeting.
 - b. At the next meeting, the Team Manager lets the team know that the prop is broken.
 - c. The Team Manager says nothing.
- 3. The team members decide that they need several materials.
 - a. You take the team to the store. Team members choose the materials and you purchase the items for them.
 - b. The team gives you a list of specific materials and you get everything on the list.
 - c. The team lists paint but doesn't name the color of the paint. You grab what you want from the paint mistakes section at the hardware store.
- 4. The team wants to cut a piece of wood in a certain way.
 - a. The team asks the hardware store employee to do a custom cut that isn't normally done for other customers.
 - b. The team asks the hardware store employee to cut the wood in a manner that is usually done for other customers.
 - c. The team members figure out which tool they need to use to make the cut and ask the Team Manager to teach them how to use the tool.
- 5. The Team Manager notices that one section of the team's Structure is missing some glue.
 - a. The team is busy working on painting the set, so the Team Manager adds the missing glue.
 - b. The Team Manager asks the team if the Structure meets both the Challenge requirements and the team-defined requirements.
 - c. The Team Manager allows the team to test the Structure without saying anything. When it collapses, the Team Manager asks the team to analyze what happened.

Answers to the Interference Quiz

- 1. A team member wishes to use welding in the solution
 - a. Not Interference Ensuring the team's safety or encouraging team members to generate a list of additional ways to solve the issue is not Interference.
 - b. Interference Team Managers cannot suggest direct solutions.
 - c. Not Interference Team Managers can help the team learn new skills.
- 2. After the team has left the meeting, the Team Manager breaks a prop.
 - a. Interference No one can contribute to the team's solution in any way, even if they broke the prop.
 - b. Not Interference Let the team know what happened; team members have to fix it.
 - c. Interference Not informing the team members about something that happened to their prop when it was out of their control would be contributing to the failure of the solution and is Interference.
- 3. The team members decide that they need several materials.
 - a. Not Interference Team Managers can pay for the team's materials.
 - b. Not Interference Team Managers and others can purchase items for the team as long as they only purchase the items included in the team's list.
 - c. Interference The Team Manager cannot make decisions for the team, even very small ones.
- 4. The team wants to cut a piece of wood in a certain way.
 - a. Interference If the hardware store doesn't make the requested cut for other customers, the team members will need to figure out how to do it themselves.
 - b. Not Interference The team asks the hardware store employee to cut the wood in a manner that they usually do for other customers.
 - c. Not Interference Team Managers can teach team members the skills they want to learn.
- 5. The Team Manager notices that one section of the team's Structure is missing some glue.
 - a. Interference No one but the team can contribute to the team's solution.
 - b. Not Interference Team Managers can remind the team of the Challenge requirements.
 - c. Not Interference Teams learn best from experimenting. Failure is a great teacher.

Interference Contract

Explain the Interference Policy to team members and their parents. Ask team members and parents to review the Interference Contract and sign it. These contracts are solely to help everyone understand and follow the rules of Interference. Keep the forms for your team records.

TEAM MEMBER: OUR TEAM OWNS EVERY PART OF OUR TEAM CHALLENGE SOLUTION

- 1. Every idea for every part of the solution must come from the members of our team. Our parents, friends, teachers, and Team Manager must keep their ideas to themselves.
- 2. When someone offers to help us, or works on our solution in any way, we will say, "No thanks! We can do it ourselves!"
- 3. If we get stuck and can't figure out how to solve a problem that arises, we will create ideas and come up with another way to do it.
- 4. When we finish our solution, we can proudly sign the Declaration of Independence and know that the entire solution is ours.

Team Member Signatures: _____

Team Member Signatures: _____

TEAM MANAGER(S): MY TEAM OWNS EVERY PART OF ITS TEAM CHALLENGE SOLUTION

- 1. I can facilitate the team's understanding of the Challenge and rules, as well as help the team to learn skills, but I must keep my ideas to myself and my hands off the team's solution.
- 2. Every idea for every part of the solution must come from the members of my team. They can figure it out for themselves even if it means that sometimes they will have to change their plans and do something another way.
- 3. At the team's request, I may acquire specifically requested materials for the team's use. At no time may I ever choose materials for the team without the team's input, and I may never select materials, take actions, or ask questions with the intent of leading the team to a solution.
- 4. When my team members do not know how to go about researching and/or acquiring information and materials, my role is to teach them the skills they will use to become independent learners for a lifetime. In other words, I may provide the team with multiple resources, but I may not select or lead the team to any aspect of its solution.
- 5. When my team is ready to turn its ideas into reality, I will stand by and manage. That means I may facilitate discussions and/or disagreements, help my team manage its time to meet its deadlines, make sure team members are working in a safe manner, acquire items requested by the team, and most importantly, ensure that each individual on the team is valued by the others.
- 6. When my team finishes its solution, I can proudly sign the Team Manager's line on the Declaration of Independence and know that the solution is the team's alone.

Team Manager Signature: _____

Team Manager Signature:

PARENT(S)/GUARDIAN(S): THE TEAM OWNS EVERY PART OF ITS TEAM CHALLENGE SOLUTION

- 1. I must keep my ideas to myself and my hands off the team's solution. I understand that completing a DI Challenge can be difficult at times, but I believe the team members are capable of handling whatever they encounter and can overcome anything. I understand that, if I interfere, I send the message to the team members that I do not trust that they are capable of creating the solution on their own.
- 2. Every idea for every part of the solution must come from team members. They must figure it out for themselves. That means that sometimes they will do things in a way that will take longer and/or might not be the most efficient or best way (in my opinion). I understand that this is a normal part of the process and I will not interfere.
- 3. When my child's team finishes its solution, I will be proud that the team members worked so hard and completed the project with their own hands and minds. I will be proud to say that they did it all by themselves!

Parent/Guardian Signature: _____

Parent/Guardian Signature: _____

What does a Destination Imagination solution look like?

Your team may benefit from watching team Presentations from past seasons to see how teams approach different Team Challenges. You can find Presentations from past seasons posted on video sites such as YouTube. You can also go to the Destination Imagination YouTube channel (youtube.com/user/DIGlobalFinals) for more videos.

Team Manager Tip: Watching other team Presentations can help both new and experienced teams understand what may be expected of them at the tournament. When watching, make sure the team remembers the rules of Interference. Team Presentations should be viewed in a broad sense—what they look like, how the teams present, what the Presentation Sites look like—rather than with the intention of repurposing another team's ideas. What did your team learn from watching other teams' Presentations? What exceptional elements can the team identify? What did the team feel were the strongest parts of the Presentation? The weakest?



Instant Challenge and Teamwork Activities Supply Box

The following list contains the materials needed to build a supply box for Instant Challenges and team activities. You can use these materials for the Instant Challenges included in Roadmap and the Instant Challenge Practice Kit. Each Instant Challenge includes a specific list of materials. You can also use the materials to create your own Instant Challenges.

□ Balloons	□ Golf Balls	Ping-Pong Balls
Binder Clips (all sizes)	Index Cards	Plastic Bags
Cardboard Tubes	Mailing Labels	Rubber Bands
Chenille Sticks (Pipe Cleaners)	□ Marbles	□ Straws
Coffee Stirrers	□ Newspapers	□ String
\Box Cups (plastic and paper)	Paper (copy, colored,	\square Tape (masking and other)
□ Clothespins	construction)	Tennis Balls
Craft Sticks	Paper Clips (large and small)	Toothpicks
Envelopes	Paper Plates	Twist Ties
□ Foil	Paper Towels/Napkins	
	Paper Towels/Napkins	
General Supplies		
	 Paper Towels/Napkins Measuring Tape 	□ Scissors
General Supplies		 Scissors Yardstick (meterstick)
General Supplies Colored Markers 	Measuring Tape	
General Supplies Colored Markers Crayons 	 Measuring Tape Pencils (sharpened and 	
General Supplies Colored Markers Crayons 	 Measuring Tape Pencils (sharpened and 	

Blindfolds
 Spaghetti Noodles (small box)
 Sandpaper

CHAPTER 4: Solving the Challenge

Planning Team Meetings

Your team will meet multiple times during the Destination Imagination season. The number of meetings will depend on how much time there is until your tournament or showcase, the ages and attention spans on your team, the complexity of the solution your team designs, the amount of time you have in your schedule as the Team Manager, and the availability of your team members.

Before you begin meeting with your team, it is required that you complete the following tasks:

- Complete your background check.
- Read the Destination Imagination Youth Protection Policies and Procedures document
- Sign the DI Code of Conduct
- Complete the Youth Protection online training on the DI Learning Management System
- Complete the Team Manager Certification on the DI Learning Management System

It is also strongly recommended that you read the following:

- Rules of the Road
- Roadmap



Team Benchmarks

Since the number of meetings and amount of time available to each team varies significantly, a strict timeline may be difficult to follow. However, here are some team benchmarks that will help to keep the team on track. Teams are encouraged to accomplish all of these benchmarks before presenting at a tournament.

Early Challenge Requirement Identification & Planning (Meetings 1-6)

- Read and understand the Challenge.
- Complete the Challenge Requirements Identification practice worksheets so team members understand what they need to plan their project.
- Complete a Challenge Requirements Identification worksheet for each Challenge elemen or complete a team-determined method of planning their solution.
- Complete a Deliverable Requirements Planning Chart for each of the Challenge elements. Include Team Choice Elements and consider other mini-projects that the team needs to complete for its solution. This is listed as Step 2 of the project management process. You are welcome to use another method to help the team decide and plan their solution.
- Learn about open-ended questions and how to use them.
- Learn about Published Clarifications and Team Clarifications.
- Complete the Team Interest Inventory.
- Review the guidelines for creating a Team Challenge project plan.
- Begin creating the project plan. (This is not required, but it will help the team members track their solution and stay on schedule.)
- Complete at least one Instant Challenge at every meeting.

Finalizing Planning and Beginning to Create the Solution (Meetings 3 – 10)

- Review the Scoring section of the Challenge several times.
- Determine which deliverables or mini-projects need the most attention.
- Generate ideas to meet the requirements for each deliverable.
- Focus ideas and decide on which ones to pursue and create for each deliverable or mini-project.
- Research how to create or build the deliverables (mini-projects) required in the Challenge.
- Learn skills necessary to create or build solution elements.
- Complete the project plan. (This is not required, but it will help the team members track their solution and stay on schedule.) Your team can use the PMIEF tools in Chapter 9 or use another project tracking method.
 - Set project goals and complete the Team Project Goals worksheet.
 - Review information on Resources, Constraints, and Assumptions.
 - Complete the Resources, Constraints, and Assumptions worksheet .
 - Consider the dependencies of the projects and complete the Deliverables and Dependencies worksheet.
 - Read the section on Establishing Team Roles and Responsibilities.
 - Decide who is responsible for which deliverables and tasks.
 - Complete the Team Roles and Responsibilities worksheet.
 - Complete a Milestones and Tasks worksheet for each deliverable.
 - Review the Resource Planning and Budget section and complete a worksheet for each deliverable.
 - Review the Risk Management section and complete a worksheet for each deliverable.
 - Divide deliverables among team members using the completed Challenge Requirements Identification worksheet and the Deliverable Requirements Planning Chart.
- Gather necessary materials.
- Begin experimenting and creating solutions.
- Complete at least one Instant Challenge at every meeting.
- Hold team check-ins at every meeting. Reflect on progress and plan the next meeting.
- Register for your Regional or Affiliate Tournament.

Working on a Solution (Meetings 6 - 14)

- Complete a score check and review. Is the team meeting the scoring requirements of the Challenge? Complete this task a few times while working on the solution.
- Finish the team project plan. (Optional)
- Continue working on deliverables (mini-projects).
- □ Hold team check-ins at every meeting. Reflect on progress and plan the next meeting.
- Complete at least one Instant Challenge at every meeting

Preparing for Presentation at a Tournament or Showcase (Meetings 9 - 20)

- Complete a score check and review. Is the team meeting the scoring requirements of the Challenge? Complete this task a few times while preparing for the Presentation.
- Review solution elements to determine if all plans are possible in the remaining time. As a team, decide if some solution elements should be eliminated and agree on which ones to eliminate.
- Finish all remaining deliverables (mini-projects or solution elements).
- Complete the required paperwork: Tournament Data Form (found in the Challenge), Declaration of Independence, and Expense Report (found in Rules of the Road). Be sure to bring the number of copies listed in the Challenge to the tournament.
- □ Plan for transportation of all solution items to the tournament or showcase venue.
- Ensure the team's parents know their child's Team Number, competition level, Challenge, Presentation time, and the team's gathering place and time. Encourage parents to share it with other team supporters. This will prevent lost parents and grandparents.
- Ensure that parents understand the team's Challenge and solution. The Team Manager can provide the Challenge Preview, a copy of the Scoring section of the Challenge, and/or an overview of the team's solution so parents understand what the team has accomplished. Make sure to clarify that you are providing this information for their understanding of their children's accomplishments, but that parents must not offer suggestions for improvement. However, they can offer praise and encouragement to the team.

Reflecting on the Team's DI Challenge Experience

(Final two meetings - usually after a tournament or showcase)

- Celebrate the completion of the solution!
- Discuss what you and the team learned and what the team might have done differently.
- Team Managers and parents can plan a celebration party.
- Clean up the team's workspace. Team parents can assist with this.
- □ If you are moving to the next level of competition, review the plan, and determine if team members want to change anything before the next tournament. If they do, revise the plans, create a meeting schedule, and encourage the team to build the next version of the solution!

Team Manager Tip: Don't worry if your team members are not as far along as you would like them to be. Remember, the value of the DI Challenge Experience lies in the way it allows teams to overcome obstacles and solve life's challenges.



Meeting Agenda Templates

Meetings will work best when structured around the current needs of the team. In the beginning, you will set the agenda. As the season moves along and you get to know your team better, you may need to adjust the number of times your team meets as well as the length of time of the team meetings. Roadmap offers examples of Meeting Agendas based on an experienced Team Manager who wants to plan his/her own meetings, a 16-week meeting plan that outlines activities and goals for each meeting for a new Team Manager, and an 8-week plan for teams that want to begin meeting later in the year. All of the Meeting Agendas have the goal of helping you guide your team to a solution that is presented at the local tournament.

Team Manager Tip: As the team gains experience and the developing solution becomes more complex, your team may ask for additional time to work together or may need more work space. Be aware of this and attempt to plan for the growth of the project in your schedule and workspace.

Agendas for Experienced Team Managers

Below are some example templates designed to help you plan meetings throughout your DI season. (The times are just suggestions.) Meetings can be weekly or more often. As you get to know your team members, you will be able to determine how long they can productively meet. At the beginning of the season, your team might meet weekly. They may need to meet more often as they get closer to the date of the tournament or showcase. If you are managing an older team, the team members will tell you how often and how long they wish or need to meet. Use the examples as you begin, and then create your own agendas. A Blank Meeting Agenda template is available in this section.

General Team Meeting Agenda

Time	Activity
10 - 20 minutes	 Reconnect as a team Consider having a snack if your meeting starts in the afternoon. Review goals for the meeting. Review accomplishments from the previous meeting. Have team members share something good that happened during their week.
20 minutes	 Instant Challenge practice and reflection Complete one Instant Challenge. Be sure to reflect on the experience. Allow the team to redo the Instant Challenge in a new or better way after they reflect.
30 - 120 minutes	Planning and/or building the team project. This time will get longer as the team gets closer to the scheduled tournament or project due date.
15 minutes	Reflection• Discuss accomplishments• Discuss any issues or disagreements• Review task lists and timeline• Make plans for homework and next meeting
Notes:	

Parent Meeting Agenda

Early in the process, you will want to have a meeting with team parents. You can provide information about meetings, any team or location rules, the DI Interference policy, and how to reach you. You will want the team parents to provide their contact information as well as information about food allergies and other needs of their child. Ask parents or volunteers to help with snacks, Instant Challenge, or other aspects of managing a team.

Time	Activity
10 - 20 minutes	 DI Overview Explain the educational goals of the DI Challenge Experience. Ask for a commitment from families about meeting times. Provide the link to the Youth Protection Policy to the team parents and discuss the Policy and your plans to keep their students safe. Discuss team budget and materials expenses.
20 minutes	 Recruit parent volunteers Create a snack schedule. Ask for a volunteer(s) to organize Instant Challenges for each meeting.
30 minutes	 Instant Challenge Have the parents and team members work together to solve an Instant Challenge. Reflect on the results. Discuss what everyone learned.
15 minutes	 Interference Explain the concept of Interference and why it is important to the team. Discuss Interference contract. Have team members and team parents sign the Interference contract.
10 minutes	Answer questions and adjourn.
Notes:	

Helping Your Team Decide on a Challenge (1 to 4 meetings)

One of the first decisions your team will make will be deciding which Challenge to solve. Some teams know right away which Challenge resonates the best with them, while others take longer. The Points of Interest, found on the **Destination Imagination website**, are designed to help you guide your team in making a decision.

Initial Team Meeting

Time	Activity
20-30 minutes	 Getting to Know Each Other Choose one or two activities from the Team Work section. Have team members share something good that happened during their week. Ask team members what they hope to accomplish as part of this team.
20 minutes	 Instant Challenge practice and reflection Complete one Instant Challenge. Be sure to reflect on the experience. Allow the team to redo the Instant Challenge in a new or better way after they reflect.
30 - 60 minutes	 Learn about the Challenges Read the Challenge Previews and watch the Team Challenge video Discuss the Challenge Previews and determine which ones to review further. Either read the Challenges that the team wants to consider or ask for team member volunteers who will read them at home and bring back a summary.
15 minutes	 Reflection Discuss the accomplishments. Discuss any issues or disagreements. Make plans for homework and the next meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Challenge Decision Team Meetings (2 to 3 meetings)

Time	Activity
20-30 minutes	 Getting to Know Each Other Choose one or two activities from the Team Work section Have team members share something good that happened during their week. Ask team members what they hope to accomplish as part of this team
20 minutes	 Instant Challenge practice and reflection Complete one Instant Challenge. Be sure to reflect on the experience. Allow the team to redo the Instant Challenge in a new or better way after they reflect.
15 minutes	 Is the team ready to decide on a Challenge? If yes, and all team members agree on one Challenge, set the next team meeting. Log in to the Resource Area and be sure to set the team's final Challenge selection. Begin using the meeting planning templates and benchmarks in the Guiding Your Team section of Roadmap.
Varies and may take additional meetings	 If the team members are not ready to decide on the Challenge, work through the following list of activities to help guide them toward making a decision: Ask the team members to think about each Challenge and come up with three reasons to do the Challenge and three reasons not to do the Challenge. Ask the team members to bring their reasons to the next meeting. Have the team begin generating themes and ideas for each Challenge. (You can write down the ideas.) After they have listed their ideas, ask the team members if one Challenge stands out above the rest. Ask individual team members to choose a Challenge and have them create a persuasive argument to present to the team at the next meeting. Instead of asking "which Challenge do you like?" ask, "which Challenge(s) can you live with solving" or "can you live with solving the Fine Arts (or whichever) Challenge?" If one person is objecting, ask the team member to outline his or her concerns/desires and see if the team can find a way to include the ideas in another Challenge (e.g., one team member really wants to do a musical, but the others really want to build structures. Can the team choose the Engineering Challenge and agree to make the solution a musical?) Ask the team to imagine what their solution might look like when they have finished. Write down their ideas and thoughts. Does one of the Challenges fit their ideas more than the others? Remind the team members that they can try one Challenge and if it doesn't work, they can choose another one. Does that make it easier for the team to choose a Challenge now? Avoid a majority rules vote, if at all possible – Challenge selection is an important opportunity for the team members to begin working together.
15 minutes	Reflection • Discuss the accomplishments. • Discuss any issues or disagreements. • Make plans for homework and the next meeting.
Notes:	

Challenge Requirement Identification and Planning (2 to 6 Meetings)

Time	Activity
20-30 minutes	 Getting to Know Each Other Choose one or two activities from the Team Work section. Have team members share something good that happened during their week. Ask team members what they hope to accomplish as part of this team.
20 minutes	 Instant Challenge practice and reflection Complete one Instant Challenge. Be sure to reflect on the experience. Allow the team to redo the Instant Challenge in a new or better way after they reflect.
30 - 60 minutes	 Plan the project Choose two or three benchmarks and begin planning. Help the team work through all the benchmarks for meetings 1-6.
15 minutes	 Reflection Discuss the accomplishments. Discuss any issues or disagreements. Make plans for homework and the next meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Working on a Solution (4 to 8 meetings)

Time	Activity
20-30 minutes	 Connecting as a team Have a snack. Review goals for the meeting Review accomplishments from the previous meeting. Have team members share something that happened this past week
20 minutes	 Instant Challenge practice and reflection Complete one Instant Challenge. Be sure to reflect on the experience. Allow the team to redo the Instant Challenge in a new or better way after they reflect.
30 - 90 minutes	 Create the solution The team can divide the work to build the solution. Create opportunities for team members to check on progress and ask questions of other team members. Help the team work through the benchmarks for meetings 3 - 14.
15 minutes	 Reflection Discuss accomplishments. Discuss any issues or disagreements. Make plans for homework and the next meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Preparing for the Team's Presentation (2 to 4 Meetings)

Time	Activity
20-30 minutes	 Connecting as a team Have a snack. Review goals for the meeting Review accomplishments from the previous meeting. Have team members share something that happened this past week
20 minutes	 Instant Challenge practice and reflection Complete one Instant Challenge. Be sure to reflect on the experience. Allow the team to redo the Instant Challenge in a new or better way after they reflect.
30 - 120 minutes	 Create the solution The team can divide the work to build the solution. Create opportunities for team members to check on progress and ask questions of other team members. Practice, practice, practice Consider having a dress rehearsal Help the team complete the benchmarks for meetings 9 - 20
15 minutes	 Reflection Discuss accomplishments Discuss any issues or disagreements Make plans for homework and next meeting
5 minutes	Set the next meeting time and adjourn.
Notes:	

Reviewing and Reflecting on the DI Challenge Experience (1 To 2 Meetings)

You and your team can decide how long to meet and what activities to do during your final meetings of the DI season. Review the benchmarks for the last two meetings, find something fun to do together, and celebrate! If you are moving to the next level of competition, the team members will need to decide what, if anything, they want to change about their solution. They will need to set their new goals and plan the next meetings.

