# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Tools</td>
</tr>
<tr>
<td>3</td>
<td>Design Toolkit</td>
</tr>
<tr>
<td>4</td>
<td>Generate</td>
</tr>
<tr>
<td>5</td>
<td>Make</td>
</tr>
<tr>
<td>6</td>
<td>Explore</td>
</tr>
<tr>
<td>7</td>
<td>Transition</td>
</tr>
<tr>
<td>8</td>
<td>Launch</td>
</tr>
<tr>
<td>9</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>
INTRODUCTION

WHAT IS HUMAN-CENTERED DESIGN?

Human-centered design, a recognized approach for creating thoughtful experiences and systems, is a core practice of some of the most innovative companies and organizations in the world. Human-centered design has been utilized to create consumer products, healthcare systems, retail spaces, fundraising events, policies, and procedures, curricula, and more.

The foundation of human-centered design is a first-hand understanding of the real-world needs and behaviors of the people for whom we’re designing. Instead of focusing only on what we think their needs are, it relies heavily on collaboration from end-users, participants from potential users and stakeholders, and willingness to see the solution through iterative cycles of learning, and a focus on action-over planning.

Using a stakeholder-centered, iterative process of human-centered design can also provide helpful structures for designing more equitable solutions for all people, even those who are traditionally underrepresented. The toolkit is designed to help stakeholders identify solutions that will solve real problems and meet important (but sometimes underestimated) needs.

HUMAN-CENTERED DESIGN IN SCHOOLS

Human-centered design methodologies have gained increasing attention in K-12 education in recent years. From-researchers using the process as a pedagogical framework for next generation, project-based learning to school leaders leveraging the process as a driver of innovative, progressive leaders of education systems around the world, human-centered design is a framework for transforming design as a method.

Armed with awareness that school systems are complex human-centered environments that are actively designed, we continue to work the desire to equip educators and learners with tools that are used by professional designers in order to creatively solve problems and actively imagine new futures.

WHAT IS THE TOOLKIT?

This toolkit is designed to support a design-based innovation process for schools participating in the Schools2020 Initiative. The process will be led by educators and school leaders, empowering them to identify problems and create solutions in response to concerns identified through the data collected with the PKM2K tool, and through reflection. The process will be iterative, adaptable to the cultural contexts and reduce constraints and opportunities of each unique school.

Your school in conducting the design process for your school is primarily tasked to identify the next steps of the learning agenda for your students in order to design and test solutions that address these next steps of your learning outcomes. The toolkit is not intended to replace the Schools2020 Initiative, learning outcomes, nor to improve.

GOOD LUCK AND HAPPY DESIGNING!

WHO IS ON THE TEAM?

Human-centered design is a collaborative problem-solving process conducted by a team. It is helpful to have a diversity of backgrounds and life experiences on your design team as those different people can bring a variety of perspectives to the challenge.

Depending on how your school has decided to proceed, you will either be working in teams with your colleagues only, in regional school teams or independently through the tools and the materials. Please talk to your colleagues, and you will see the benefit of a teamwork on your own.

WHAT DO YOU NEED TO KNOW?

You will need a school or classroom in your innovation process and you and your colleagues will rely on the tools in this toolkit to help you complete the needed activities for each phase of the process.

HOW WILL YOU USE THE TOOLKIT?

You will use this toolkit to guide your work throughout the design challenge. Each phase of the challenge has a specific set of resources and activities for you to complete. Though the toolkit is intended to guide you throughout these activities starting at the beginning, please do not skip any steps. There is one optional activity: shadowing a student— that is labeled as such. Turn to the next page to take a look at each phase of the design challenge as well as the tools you will use.

Although we are asking you not to skip steps, we do invite you to adjust and modify the tools to best suit your cultural context. Please work with your facilitator to make these modifications to ensure that all changes will accelerate your goal for the process.

At the end of this challenge, you will have the opportunity to showcase your designs and pitch your ideas to representatives from the Schools2020 Initiative.
INTRODUCTION

PHASES OF THE DESIGN PROCESS & WHAT IS INCLUDED IN THE TOOLKIT

For this project, there are ten phases. Each phase has different tools or activities that you need to complete in order to move to the next phase. See below for a list of the phases and tools included in the toolkit.

Throughout the toolkit, at the beginning of each phase there is an introduction page with context and instructions for the phase, as well as summaries of the tools.

At the end of each phase there is a tool to help you summarize your work and a book to help you determine whether you are ready to move on to and reflect on what you have learned.