Blank Meeting Agenda

Time	Activity
10 - 20 minutes	Reconnect as a team
20 minutes	Instant Challenge practice and reflection
30 - 120 minutes	Planning and/or building the team project. This time will get longer as the team gets closer to the scheduled tournament or project due date.
15 minutes	Reflection Discuss accomplishments Discuss any issues or disagreements Review task lists and timeline Make plans for homework and next meeting
Notes:	

Example Meeting Agendas for a 16-Meeting Season

New Team Managers

These meeting agendas are to guide new Team Managers and teams. They are designed to be used after your team has selected a Challenge to solve. They are detailed examples/suggestions to help you enhance your team's educational experience. You may choose to follow these suggestions, use the more general meeting agendas on the previous pages, or you may create your own team meeting plan. As your team members become more experienced, they will begin to manage their own agendas and you will need to choose different activities and Instant Challenges based on the current needs of the team. If your meeting times are shorter than the times suggested here, you can use the Blank Meeting Agenda Form to divide each meeting into two or more separate meetings.



Suggested Time	Activity
Before the meeting	 Read Roadmap and Rules of the Road. Read the team's chosen Team Challenge at least two times. Complete online training and attend local in-person training for Team Managers when it is offered. Gather Instant Challenge materials. Gather paper and pencils. Copy the Catch the Ball activity sheet. Copy the Mini-Challenge Blitz activity. Copy the Interference Contract. Copy the Team Interest Inventory. Copy the Team Challenge.
Connecting as a team 10 minutes (30 to discuss the Challenge)	 Connecting as a team Remind the team members of the Challenge they have selected - check in to see if everyone still agrees on the team's choice (go back to the Challenge selection suggestions if discussion is still needed). Complete the Catch the Ball activity. Complete the Let's Hear It activity.
20 minutes	 Instant Challenge practice and reflection Review Instant Challenge Practice Procedures with the team. Have the team complete 1 or 2 Challenges from the Mini-Challenge Blitz.
30 - 120 minutes	 Review DI Challenge and Scoring section in Rules of the Road and page 10 in Roadmap. Read the team's selected Challenge together, making note of any questions. Review the Interference Contract. Have each team member sign a copy of the Interference Contract and take a copy home for their parents to sign (or have parents sign it at a parent meeting).
15 minutes	 Reflection Have the team members talk about what went well and what they would change. Provide supportive/constructive comments with the team. Ask the team members to complete the Interest Inventory and bring it to the next meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Suggested Time	Activity
Before the meeting	 Read the Team Challenge again. Gather the materials needed for the Instant Challenges. Copy the Idea Generation Chart.
Connecting as a team 10 minutes	 Connecting as a team Collect completed Interest Inventory sheets. Collect completed Interference Contracts. Ask the team 3-4 icebreaker questions from the Getting to Know You activity list
20 minutes	 Instant Challenge practice and reflection Have the team complete the Spaghetti Structure Instant Challenge. Discuss the Project Management Tool for Instant Challenge. Discuss the Idea Generating/Focusing for Instant Challenge tools. Have the team redo the Spaghetti Structure Instant Challenge using the Project Management and Idea Generating/Focusing tools Discuss team roles. Ask if the team noticed any team members filling those roles during Instant Challenge practice. Give your observations to the team.
30 - 120 minutes	 Analyze the Team Interest Inventory sheets. Discuss results with the team. Discuss the qualities of successful teamwork: trust, common goals and purpose, good communication, respect for people and ideas. Walk the team through the New DI School Name exercise. Have the team members discuss how they can use the Idea Generation Chart for generating ideas for elements other than their team name.
15 minutes	 Reflection Review team accomplishments. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are happy with the decisions made during the meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Suggested Time	Activity
Before the meeting	Read the Team Challenge again.Gather the materials needed for the Instant Challenges
Connecting as a team 10 minutes	 Connecting as a team Ask some team check-in questions What did you learn this week that you could use to solve the Challenge? What was the best part of the week? Ask a few of the Getting to Know You questions.
20 minutes	 Instant Challenge practice and reflection Complete the Materials Matter exercise. Complete 1 or 2 Mini-Challenges from Mini-Challenge Blitz.
30 - 120 minutes	 Complete the Setting Team Rules activity. Have the team choose a Challenge element to begin solving (the overall story theme, a setting, or other simple aspect of the solution). Use the ABC Brainstorming exercise to have the team generate as many ideas as possible about the selected Challenge element. Record the team's ideas and save them for the next meeting.
15 minutes	 Reflection Review team accomplishments. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are happy with the decisions made during the meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Suggested Time	Activity
Before the meeting	 Read the Team Challenge again. Gather the materials needed for the Instant Challenges
Connecting as a team 10 minutes	 Connecting as a team Ask some team check-in questions What did you learn this week that you could use to solve the Challenge? What was the best part of the week? Ask a few of the Getting to Know You questions.
20 minutes	 Instant Challenge practice and reflection Complete the Materials Matter exercise. Complete 1 or 2 Mini-Challenges from Mini-Challenge Blitz.
30 - 120 minutes	 Complete the Setting Team Rules activity. Have the team choose a Challenge element to begin solving (the overall story theme, a setting, or other simple aspect of the solution). Use the ABC Brainstorming exercise to have the team generate as many ideas as possible about the selected Challenge element. Record the team's ideas and save them for the next meeting.
15 minutes	 Reflection Review team accomplishments. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are happy with the decisions made during the meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Suggested Time	Activity
Before the meeting	 Gather the materials needed for the Instant Challenges. Review the Solving the Challenge section. Make several copies of the Challenge Requirements Identification Worksheet.
Connecting as a team 10 minutes	 Connecting as a team If the team is connected and cohesive, do a quick check-in and get started. If the team needs more time to build trust and communication, choose an appropriate activity from the Teamwork section.
20 minutes	Instant Challenge practice and reflection Complete the Invisible Props Instant Challenge
30 - 120 minutes	 Review the Solving the Challenge section of Roadmap with the team. Check Destination Imagination website for Published Clarifications. Complete the Challenge Requirements Identification Worksheet Practice Exercise. This is the Recognize stage of the creative process and Step 1 of the Project Management process. Review the Team Challenge with the team. Complete a Challenge Requirement Identification Worksheet for each Challenge element listed in the Team Challenge.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are feeling comfortable with their process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Suggested Time	Activity
Before the meeting	 Gather the materials needed for the Instant Challenges. Review Steps 1 and 2 of the Project Management Process. Make several copies of the Deliverable Requirements Planning Chart.
Connecting as a team 10 minutes	 Connecting as a team If the team is connected and cohesive, do a quick check-in and get started. If the team needs more time to build trust and communication, choose an appropriate activity from the Teamwork section.
20 minutes	 Instant Challenge practice and reflection Complete On the Banks Instant Challenge.
30 - 120 minutes	 Review the steps in project management with the team and discuss the examples. Check the Destination Imagination website for Published Clarifications. Review the Clarification process - ask the team members if they need to ask for a Team Clarification. Review the Challenge Requirements Identification worksheets the team completed during the last meeting. Using one of the Challenge Requirements Identification worksheets completed during the last meeting, begin generating ideas to meet the requirements of the Challenge. The team can use any of the tools listed in the Thinking Skills section of Roadmap. Hits and Hot Spots can help the team narrow the ideas to a more manageable list. The other tools can help the team decide on just one idea. Have the team members focus their ideas and then complete a Deliverables Requirement Planning Chart for each task or mini-task they decide to complete to solve the Challenge. The team and chart for each task or mini-task they decide to complete building, story development, set building, etc.). The team can choose to begin creating a solution or the team can choose to move on to plan the next element. (Note: getting started on creating/building can help the team members stay focused on their goals.) This process will repeat over the next several meetings until the plan is complete and the team begins to focus solely on completing/building a solution. This is the Initiate and Collaborate stage of the creative process.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are feeling comfortable with their process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Suggested Time	Activity
Before the meeting	Gather the materials needed for the Instant Challenges.
Connecting as a team 10 minutes	 Connecting as a team If the team is connected and cohesive, do a quick check-in and get started. If the team needs more time to build trust and communication, choose an appropriate activity from the Teamwork section.
20 minutes	 Instant Challenge practice and reflection Choose an Instant Challenge from Roadmap or from the Instant Challenge Practice Set (found in the Destination Imagination Resource Area).
30 - 120 minutes	 Review the Challenge Requirements Identification worksheets the team completed during the previous meetings. Using one of the Challenge Requirements Identification worksheets, begin generating ideas to meet the requirements of the Challenge. The team can use any of the tools listed in the Thinking Skills section of Roadmap. Hits and Hot Spots can help the team narrow the ideas to a more manageable list, while the other tools can help the team decide on just one idea. Have the team focus ideas and then complete a Deliverables Requirement Planning Chart for each task or mini-task the team decides to complete to solve the Challenge. The team can choose to begin creating a solution or the team can choose to move on to plan the next element. (Note: Getting started on creating/building may help the team members stay focused on their goals.) The team members can work together to build the next steps of a solution or they could divide the elements and work in smaller groups (structure building, story development, set building, etc.). This process will repeat over the next several meetings until the plan is complete and the team begins to focus solely on completing/building a solution. This is the Initiate and Collaborate stage of the creative process.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Ask the team members about materials they need. Plan field trips to purchase or find materials, or have the team make a specific list of materials for you to acquire Check in to ensure team members are feeling comfortable with their process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Meeting 8 - 11

(Or Until Planning Is Complete)

Suggested Time	Activity
Before the meeting	Gather the materials needed for the Instant Challenges.
Connecting as a team 10 minutes	 Connecting as a team Do a quick team check-in and get started.
20 minutes	 Instant Challenge practice and reflection Choose an Instant Challenge from Roadmap or from the Instant Challenge Practice Set (found in the Destination Imagination Resource Area).
30 - 120 minutes	 Review the Challenge Requirements Identification worksheets the team completed during the previous meetings. Check the Destination Imagination website for Published Clarifications. Review the Clarification process - ask the team members if they need to ask for a Team Clarification. The team members can choose to begin creating a solution or they can choose to move on to plan the next element. (Note: Getting started on creating/building can help the team stay focused on their goals.) The team can work together to build the next steps of a solution or the team could divide the elements and work in smaller groups (structure building, story development, set building, etc.). Using one of the Challenge Requirements Identification worksheets, begin generating ideas to meet the requirements of the Challenge. The team can use any of the tools listed in the Thinking Skills section of Roadmap Have the team members focus ideas and then complete a Deliverables Requirement Planning Chart for each task or mini-task they decide to complete to solve the Challenge. This process will repeat over the next several meetings until the plan is complete. and the team begins to focus solely on completing/building a solution. This is the Initiate and Collaborate stage of the creative process.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Ask the team members about materials they need. Plan field trips to purchase or find materials, or have the team make a specific list of materials for you to acquire Check in to ensure team members are feeling comfortable with their process. Review the Scoring section of the Challenge and the team's Deliverable Requirements Planning Charts to ensure the team is on track with team goals and Challenge requirements. This is the Assess stage of the creative process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Meetings 12 - 14

(Use this agenda until the team is ready to begin preparing for the tournament. The team may need more or fewer than 16 meetings.)

Suggested Time	Activity
Before the meeting	Gather the materials needed for the Instant Challenges.
Connecting as a team 10 minutes	 Connecting as a team Do a quick team check-in and get started.
20 minutes	 Instant Challenge practice and reflection Choose an Instant Challenge from Roadmap or from the Instant Challenge Practice Set (found in the Destination Imagination Resource Area).
30 - 120 minutes	 Have the team continue building elements of the solution. Check the Destination Imagination website for Published Clarifications. Review Clarification process - ask the team members if they need to ask for a Team Clarification. Confirm tournament registration. Plan a dress rehearsal if the team would like to have one. Begin planning the tournament day, including transporting props and team members, food, and other activities.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Ask the team members about materials they need. Plan field trips to purchase or find materials, or have the team make a specific list of materials for you to acquire Check in to ensure team members are feeling comfortable with their process. Review the Scoring section of the Challenge and the team's Deliverable Requirements Planning Charts to ensure the team is on track with team goals and Challenge requirements. This is the Assess stage of the creative process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Finalizing The Solution

(Use this agenda until the team's solution is complete. The team may need more or fewer than 16 meetings.)

Suggested Time	Activity
Before the meeting	Gather the materials needed for the Instant Challenges.
Connecting as a team 10 minutes	 Connecting as a team Do a quick team check-in and get started.
20 minutes	 Instant Challenge practice and reflection Choose an Instant Challenge from Roadmap or from the Instant Challenge Practice Set (found in the Destination Imagination Resource Area).
30 - 120 minutes	 Have the team finish building the solution. (Note: The team may decide that some of the team goals may not be met and that some of the project plan will not be completed. The team can still bring the solution to the tournament.). Have the team members complete the required paperwork for their Challenge, including the Tournament Data Form, the Expense Report (with receipts), and the Declaration of Independence. Finalize planning for the tournament day, including transporting props and team members, food, and other activities. Have the team create a toolkit for the tournament. Review the Final Checklist for Presentation with the team members to ensure they are ready for the tournament.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Ask the team members about materials they need. Plan field trips to purchase or find materials, or have the team make a specific list of materials for you to acquire. Check in to ensure team members are feeling comfortable with their process. Review the Scoring section of the Challenge and the team's Deliverable Requirements Planning Charts to ensure the team is on track with team goals and Challenge requirements. This is the Assess stage of the creative process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Last Meeting Before Tournament

Suggested Time	Activity
Before the meeting	Gather the materials needed for the Instant Challenges.
Connecting as a team 10 minutes	 Connecting as a team Do a quick team check-in and get started.
20 minutes	 Instant Challenge practice and reflection Choose an Instant Challenge from Roadmap or from the Instant Challenge Practice Set (found in the Destination Imagination Resource Area).
30 - 120 minutes	 Have the team finish building solutions. (Note: The team may decide that some of the team goals may not be met and that some of the project plan will not be completed. The team can still bring the solution to the tournament.) Have the team members complete the required paperwork for their Challenge, including the Tournament Data Form, the Expense Report (with receipts), and the Declaration of Independence. Have the team members review the last page of the Tournament Data Form to reflect on their journey through the creative process. Host the dress rehearsal. Pack up all elements of the team's solution.
15 minutes	 Reflection Congratulate the team and celebrate accomplishments. Remind the team members about the scheduled Presentation time, the time they need to be at the Prep Area, and the team's meeting time and location at the tournament. Ensure parents have all of the same information and that they know the team's school, Team Number, Challenge, and competition level. Remind parents to share that information with any other team supporters (grandparents, aunts, uncles, teachers, etc.). Consider creating a document for team parents that lists the Challenge's scoring.
5 minutes	Set the next meeting time and adjourn.
Notes:	

8-week Meeting Agendas

Teams and Team Managers can choose to solve the challenge in as little as 8 weeks. These agendas are based on having at least 4 hours each week to meet and each agenda can be broken down into two 2-hour meetings each week. (There is not enough time in a one-hour meeting to get the team started and then get anything accomplished before they have to leave.) Team members may need to agree to work on some of the project on their own time, away from the meeting. You as the Team Manager can help facilitate the homework assignments. Solving a Challenge in an 8-week time frame will take dedication and planning on the part of the Team Manager. This includes reading the materials and participating in training opportunities both online and in person. In addition, all team members will have to be dedicated to attending each meeting and staying focused each meeting. Should you not complete a task during the assigned meeting, you will need to move that task to the next meeting and adjust the agenda accordingly. Teams may decide not to do some of the suggested activities in these agendas to allow for the available time and the team's goals.

Team Manager Tip: When you are working with an 8-week time frame, it can be tempting to jump in and help team members finish their project. Please follow the Interference guidelines and remember that you can assist the team with planning and keeping them on schedule.

Suggested Time	Activity
Connecting as a team 30 minutes	 Connecting as a team Introduce Team Managers to the group. Have team members introduce themselves and their parents. Divide the group into parents and team members. Have each team complete the Stack 'Em Up Challenge. Discuss the results and share ideas across teams.
Discussion of Youth Safety and Interference Policy 30 minutes	 Discuss the Youth Protection Policy in age-appropriate language. Explain the DI educational philosophy and why non-Interference is important to their children's learning. Have team members and parents sign the Interference contract.
Meeting Scheduling and planning	 Determine a snack schedule. Explain that team parents will need to contribute financially for equipment and materials purchases. You can ask for a small amount up front to help or ask them to find the things that the team members say they need for their solution. Team parents can leave and come back later if they would like.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Week 1: Parent Meeting

Challenge Decision Meeting

Suggested Time	Activity	
60 - 90 minutes	 Deciding on a Team Challenge Watch the Challenge Preview video on the DI website. Have team members discuss their favorite Challenge and why they like it. If the team agrees on the same Challenge, read the Challenge choice together, noting questions and ideas that the team members develop. If the team does not agree on the Challenge, try these activities: Have the team members generate ideas for themes for each Challenge to see which one has the most ideas from the team. Give a piece of paper to each team member. Have them choose their two favorite Challenges and write down three good things and three not so good things about the two Challenges. Ask the team members to share their answers. Ask the team to imagine what their solution might look like when they have finished. Write down their ideas and thoughts. Does one of the Challenges fit their ideas more than others? If your team is still stuck, there are other activities in the 16 week meeting agendas. Have the team make a choice, but avoid a majority rules vote, if at all possible – Challenge selection is an important opportunity for the team members to begin working together. 	
30 minutes	 Idea generating exercise Walk the team through the Team Name Challenge. Have the team members discuss how they could use the Idea Generation Chart for generating ideas for elements other than their team name. 	
15 minutes	 Reflection Acknowledge what the team has accomplished. Have the team members discuss their thoughts about the meeting. Discuss what is planned for the next meeting. 	
Homework	Give each team member a copy of the Interest Inventory and ask them to complete it at home and bring it to the next meeting.	
5 minutes	Set the next meeting time and adjourn.	
Notes:		

Week 2: Challenge Theme And Challenge Element Planning

Suggested Time	Activity
Before the meeting	 Read Solving the Challenge, ABC Brainstorming, Hits & Hotspots, Team Interest Inventory, Planning a Solution to a Team Challenge in Roadmap before meeting with the team. Print a copy of the Individual Interest Survey and the Team Interest Tally sheets. Print copies of the Challenge the team has chosen. Print a copy of the Did You See That? Instant Challenge. Gather materials for the Instant Challenge. Print several copies of the Challenge Requirements Identification Worksheet. Bring a large pack of sticky notes. Bring sticky dots, enough for 10 per team member. Print several copies of the Blank Deliverable Planning Requirements Chart.
Connecting as a team 10 minutes	 Connecting as a team Remind the team of the Challenge they chose at the last meeting. Have each team member share what they are most excited about in the Challenge. Have the team complete the Camp Out Instant Challenge. Complete the Setting Team Rules activity.
30 - 120 minutes	 Deciding on a Challenge theme Read Section I of the Challenge (Section I & II for the Service Learning Challenge) with the team. Using the ABC Brainstorming tool, have the team members generate as many ideas as they can about possible themes for their solution. Write down all the ideas they say on individual sticky notes. After the team has listed all possible ideas, put the sticky notes on a wall. Have the team work together to put the ideas into categories. Give each team member 10 dots and have them place their dots on their favorite groups or individual themes. They can put more than one dot on an idea, but they only have 10 total to place. Looking at the dots, the team will most likely have focused their ideas to 2 or 3. Have the team members discuss those ideas and see if they can come to an agreement on their theme. Understanding the Challenge elements Review the Challenge elements and have team members assign themselves to each of the Challenge elements. Try to get at least two members for each element. Remind the team of the timeline so they will have to divide the work. Review with the team the "Planning a Solution to a Team Challenge" topic in Roadmap. There is a practice worksheet to help the team understand how to add their own ideas to the Challenge. Divide the team into their agreed upon work groups (team members may be on more than one workgroup, so have them choose the one to start with). Give the groups a copy of the Challenge Requirements Identification Worksheet with the element the group will work to solve. Remind the team of the agreed upon theme. Have the group complete a Deliverable Requirements Planning Chart for each element of the Challenge with their ideas and ensure that their Deliverable meets the requirements of the Challenge and the team's planned theme. At the end of the meeting, collect the worksheets so the team's work is saved for
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are feeling comfortable with their process.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Week 3: Challenge Element Planning And Beginning To Create Solution

Suggested Time	Activity
Before the meeting	 Read Solving the Challenge, ABC Brainstorming, Hits & Hotspots, Team Interest Inventory, Planning a Solution to a Team Challenge inRoadmap before meeting with the team. Print a copy of the Individual Interest Survey and the Team Interest Tally sheets. Print copies of the Challenge the team has chosen. Print a copy of the Did You See That? Instant Challenge Gather materials for the Instant Challenge. Print several copies of the Challenge Requirements Identification Worksheet. Bring a large pack of sticky notes. Bring sticky dots, enough for 10 per team member. Print several copies of the Blank Deliverable Planning Requirements Chart.
Connecting as a team 10 minutes	 Connecting as a team Remind the team of the Challenge they chose at the last meeting. Have each team member share what they are most excited about in the Challenge. Have the team complete the Camp Out Instant Challenge. Complete the Setting Team Rules activity.
30 - 120 minutes	 Deciding on a Challenge theme Read Section I of the Challenge (Section I & II for Service Learning Challenge) with the team. Using the ABC Brainstorming tool, have the team members generate as many ideas as they can about possible themes for their solution. Write down all the ideas they say on individual sticky notes. After the team has listed all possible ideas, put the sticky notes on a wall. Have the team work together to put the ideas into categories. Give each team member 10 dots and have them place their dots on their favorite groups or individual theme. They can put more than one dot on an idea, but they only have 10 total to place. Looking at the dots, the team will most likely have focused their ideas to 2 or 3. Have the team members discuss those ideas and see if they can come to an agreement on their theme. Understanding the Challenge elements and have team members assign themselves to each of the Challenge elements. Try to get at least two members for each element. Remind the team of the timeline so they will have to divide the work. Review with the team the "Planning a Solution to a Team Challenge" topic in Roadmap. There is a practice worksheet to help the team understand how to add their own ideas to the Challenge. Divide the team into their agreed upon work groups (team members may be in more than one workgroup, so have them choose the one to start with). Give the groups a copy of the Challenge Requirements Identification Worksheet with the element the group will work to solve. Remind the team of the agreed upon theme. Have the group complete a Deliverable Requirements Planning Chart for each element of the Challenge with their ideas and ensure that their Deliverable meets the requirements of the Challenge and the team's planned theme. At the end of the meeting, collect the worksheets so the team's work is saved for the next meeting.
15 minutes	 Reflection Review team accomplishments. Discuss any difficulties the team might have had. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are feeling comfortable with their process.
Homework	Ask team members to look at home for the materials that they need to complete their Challenge and have them bring them to the next meeting.
5 minutes	Set the next meeting time and adjourn.
Notes:	

Weeks 4 - 7: Completing The Solution

Suggested Time	Activity	
Before the meeting	 Gather the materials the team requested at the last meeting. (Remember, you can only gather what the team has requested.) Select an Instant Challenge and gather materials for an Instant Challenge. 	
Connecting as a team 20 minutes	 Connecting as a team Have the team complete an Instant Challenge from Roadmap or the Instant Challenge Practice Set. 	
30 - 120 minutes	 Solving the Challenge Have the team continue to work on the Challenge elements they planned on the Deliverable Requirements Planning Charts. Check the Destination Imagination website for Published Clarifications. Review the Scoring section of the Challenge and the Deliverable Requirements Planning Chart to ensure the team is on track with team goals and Challenge requirements. During meetings 6 – 7, the team should start practicing their solution, if they have enough completed. 	
15 minutes	 Reflection Have each group report on their project to the team. Amplify the team's accomplishments. Discuss any difficulties the team might have had. Ask the team members about any materials they might need for the next meeting. Ask the team members what they would like to accomplish at the next meeting. Check in to ensure team members are feeling comfortable with their process. 	
Homework	Ask the team members if there is any aspect of the project that needs work outside of the meeting. If yes, provide materials and get agreement from the team member to complete the task.	
5 minutes	Set the next meeting time and adjourn.	
Notes:		

Week 8: Getting Ready For Tournament

Suggested Time	Activity	
Before the meeting	 Gather the materials the team requested at the last meeting. (Remember, you can only gather what the team has requested.) Select an Instant Challenge and gather materials for the Instant Challenge. 	
Connecting as a team 20 minutes	 Connecting as a team Have the team complete an Instant Challenge from Roadmap or the Instant Challenge Practice Set. 	
30 - 120 minutes	 Solving the Challenge Have the team finish building the solution. (Note: The team may decide that some of the team goals may not be met and that some of the project plan will not be completed. The team can still bring the solution to the tournament.) Have the team members complete the required paperwork for their Challenge, including the Tournament Data Form, the Expense Report (with receipts), and the Declaration of Independence. Finalize planning for the tournament day, including transporting props and team members, food, and other activities. Have the team create a toolkit for the tournament. Review the Final Checklist for Presentation with the team members to ensure they are ready for the tournament. Check the Destination Imagination website for Published Clarifications. Have a dress rehearsal of the final solution. You can invite parents to observe, but not provide feedback to the team. 	
15 minutes	 Reflection Review team accomplishments. Review the Scoring section of the Challenge and the Deliverable Requirements Planning Chart to ensure the team is on track with team goals and Challenge requirements. Discuss packing and travel plans with the team and team parents 	
Homework	Ensure the team members and team parents know when and where the team's Presentation will be. Tell the parents the team name, team number, Challenge, and school or organization.	
5 minutes	Set the next meeting time and adjourn.	
Notes:		

Reflection Questions and Activities

Include time for reflection at every team meeting.

Reflection Questions To Ask Your Team:

- As a team, how are you doing overall? What are your team's strengths at this point in the process?
- Where and how might your team improve? Has your team been using and following the provided project management tools and activities?
- Is everyone adhering to the ground rules and deadlines set by your team?
- Are you comfortable with the number of ideas generated in this session? (Teams should strive for fluency and should generate more ideas than can be used.)
- Have you explored as many options as possible? Are there other ways you could encourage different ideas?
- Have you spent time trying to generate ideas that might seem crazy or ridiculous at first so the team can push beyond the obvious solutions?
- How have you made progress toward a solution?
- Do you, as a team, need to return to idea generation to create more ideas?
- Are you on track with plans and timelines? Have things changed? Should the timeline be adjusted or should new deadlines be set?
- Can you visualize your ideal solution? What are ways your team can achieve that ideal solution?
- Have you decided on Team Choice Elements and integrated them into your solution?
- Are you checking the Published Clarifications? Have the Published Clarifications changed your approach in any way? Do you need to ask for a Team Clarification?
- Have you encountered conflict? What are ways that you can work out conflict when it arises in the future? Can you think of encouraging words or activities that would help break the tension so the team can focus on the problem?
- What are your team's top priorities?
- Does your team need to acquire any new skills? What are ways to learn the skills needed?
- Think about the activities you've done during your meetings. How is your team doing overall? What are your team's strengths at this point in the process? Where might you improve?
- Are you, as a team, effectively directing your ideas into solutions? Can you think of ways to improve this process? (It's important to remember that problem solving is a fluid process.)
- Can you think of an instance when your team benefited (or might have benefited) from returning to idea generation?
- Review Rules of the Road. Are you prepared for a tournament? Have you revisited the Published Clarifications?

Reflection Activity

Plan a Dress Rehearsal Dress rehearsals can help team members polish any rough patches in their solution. Your team can learn how audiences respond to particular sections of the Presentation and help identify where team members seem to have trouble. It is important for your team to become comfortable with the Presentation time limit, set up, audiences, and live performance. You can invite parents, friends, or other family members to see the show. You can even make it an event!

😐 Team Manager Tips:

- A dress rehearsal can be a great chance for the Team Manager to share information with parents or people interested in going to the tournament. If you can, provide tournament information, Presentation times, travel information, and any other information parents may need.
- When presenting your dress rehearsal, make sure to remember the rules of Interference. Inform or remind audience members about the rules, and make sure they don't provide input regarding the team's solution. The audience can cheer or celebrate along with the team, but the team's solution is the team's alone. Afterward, the team members should discuss and assess the Presentation on their own.
- It is also helpful for the team to create a list of things that could go wrong with the Presentation. This can help the team prepare for potential mishaps. Additionally, it can be helpful to have the team present while the Team Manager "sabotages" the Presentation. The Team Manager can call, "Time Out!" and then remove or disable an element of the Presentation by pulling an extension cord from the wall, physically removing an item, etc.

Getting Ready for a Tournament

As a Team Manager, it is your responsibility to register your team for the tournament. Each Region and Affiliate has different registration procedures, so you will need to get in touch with a Tournament Director to make sure your team is ready and scheduled for the tournament. Your Affiliate Director can direct you to the right contact person. A full list of Affiliate Directors is available at DestinationImagination.org.

Review the Tournament Guide for Teams

The Tournament Guide for Teams is published annually to help teams prepare for tournaments. It is made available in January and can be downloaded from the Destination Imagination Resource Area. The Tournament Guide for Teams provides information about tournament officials, details regarding Challenge-specific site procedures, and sample rubrics that Appraisers may use at the tournament. It also provides information related to keeping your team supporters informed about Presentation times and locations.

Complete the Paperwork

You will need to enter your team's paperwork into the Resource Area, so Appraisers will have access to it via mobile scoring during the tournament. While you will be typing the forms into your account in the Resource Area, your team must tell you what to type on the forms. This will ensure that tournament officials can read your information, and it will make their job much easier!

Create a Tournament Toolkit

Be aware that transportation of props, backdrops, technical elements, and other Presentation materials can often cause problems. Your team should work on preparing for any potential difficulties before you travel to your tournament. For example, your team could practice disassembling and reassembling props for transport. Additionally, your team should discuss any complex elements that may cause difficulties. Many teams create travel toolkits for tournaments to help them solve problems on the road. The team can pack replacement parts, tools, theatrical makeup, and anything else the team may need to do touch-up work, fix a broken prop, etc.

Questions to ask the team:

- What are the elements of your Team Challenge solution that may fail?
- What tools would be required to fix those elements?
- What tools do you need for general upkeep and maintenance?

Toolkit Worksheet

List toolkit items to bring to the tournament:



CHAPTER 5: Instant Challenge

The Instant Challenge component of the Destination Imagination Challenge Experience allows your team to learn to assess a situation, define the problem, make a plan, and create solutions quickly. The boardroom skills learned through Instant Challenge prepare DI participants to handle making business and life decisions in rapidly changing situations. Instant Challenge is worth 25% of your team's overall score at a tournament (if your tournament includes Instant Challenge). Often, a solid Instant Challenge score will significantly help a team at a tournament, especially if Team Challenge scores are very close. The team should be diligent about practicing and preparing for all types of Instant Challenges. Although the Instant Challenges are never the same, there are certain skills that can drastically improve your team's chances of solving any Instant Challenge and any problem or situation team members may encounter in the future.

Instant Challenge General Practice Procedure

- 1. The team stands around a table that has a copy of the Instant Challenge laying face down.
- 2. If the Instant Challenge requires materials, the materials will be on the same table. The team may not touch the materials until time starts.
- 3. When everyone is ready, the Team Manager flips over the Instant Challenge.
- 4. The Team Manager reads the copy of the Instant Challenge aloud. As soon as the Team Manager is finished reading, the timer starts and the team can begin working.
- 5. The Team Manager reads the time allowed for the Instant Challenge to the team and makes sure the team follows the timing. Since the team is not allowed to take any timing devices, including wristwatches, into the Instant Challenge room at the tournament, team members should practice asking for the time remaining in the Challenge. To ensure that the team members understand the procedures that will be followed in the Instant Challenge room, the Team Manager should only announce how much time is left if the team asks or if the Instant Challenge directs you to announce the time during the Challenge.
- 6. The Team Manager scores the team's solution to the Challenge. To help the team members understand the scoring and reflect on their results, it is helpful to have them score their own solution.

Reflection/Processing Questions

After each Instant Challenge, it's important that the team members discuss their process. The Team Manager's job is to facilitate the discussion as necessary, without telling the team exactly what to do. However, the Team Manager may provide objective observation about team behavior as the team works through an Instant Challenge.

For example, the Team Manager can ask questions such as:

- What did you do well?
- What was the most difficult part of the performance or the task?
- What could you do to improve in the future?

The Team Manager should not provide answers to the reflection questions. Team members need to reflect and assess the process on their own based on objective information.

Don't worry about perfection, especially at the beginning of the season. Focus on having fun and having the team give its best effort! This is also a chance for team members to get used to the format, procedure, and scoring of Instant Challenges. Pay particular attention to the scoring, which can help determine how to best solve the Instant Challenge.

Team Manager Tip: To help build strong critical thinking skills, the Team Manager needs to model for the team what objective information looks like. You can do this by:

- Repeating what a team member actually says without interpreting the meaning.
- Observing team members' behaviors while solving the Challenge.
- Taking notes as the team works so you can accurately report what you see.
- Recording the team so you can point out what is said or done and allow the team members to evaluate their solution based on their observations of the recording.

Team Manager Tip: When your team is beginning to learn about Instant Challenges, start with Challenges that are simple to solve to give the team a chance to succeed together. As the team gains experience, you can increase the difficulty of the Challenges. If the team members are completely stuck on a particular Instant Challenge, stop and have them try again on another day. If the team members are still struggling, you can teach them about the materials they are using, talk them through potential solutions, or go back to an easier Challenge. Remember, processing after the Instant Challenge, whether the team was successful or not, is an important part of the learning process. It will help the team members internalize what they learned.

Team Roles for Instant Challenge

Teamwork does not mean that all team members must be working together on the same thing at the same time. In fact, teams often work better when tasks are divided up into smaller and more manageable pieces. Below are some key team roles that may be useful as the team works through an Instant Challenge solution. The team could choose to assign similar roles for a Team Challenge as well.

- **The Task Manager** is in charge of the overall development and implementation of a Task-Based Instant Challenge.
- **The Performance Manager** is in charge of the overall development and implementation of a Performance-Based Instant Challenge.
- **The Timekeeper** is in charge of asking the Appraisers for the amount of time that remains for the team to solve the Instant Challenge.
- **The Materials Manager** is in charge of making sure that materials are used thoughtfully because most Instant Challenges do not offer unlimited quantities.
- **The Score Manager** is in charge of keeping track of where the team will earn the most points in an Instant Challenge and making judgments about where the team should focus its time.
- The Flex Team Member has the ability to float between numerous positions or fill in a new one if necessary.

Team members should practice taking on each role and expanding themselves into new roles that have not been defined here. The best teams are made up of those who understand and respect the roles of others while still being able to solve the Challenge.

Team Manager Tip: Write each role on a different card or piece of paper. Have the team members randomly draw for a role to fulfill during an Instant Challenge. This gives each team member the opportunity to try different roles, to understand the importance of each role, and to discover the role that fits them best.

Project Management Tool for Instant Challenge

Instant Challenges can be approached as short projects and can be managed with a simplified version of the project management process. Practice using this tool so the team becomes familiar with how to apply it to an Instant Challenge. This form must not be brought into the Instant Challenge room at a DI tournament and is not part of tournament procedures. This tool is a method for the team to use in practice. The goal is to get the team to use the Initiating, Planning, Executing, Monitoring, and Controlling, and Closing steps automatically, without relying on the form. You can find more information in the Creating a Project Plan section of Roadmap.

Step	Questions to ask; things to do	
Initiating	 Understand the requirements of the Instant Challenge: What type of Instant Challenge is it? What do you need to have done at the end of the Instant Challenge? What elements of the Instant Challenge receive a score? Are there limitations in the scoring? What are the materials? How much time do you have? 	
Planning	 Create a plan to complete the Instant Challenge: How much time are you going to dedicate to generating ideas? Practice generating ideas in 30 – 40 seconds. What ideas do you have that will meet the requirements of the Instant Challenge? How can the materials be used? What is your final idea? Can you divide the work so it gets done on time? Who is going to do what? What is your back-up plan if your first solution doesn't work? How will you know when your solution is complete? 	
Executing, Monitoring, and Controlling	 Complete the Instant Challenge: Are you checking your time regularly? Is your solution working? If not, do you want to try your back-up plan? Does everyone have a role? Is everyone fulfilling their roles? Does your final solution meet the requirements of the Instant Challenge? 	
Closing	 Discuss your team process and solution after completing the Instant Challenge: Did you follow your plan? What would you do differently next time? What could you improve? Did your team work well together? 	

Instant Challenge Project Management Practice Tool

(To be used to practice Instant Challenge only.)

Give the team a copy of this form to use during Instant Challenge practice. Have the team complete the form after reading the Instant Challenge. Early in the season, the process will take longer than the time listed on the Instant Challenge, so give the team five extra minutes to complete the form. After the form is completed, have the team start the Instant Challenge. As the season progresses, the team should be able to run through the steps without the form and within the time limit of the Instant Challenge.

Step	Questions to ask; things to do
Initiating	Understand the requirements of the Instant Challenge:
Planning	Create a plan to complete the Instant Challenge:
Executing, Monitoring, and Controlling	Complete the Instant Challenge:
Closing	Discuss your team process and solution after completing the Instant Challenge:

Team Manager Tip: You may find that some Instant Challenges are impractical for you to set up for your team. You can have your team members read those Instant Challenges and use this form to imagine how they might solve it. This will prepare the team for the larger Instant Challenges that may be encountered at tournaments.

Idea Generating/Focusing for Instant Challenge

Choose an Instant Challenge your team has not solved before. You'll guide your team through the creative process to discuss different ways to approach the Instant Challenge.

Idea Generating

Have your team think of as many approaches to the Instant Challenge as possible. To learn the technique, ask the team members to say their ideas out loud, and have one team member write every idea. While generating ideas, encourage the team to think of as many ideas as possible, and make sure to defer judgment (both yours and the team's). When generating ideas, there is no such thing as a bad idea.

Idea Focusing

Next, your team should focus the ideas down into workable solutions. Ask the team members to verbalize what they think are the most promising ideas. Why are the ideas promising? What is it about the other ideas that makes them less promising?

Plan your Instant Challenge Solution

The team can complete the Project Management for Instant Challenge tool to help organize ideas.

Complete the Instant Challenge

When the team members have finished generating and focusing ideas, have them solve the Instant Challenge. Since they have already planned their solution, give them 30 seconds less time than is listed in the Instant Challenge. After they have completed the Instant Challenge, score it and have the team discuss the process.

Reflection/Processing Questions

- Did the idea generation time help? Why or why not?
- How can the team get better at using the creative process for Instant Challenges?
- How did the team use the Project Management for Instant Challenge tool in the solution?
- How might you approach a Task-Based Instant Challenge more effectively? How might you approach a Performance-Based Instant Challenge more effectively?
- How might you ensure that you are considering as many ideas as possible in a short time frame?
- How has your teamwork changed since your first Instant Challenge?
- Have you defined team roles? Are you finding team roles to be helpful?

The team can complete this exercise several times. The goal is to get the team to do all of the steps as quickly as possible. Defining the Challenge, idea generating, and planning should take less than a minute.

Developmental Instant Challenges

The Instant Challenges in this section are designed to help your team to begin working together and should be done in order. The goal is to have the team become familiar with the Instant Challenge process.

Team Manager Tip: When your team is new, improv games are a great way to help the team members get to know each other and work together. In the Resource Area of the DI website, download the document "Improvisation Concepts." It is chock full of activities for your team!

Let's Hear It

Have your team stand in a circle.

- Choose one team member to go first.
- That team member turns to the team member on the right and starts by saying, "Did you hear about ____?" and fills in the blank with one word.
- The next team member immediately repeats what the first one said but adds two words to the end.
- Continue around the circle until the team manager says reverse. Then, the process repeats going the opposite direction using a new "Did you hear about ____?"

Example:

- Did you hear about lunch? (1 word)
- Did you hear about lunch at school? (2 words)
- Did you hear about lunch at school after our recess? (3 words)
- Did you hear about lunch at school after recess when food jumped around? (4 words)
- Did you hear about lunch at school after recess when food jumped around and our forks didn't work? (5 words)

Did You Hear That?

A Foley artist is the person who makes sound effects for movies. Today, your team is going to try your hands at being Foley artists!

The team must separate into two groups: the Foley artists and the actors. Take a few minutes to plan and practice a short performance that incorporates at least 4 sound effects. Your performance can be about anything you like, as long as the performance has a beginning, a middle, and an end. Your Foley artists can use the materials around the room to help make their sound effects. If you want, you can reverse roles and try again!

- How did your team decide who would be in which group?
- If you reversed roles, did the sound effects and/or the performance improve? If so, how?
- Were the sound effects important to the story? If so, how?
- How creatively did the Foley group use objects to produce the sound effects?
- Were all three parts of the story included? Describe the beginning, the middle, and the end of the story.