KEY CONCEPTS

- Single-person activity
- Group activity
- Introduction
- Tasks
- Transition

LAUNCH THE CHALLENGE

- #1 Smooth-Sailing
- #2 Quantitative Data Analysis
- #3 Identify a Problem to Explore
- #4 Secondary Research
- #5 Context Mapping

DEFINE THE PROBLEM

- #1 Preparing to Interview
- #2 Interviewing
- #3 Additional Interview Techniques
- #4 Interview Notes & Reflection
- #5 Journey Mapping
- #6 Preparing to Sketch - optional - #7 Observation & Reflection - optional

DETERMINE THE PROBLEM

- #1 Prepare to Brainstorm
- #2 SolidBrainstorm
- #3 Group Brainstorm
- #4 Idea Selection

MAKE YOUR PROTOTYPE

- #1 Combine Ideas
- #2 Building Blocks
- #3 Storyboarding
- #4 Design a Prototype
- #5 Tips for Designing
- #6 Testing a Prototype

TEST YOUR PROTOTYPE

- #1 Test a Prototype
- #2 Testing a Prototype Reflection
- #3 Reflection格
- #4 What Did You Learn?
- #5 Idea Evaluation
- #6 Evaluating Prototypes to Get to Next Steps
- #7 What’s Next?

REFINE

- #1 Combine Reflections & Ideas
- #2 Building to Ideate
- #3 Storyboarding Your Iteration
- #4 Design Another Prototype

DEFINE ANOTHER PROTOTYPE

- #1 Test a Prototype
- #2 Testing a Prototype Reflection
- #3 Reflection格
- #4 What Did You Learn?
- #5 Idea Evaluation

RENEWED IMPLEMENT

- #1 Better Than What
- #2 Project Planning

TELL YOUR COMMUNITY

- #1 Storytelling
- #2 Pitching

HOLISTIC LEARNING OUTCOMES

The goal of this design challenge is for you to improve the holistic learning outcomes in your school. Your design work will be focused on the holistic learning outcomes below. See the appendix for more detailed definitions, see the appendix. Below, record which holistic learning outcomes your team is focusing on.

- Literacy
- Numeracy & Mathematics
- Science
- Health & Nutrition
- Arts & Culture
- Digital Literacy & Technology

- Critical thinking
- Creativity
- Ethical decision-making
- Self-awareness
- Self-efficacy
- Resilience
- Effective decision-making
- Collaboration
- Communication
- Critical thinking

For more detailed definitions, see the appendix. Below, record which holistic learning outcomes your team is focusing on.

- Critical thinking
- Creativity
- Ethical decision-making
- Self-awareness
- Self-efficacy
- Resilience
- Effective decision-making
- Collaboration
- Communication
- Critical thinking

GLOSSARY OF TERMS

Any work through this toolkit, you may encounter new words or phrases. Use the glossary to help define those words.

- Assumption: A person’s beliefs that are not based on facts or evidence.
- Brainstorming: A process for creating a large number of ideas.
- Concept: A tool kit that has been developed.
- Equity: An approach where every person, regardless of who they are, is given the same or equal opportunity to succeed.
- Formative: Feedback that you will complete independently through interviewing students and teachers and testing prototypes in the classroom and beyond.
- Generator: The process of creating something.
- Holistic: A word that means “whole.”

- Impact: A change in something.
- Iteration: An idea or a solution that has been refined.
- Key: A tool in the process.
- Prototype: A working model that can be tested.
- Resources: Materials that can be used.
- Student: A person who is learning.
- Thinking: A mental process.
- Tool: A device that can be used.
- Toolkit: A collection of tools.
- Work: A task or a job.

- Feedback: A piece of information that can be used.
- Field: A place where something happens.
- Phase: A part of a whole.
- Prototype: A working model that can be tested.
- Resources: Materials that can be used.
- Student: A person who is learning.
- Thinking: A mental process.
- Tool: A device that can be used.
- Toolkit: A collection of tools.
- Work: A task or a job.

- Feedback: A piece of information that can be used.
- Field: A place where something happens.
- Phase: A part of a whole.
- Prototype: A working model that can be tested.
- Resources: Materials that can be used.
- Student: A person who is learning.
- Thinking: A mental process.
- Tool: A device that can be used.
- Toolkit: A collection of tools.
- Work: A task or a job.

- Feedback: A piece of information that can be used.
- Field: A place where something happens.
- Phase: A part of a whole.
- Prototype: A working model that can be tested.
- Resources: Materials that can be used.
- Student: A person who is learning.
- Thinking: A mental process.
- Tool: A device that can be used.
- Toolkit: A collection of tools.
- Work: A task or a job.
Review the diagram below to get oriented to the Introduction page for each phase. The Introduction pages are designed to give you context for this phase of the design challenge.