Team Manager Tip: Take some time to get comfortable with performances. Your team won't know the type of Instant Challenge it will face at the tournament. Your team will also have to present its Team Challenge solution to a live audience. Practicing Instant Challenge is a great way for your team to learn the rhythms of working with teammates and to build trust in improvisation and presentation.

Pestilence

Use this activity to kick-start the team's performance skills. The premise is simple: a pest has invaded the team's workspace and has taken up residence. Identify the type of pest living in the workspace. Your team will create a performance about how to safely remove the pest from their workspace using only the materials available in the room. Your team will have up to 4 minutes to plan and prepare a performance about the weekend and 2 minutes to perform.

Being A Good Sport

This game requires at least 2 athletes, 2 judges, a host, and a co-host. With smaller teams, team members can play more than one character. The host gets an everyday activity from the Team Manager. The everyday activity they receive becomes the "sport" that the "athletes" will be attempting. An example of an everyday activity would be "dishwashing" or "tying shoes." The host speaks with the athletes for a minute and then allows the athletes to begin to warm up.

While the athletes are warming up, the host will throw the commentary over to the co-host who will be joined by an expert. They will talk for a minute and then a team member will act as a buzzer, which means the competition has begun. The athletes then pantomime doing the everyday activity in a very physical, intense, and ridiculous way. Once the buzzer ends the competition, the athletes debrief with the host and then receive scores from judges.

Team Manager Tip: You may rearrange the roles of team members based on what you wish to accomplish. For example, if you believe the team needs to work on communication, it might be useful to have multiple athletes competing and pantomiming in different ways while the commentators remark on various things going on in the scene. You can also create new roles, such as a coach, to enhance the scene.

Materials Matter

Types Of Materials

The materials used in designing Instant Challenge solutions can usually be described as having properties that allow them to function in one or more of the following ways:

- Extenders: used to achieve length
- Connectors: used to fasten
- Controllers: used to contain, confine, and/or carry

Make Materials Work

Take the time to encourage the team to discover ways to interact with common materials and better understand the materials' properties. Although many materials can easily fit into one type of function, virtually any material can function as an extender, connector, and controller. This knowledge will not only help your team use materials that are supplied for Instant Challenges, but will also help them look at how to repurpose items or use them in unique and creative ways in the Team Challenge solution. Have the team come up with as many different uses as possible for each of the following materials. Try to create at least 20 different uses for each. Uses may be as functional or as off-the-wall as you would like.

- Straw
- Paper Clip
- Envelope
- Chenille Sticks (pipe cleaners)
- Piece of Paper
- Tape
- Labels

How might you use each of these materials as an extender, as a connector, and as a controller?

Mini-Challenge Blitz: Understanding Materials

Focus

Innovation and Design Process, Technical Design and Construction, Teamwork

This activity requires rapid-fire thinking and also invites the team to explore the physical properties of common Instant Challenge materials. First, simply go through the four Mini-Challenges in order. After the team has attempted all four, go through the Materials Matter worksheet. If the team wants to—and if you have the time and materials—you can do the Mini-Challenge Blitz again.

(You can also use it again much later to reinforce the lessons learned.)

Mini-Challenge 1: A Device

Challenge: Create a device that will move a Ping-Pong ball from the floor, to the seat of a chair, to a tabletop to the other without falling. The team is only allowed to operate the device and may not directly touch the Ping-Pong ball.

Time: 4 minutes

Materials: 1 Envelope, 1 Clothespin, 1 Binder Clip, 1 Mailing Label, 2 Straws, 1 Ping-Pong Ball

Mini-Challenge 2: A Bridge

Challenge: Build a bridge between two chairs that will support the weight of a golf ball for 10 seconds. **Time:** 4 minutes

Materials: 1 Paper Plate, 1 Rubber Band, 1 Clothespin, 2 Jumbo Paper Clips, an envelope, 1 Golf Ball

Mini-Challenge 3: A Tower

Challenge: Build a tower that will hold a golf ball and a Ping-Pong ball above the table as high as possible while holding two marbles.

Time: 4 minutes

Materials:

2 Marbles, 1 Index Card, 3 Straws, 3 Paper Clips, 1 Golf Ball, one envelope, 1 Ping-Pong Ball

Mini-Challenge 4: A Tale

Challenge: Using only gestures and pantomime, tell a tale of three great creations: a device, a bridge, and a tower. You may plan using words, but you must present non-verbally. Include the three other Mini-Challenges in your tale.

Time: 4 minutes (2 minutes to plan story with words, 2 minutes to present non-verbally)

Processing Questions

- How did your team delegate responsibilities?
- Were there one or more team members who were really strong at building? Planning?
- Generating ideas? Focusing ideas?
- How did your team respond to the stress of doing multiple Mini-Challenges in a row?
- How did your strategy change as you solved each Mini-Challenge?

Think of Combinations

Sometimes it can be beneficial to practice using combinations of materials. Have your team practice thinking about how to combine materials to expand their use. For example:

- Two straws stuck together, one inside the other, can serve as a longer extender.
- A straw stuck into a piece of clay will stand erect to help build a tower.
- Using its own glue, an envelope can be stuck to a rolled piece of paper to create a device like a paper ladle.

Looking at the materials used for the Mini-Challenge Blitz, what are some other combinations that could help? Can you combine items to create three extenders, three connectors, and three controllers?

Extenders	Connectors	Controllers
1.	2.	3.
1.	2.	3.
1.	2.	3.

Spaghetti Structure

Focus

Innovation and Design Process, Technical Design and Construction, Teamwork

Challenge

Your TASK is to build a freestanding **bridge** that is as tall as possible and spans to opposite sides of an 8.5in x 11in sheet of paper (an A4 sized paper will work as well). You will make the bridge out of spaghetti and mailing labels. For this Challenge, freestanding means the bridge may not be attached to anything (including the piece of paper or floor) and must stand without team member assistance.

Time

You will have up to 2 minutes to discuss strategy and up to 6 minutes to build your bridge

Procedure

Part One (2 minutes): Discuss your strategy.

Part Two (6 minutes): Using only the materials provided, build a freestanding bridge that is as tall as possible and that spans to opposite sides of an 8.5in x 11in sheet of paper (or A4 piece of paper) on the floor. You should try to use the materials in different and creative ways. You may measure the height of the structure at any time. The structure must be stable for long enough to be measured.

Materials

- □ 1 Small Box of Spaghetti Noodles
- 9 Mailing Labels

A yardstick (meterstick) will also be available for your team to use, but it may NOT be damaged and may NOT be used as part of your structure.

Scoring

- A. 2 points (40 points total) for each full inch of height of your structure.
- B. 20 points if your bridge spans the distance between opposite corners of the piece of paper.
- C. Up to 20 points for how creatively you use the materials.
- D. Up to 20 points for how well your team works together.

Notes

How did the team do? Use this space to make some notes to read later. This will help the team track its progress.

- Did all team members contribute to the creation of the tower?
- How did each person contribute differently?
- How could you use the materials differently to get better results?

Practice Instant Challenge: Invisible Props

Focus

Innovation, improvisational acting, artistic design, teamwork

Challenge

Present a PERFORMANCE in which you use 3 invisible props to get home.

Time

You will have up to 3 minutes to use your IMAGINATION and the CREATIVE PROCESS to plan and practice your PERFORMANCE. You will then have up to 2 minutes to present your PERFORMANCE.

The Scene

Your team is lost in a strange, new place and all of your belongings have suddenly become invisible! Your team has to get home using some of your invisible equipment!

Part One (3 minutes): Plan and practice your PERFORMANCE. Your PERFORMANCE should include at least 3 different invisible props that help you get home. You will have a sheet of paper on which to write the 3 invisible props. Before the end of Part One, write down the 3 invisible props.

Part Two (2 minutes): Present your PERFORMANCE. Be sure your PERFORMANCE has a beginning, a middle, and an end.

Materials

Your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE. The paper and pencil may NOT be used as props.

Scoring

- A. 10 points if your PERFORMANCE has a beginning, a middle, and an end.
- B. 10 points if your PERFORMANCE includes at least 3 invisible props that help you get home.
- C. Up to 10 points (30 points maximum) for the creativity of each of your invisible props.
- D. Up to 30 points for the creativity of your PERFORMANCE.
- E. Up to 20 points for how well your team works together.

- How did you choose the props that would help to get you home?
- How is using invisible props easier to use than real props?
- Did the team use the full 2 minutes for the performance? Why or why not?
- What was your favorite part about the performance?

Invisible Props

1	
2	
3.	
··-	

On the Banks

Focus

Innovation, improvisational acting, artistic design, teamwork

Challenge

Your TASK is to create 2 props and then present a PERFORMANCE in which you explore a mysterious body of water.

Time

You will have up to 4 minutes to use your IMAGINATION and the CREATIVE PROCESS to create your props and plan and practice your PERFORMANCE. You will then have up to 2 minutes to present your PERFORMANCE.

The Scene

Throughout history, bodies of water have been gateways to new and exciting places. What will you find in an unexplored body of water?

Part One (4 minutes): Create 2 props for a PERFORMANCE in which your team explores a mysterious body of water. You should also use this time to plan and practice your PERFORMANCE.

Part Two (2 minutes): Present your PERFORMANCE. Be sure your PERFORMANCE has a beginning, a middle, and an end.

Materials

6 Chenille Sticks (Pipe Cleaners)	Two 12in (30cm) Pieces of String
2 Sheets of Newspaper	2 Cardboard Tubes
6 Mailing Labels	5 Crayons

2 Paper Cups

Your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE. The paper and pencil may NOT be used as props.

Scoring

- A. 10 points if your PERFORMANCE has a beginning, a middle, and an end.
- B. Up to 20 points (40 points maximum) for the creativity of each of your props.
- C. Up to 30 points for the creativity of your PERFORMANCE.
- D. Up to 20 points for how well your team works together.

- Did your team do better with the task or the performance?
- What ideas made the props creative?
- What made the performance creative?
- How did each team member contribute to the solution?

Peppy Puppies

Focus

Innovation, improvisational acting, teamwork

Challenge

Present a PERFORMANCE in which you are young puppies who get into mischief.

Time

You will have up to 3 minutes to use your IMAGINATION and the CREATIVE PROCESS to plan and practice your PERFORMANCE. You will then have up to 2 minutes to present your PERFORMANCE.

The Scene

Puppies often get into some trouble and mischief, especially when they have new surroundings to explore!

Part One (3 minutes): Plan and practice your PERFORMANCE in which you are young puppies who get into mischief.

Part Two (2 minutes): Present your PERFORMANCE. Be sure your PERFORMANCE has a beginning, a middle, and an end.

Materials

Your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE. The paper and pencil may NOT be used as props.

Scoring

- A. 10 points if your PERFORMANCE has a beginning, a middle, and an end.
- B. Up to 20 points for how creatively you portray puppies.
- C. Up to 20 points for the creativity of the mischief the puppies get into.
- D. Up to 30 points for the creativity of your PERFORMANCE.
- E. Up to 20 points for how well your team works together.

- What made how you portrayed the puppies creative?
- What made the mischief the puppies got into creative?
- How does the creativity of the performance differ from the creativity of the puppies and the mischief?

Odd Jobs

Focus

Innovation, improvisational acting, artistic design, teamwork

Challenge

Present a PERFORMANCE in which you feature a new mash-up job. For this Challenge, a "mash-up job" is one that combines 2 existing jobs into a new job.

Time

You will have up to 3 minutes to use your IMAGINATION and the CREATIVE PROCESS to plan and practice your PERFORMANCE. You will then have up to 2 minutes to present your PERFORMANCE.

The Scene

Your team has found an unusual job that needs to be filled. It turns out the job is a combination of 2 existing jobs!

Part One (3 minutes): Randomly select 3 cards. Each card has an existing job written on it. Choose 2 of these cards to make the mash-up job for your PERFORMANCE. You should also use this time to plan and practice your PERFORMANCE in which you feature your mash-up job. Your PERFORMANCE should also include 2 unusual characters.

Part Two (2 minutes): Present your PERFORMANCE. Be sure your PERFORMANCE has a beginning, a middle, and an end

Materials

Your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE. The paper and pencil may NOT be used as props.

Scoring

- A. 10 points if your PERFORMANCE has a beginning, a middle, and an end.
- B. Up to 20 points for the creativity of your mash-up job.
- C. Up to 10 points (20 points maximum) for the creativity of each of the unusual characters.
- D. Up to 30 points for the creativity of your PERFORMANCE.
- E. Up to 20 points for how well your team works together.

- How did you decide which of the two jobs to mash up?
- How did you decide what the two unusual characters would be and what made them unusual?
- What made the characters unusual?
- What made the characters creative?

Odd Jobs (cont'd)

The setup consists of a table with 15 job cards, face down.

Carpenter	Cook	Zookeeper
Teacher	Doctor	Astronaut
Bus Driver	Dog Groomer	Gardner
Singer	Hair Stylist	Writer
Athlete	Movie Director	Sailor

One of Each

Focus

Innovation and design process, technical design and construction, improvisation, teamwork

Challenge

Your TASK is to create a freestanding tower that is as tall as possible above the table. For this Challenge, "freestanding" means not attached to anything.

Time

You will have up to 5 minutes to use your IMAGINATION and the CREATIVE PROCESS to create your tower.

The Scene

In the center of the room is a table with materials

Procedure (5 minutes): NOTE THAT THIS CHALLENGE HAS ONLY ONE PART! Create a freestanding tower that is as tall as possible above the table. You will receive additional points if you use 6 or fewer materials in your tower. At the end of time, or sooner if you wish, the height of your tower will be measured.

Materials

1 Sheet of Paper	1 Index Card
1 Piece of Foil	🔲 1 Pencil
🗌 1 Straw	1 Chenille Stick (Pipe Cleaner)
1 Paper Clip	12in (30cm) of String
🔲 1 Twist Tie	1 Coffee Stirrer
1 Mailing Label	1 Rubber Band

Your team will also have a yardstick (meterstick), but this may NOT be damaged and may NOT be part of your tower

Scoring

- A. 10 points if you use 6 or fewer materials in your tower.
- B. 2 points (40 points maximum) for each inch (2.5cm) of height of your tower.
- C. Up to 30 points for the creativity of your tower.
- D. Up to 20 points for how well your team works together.

- What made your tower creative?
- How did you decide which materials to use in the tower?
- How did having a choice of materials change the way the team worked on the solution?

Outside In

Focus

Innovation and design process, technical design and construction, improvisation, teamwork

Challenge

Your TASK is to create a freestanding tower that is as tall as possible outside a taped area and suspends weights above the taped area. For this Challenge, "freestanding" means not attached to anything.

Time

You will have up to 5 minutes to use your IMAGINATION and the CREATIVE PROCESS to create your tower.

Setup

In the center of the room is a table with a 12in (30cm) taped square, 8 weights, and materials. The weights are 0.5in (12mm) washers.

Procedure (5 minutes): NOTE THAT THIS CHALLENGE HAS ONLY ONE PART! Create a tower that is as tall as possible. Your tower must not touch the table within the taped area. Your tower should suspend as many weights as possible above the taped area. At the end of time, or sooner if you wish, the height of your tower may be measured.

Materials

3 Chenille Sticks (Pipe Cleaners)	🔲 4 Straws
3 Pencils	🔲 3 Twist Ties
12in (30cm) of String	🗌 4 Mailing Labels
2 Paper Cups	🔲 2 Rubber Bands
1 Sheet of Paper	🔲 4 Paper Clips

1 Sheet of Newspaper

Your team will also have a yardstick (meterstick), but this may NOT be damaged and may NOT be part of your tower

Scoring

- A. 1 point (20 points maximum) for each inch (2.5cm) of height of your tower.
- B. 5 points (40 points maximum) for each weight your tower suspends above the taped area at the end of the Challenge.
- C. Up to 20 points for how creatively you use the materials.
- D. Up to 20 points for how well your team works together.

- Which materials were the easiest to use as you created your solution?
- How did having to work around the taped square affect how your team worked together to create the solution?
- What is the most creative way you used the materials?

Rewind

Focus

Innovation, improvisational acting, artistic design, teamwork

Challenge

Present a PERFORMANCE in which your team is participating in a group activity when time suddenly begins running backward.

Time

You will have up to 3 minutes to use your IMAGINATION and the CREATIVE PROCESS to plan and practice your PERFORMANCE. You will then have up to 2 minutes to present your PERFORMANCE.

The Scene

Your team is going about a normal day when a signal indicates that time has begun running backward.

Part One (3 minutes): Plan and practice your PERFORMANCE in which your team is participating in a group activity when time suddenly begins running backward. Your PERFORMANCE should show your team participating in the group activity both normally and in reverse. You should also create a signal to indicate when time begins running backward. You will have a sheet of paper on which to write this signal before the end of Part One.

Part Two (2 minutes): Present your PERFORMANCE.

Materials

Your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE. The paper and pencil may NOT be used as props.

Scoring

- A. 10 points if your PERFORMANCE shows your team participating in a group activity both normally and in reverse.
- B. Up to 30 points for how creatively you portray the group activity when it is performed normally.
- C. Up to 30 points for how creatively you portray the group activity in reverse.
- D. Up to 10 points for the creativity of your signal.
- E. Up to 20 points for how well your team works together.

- Which element of the Challenge was worth the most points? How did that affect your strategy for solving the Challenge?
- What sort of teamwork strategies did you use in your planning?
- What sort of changes might you make if you solved the Instant Challenge again?

Rewind (cont'd)

Signal:

Time Capsule

Focus

Innovation and design process, technical design and construction, improvisation, teamwork

Challenge

Your TASK is to create 3 items to put into a time capsule and then present a PERFORMANCE in which you show why you chose each item.

For this Challenge, a "time capsule" is a container of items that will be opened many years in the future.

Time

You will have up to 4 minutes to use your IMAGINATION and the CREATIVE PROCESS to create 3 items to put into the time capsule and plan and practice your PERFORMANCE. You will then have up to 2 minutes to present your PERFORMANCE.

The Scene

Time capsules capture a moment in time by collecting a variety of items. What items do you want people in the future to find?

Part One (4 minutes): Use the materials in any combination to create 3 items to put into a time capsule. You should also use this time to plan and practice your PERFORMANCE in which you show why you chose each item.

Part Two (2 minutes): Present your PERFORMANCE. Be sure it has a beginning, middle, and end.

Materials

2 Sheets of Paper	4 Paper Clips	3 Craft Sticks
4 Mailing Labels	4 Clothespins	5 Crayons
2 Paper Plates	🔲 3 Straws	🔲 Two 12in (30cm) Pieces
🔲 1 Plastic Bag	4 Chenille Sticks (Pipe	of String
	Cleaners)	

Your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE. The paper and pencil may NOT be used as props.

Scoring

- A. 0 points if your PERFORMANCE has a beginning, a middle, and an end.
- B. Up to 15 points (45 points max) for the creativity of each item your team chose to put in the time capsule.
- C. Up to 30 points for the creativity of your PERFORMANCE.
- D. Up to 20 points for how well your team works together.

- How did you divide up the tasks to get the three items created?
- What did you use as the beginning, middle, and end of your story?
- How did your team plan out the performance? How did you make time to practice?

Paper Thin

Focus

Innovation and design process, technical design and construction, teamwork.

Challenge

Your TASK is to create a freestanding structure that is as tall as possible and that spans the greatest distance as possible above the table. For this Challenge, "freestanding" means not attached to anything.

Time

You will have up to 5 minutes to use your IMAGINATION and the CREATIVE PROCESS to create your structure.

Setup

In the center of the room is a table with materials.

Procedure (5 minutes): NOTE THAT THIS CHALLENGE HAS ONLY ONE PART! Create a freestanding structure that is as tall as possible and that spans the greatest distance as possible above the table. You will receive additional points if you do not use the mailing labels in your tower. At the end of time, or sooner if you wish, the height and span of your structure will be measured.

Materials

1 Sheet of Newspaper
1 Sheet of Paper
1 Sheet of Paper
1 Paper Cup
1 Paper Napkin
1 Envelope
4 Paper Clips
1 Piece of Sandpaper
1 Paper Bag
1 Sheet of Construction Paper
1 Paper Towel
4 Mailing Labels

Your team will also have a yardstick (meterstick), but this may NOT be damaged and may NOT be part of your structure.

Scoring

- A. 1 point (20 points maximum) for each inch (2.5cm) of height of your structure.
- B. 1 point (20 points maximum) for each inch (2.5cm) of span of your structure.
- C. 10 points if you do not use the mailing labels in your tower.
- D. Up to 30 points for how creatively you use the materials.
- E. Up to 20 points for how well your team works together.

- Which materials were the easiest to use as you created your solution?
- What methods did you brainstorm to use in order to NOT use the mailing labels?
- Which materials had the best properties for use in creating the height? In creating the span?

Fetch and Stretch

Focus

Innovation and design process, technical design and construction, teamwork

Challenge

Your TASK is to build a device that can retrieve a ball from behind a taped line and that can support the ball between 2 posts.

Time

You will have up to 5 minutes to use your IMAGINATION and the CREATIVE PROCESS to build your device and practice retrieving balls. You will then have up to 2 minutes to use the device to retrieve a ball, place the device between 2 posts, and rest the ball you have retrieved on top of the device.

Setup

In the center of the room is a taped line. Beyond the taped line are 3 balls—a tennis ball 2ft (60cm) from the taped line, a golf ball 1.5ft (45cm) from the taped line, and a Ping-Pong ball 1ft (30cm) from the taped line. On the table are two wooden posts, as well as materials and a yardstick (meterstick).

Part One (4 minutes): Use the materials on the table to build a device that can be used to retrieve a ball from the far side of the taped line. You may practice retrieving balls in Part One. At the end of Part One, the balls will be returned to their original positions.

Part Two (2 minutes): Use the device to retrieve one of the balls from behind the taped line. You should then rest your device on top of the 2 wooden posts and have the device support the ball in the gap between the 2 posts. The posts must remain upright, but can be moved. You may modify your device, but you may NOT add any additional materials and you may NOT modify the ball. If your device supports the ball, the farther the posts are away from each other, the more points you will receive.

Materials

4 Straws	4 Twist Ties	3 Index Cards
1 Piece of Paper	4 Chenille Sticks (Pipe	3 Rubber Bands
4 Paper Clips	Cleaners)	1 Piece of Foil

Your team will also have a yardstick (meterstick), but this may NOT be damaged and may NOT be part of your structure.

Fetch and Stretch (cont'd)

Scoring

- A. 10 points for retrieving a ball using the device in Part Two and 5 points if the ball is attempted to be retrieved using the device but is retrieved by a team member reaching over the taped line and retrieving the ball.
- B. 5 points if you do NOT modify your device in Part Two.
- C. If your device supports the ball, you will receive variable points depending upon which ball is supported: 5 points for the Ping-Pong ball; 10 points for the golf ball, 15 points for the tennis ball.
- D. In addition, if your device supports the ball, you will also receive 1 point (20 points maximum) for each inch (2.5cm) of distance between the 2 posts.
- E. Up to 30 points for how creatively you use the materials.
- F. Up to 20 points for how well your team works together.

- Which materials were the easiest to use as you created your solution?
- What element of the Instant Challenge solution was worth the most points?
- How did you use Part One of the time to best solve the Instant Challenge?
- How did teamwork help your score?
- How would you solve the Instant Challenge differently if you attempted it again?

Chapter 6: Creative and Critical Thinking Skills

Skills and Tools for Idea Generating and Focusing

Focusing on idea-generating skills and tools can help the team think creatively and move past more common ideas. When utilizing idea-generating tools, consider these basic guidelines:

- Remain open. Nothing smothers the free flow of ideas like a sharp, critical remark or harsh laughter from another person. To encourage the flow of ideas, make sure no judgmental attitudes are present that may make a team member become more concerned with defending ideas rather than creating them. Remind team members to avoid self-judgment. They should not stifle their own ideas.
- State and document all ideas. Toning down an idea is easier than thinking of a new idea. Encouraging wild or silly ideas allows team members to be imaginative. Amplifying ideas that initially appear extremely unusual encourages team members to expand their thinking.
- Quantity counts. The chance of finding a really good idea increases if there are a large number of ideas to be considered.
- Add to or build on the ideas of others. Most of us have built on others' ideas or been reminded of something upon hearing an idea from someone else.

When you use idea-focusing tools, follow these basic guidelines:

- Stay positive. Don't confuse negative criticism and critical thinking. Critical thinking should be focused toward guiding beliefs and actions, not just toward attacking ideas or pointing out what's wrong with them. Critical thinking and critique should always be focused on ideas and not on people.
- Be thoughtful. Critical thinking is not a matter of settling on an idea or course of action as a matter of whim. Knowing and using thinking strategies helps the team focus on options and goals and also helps prevent conflict.
- Consider uniqueness. Focus your ideas into possibilities that provide new and better ways to proceed.
- Stay on the path. It is much easier to focus your critical thinking in productive ways if the goals and objectives are clear. Test progress by asking, "Are we moving closer toward where we want to be? Will these ideas help us move in a positive, constructive direction?"

Creative Thinking

The process of developing ideas and options to solve the Challenge

Idea Creation

As team members work toward a solution, they will need to generate many ideas to find the few that will make their solution unique. Fluency, flexibility, originality, and elaboration are strategies to increase creative thinking. **FLUENCY** is the ability to generate as many ideas as possible. The more ideas the team generates, the more opportunities the team has to combine ideas and find new solutions.

Team Manager Tip: Continually ask open-ended questions and press for multiple answers to instill fluent thinking in team members. Use the creative thinking tools to push your team past the most common answers. After the team members give you as many answers as they think are possible, use a different tool to help them go deeper with their ideas. Remind them that the first answers are often the same answers other teams are giving.
FLEXIBILITY is categorizing and connecting ideas and objects as well as learning from different categories (such as materials, functions, or features) and thinking about them in diverse ways. Flexibility helps the team members think beyond common answers and create unusual or unconventional solutions.

Team Manager Tip: Provide a wide variety of common Instant Challenge materials and ask the team to demonstrate each of the materials as an extender, a connector, and a controller. Well-developed flexible thinking allows team members to see how items can cross over into multiple categories. ORIGINALITY is creating innovative options that are often clever and unfamiliar, such as word play or an unusual combination of two objects.

Team Manager Tip: For an Instant Challenge, give the team members a character and an unrelated setting and ask them to create a performance that successfully integrates the two. Example: An octopus living in the desert. ELABORATION is using words, images, and actions to add details to enhance meaning.

Team Manager Tip: As an exercise, ask the team members to think about how they might build a costume that effectively portrays an animal. Ask questions that push them to think about details, such as: "What color is the animal?" "What materials can you use to make the costume?" "What makes the animal unique?" Ask team members to build on other team members' ideas.

Critical Thinking

The process of evaluating and selecting an option

Critical thinking involves objective analysis and evaluation of ideas and options. When team members have generated many ideas, they will need to begin to sort through them and decide which ideas merit a closer look. Idea focusing involves examining possibilities carefully, fairly, and constructively. The team should then focus thoughts and actions by:

- Organizing and analyzing possibilities
- Refining and developing promising possibilities
- Ranking or prioritizing options
- Choosing or deciding on certain options
- Using idea-focusing tools to aid in the option selection process

Team Manager Tip: Help team members learn how to recognize the difference between objective and subjective reasoning. As team members evaluate different idea options, ask if their reasoning is objective or subjective. This will help the team differentiate between fact and opinion. Good evaluation should be as opinion-free as possible and should be based more on objective criteria. Also, when team members can recognize that subjective scoring is based on opinion, they can then find ways to strengthen positive opinion toward their solutions.

Tools and Practice

Tool: Race For Fluency

Start an idea generating session on a high-energy, creative note with this tool! First, split your team into two separate groups. Next, give each group a few sheets of paper and a pencil.

Tell the groups you will pose a problem, and then the groups will race to generate 30 ideas that could potentially solve the problem. The first group to hand a list of 30 ideas to the Team Manager wins a prize! (If you're worried about being fair, the prize can be as simple as bragging rights.)

When the groups are ready, ask a question like: "How might you creatively use a necktie in a skit about building a home for a pet?" Remember, the goal is for team members to get used to creating as many ideas as possible. In idea generating, the team should not judge ideas, but rather record them for later consideration. Right now, each idea is simply an option.

Keep all of your team's ideas in one place. You can use the focusing tools to help pare down the list. After the groups are finished, have them share their ideas.

- How many ideas were on both lists?
- How many were only on one team's list?
- How might you have used a thinking tool to help you complete this activity?
- What can your team learn from this activity?

Tool: Decision Making Matrix

Everyone has had experiences with group decision making where they have walked away feeling dissatisfied with the outcome, the process, or their relationship with the other group members. There are hundreds of decisions to be made during a Destination Imagination season. Reaching quality decisions in an efficient way that preserves relationships among team members may seem like an impossible goal.

Teams generally believe there are only two ways to reach a conclusion: voting and consensus. However, there are alternatives. One alternative is for a single team member to make a decision for the whole team, as long as the team has created some rules about how and when an individual is empowered to make the decision. The following are a few decision-making rules that DI teams use which allow a single team member to make a decision for the whole team under certain circumstances:

- 1. If the team members can't reach a quick conclusion about their approach to solving an Instant Challenge, the Task or Performance Manager (see Team Roles in the Instant Challenge section of Roadmap) can make the decision based on everyone's input.
- 2. The team member in charge of a certain aspect of the team's solution (e.g. script writing, set building, programming, etc.) can act as the final decision maker if the team members can't reach a consensus about the element they're discussing.
- 3. Some teams use the Individual Interest Inventory survey that can be found in the Chapter 7 of Roadmap to talk about the special skills of different team members. When a decision related to an area of strength for one of the team members comes up, that team member can become the final decision maker.

In each of these examples, the team took the time to think through different roles in different situations and had included a certain amount of decision-making authority into the description of the role. One practical way to clarify decision making is to spend time early in the season building a matrix that the team can use throughout the season. An example of a decision-making matrix:

Decisions related to:	Decision Maker(s)	Consensus	If we can't reach consensus
Meeting times and dates	Team Manager		
The Team Challenge we decide to solve		Х	Use a tool from Roadmap
Our story		х	Amanda decides
Costumes and Props	Danielle with input from the team		
Technical Elements	Diego and Emily		
Task-Based Instant Challenges	Sofia with input from the team		
Performance-Based or Combination Instant Challenges	Benjamin with input from the team		
Who plays which role in the Presentation?		Х	Private voting

Blank Decision Making Matrix

Decisions related to:	Decision Maker(s)	Consensus	If we can't reach consensus

Tool: Idea Generating Chart

Practice: A name for a new DI school

Have your team members practice their idea generating abilities with this simple, fun activity. This is a good activity for early in the season. It will help your team members to learn to work collaboratively and develop a name for a new DI school. You will need a large floor space for this activity.

Idea Generating

Hand out three copies of the Idea Generation Chart to each team member.

- 1. Over the next several minutes, your team will generate ideas for a name for a brand new DI school. No one should talk during this stage of the process. Have the team members write down their ideas for school names on their papers. Each idea should go in a separate cell of the table.
- 2. In this stage, the ideas don't have to be fully formed. Encourage fluency of ideas, and have the team members write down anything they can think of as soon as they think of it.
- 3. After the team cannot generate any more ideas, have the team members cut their charts apart on the dotted lines. Each team member should have a stack of his or her ideas.

Idea Focusing

- Begin the Idea Focusing stage by having one team member present each of his or her school name ideas, one at a time, so everyone else can understand them. After each idea is presented, the team member places it on the floor in full view. After the team member's ideas are all announced, the presenting team member should quickly group the ideas into similar topics. For example, sports teams might be a group and plants might be another group.
- 2. Have the other team members follow by presenting their ideas and grouping them. They can group their ideas with ideas from other team members.
- 3. Have the team discuss its favorite ideas or groupings.
- 4. Each team member has three votes for his or her favorite groupings. Make note of the votes, and you'll have the ideas ranked by popularity!

This tool combines generating and focusing into one exercise and can be used to create ideas for many topics. It is not just for deciding on a school name. After team members have practiced using this tool, have them try generating and focusing ideas for different elements of their solution (theme, location, technical element, etc.).

Team Manager Tip: Remember, this process is very fluid. Your team can return to generating ideas as often as necessary, even after the team has focused their ideas. For example, team members might generate new ideas after seeing other ideas from their team members. Have them record and share any such ideas. For this activity, work toward finding a DI school name, but don't force the team members to pick a school name if they can't agree.

Blank Idea Generation Chart

Tool: ABC Brainstorming

"ABC Brainstorming" is a thinking tool that can help teams generate ideas. This technique is a good method to help a team in the Imagine stage of the creative process. By forcing teams to think differently, thinking tools help teams discover options they might not have generated on their own.

Draw the grid below on a blackboard, whiteboard, or flip chart. The team will generate ideas that start with each letter. The first time you use this tool, try to address a simple or unrelated problem so the team can work for fluency of ideas. For example, what are different functions that a chair might serve? What functions can a ballpoint pen serve? What are potential names for a new cat? Strive for as many ideas as possible, and try to fill in every letter.

Team Manager Tip: When your team members are more comfortable with the technique, they can use this tool to generate ideas for the Team Challenge. Try having team members use this tool to determine a setting for their team story or for materials they can use to build their sets, props, costumes, or technical elements.

Note: This exercise is based in the English alphabet; however, it can be adapted for use with a variety of other languages.

Below is an example of ABC Brainstorming for a cat's name. Have your team add more ideas to this list of potential **cat names.**

Letter	Idea	Letter	Idea
А	Apple, Annie, Andy, Anthony, Antsy	N	
В	Bear, Bonnie, Baxter, Baby, Boo	0	
С	Cat-cat, Connie, Cuddles	Р	
D		Q	
E		R	
F		S	
G		Т	
Н		U	
I		V	
J		W	
К		Х	
L		Y	
М		Z	

Blank ABC Brainstorming Grid

Letter	ldea	Letter	ldea
А		N	
В		0	
С		Р	
D		Q	
E		R	
F		S	
G		Т	
Н		U	
I		V	
J		W	
К		Х	
L		Y	
М		Z	

Tool: Mix And Match

The Mix and Match tool, sometimes called a "morphological analysis," links ideas or attributes together in a random manner to generate numerous and original options. Using this tool, different attributes are generated in a number of columns. By randomly selecting one idea from each column, the team can generate hundreds of combinations that may inspire a variety of new ideas to research and explore.

Number ten small pieces of paper or index cards sequentially from 1 to 10. Hold these cards to use after the team members have generated their ideas.

To use the tool, draw a graph with six columns. The first column lists numbers from 1 to 10. The heading for each of the remaining four columns should be labeled with different categories for which the team wants to generate possibilities.

To practice using the tool, ask the team to generate ideas for a possible storyline for a skit. Use the categories on the top of the form. Generate enough ideas to fill the column under each category. Afterward, randomly choose one number for each category by using the numbered pieces of paper. By combining those five choices, your team will have generated a new idea for a storyline.

Use this tool as your team works on different parts of the Challenge. Adjust the columns in number and category, as necessary. For example, to use the tool to generate ideas for a character, you can use the categories of age, style, behavior, movement, and attitude. You can copy the blank form without column titles and use it to generate ideas about different topics.

	HERO	VILLAIN	CONFLICT	SETTING	HUMOR
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Practice Mix and Match Grid

Blank Mix and Match Grid

	Element #1	Element #2	Element #3	Element #4	Element #5
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Exam Manager Tip: Another version of Mix and Match uses index cards and paper bags. Label five paper bags with a category. Using index cards, ask the team members to list as many ideas as they can for each category. Put the completed cards into the appropriate bags. Ask the team to randomly draw a card from each bag and then discuss ideas that arise from the combinations.

Tool: Hits And Hotspots

Hits and Hot Spots is a generating and focusing tool that can be used when the team has generated a long list of ideas that need to be focused.

You will need flipchart paper, sticky notes, and colored sticky dots for this tool.

Choose two or three topics that relate to the Challenge solution (e.g., story location & time, story plots, characters, or set ideas). Write the topics on the top of individual flipchart papers. Give each team member several sticky notes. Each team member silently lists as many ideas as they can, one idea per sticky note. Team members place their sticky notes on the appropriate flipchart. Encourage them to list as many ideas as they can, asking them to dig a bit deeper.

Divide the team members into groups based on the number of flipcharts you have. Assign a group of team members to each flipchart. Each group will cluster all the ideas on the flipchart into related categories. For example, all outer space locations might form a category.

Ask each group to discuss the categories and ideas on the flipchart.

Give each team member a specified number of sticky dots (10 is a good number, but you can choose a lower or higher number of dots). Explain that the dots represent their level of approval of an idea. Have the team members put one dot on each idea they really like. (If you give them more than 10 dots, the team members can "spend" their dots as they wish – with more dots representing more approval).

When the team is finished with the dots, the team members will probably see some agreement around categories and ideas. The team can use the same tool or a different tool to focus those ideas even further.

Team Manager Tip: Hits and Hotspots does not have to be done silently. The team can generate idea lists together and the Team Manager can write down the ideas on sticky notes exactly as the team says them. The Team Manager could also list the ideas on flipchart paper which could make it difficult to group the ideas, but the sticky dots can still be used to identify the most popular ideas.

Tool: KWL (Know, Want to Know, Learned) Chart

After your team has generated as many ideas as possible, the team members should then choose their top three ideas and perform research/observation to learn more about each generated option. Research can give the team a better understanding of each idea, which can make the team more efficient when it starts focusing ideas down to the most viable options.

One of the strategy tools your team can use is the K-W-L Chart. This chart can serve as a graphic organizer to help organize and document your team's research efforts. First, use a large surface (e.g., a blackboard, whiteboard, or flipchart) to list all the information known about the idea under the K (Know) column. Then list all the questions the team has under the W (Want to Know) column. As the team gains information and learns new things, list all the facts in the L (Learned) column. Below is a sample chart.

Blank KWL Chart

IDEA:

KNOW	WANT TO KNOW	LEARNED

Tool: WWWH

As the team members continue researching options, it will become more important for them to consider efficiency in their research. To help, the team can use the What – Who – When – How (WWWH) strategy tool. Your team can use this tool in tandem with the K-W-L Chart, but the team is not required to do so.

To use the WWWH tool, list items that the team wants to research in the "What" column. Team members then volunteer to research and learn about each item. The team member who volunteers for each "What" item should be listed in the "Who" column next to the item. The team member then commits to a time when the research will be finished. All the team members then suggest ways to conduct the research and then list those ways in the "How" column.

WHAT	WHO	WHEN	HOW

Team Manager Tip: You may need to establish rules as the team begins to research information on its own. Rules of the Road features information regarding Internet safety. Keep the K-W-L and WWWH Charts for future reference. For now, they can keep track of the types of knowledge the team needs to acquire. Later, you'll find they detail what the team has learned over the course of a season.

Tool: Choice Helper

One way the team can choose ideas is by using Choice Helper. Choice Helper is a matrix that helps the team to assess ideas according to factors the team members consider important. Divide the team into two groups. Give each team a few pieces of paper.

Choice Helper allows the team to narrow its choices and to evaluate options in an orderly manner.

- 1. To use the matrix, the team first lists ideas down the left side of the matrix. For example, if team members have five different options for a prop, they would list the five options on the left side of the matrix.
- 2. Then the team lists criteria that are important to choosing the best ideas across the top of the matrix. Using the same example, the team might decide that low-cost, readily-available materials, needed skills, building time, and uniqueness are the criteria it will use to judge each prop. (Use these criteria, or have the team members make up their own.)
- 3. The team members then assign a ranking scale with which they can assess each option for each criterion (e.g., 1=fair, 3=average, 5=great).
- 4. Each team member should be given a sheet of paper and a writing utensil with which to rank each option.
- 5. Then the team should consider each idea, one at a time. Each team member will work down each column to rank each option for the same criterion. Then they should go to the next criterion. (Doing it this way will reduce the possibility that a team member will be affected by how others ranked the criteria.)
- 6. When each team member has ranked the options for each criterion, they give their individual sheets to the Team Manager to average the points. The results can direct the team's discussion until they can come to an orderly and well-considered decision.

Option	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Average
1						
2						
3						
4						
5						

Choice Helper Grid

Tool: Paired Choice Analysis

The Paired Choice Analysis (PCA) tool is particularly useful when the team has a small number of appealing options and wants to select the most promising one. The tool asks team members to compare and rate each option against every other option. Because the PCA tool also asks team members to number the strength of their preferences, the tool effectively ranks the team's options in order of preference.

Hand each team member a copy of the form and follow the instructions to show the team how to use the tool. To see how the PCA tool works, ask the team to generate four ideas for main characters in a short skit about a fictional election. Go quickly, and don't put too much emphasis on idea generation. Then ask the team members to fill out their forms using those four options.

Paired Choice Analysis Worksheet - Example

1. List the options

Option A	Yosemite Sam
Option B	Bugs Bunny
Option C	Superman
Option D	Wonder Woman

2. For each pair, circle the option you prefer. In the Value column, enter a number to indicate how strongly you feel about your choice (3=very strongly prefer, 2=moderately prefer, 1=slightly prefer).

Team Member #1

Option	Value	Option	Value	Option	Value
A / B	2	A/C	2	A / D	2
		B / C	2	В / D	2
				C / D	1

Team Member #2

Option	Value	Value Option Value Op		Option	Value
A / B	2	A / C	3	A / D	1
		B / C	3	в / D	2
				C / D	1

Team Member #3

Option	Value	Option	Value	Option	Value
A / B	1	A / C	1	A / D	3
		в / С	2	B / D	2
				C / D	2

3. For each team member, add up the total score for each option. For example, Team Member 1 has chosen Option D twice and given a total score of 3. Record the total in the Team Manager Tally Sheet.

Team Manager Tally Sheet - example

1. For each team member, add up the total score for each option.

	Option A Yosemite Sam	Option B Bugs Bunny	Option C Superman	Option D Wonder Woman
Team Member 1	2	4	2	3
Team Member 2	3	3	6	2
Team Member 3	1	2	3	5
Team Member 4				
Team Member 5				
Team Member 6				
Team Member 7				
Team Total	6	9	11	10

2. Rank the results

Top Choice	2nd Choice	3rd Choice	4th Choice
Superman	Wonder Woman	Bugs Bunny	Yosemite Sam
Option C	Option D	Option B	Option A

Paired Choice Analysis Worksheets - Blank

1. List the options:

Option A	
Option B	
Option C	
Option D	

2. Make a copy for each team member. For each pair, the team member will circle their preferred option. In the Value column, the team member will enter a number to indicate how strongly they feel about their choice (3=very strongly prefer, 2=moderately prefer, 1=slightly prefer).

Team Member #_____

Option	Value	Option	Value	Option	Value
A / B		A / C		A / D	
		B / C		B / D	
				C / D	

3. For each team member, add up the total score for each option. For example, Team Member 1 has chosen Option D twice and given a total score of 3. Record the total in the Team Manager Tally Sheet.

Team Manager Tally Sheet

1. For each team member, add up the total score for each option.

	Option A	Option B	Option C	Option D
Team Member 1				
Team Member 2				
Team Member 3				
Team Member 4				
Team Member 5				
Team Member 6				
Team Member 7				
Team Total				

2. Rank the results

Top Choice	2nd Choice	3rd Choice	4th Choice
------------	------------	------------	------------

Chapter 7: Facilitating for Successful Teamwork

Destination Imagination teams are much like adult work teams. They accept tasks, work together to solve a problem or create something, manage personality conflicts, and work best when they have trust and shared leadership. A Team Manager's most important role is to create an environment that encourages team members to work together. Working with others and their ideas can be a struggle for many team members.

This section of Roadmap provides suggestions and tips for understanding team development and the qualities of successful teamwork. To build solid teamwork, Team Managers should:

- Stay supportive from the sidelines.
- Nurture the team's progress toward team-identified goals.
- Guide growth as a team.
- Teach the team to guide and manage themselves.
- Celebrate successes as they happen (especially small successes).

Team Development

In 1965, educational psychologist Bruce Tuckman published a well-known and elegant framework for describing the stages of team development. This framework names the patterns of behavior almost always observed when individuals form groups with interdependencies. First is the forming stage, followed by the storming, norming, performing, and adjourning stages.

It's important to note that these stages overlap somewhat and teams can move back and forth as circumstances affect their development. Some teams may get stuck at any one of the stages and may need a defining event to push them into the next stage.

Forming Stage: Team members in this stage often appear to be reserved, polite, and on their best behavior. This is not a time for making important decisions about the Challenge solution or expecting team members to be open or direct in their communication. DI teams in the forming stage may be very quiet ("It's too scary to say anything") or very silly ("I'll laugh at everything you do to show you that I care about you"). Team members are dealing with issues of inclusion.

Storming Stage: Team members may appear competitive and express themselves through arguments by digging in their heels or wanting credit and attention. DI teams in the storming stage are often disruptive, interrupt each other, and talk more about "I" and "me" rather than "we."

Norming Stage: Team members appropriately interact and begin to reach agreements more quickly. The team members operate according to working agreements (could be explicit or implicit), their roles have been defined, and they are working together. DI team members in the norming stage generally accept each other and have learned how to work together and get themselves unstuck. Teams in this stage are still fairly dependent on the Team Manager to direct their activities and set the agenda. Team members are dealing with issues of openness.

Performing Stage: Team members identify as a cohesive team. Team members willingly sacrifice in order to contribute to team success. The Team Manager moves into more of a support role. Team members are direct and open with each other on behalf of the team's goals and working agreements. DI team members in the performing stage take initiative to divide work, contact each other between formal team meetings, and stay focused at meetings, generally accomplishing team tasks and goals.

Adjourning Stage: Team members conclude their time together after the tournament season has ended. The Adjourning Stage parallels the Evaluation and Celebration phase of the creative process. Team members need to celebrate their accomplishments and group achievements together. Team Managers may hold a celebratory party to allow team members the chance to reflect on their time together as a team and say personal goodbyes.

Team Managers are an integral part of helping teams cycle through the stages of team development. The following table will help you outline some strategies to help your team work through the different stages of team development.

Stage	Team Manager Strategy
Forming	 Focus on relationships. Help the team members get to know each other and avoid focusing on major decisions. Push team members stuck in this stage into disagreeing or competing with each other in order to initiate storming.
Storming	 Focus on the process. The team members must learn to trust and respect one another. Don't try to bypass the storming stage. Team members will learn to be more open and trust one another if they have had an opportunity to compete with each other for the team's attention. Remind the team members to value everyone's input and to be respectful when disagreeing. Create a shared experience or success to help build a team identity.
Norming	 Focus on results. As the team develops its working agreements, be sure to keep the agreements posted in clear view at meetings. Have the team members focus their attention on their plans and timelines. Bring back issues that were left unresolved. Encourage the team members to challenge one another to raise the bar or to face a significant conflict.
Performing	 Focus on results, the process, and relationships. Encourage team members to be open and honest in a safe, productive way. Help the team members hold each other accountable for high-quality results.
Adjourning	 Focus on celebration. Highlight the team's progress and successes. Take time to reflect on how the team and team members developed over the season, including how some of the team's failures became successes.

Successful Teamwork

Certain qualities and behaviors are hallmarks of successful teamwork whether you are working with a team of adults or with a team of young people. Successful teamwork involves:

- Trust
- Common goals and purpose
- Good communication
- Respect for people and ideas

Trust

Team members who trust each other:

- Feel that they are part of the group.
- Are concerned about the well-being of other members.
- Believe that other team members are capable.
- Feel competent with tasks and roles.
- Are open and honest with each other.

The Team Manager's role in facilitating trust among the team is to:

- Focus on relationships. This includes your relationships with each team member and relationships between team members.
- Help the team set guidelines around respectful behavior.
- Create opportunities for success.
- Help the team avoid destructive conflict. Remember, constructive conflict is productive.

Methods for helping your team develop trust:

- Give the team an Instant Challenge that you know the team can master.
- Direct the team members to talk about the talents they see in each other.
- Follow the team-developed rules for handling conflict and using respectful language.
- Ensure the team has time to have fun together.



Activities To Develop Trust

Setting Team Rules

One of the best ways to create an atmosphere of safety and trust is to work with the team to develop some team rules. Rules can be as general or specific as the team needs or wants. During one of the first meetings, start a discussion about team rules. Here are some examples:

- Respectful, kind language is used at all times.
- Team members will call if they are not able to attend a meeting.
- Should team members miss a meeting, they have to accept the decisions that were made by the rest of the team in their absence.
- No spray painting in the house.
- Power tools are only used in the presence of at least one adult.
- All hands must be visible before power tools are started.
- Team members must ask permission to eat or drink anything in the kitchen.

The team may also come up with some simple consequences for rule infractions. Here are some examples:

- If you use a power tool without an adult present, you will not be allowed to use the tools for the rest of the meeting.
- If you use disrespectful language, you must apologize to the team member and the team. If the behavior becomes disruptive to the team, you will have to call a parent to come get you and you will miss the rest of the meeting.

Write down the team's rules here:

e Team Manager Tip: Record the rules on poster board and display them at every meeting.

Catch the Ball

Gather the team in a circle. If your team is brand new to each other, go around the circle and have the team members say their names. Take the tennis ball and toss it to a team member saying, "I am ______ and you are _____." Then that person tosses the ball to someone else and says the same statement. Do several rounds of this until everyone knows everyone's name.

Once everyone's name is known, remove yourself from the circle. Have a team member answer each of the following questions and then toss the ball to another team member. As the team members answer the question, take notes about the answers. Move to the next question after every team member has answered.

- What is your favorite movie and why?
- What are you good at in school?
- What are you good at home?
- What is your favorite hobby?
- What is your favorite TV show?

Read back the answers the team members gave you. Then ask them to use the ball again and answer the question, what was the most interesting thing I learned about my team members today? Write down the most interesting things the team members learned about their teammates.

All Aboard

Have the team stand inside a rope circle that will hold the entire team. Gradually decrease the size of the circle and have the team work together to keep everyone inside no matter how small the circle gets.

Helium Stick

Give your team a thin, lightweight stick (bamboo or light tent pole) which the team must lower to the ground, using just their index fingers. The stick will sit on top of the team's fingers without pinching or grabbing the stick. All participants must remain in contact with the stick at all times – what seems like a simple task can become a challenge.

Try this activity again with the stick resting on index fingers with one hand palm down and the other hand palm up. Was the team able to lower the stick to the floor with either variation? Why or why not? Ask the team to discuss the activity and what they could have done differently.

Physical Play

Play games that require physical interaction:

- Group Knot Team members stand in a circle facing inward with their eyes closed. Each team member reaches into the circle and grabs a hand. Repeat with the other hand. Have them open their eyes and work to untangle the knot without dropping hands.
- Ring Around the Circle The team stands or sits in a circle and holds hands. Place a hula hoop between two members. The team moves the hoop around the circle without dropping hands.
- Tag A good old-fashioned game of tag gets blood moving and laughter flowing. Be sure to play along. Nothing gets a team feeling like a team faster than the common target of the Team Manager.
- Blindfold Walk Break the team up into pairs or groups of three. One member of the small group wears a blindfold. The small group walks with the blind folded team member across the room or somewhere safe. Group members take turns wearing the blindfold. To demonstrate your trust in the team, wear a blindfold and have the team work together to guide you physically around a room. When trust is strong, you can venture outside. Repeat the activity using verbal commands to guide each other, including you as the Team Manager, safely around the room or through obstacles.
- 3-D Human Sculptures Team members work together to use their bodies to create shapes, designs, and objects, including all team members in the sculpture. Start with easier sculptures, such as triangles, rectangles, diamonds, squares, etc., and work toward more complex objects, such as flowers, a book, elephants, helicopters, eating utensils, etc. As the team becomes experienced at moving from one shape to another, have them add movement to their sculptures (e.g., snake that moves across the room, airplane that flies, roller coaster, etc.).

e Team Manager Tip: Joining in on the play will build trust and help you connect with your team.

Common Goals & Purpose

As they learn to work together, completing the Challenge becomes the team's purpose. Setting goals is integral to building a solution.

Team members with common goals and purpose:

- Set their goals together.
- Accept and agree on the goals.
- Commit to the work necessary to complete those goals.

The Team Manager's role in facilitating common goals and purpose is to:

- Help the team generate ideas for goals.
- Facilitate agreement on the goals.
- Inspire the team members to reach their goals.

Methods for helping your team develop common goals and purpose:

- Encourage team members to express their thoughts and listen to each other.
- Ask team members to talk about why the project is important to them.

Team Manager Tip: Idea generating and focusing tools can be used for more than creating ideas for the team's Challenge solution. You can use them to help generate ideas for goals, team rules, team names and other issues the team needs to solve.

Activities to Develop Common Goals & Purpose

Open-Ended Questions

Asking your team members open-ended questions about goals will help get the discussion moving, teach them to listen to each other, and help them make decisions. The questions could include:

- What skills, abilities, and interests do you bring to your team?
- What do you hope to learn this year?
- What is your favorite part of the Challenge?
- What part of the Challenge is going to be the most difficult for you?
- Imagine yourself unloading your props before the tournament. What do other people see? What part of your solution makes you the most proud?
- How much work are you willing to do to help your team meet goals?

Create Situations for the Team To Meet a Common Goal

Sometimes your team members will need you to create a situation that will help them make a decision or require them to work together. Here are some suggestions:

- Ask each team member to bring \$3-\$4 to the meeting and take them to the grocery store to purchase dinner that they will/can make and eat.
- Provide paper, scissors, glue, and old magazines for team members to build a one-page collage that represents their personal goals for the team.
- Ask the team to bake and frost a cake without speaking.
- Divide a puzzle into two baggies of puzzle pieces. Split the team members into two groups and have them complete the puzzles as fast as they can. It will take the team a bit of time to figure out that the only way they can complete the puzzle is to work together.

Team Interest Inventory

The Team Interest Inventory is a four-part activity that is good to use early in the team's process to allow team members to learn more about each other. Follow these steps:

- 1. Ask each team member to complete the Individual Interest Inventory.
- 2. Have each team member add his or her scores on the Individual Interest Tally Sheet.
- 3. Combine all team member scores on the Team Interest Tally Sheet.
- 4. Discuss the results and discuss ways to incorporate your team members' talents and specialties into the Team Challenge.

Part One: Individual Interest Inventory

Scale: 0 - Not applicable 1 - Rarely 2 - Occasionally 3 - Frequently 4 - Usually 5 - Almost Always

#	Statements	Rating
1	I like to make up puns, rhymes, and jokes.	012345
2	When given the opportunity, I love to play brain teaser games that require logical thinking.	012345
3	I listen to music whenever I can.	012345
4	I work best when I can get up and move around.	012345
5	I love to do mazes, hidden object games, and jigsaw puzzles.	012345
6	I'm the kind of person who people come to with problems and discuss important issues.	012345
7	I write in a journal or I blog to record things that I think and care about.	012345
8	I love to be outdoors whenever I can.	012345
9	I use lots of patterns, colors, and shapes in my artwork.	012345
10	I like to get involved, so I join groups or clubs.	012345
11	I like finding just the right word when I write.	012345
12	I would like to study how different people have used certain plants for medicine.	012345
13	I like sports and most physical activities.	012345
14	I remember most TV jingles and recall songs after only hearing them once or twice.	012345
15	Before I begin a project, I have figured out a step-by-step procedure for myself.	012345
16	I love spending time alone pursuing personal hobbies and interests.	012345
17	When I give directions, I draw a picture to explain it better.	012345
18	I have strong opinions and tend not to follow the crowd.	012345
19	Math and science are my favorite subjects in school.	012345
20	Reading and writing are my favorite subjects in school.	012345
21	I love to help others learn new skills.	012345
22	I would have lots of pets, if my parents would let me.	012345
23	When I do a presentation, I always include music.	012345
24	I love doing things with my hands, such as model building, crafts, art, or carpentry.	012345

Part Two: Individual Interest Tally Sheet

Print a copy of this sheet for each team member. Have each team member write his or her score for each statement to the chart below, and add the scores as grouped. The highest totals most likely indicate the areas of their greatest interests or strengths.

A. Interpersonal	+ + =
	#6 #10 #21
B. Intrapersonal	+ + = #7 #16 #18
C. Logic and Mathematics	+ + =
	#2 #15 #19
D. Musical	+ + = #3 #14 #23
E. Nature and Environment	+ + =
	#8 #12 #22
F. Physical Movement	+ + = #4 #13 #24
G. Words and Language	+ + =
	#1 #11 #20
H. Visual and Spatial	+ + =

Part Three: Team Interest Tally Sheet

Add the total for each team member in each of the eight areas. The team's highest scoring categories indicate your team's areas of interest.

Team Member	А	В	С	D	E	F	G	н

- A. Interpersonal = _____
- B. Intrapersonal = _____
- C. Logic and Mathematics = _____
- D. Musical =
- E. Nature and Environment = _____
- F. Physical Movement = _____
- G. Words and Language = _____
- H. Visual and Spatial = _____

What if there are many clear-cut interests indicated?

A team's areas of interest may spread evenly across the entire list of interests. For example, there may be approximately equal scores in the areas of Logic and Mathematics, Music, and Physical Movement, meaning that the team has diverse areas of interest. The team will have to learn to manage diverse methods of thought and styles to create a solution. As the Team Manager, you will need to guide the team members as they navigate their diverse interests.

What if the team only seems to have one clear-cut interest?

When the inventory indicates that all of the team members lean toward a specific type of interest area, the team should look closely at some of the individual team member's scores on the Individual Interests Tally Sheet to see if there are any areas that are clear interests for one or more team members. The team can then create solution options from those areas of interest.

Team Manager Tip: Teams do not have to base their solution on the interests indicated in this Interest Inventory. Team members may choose to create solutions from any area of interest they choose.

Part Four: Team Interests Chart

The team can use the chart below for some samples of interests and ways the team members can use them in their solutions. The team is not limited to these options. Ask the team to generate additional ideas in each category.

Interest	Some Team Element Ideas		
Interpersonal Working in groups; communicating; socializing; caring for others; showing concern; cooperation; etc.	Demonstration of teamwork well beyond what is necessary to solve the Challenge; group harmony; teamwork in manipulation of props; group communication system; extreme collaboration; cooperative project; etc.		
Intrapersonal Exploring their feelings; knowing or understanding themselves and why they do the things they do; understanding their place in the universe; self-awareness; etc.	Developing one or more characters who explore their feelings/thinking/moods/emotions or assess themselves; writing poetry or music that expresses deep feelings or emotions; etc.		
Logic and Mathematics Logic; mathematics; principles of physics; analyzing, comparing and contrasting; identifying patterns; deciphering codes; reasoning; collecting data; etc.	Use of patterns such as tessellations, codes, mazes, puzzles; use of surveys, tabulations, graphs in Presentation; use of mathematical principles such as fractions or multiplication; application of principles of physics (machines, technology); use of data, formulas, calculations; etc.		
Musical Singing; playing instruments; listening to music; composing music; music appreciation; etc.	Composing original music; singing and/or harmonizing; creating instruments; playing instruments; use of rhythm and/or percussion; creating vocal sounds or tones, etc.		
Nature and Environment Understanding and learning about the natural world; categorizing plants, rocks, animals, etc.; ecology and/or wildlife studies; learning about atmosphere, weather and/or constellations; etc.	Use of ecological issues in Presentation; depiction of authentic natural environment, animals, insects, plants, natural habitats, constellations; use of natural resources in the Challenge solution; depiction of natural phenomena; etc.		
Physical Movement Dancing; physical exercise; acting; working with their hands; martial arts; sports; games involving physical ability; hands-on learning; manipulating puppets; etc.	An original dance; physical or gymnastic demonstration; acting out roles; pantomime; use of dramatic bodily movement; construction and/or manipulation of props; etc.		
Visual and Spatial Creating visual art; designing; creating pictures, illustrations, drawings, maps; inventing; sculpting; building models; working with color schemes; construction; engineering; creating gadgets; etc.	Sculptures, paintings, posters, mosaics, or other physical works of art; set, scenery, and/or costume design; creating unique and innovative props; creative use of color; innovative uses for ordinary materials; technical design; construction; etc.		
Words and Language Working with words, both written and spoken; creative writing; poetry; dramatic readings; debating; telling jokes and stories; playing word games and solving word puzzles; reading and writing plays; etc.	Use of puns, rhymes, poems; use of imagery and colorful words; creating unique and memorable characters; writing and reporting news stories; broadcasts; use of accents; storytelling; presenting a debate on an issue; use of humor; script writing; etc.		

Good Communication

Listening is a vital skill for successful teamwork. Listening with the intent to understand rather than reply is a critical skill for team members. Acquiring good listening skills can lead to the success of the Challenge solution as well as future relationships, education, and employment.

Team members who communicate effectively:

- Listen carefully.
- Listen for understanding.
- Share information and knowledge.
- Contribute ideas.
- State the other side of a disagreement.
- Are honest and respectful when sharing thoughts, ideas, and opinions.

The Team Manager's role in facilitating communication among the team is to:

- Teach listening skills.
- Ensure two-way dialogue.
- Help the team leave judgment out of idea generating.
- Keep interactions positive and exciting.

Methods for helping your team develop communication skills:

- Start the meeting with a check-in question, such as:
 - What did you learn at the last meeting?
 - What are you most proud of this week?
 - What does the team need to know about you?
- Teach the team to use "yes, and" rather than "yes, but" or "no" when responding to the ideas of others.
- Require team members to restate the last idea before they add another of their own.
- Recap accomplishments and set goals for the next meeting at the end of each meeting.

Activities to Develop Communication Skills

Improv Games

- Alphabet Game This is a scene consisting of at least 26 lines of dialogue. The first line starts with a given letter (e.g., "R"). The reply to that line must start with an "S," and so on, until the whole alphabet has been covered. After "Z" comes "A." Players that hesitate or use the wrong letter are replaced by another player. The replacement needs to take over the letter of the replaced player. This activity can be practiced with the alphabet of any language.
- One Word at a Time All players sit in a circle. A story is told one word at a time. Each player provides one word of a sentence. The end of a sentence can be indicated by a player saying "period," though that is not necessary. If your team is new to improvisation, have them try a familiar story, such as "Snow White and the Seven Dwarves."
- Animal Scenes Players find a partner; partners separate and run around. The leader calls out a phrase and the players must find their partner and depict the scene. The last pair to depict the scene is out. Examples:
 - Frog on a log: One student gets down on their hands and knees (log) and the frog sits gently on their back.
 - Bird on a perch: One student gets down on one knee (perch) and the bird sits on the perch.
 - Lion in a den: One person stands with their feet apart (den) and the lion lies down on the floor.
- **Energizer** Ask the team to pick its favorite television show. Then have team members work together to perform an episode of the show. The team can either perform its favorite episode or write its own episode. Encourage the team to incorporate humor into the performance, and make sure everyone plays a different part.

Family Portrait

Have your team create a still life family portrait with the following family types. "Family of Dentists. Family of Cheerleaders. Family of Lost Librarians. Family of DI Alumni. Family of DI Appraisers." You can ask the team to be more specific by using captions such as, "Right after grandma's big announcement" or "The Dentists Convention" or "Cheerleaders Lose the Championship." Your team has ten seconds to form a portrait based on the title. Remind team members to think about the characters involved in the picture and to talk to each other so that there are no repeat characters. They have to tell a story, even though they are frozen in place. A time limit forces students to work quickly. Count them down and at the end of 10 seconds yell out FREEZE! The end result should be a cohesive picture. Take a picture of each family portrait and share them with the team.

Listening Games

- **Telephone** The team members sit in a row. Give the first team member a complicated message. Team members whisper the message down the line. Compare the message at the end to the one at the beginning.
- Ha! The object is to keep from laughing. Players face each other in a circle. One person says, "Ha!" The next one says, "Ha-ha!" The third continues, "Ha-ha-ha!" If someone speaks the wrong number of "ha's" or laughs, he or she is out. Start over at that point. The player who laughs last is the winner.
- **Go!** Have the team sit in a horseshoe or a circle so that you can see everyone. Explain: "Listen carefully. I am going to tell you to do something. For example, Jump! Turn around! But don't do the action, until I say GO! Get the team to stand up. Read the instructions and leave a short pause before you say GO!
 - To make this harder: leave a longer gap before you say GO! Or combine some of the actions into a statement. Rub your tummy and stick out your tongue. GO!
 - Suggestion: Chose team members to think of an instruction and say GO
 - Example Instructions:
 - Stand up. Go!
 - Pat your head. Go!
 - Close your eyes. Go!
 - Stick your tongue out. Go!
 - Rub your tummy. Go!
 - Go!
 - Clap twice. Go!
 - Turn around. Go!
 - Shake hands with the person next to you. Go!
 - Pull a silly face. Go!
 - Close your eyes and hop. Go!
 - Pat your head and touch the floor. Go!

Stack 'Em Up

Place a stack of 10 plastic cups upside down on a table. Work together as a team and use only the rubber band and string device provided to stack the cups into a pyramid. The pyramid should have four cups in the bottom row, three in the next row, two in the next row, and one cup in the top row. Each team member must hold one string by its loose end.

The team may take 1 minute to plan, and then the team will have 6 minutes to build the pyramid. The team members may not talk when they are stacking the cups.

Materials

- 10 Plastic Cups
- 🔲 8 12in (30.5cm) Pieces of String
- 1 Rubber Band

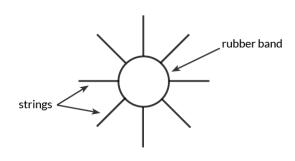
Note To Team Manager

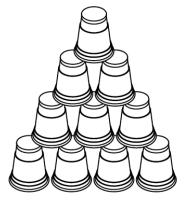
Feel free to have the team try this activity again. Can the team build the pyramid faster the second time? For a change of pace, try leaving the stack of cups in the same place, but ask the team to transport the cups using the device and build the pyramid across the room. The team can also flip the stack of cups, so the cups are right side up, to make the activity more difficult.

Processing Questions

- How well do you feel your team communicated?
- Was there one person leading or were there multiple leaders?
- Is there another strategy you could have used to stack the cups that may have worked better?

Team Manager Tip: At a later time, give the team the same task. Provide the team with string and rubber bands. Ask the team to build a different device. Have the team reflect on the difference between when the team was provided a ready-made device versus a team-created device.





Respect for People and Ideas

Respectful behavior creates an environment where team members feel comfortable sharing ideas and taking risks.

Team members who respect each other:

- Use respectful language when generating, evaluating, and choosing ideas.
- Appreciate the different skills and strengths each team member brings to the team.
- Ensure that conflict is focused on the issue and not on the person.

The Team Manager's role in facilitating respect among the team is to:

- Expect respectful language and attitudes from all team members.
- Identify team members' strengths.
- Remember that constructive conflict is vital to a creative solution.
- Interrupt and refocus negative conversations or attacks.

Methods for helping your team develop respect for each other:

- Share your observations about the team's strengths.
- Suggest team members write down nice observations/comments about each other.
- When the team is struggling to be respectful during idea generation, have the team list nothing but silly and outlandish ideas until everyone is laughing.
- Ask each team member to take a turn observing the rest of the team members as they solve an Instant Challenge. Then have the observing team member list the strengths and good ideas that were observed.
- If the team members are struggling with conflict over something in their solution, direct a team member to write the issue on a piece of paper and place the paper on the table. The entire team sits on one side of the table facing the issue and discusses the issue without changing position. This puts the team's focus on the issue rather than each other.

Activities to Develop Respect for People & Ideas

Shape Up

Start by handing each of the team members a piece of paper and a different colored marker. Then ask each team member to choose a different shape (e.g., triangle, cube, or trapezoid). Have the team members use their markers to draw chosen shapes three times on their papers. The shapes can be any size and can be drawn anywhere on the paper. Once they are done, have them pass the papers to the right.

Next, ask them to draw their shapes three times on the papers now in front of them. Pass the papers to the right. Repeat until everyone has drawn on each paper. You now have team-created art!

Once the team members have completed the activity, they will use their newly created works of art to tell a story. A variation on this activity would be for each team member to tell an ongoing story that is related to the shapes that he or she adds to the individual pieces of paper.

What does this activity tell the team about teamwork? What about the creative process or collaboration? How can the lessons of this activity apply in other activities? Write down some team comments. You can use them later so the team can track progress.

Getting to Know You

A great way to help team members open up is to ask fun questions that allow them to express their personalities or interests. Here is a list of twenty safe and useful icebreaker questions to help the team get to know each other. You, as the Team Manager, can also answer the questions to let the team know more about you.

- If you could have an endless supply of any food, what would it be?
- If you were an animal, what would you be and why?
- What is one goal you'd like to accomplish during your lifetime?
- When you were little, who was your favorite superhero and why?
- Who is your hero? (e.g., a parent, a celebrity, an influential person in one's life)
- What's your favorite thing to do in the summer?
- If they made a movie of your life, what would it be about and which actor would you want to play you?
- If you were an ice cream flavor, which one would you be and why?
- What's your favorite cartoon character and why?
- If you could visit any place in the world, where would you choose to go and why?
- What's your dream job?
- Are you a morning or night person?
- What are your favorite hobbies?
- What are your pet peeves?
- What's the weirdest thing you've ever eaten?
- Name one of your favorite things about someone in your family.
- Tell us about a unique or quirky habit of yours.
- Use three words to describe yourself.

Other People's Ideas

As part of the creative process, team members will need to learn to assess ideas based on the best interest of the team. Use this activity to promote open discussion and consideration of ideas. First, place a cardboard box somewhere visible in front of the team. Then ask the team members to generate as many ideas as possible for how the box might be used in their Team Challenge solution. Each team member must generate at least three ideas.

After the team is done generating, each team member selects two of his or her favorite ideas from the list. Team members may not select their own ideas. They must say why they like the ideas they chose.

Why is it important for team members to compromise? What can they gain by making sure that everyone is involved? What are some ways they can make sure that everyone is heard? What are some ways they can voice their concerns if they don't feel they're being listened to?

Write some ideas here:

Team Manager Tip: If your team is having a hard time acknowledging other team members' ideas, consider creating your idea lists in one meeting, retyping/rewriting the list during the week, and having the team use the list at the next meeting. Time can help the team to forget which ideas are from which team member.

Three Things

Give each team member a sheet of paper and a writing utensil. Each team member writes the other team members' names somewhere on the paper and writes three positive things under each name. The three things can be funny moments, great ideas, positive qualities, surprising showcases of talent, or whatever else the team members want to highlight. Then have all of the team members share their items with the rest of the team.

Collect and save these thoughts for when the team begins to celebrate at the end of the season or at the end of a trying, conflict filled meeting.

Team Manager Tip: Taking time to acknowledge each other is an important part of becoming a great team. When conflicts arise, it can help the team to recall all of the shared experiences over the last few weeks. It can also help the team better define individual strengths and how to best apply them toward solutions.

Conflict

Your team will encounter conflict as it works toward a solution. Conflict is often a necessary step toward progress. Therefore, it is important for your team to learn how to deal with conflict as it arises. As a Team Manager, remember to play the role of facilitator. You should help the team process conflict as it happens, but you should avoid making decisions and judgments for the team. In other words, stay out of the conflict as much as possible; your team will thank you later. In their book "Getting to Yes: Negotiating Agreement Without Giving In," authors Roger Fisher and William Ury break down conflicts into three components:

- The Issue: the point, subject or matter of discussion, debate, or dispute
- The Positions: where people stand in relation to the issue
- The Interests: the underlying concerns, needs, or desires

When team members are at a standstill due to conflict, ask them to define and divide the conflict into the three components: the issue, the positions, and the interests. As the team is identifying the issue, positions, and interests, write down the team's ideas. The issue and the positions are typically easy for team members to identify, but they often have trouble with understanding their underlying interests. The act of writing these components can help the team step away from the emotion and get to the reasons for the emotion. In these instances, you can facilitate as necessary. The team members need to learn to discuss their reasoning until the team can come to a collaborative resolution. For example, if a team is disagreeing about incorporating a superhero into a skit, the conflict may break down like this:

- The Issue: Should we include a superhero in our skit?
- The Positions: Tómas thinks a superhero would be a pointless addition to the skit. Steve thinks a superhero would be an awesome addition to the skit.
- The Interests: Tómas doesn't want to confuse the audience and likes the story already. Steve wants to be more involved in the Presentation, and if he played a superhero, it would command attention.

In this instance, as in most conflicts, the interests of each side were unclear. Try this exercise with your team to help resolve conflict when it arises.

Team Manager Tip: If your team is really struggling with an issue, sometimes a quick, physical activity will help them get unstuck. If the conflict is becoming a distraction, table the issue until the next meeting and do something fun together.

Chapter 8: Working with a Team Member with Differing Abilities

All children have the right to play. Afterschool programs that include children with special needs allow all children to develop social skills as well as participate in enrichment activities. These programs bring out the best in all the children." -- Elizabeth Fulmer School Age Child Care Services, Orange County Public Schools Orange County, Florida (http://www.afterschoolalliance.org/Special%20Needs%20IB34%20final.pdf)

At Destination Imagination (DI), our vision is to ignite the power of ALL youth to be the creative and collaborative innovators of tomorrow. The most direct way to ignite that power is to create a diverse and inclusive environment in which our youth participants can explore and grow.

The words "all youth" include students with differing abilities. Students who have developmental delays, activity limitations, special needs, non-neurotypical thinking patterns, physical differences or disabilities, or chronic illnesses are included as fully participating team members of a DI team.

If you are fortunate enough to have a child on your team who has special or differing needs and abilities, you may be wondering how to ensure that the team is inclusive of the child. Here are some suggestions from experienced Team Managers:

- Treat youth with disabilities as similarly to those without disabilities as possible by ensuring a welcoming and supportive environment for all students while being sensitive to the needs of each individual.
- Talk with the team member to determine what accommodations they might need.
- Discuss younger team member needs with team members' parents
- Talk to the team member's teacher about how best to support them, if your team is sponsored by the school.
- Keep your meeting locations accessible by meeting at the school or a library rather than at a private home.
- Use person-first language. This means "person with a disability" rather than a "disabled person."
- Invite parents to join some of the meetings, especially if you are struggling with a team member's behavior. This will support you and your team members.

Everyone benefits from inclusion

- Attain higher levels of social development
- Experience higher academic achievement
- Develop higher aspirations
- Build more meaningful relationships
- Learn to appreciate and accept individual differences
- Develop respect for others, regardless of ability.
- See the benefits of thinking differently

Resources to help

- https://www.nchpad.org/1294/6047/Inclusive~Out-of-School~Time
- https://www.teachervision.com/blog/morning-announcements/best-practices-for-supporting-students-with-specialneeds
- https://www.teachervision.com/teaching-strategies/special-needs/accommodations-environment

Say yes to having a child with differing abilities on your team. The team will experience new perspectives and ideas together and as a Team Manager, you will make a huge difference in your team members' lives.

Chapter 9: Creating a Complete Project Plan using PMI Tools, Forms, and Examples

Project Management

The world runs on projects, and your team members will be managing a large project (the Team Challenge solution) with many mini-projects, called deliverables (the individual Challenge elements your team will need to complete), as they create a solution to their Destination Imagination Team Challenge.

Destination Imagination has been working with the Project Management Institute Educational Foundation (PMIEF) to give team members tools and skills that will help them solve their Challenge and help them handle future school or work projects. These tools will also help Team Managers run efficient team meetings and keep their teams on track. There are four steps (or Process Groups in PMI language) to successfully managing a project. This section of Roadmap uses official terms used by the Project Management Institute (PMI) to familiarize you and your team with the official PMI language.



Project Management Steps

Every project proceeds through a cycle comprising five steps: Initiating, Planning, Executing, Monitoring and Controlling, and Closing. While solving a Challenge, DI teams experience the same process that professionals use as they address large-scale, real-world problems. The project management cycle closely aligns with the creative process teams follow when solving the different components of a Team Challenge.

Initiating: The first step of every project cycle is to define the project. This step is related to the Recognize Stage of the creative process. Your DI team's Challenge project can be broken down into a smaller number of mini-projects (deliverables). Each Team Challenge has a number of requirements that need to be met for the team to solve the Challenge. During this step, your team will work to determine team guidelines and expected behaviors, choose a Challenge, understand all elements of the Challenge, set goals for the overall project, determine meeting schedules, begin to learn to work together, and start to explore the roles and behaviors that are necessary for team success. The team should discuss and agree upon these important factors before any work begins on the solution.

With DI Team Challenges, many of these essential project requirements are defined in the Challenge rules to help teams know where to start. During this step, it will also be important for the team to define roles for each team member. By defining team roles, each individual team member can more easily understand the task at hand and how to contribute effectively and efficiently to the Challenge solution.

Planning: During the Plan step, your team members will use their imaginations (the Imagine Stage of the creative process) to identify the mini-projects and tasks (deliverables) that need to be completed to solve the Challenge. Once the team members have a good understanding of the Challenge, they will be able to see how many tasks and mini-projects they need to undertake to successfully complete the Challenge.

For example, team members working on an example Challenge that is described in the College/Career/Future Readiness chapter and again in this chapter's Example Challenge. decided on a theme for their solution. They generated many ideas to make the set match the theme and decided on two set pieces to build. As a team, they generated ideas and then decided which elements are needed for each set piece (team-defined requirements). The team agreed on who was responsible for building those set pieces and developed the timeline. The team can use this process for each element of the Challenge. Once a plan is in place, the team will move to the Executing step of project management.

Team Manager Tip: You may find, especially with younger teams, that your team might do better to decide on the overall theme and then plan one deliverable for the Challenge, move to the Executing and Monitoring and Controlling steps, and finish that task before planning the next one. Planning the entire solution can take time and patience; some team members might need to take action on smaller projects to keep feeling motivated about their Challenge solution. **Executing:** In the Executing step, teams will use the Initiate and Collaborate Stage of the creative process. Most of a team's time will be spent in this step of project management. Team members will use the team-generated requirements from the Planning step and bring those ideas to life. Though it may seem exciting to jump ahead and "just do something," executing a project works best if the appropriate amount of time has been allocated first to defining and planning. Careful planning, research, and testing will make the Executing step easier. Since the DI Challenge Experience requires teamwork and collaboration, the Executing step will be more effective if roles are defined and the work and project can be split up between team members who have specific skills, expertise, or interest in certain areas of the Challenge.

Monitor and Controlling: In this step, teams will use the Assess stage of the creative process. Team members will use the plans they developed in the Planning step to track their progress on each task or mini-project and ensure that their completed mini-project and tasks meet the team defined requirements. Have the team members refer back to the Scoring section of the Challenge to ensure that their plans for a task or mini-project are not working and they will cycle back through the other steps in the creative process to create a new plan that does meet the Challenge requirements.

Closing: The last step in every project is Closing, where the team will focus on the quality of the project deliverables and complete the evaluation and celebration stages of the creative process.

For the Destination Imagination Challenge Experience, the team's final deliverable is the Challenge solution Presentation that will take place at a local tournament. During Closing, the team members reflect on how they worked through the creative process by evaluating how their solution meets the requirements on the scoring chart. They will also complete the forms required for the tournament. The third page of the Tournament Data Form asks the team members to reflect on their use of the creative process. This form is a great discussion starter to help the team members understand all they have learned. Attending a tournament or showcase is an opportunity for the team to present its solution to a set of trained Appraisers who will validate the team's evaluation of its Challenge solution. This step is the Evaluate and Celebrate Stage of the creative process.

After the tournament, take time to process the results with the team members. Review the score sheets the tournament provided. Did they receive the points they expected to receive? What might they have done differently? How did the team members feel about their Presentation?

Be sure to celebrate the completion of the Challenge solution, no matter what score the team received at the tournament. Completing the Challenge is a huge accomplishment! Take time to remind the team members of what they learned and how they grew through the Challenge season.

Team Manager Tip: As the team members work on creating their solutions, they may find their initial ideas are more difficult than they realized. You can encourage them to keep working to create the team's original plan. Don't let the team members give up because the task is difficult; remind them that they CAN do it. If, after trying many ideas, the team members working on the task or mini-project feel they can't meet the original requirements planned by the team, have them meet with the entire team to replan the task.

Creative Process/Project Management Steps

Your team will use project management steps and the creative process when working on the Challenge solution. Below is a chart describing the creative process and project management steps.

Project Management Steps	Creative Process	Description			
Initiating	Recognize	Beginning a project; identifying the problem orChallenge and agreeing to work together to solve it.			
Planning	Imagine	Generating ideas; defining goals and creating a project plan and timeline			
Executing	Collaborate & Initiate	Experimenting with potential solutions; completing the work defined in the project plan; working with others to complete the project			
Controlling and Monitoring	Assess	Tracking progress on the project goals and timelines; ensuring that the products meet the requirements of the Challenge; identifying any areas of the project that need changing; practicing and preparing the solution for Presentation			
Closing	Evaluating & Celebrating	Finalizing the project; presenting a solution to an audience; reflecting on what was learned and what could have been done differently; celebrating the completion of the project			

Team Manager Tip: Encourage the team to follow the project management process and develop a project plan. Meeting the goals in the project plan helps the team see accomplishments and results, which will validate the planning, effort, and work that go into each of the goals. The project plan also makes for a nice piece of documentation when the team reaches the Celebrate stage.

PMIEF has created a Project Management Basics recognition that DI participants can earn based on what they learn as they complete their Challenge solution. Team members will be given the opportunity to demonstrate their knowledge and earn the certificate of completion, which can be shared on college applications and resumes.

For more educational resources that strengthen both teaching and learning, please visit the following links on the Project Management Institute Educational Foundation website:

- Careers in Project Management
 https://pmief.org/library/resources/careers-in-project-management
- Project Management Skills for Life https://pmief.org/library/resources/project-management-skills-for-life
- Project Management Toolkit for Teachers https://pmief.org/library/resources/project-management-toolkit-for-teachers
- Project Management Toolkit for Youth
 https://pmief.org/library/resources/project-management-toolkit-for-youth
- 21st Century Skills Map https://pmief.org/library/resources/21st-century-skills-map

Planning A Solution To A Team Challenge

Step 1: Identifying and Understanding Challenge Requirements

Your team's solution will be based on the requirements of the Challenge. Your team will need to read the Challenge thoroughly to identify the requirements and deliverables of the project. The **Project Management Overview section** of Roadmap provides instructions to understand a Challenge and includes a worksheet to help the team members identify the specific Challenge requirements.

In addition, the Challenge Requirements Identification worksheet will help the team identify the requirements and is the first step in the project planning process. Once the team has completed the worksheet, the team members can move to Step 2 of the planning process.

Step 2: Defining the Team's Project Deliverables (Mini-Projects or Tasks)

In addition to the Challenge requirements, team members will identify additional project deliverables to enhance their solution. Team members will work together to decide how they are going to create a solution that meets both the Challenge requirements and the team's goals and aspirations.

To decide on the team-generated requirements for the solution, team members generate ideas by using one or more of the generating tools listed on the first 3 pages of Chapter 6. After generating ideas, team members will focus the ideas and choose one or more ideas to add to their solution. Team members will include them on the Deliverable Requirements Planning Chart (examples 1 and 2). The completed charts become tools for dividing the work between team members and tracking their progress.

A blank copy of the **Deliverable Requirements Planning Chart** can be found later in this Chapter. You will need several copies of the chart – one for each deliverable (task or mini-project) the team identified on the Challenge Requirements Identification worksheet. Using this worksheet, the team will list the requirements defined by the Challenge and the final requirements decided by the team.

Each Challenge deliverable or element, whether team-decided or Challenge-required, will need a completed Deliverable Requirements Planning Chart. Remember to include Team Choice Elements in your project planning process. As your team members analyze the Challenge elements and requirements, they may discover that they want to add deliverables to enhance the Presentation. For instance, to solve the Challenge example introduced in Chapter 2, the team added costumes and set pieces.

REMINDER: The examples in this section are based on a team's solution to an example Challenge for you to understand the process as a Team Manager. Do not use this example to spur ideas for your team.

Example Challenge

This Project Management section and the **Project Management Overview section** earlier in Roadmap use this example Challenge and a team's potential solution to highlight how to create a project plan.

A. Story

- 1. Create and present a story that features an Attraction operating in an Unlikely Location.
- 2. For this Challenge, the Unlikely Location may be any place, real or imaginary, where amusement park attractions are not usually found. A real or imaginary carnival, festival, arcade, theme park or amusement park is NOT a valid Unlikely Location.
- 3. The story may be set in multiple locations, but only one will earn points for the Unlikely Location.
- 4. The Attraction must be in the Unlikely Location during all or part of the Presentation.
- 5. The story must show the impact of the Attraction, including its operation, on the Unlikely Location.
- 6. The story may be set in any time period(s): past, present or future.

B. The Attraction

- 1. Research and explore Scientific Concepts used in the operation of amusement park attractions. These attractions may be rides, games, shows, concessions or other activities that are typically found in an amusement park.
- 2. Design and build an Attraction that operates live during the 8-minute Presentation. Dramatic simulations and pre-recorded demonstrations do NOT meet the requirements for the Attraction.
- 3. For this Challenge, the Attraction is any team-created device that operates using at least 3 Scientific Concepts during the Presentation.
- 4. For this Challenge, a Scientific Concept is one or more rules and/or natural laws that describe an action or mechanical process.
- 5. Select two of the Scientific Concepts from the following list: Aerodynamics, Angular Momentum, Buoyancy, Electricity, Kinetic Energy, Lever/Leverage, Magnetism, Newton's Laws of Motion, Optics, Oscillation, Pneumatics/Hydraulics. Thermodynamics
- 6. Your team may choose the third Scientific Concept from the list, or you may choose a different Scientific Concept not found in the Table. The third Scientific Concept may be from physics, mathematics, computer science, chemistry, biology, or any other scientific field.
- 7. Your team may use more than 3 Scientific Concepts during the operation of the Attraction. However, only the 3 Scientific Concepts listed on the Tournament Data Form will receive points.

Team Manager Tip: After analyzing the requirements, some teams start with planning the story to help drive the look and feel of the other requirements. Other teams start with what they want the Presentation to look like and allow that to drive the look and feel of the story and other requirements.

Team Manager Tip: Blank copies of all the Project Management Institute documents are at the end of this Chapter.

Deliverable Requirements Planning Chart (Example 1)

Deliverable: Story Outline Relates to which part of the Challenge: Story Responsible team members: Sally and Mike Deadline: December 15, end of team meeting

Requirements Defined by the Challenge	Requirements Defined by the Team
Must include an Attraction operating in an Unlikely Location	Story takes place in an underground cave in a forest
(As practice, have your team list the rest of the requirements that are defined by the Challenge.)	Characters fall into the cave when searching for their pet
	The Attraction is a Ferris wheel
	The ferris wheel is grinding into the cave making it bigger and making the ground above it unstable.
	(As practice, have your team list additional team-defined requirements for the story)

Deliverable Requirements Planning Chart (Example 2)

Deliverable: Attraction Relates to which part of the Challenge: The Attraction Responsible team members: José and Sarah Deadline: February 28, end of team meeting

Requirements Defined by the Challenge	Requirements Defined by the Team
The Attraction operates live during the 8-minute Presentation	The Attraction is a Ferris wheel with a jungle animal theme
The Attraction must operated using at least 3 Scientific Concepts	The Ferris wheel will use Aerodynamics, Electricity, and Magnetism
The Attraction cannot be a simulation or acted out.	The foot rests on the chairs will grind into the earth.
(As practice, have your team list the rest of the requirements that are defined by the Challenge.)	(As practice, have your team list additional team-defined requirements for the story)

Team Manager Tip: Teams can plan Team Choice Elements as distinct parts of the Challenge from the start of planning or the team can select Team Choice Elements toward the completion of the solution. Remember, Team Choice Elements must not already be scored elsewhere in the Challenge. For example, in the example Challenge above, costumes are not listed as a scoring item, so the team could choose a particular costume as a Team Choice Element.

Step 3: Team Challenge Project Plan

Project Management Institute Educational Foundation (PMIEF) adapted professional project management tools and forms to be used by students. Through our partnership with PMIEF, Destination Imagination has modified the plans and tools to meet the needs of DI teams.

More tools can be downloaded at the PMIEF website. Click on "Toolkit Materials." http://pmief.org/learning-resources/learning-resources-library/project-management-toolkit-for-teachers

The Team Challenge project plan will help your team:

- Define the goals and success measures for the project.
- Evaluate resources, constraints, and assumptions.
- Explore the scope of the project.
- Look at deliverables and dependencies.
- Establish project managers for each deliverable or mini-project.
- Sequence, schedule, and set milestones.
- Plan and procure resources and materials.
- Assess risks and plan for prevention or mitigation.
- Monitor and control the project and its deliverables.
- Review the project and ensure the project meets the requirements of the Challenge and the requirements defined by the team.

Goals

- Goals explain what will be achieved in the solution (project). In Destination Imagination, goals could include but are not limited to:
- Completing the project in time to attend the local tournament.
- Presenting your solution at a parent night or showcase at your school.
- Earning the chance to present at the Affiliate Tournament or Global Finals.
- Having a good time together while working on the solution.
- Creating a Structure that will hold a certain amount of weight.
- Building a set that has many moving parts.
- Working on a service project that will help hungry students in your school.

Remember, your job as a Team Manager is to help the team members reach their goals, not your goals.

Lead the team members through a discussion about their goals and help them establish and agree to the goals.

- 1. What is the question, problem, issue, or perspective that drives your project?
- 2. What is your overall goal for your team?
- 3. Do you have goals for specific parts of the Challenge? What are those goals?
- 4. What are your goals for the end of your Challenge solution? What will your solution look like?

After establishing goals, the team completes the **Team Project Goals worksheet**. (See an example Team Project Goals worksheet on the following page.)

Team Project Goals Worksheet (Example)

What is the question, problem, issue, or perspective that is driving your project (Challenge solution)?

We have decided to do the Technical Challenge. We want to base our solution on the idea of the damage caused to the environment by things that don't belong there.

Category	Goal			
What is your overall goal for your team?	We want to have a good time together while we work on a solution that will make our point to the Appraisers and the audience.			
Do you have goals for specific parts of the Challenge? What are those goals?	We want our ferris wheel to be big and colorful enough to be impressive to the audience. We also want the audience to understand how objects in locations where they don't belong can cause environmental damage.			
What are your goals for the end of your Challenge solution? What will your solution look like?	We will have non-human characters for our entire story. The set will be realistic and take place in a forest.			

Resources, Constraints, and Assumptions

Resources are everything applied to complete the project, which may include money, time, knowledge, skills and abilities, services, items traded for, or goods owned or donated. Work with your team to name and describe the available resources.

Constraints are anything that limits what the team can do. Destination Imagination Challenges include a variety of constraints. Look back at the list your team created when they read the Challenge. The budget, the size of the Presentation Area, and the time limit are constraints. The team should identify and describe the constraints included in the Challenge. Constraints may be found in other areas as well. Perhaps your school won't let the students use power tools or spray paint, or there is a low ceiling in your work environment.

Assumptions are anything believed to be true about the project. What do the team members believe to be true about their Challenge solution?

Resources, Constraints, and Assumptions Worksheet (Example)

Category	Resource
People	Allen's dad can teach welding. D'Andre's mom understands electronics. Sarah's dad is a plumber. Our Team Manager can teach us to sew. The local hardware store has a tool class on Saturdays.
Money	The Parent Teacher Organization (PTO) will give us up to \$50 for supplies. The local bank supports team projects. Each of us will pitch in \$20 for supplies.
Team	D'Andre is great at writing stories. Mike does great puns. Julie understands physics and can sing. Molly designs beautiful costumes.
Materials	Sarah's family has leftover wood from a deck project. Molly has been collecting fabric since last year.
Other	

Category	Constraint	
Challenge	Value of our solution has to be less than \$175. The Attraction has to use at least 3 Scientific Concepts - 2 of which come from the list in the Challenge. The Attraction has to operate live on stage.	
Environmental	We can't use glitter inside our meeting space. Everything has to fit through the front door, which is 32in (81cm) wide. Everything also has to fit through the doors at the Presentation Site.	
Other: Meeting times	We can only meet all together on Sunday afternoons.	
Other		

Category	Assumptions		
Challenge	The Presentation Site will have high ceilings.		
Environmental	We can meet at our Team Manager's house.		
People	Our Team Manager can be at every meeting.		
Other	Our team will be ready to present at the tournament scheduled for Saturday, March 5.		

Scope

Defining the scope of your project is the process of determining tasks that are required to solve the Challenge and then making sure that all of that work, and only that work, is completed. Your team has probably listed several mini-projects on the Deliverable Requirements Planning Charts. These documents define the scope of your project. As ideas are tested and new ideas are discovered, the project scope may change. However, the decision to change the scope of the project is a team decision. Use the Deliverable Requirement Planning Charts to help you decide if a new idea fits into your project goals.

Deliverables and Dependencies

Deliverables are the mini-projects that are created through the course of the project that lead to the team's Challenge solution. Each deliverable will have requirements that need to be met and tasks that will need to be completed within a certain time frame and in a particular order.

Dependencies are the relationships between the deliverables and the tasks. In which order will the deliverables (mini-projects) need to be completed? Are there any mini-projects that are not dependent on other deliverables?

Deliverables (From Your Deliverable Planning Charts)	Dependencies
The Attraction	Need to research and decide on the three Scientific Concepts before we can start building the Attraction.
Story	Not dependent on other parts of the project.
Other	

Establish Team Roles and Responsibilities

Identifying project roles and deliverable managers will help the team manage the project. Team members will assign roles and responsibilities to each other.

Together, the team will be responsible for making sure the Team Challenge solution remains within all of the requirements. Deliverable managers should be prepared to give regular updates to the entire team. Team members will most likely have more than one responsibility on the team. Roles and responsibilities can be shared between team members.

Project Management Roles

The Time Manager helps each team member remain on track and on schedule.

The Quality & Risk Manager helps team members identify possible issues or stumbling blocks. This team member will be responsible for making sure the team is aware of all the potential risks associated with completing the Team Challenge solution. Some possible risks include going over the stated budget for the chosen Team Challenge, accepting Interference from non-team members, or not solving all the Team Challenge requirements before the day of the tournament.

The Communication Manager keeps track of the project plan and Challenge materials and ensures that team members are communicating with each other.

The Deliverable Manager oversees one or more deliverables (mini-projects) for the Challenge solution and works to ensure that each deliverable meets the Challenge requirements and the requirements defined by the team. Deliverable managers will gather the supplies or other resources needed to produce their assigned deliverables.

Team Roles And Responsibilities (Example)

Time Manager: Sally

Quality & Risk Manager: D'Andre & Molly C

Communication Manager: Allen

Deliverable	Manager(s)	Other Members
Story	D'Andre and Mike	Molly
Attraction	Sarah and Julie	Allen & D'Andre
Backdrop	Allen	Josè
Costumes	Molly and Josè	Sarah

Sequencing, Scheduling, and Milestones

The Time Manager(s) should lead the development of the project schedule. The team should have the final approval of the schedule.

Project Management Timeline Terms

Milestones are the points in a project's timeline that help you monitor whether or not the project is on schedule. Completing a deliverable will always be a milestone, but there are other points leading to the deliverable that may also be named as milestones. (See example on the following page.) Milestones are written as a statement of what will be accomplished. Each deliverable may have one or more milestones.

Tasks are individual to-do items. Each deliverable may have multiple tasks. See the **example Milestones and Tasks Sequencing Worksheet** to see how a team might complete the worksheet.

Work time is the estimated time it will take to do the task. Record the estimated work time on the Task List Chart for each task.

Sequencing is putting milestones, activities, and tasks in the order they will be completed. Identify the order of the tasks needed to complete your deliverable. Combining your milestones, activities, and tasks with sequencing and work time will give you a schedule for your project. Use the **blank Milestones and Tasks Sequencing Worksheet** to record your project sequence.

Milestones and Tasks Sequencing Worksheet (Example)

Deliverable: Attraction

Managers: Sarah and Julie

Milestones

- 1. Ferris wheel stands on its own
- 2. Ferris wheel rotates
- 3. Ferris wheel's seats are added
- 4. Ferris wheel is decorated
- 5. Ferris wheel is complete

Total Work Time Estimate: 41 hours Completion Date: February 28

	Tasks in order of completion	Work Time Estimate
1	Draw a picture of the ferris wheel with planned measurements	2 hours
2	Create a working model of the ferris wheel	8 hours
3	Gather materials for the ferris wheel	1 hours
4	Build the ferris wheel	16 hours
5	Build the ferris wheel seats	4 hours
6	Add the electricity and magnets	4 hours
7	Add a stop and start switch	4 hours
8	Decorate the ferris wheel	2 hours

Resource Planning and Budget

Resource planning means considering everything needed to complete the Team Challenge solution. This might be money, space, supplies, or materials. Every DI Challenge includes a budget limit. The team should consider how money and resources are spent. The Quality & Risk Manager can help track the resources. Different team members may require similar resources, so it is important that the Communication Manager helps team members communicate and work together.

Resource Planning Worksheet (Example)

Deliverable: Attraction

Managers: Sarah & Julie

Resource Needed (List each separately)	How will you acquire it?	Estimated Cost
(8) 2ft x4ft (0.6m x 1.2m) pieces of wood	4 are left over from Sarah's deck, 4 need to be purchased	(4) \$1.00 each garage sale value (4) new, \$2.50 each
2 large sheets of plywood	Construction site down the road tossed several into their trash. Ask permission to take them.	Garage sale value of \$3.00 per sheet
Paint	Purchase at hardware or craft store	\$5.00/pint
2 electrical switches	Purchase at hardware store	\$2.50 each

Budgeting and Expense Report

Each DI Challenge has a budget limit, and teams are required to complete an Expense Report and turn it in at the tournament or showcase. See Rules of the Road and the DI Learning Management System for an explanation of the Expense Report and categories.

Team Manager Tip: Items that are both used and functional should be assigned a garage sale value. Your team may list true discards, such as used cardboard boxes, used empty containers, etc., as trash items. Remember, only items that are brought to the Presentation Site as part of your team's Presentation need to be included in the Expense Report.

Risk Management Plan

Managing risk means reducing the likelihood and/or impact of negative events. The Quality & Risk Manager should lead the development of the plan.

There are a number of different risks that the team may want to consider when developing your Team Challenge solution. Some risks (but not all) include spending more than the Challenge budget will allow, accepting non-team member Interference, or not completing all Team Challenge requirements before the tournament, etc.

Risk Management Worksheet (example)

Deliverable: Attraction

Managers: Sarah & Julie

What might go wrong?	Risk Level L=Low	Area of Impact				How to prevent it or fix it
	M=Medium H=High	Resources	Timing	Requirements	Quality	
Ferris wheel could break or not move	М		х	х	х	Make a model; add an additional meeting to focus on ferris wheel; ask team members for ideas and help
Ferris wheel won't fit through door	Н			х	Х	Measure carefully before building

Monitor and Control Process

Monitoring and controlling can help the team members stay engaged throughout the Doing step. Through the monitoring and controlling process, they can stay on time and budget and create high-quality solutions. To effectively monitor and control the project, the team members should continually update each other on the progress made toward completing individual activities. This can include keeping an up-to-date inventory of materials and revising the overall Team Challenge Project Plan as needed.

Team Manager Tip: Have the team use the Milestones & Tasks Sequencing worksheet as a to-do list and check off the tasks and milestones as they are completed. This will help the team visualize any remaining work.

STEP 4: Review Project

The final step of project management is the opportunity to ensure all work is completed, review and assess the end product, and take the final Presentation to a tournament or showcase.

Below are some useful activities that were developed by the Project Management Institute Educational Foundation.

Group Reflection: Line Up!

Materials

A rope or item to make a "line" on the ground

Directions

- 1. Explain that the line represents how strongly team members feel about the statements you are going to make. One end (decide which one) is the "strongly disagree" end of the line and the other end is the "strongly agree" end of the line. The middle is "neutral."
- 2. Read a statement and tell team members to place themselves on the line depending on how much they agree or disagree with the statement.
- 3. Give team members a practice statement such as, "I like chocolate ice cream." Ask them to place themselves on the line depending on how much they agree or disagree with the statement.
- 4. Do this activity with the suggested statements. After each statement, you can ask individual team members to explain why they chose to stand where they did on the line. Or, have team members turn to someone and explain their choice.
- 5. Remind team members that there are no "right" or "wrong" places to stand on the line.

Statements

- I enjoyed participating in Destination Imagination this year.
- I gained new skills and knowledge by solving our Team Challenge.
- I liked practicing Instant Challenges with my team.
- I feel more confident now that I have participated in DI.
- We did a great job on _____. (Team Manager fills in the blank)

Pass the Ball

Materials

Beach ball with questions written on each colored area

Directions

- 1. Arrange the team in a circle.
- 2. Toss the beach ball. After three bumps/hits of the ball, the team member who has the ball reads the question that their right thumb is on and answers the question, or they can ask someone else to answer it.
- 3. The game continues until everyone has had a chance to answer a question.

Questions

- How did your group work together?
- What did you contribute to the solution?
- What were the most important lessons learned?
- What would you do differently next time?
- What is something your team learned about the Challenge subject?
- What is one thing you learned about each of your team members?
- What is something the team learned thanks in part to someone they didn't know before the season started?

Blank Project Plan Documents

Deliverable Requirements Planning Chart

(Make copies as needed)

Deliverable :
Relates to which part of the Challenge:
Responsible team members:
Deadline:

Requirements Defined by the Challenge	Requirements Defined by the Team

Notes about this deliverable:

Team Project Goals Worksheet

What is the question, problem, issue, or perspective that is driving your project (Challenge solution)?

Category	Goal
What is your overall goal for your team?	
Do you have goals for specific parts of the Challenge? What are those goals?	
What are your goals for the end of your Challenge solution? What will your solution look like?	

Resources, Constraints, and Assumptions Worksheet

Category	Resource
People	
Money	
Team	
Materials	
Others	

Category	Constraint
Challenge	
Environmental	
Other: Meeting Times	
Other	

Category	Constraint
Challenge	
Environmental	
Other: Meeting Times	
Other	

Deliverables and Dependencies

Deliverables (from your deliverable planning charts)	Dependencies

Team Roles and Responsibilities

Time Manager:	
Quality & Risk Manager: _	
Communication Manager:	

Deliverable	Manager(s)	Other Members

Milestones and Tasks Sequencing Worksheet (Make copies as needed)

Deliverable:	
Managers:	
Milestones:	
1	
2	
3	· · · · · · · · · · · · · · · · · · ·
Total Work Time Estimate:	_
Completion Date:	_

	Tasks in order of completion	Work time estimate
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Resource Planning Worksheet

(Make copies as needed)

Deliverable:

Managers: _____

Resource Needed (List each separately)	How will you acquire it?	Estimated Cost

Risk Management Worksheet

(Make copies as needed)

Deliverable:

Managers: _____

What might go wrong?	Risk Level L=Low	Area of Impact				How to prevent it or fix it
	M=Medium H=High	Resources	Timing	Requirements	Quality	

Appendix

References

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Additional Resources

The Destination Imagination Educational Experience is inquiry-guided learning that uses learning theory as its foundation. Below are some readings that support inquiry-guided learning, imagination, and social cognitive theory:

- 1. Bandura, A. (1991). "Social cognitive theory of self-regulation." Organizational Behavior and Human Decision Processes, Vol. 50(2), 248-287.
- 2. Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). "How People Learn: Brain, Mind, Experience, and School." Washington, DC: National Academies Press.
- 3. Caine, R. N., & Caine, G. (1991). "Making Connections: Teaching and the Human Brain." Alexandria, VA: Association for Supervision and Curriculum Development.
- 4. Nilson, L. B. (2010). "Teaching at Its Best: A Research-Based Resource for College Instructors "(3rd ed.). San Francisco, CA: Jossey-Bass.
- 5. Prince, M., & Felder, R. M. (2006). "Inductive teaching and learning methods: Definitions, comparisons, and research bases." Journal of College Science Teaching, 36(5), 14-20.
- 6. Vygotsky, L. S. (2004). Imagination and creativity in childhood. Journal of Russian and East European Psychology, 42(1), 7 97.
- 7. Creative Problem Solving See Center for Creative Learning, LLC, http://www.creativelearning.com/index.php/creative-problem-solving/about-cps



The Team Manager/Coordinator of a team with an active, registered Team Number is given permission to make 10 copies of this document for their team's use only, provided these copies are supplied to participants solely for their use in Destination Imagination.

The PDF files for the Team Challenges, Roadmap, and Rules of the Road are available for download in the Resource Area.

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