**Holistic Learning Outcomes**

Identity all of the holistic learning outcomes identified in the Schools2030 initiative as a reference throughout your design work.

**Tools From This Phase**

These tools are the ones you will use in this phase of the design challenge. They are in order. Read them from left to right.

**Title of the Phase**

This is the title of the phase as well as the title of the page. In this case, “Launch” is the phase and “Introduction” is the page.

**Workshop & Fieldwork Tools**

These boxes explain each of the tools you will be using during this phase of the design challenge and what your objective is for using each tool. Above the boxes you’ll see a title that specifies “workshop” or “field work.” Each box also includes a time estimate for completing the tool.

**Page Navigation Bar**

This navigation bar shows you all the phases of your design challenge. The highlighted arrow shows how the phases are currently working on.

**Overview, Objectives & Mindsets**

These boxes are designed to give you context for this phase of the design challenge.

- The Overview explains what you will be doing.
- The Objective explains your goals for this phase.
- The Mindsets explain what attitudes and behaviors you want to practice during this phase of the design challenge.

**Toolkit Orientation: Phase Introduction Pages**

Each page is divided into sections to give you context for the Introduction pages for each phase of the design challenge.
ORIENTATION

Review the diagram below to get oriented to how the tool pages are designed. Each phase of the design challenge will have several tools that you will need to complete before moving on to the next phase.

INSTRUCTIONS
The instructions will help you understand how to use the tool. Always read the instructions first.

TOOL ORIENTATION
These tools are designed to be read from left to right. Each step in the process is numbered to help you navigate between the steps.

PHASE NAVIGATION
This navigation bar shows you all the phases of your design challenge. The highlighted arrow is the phase you are currently working on.

TITLE OF THE PHASE
This is the title of the phase as well as the page title. In this case, "Launch" is the phase and "Summary" is the page.

TOOLS FROM THIS PHASE
These tools indicate all the tools you will use in this phase of the design challenge. They are in order. Read them from left to right.

WORKSHOP & FIELDWORK TOOLS
These boxes give you reflection prompts to complete individually. These prompts are designed to help you focus your design work in order to get ready to share your work with your team. Above the boxes you’ll see a title that specifies "workshop" or "field work."
Orientation

This page is designed to help your team prepare for the orientation phase of your design challenge.

**Title of the Phase:**
This is the title of the phase as well as a section of the page. The title is a title box.

**Tools from This Phase:**
These tools are designed to help your team prepare for the orientation phase. They are in order from left to right.

**Launch Transition Alignment:**
This section is designed to help your team align with the phase. The tools are in order from left to right.

**Criteria for Moving Forward:**
These tools are designed to help your team move forward in the phase and assess whether you are ready to move forward as a group. If you do not feel comfortable moving forward based on the criteria, ask for help from your facilitator, school leader or another team.

**Phase Navigation Bar:**
This navigation bar shows you all the phases of your design challenge. The highlighted arrow is the phase you are currently working on.

**Holistic Learning Outcomes:**
Use these learning outcomes to identify areas where you need to focus your work.

**Tools from This Phase:**
These tools are designed to help your team align with the phase. They are in order from left to right.
LAUNCH INTRODUCTION

OVERVIEW OF LAUNCH THE CHALLENGE PHASE

The workshop in the Launch the Challenge phase are designed to help your team align around a particular challenge in terms of learning gaps and outcomes (paraphrase the holistic learning outcomes on the right side of this page). The point of the design process should be conducive with state-based teams. If there are enough participants, educators should put into teams based on age level of students. Therefore, this phase is called framing a problem. During framing a problem you prepare for the design work you will be conducting during the next phase. This phase is dedicated to framing, contextualizing and aligning the challenge. The phase of the design process will initiate identifying strengths and addressing weaknesses in the school's missions and learning outcomes, connecting to quantitative data, framing the challenge, connecting to secondary research and identifying stakeholders.

OBJECTIVES OF LAUNCH THE CHALLENGE PHASE

The goal of this process is to get your design team aligned around a particular framing of a problem, so you can frame your work in the next phase and refer and connect to the team and the larger challenges facing your school. Therefore, you need to prepare different types of resource to help you frame the problem you are working to solve.

At the end of the phase, all team members should be clear and aligned on a common problem you are working to solve and should have a shared context for the problem.

MINDSETS OF LAUNCH THE CHALLENGE PHASE

• Work together to understand the context
• Look deeply to understand potential problems and opportunities
• Stay optimistic that you can solve the problem
• Hold back on solving the problem during this phase

INTEGRATION

INTRODUCTION

OBJECTIVES OF LAUNCH THE CHALLENGE PHASE

The goal of this process is to get your design team aligned around a particular framing of a problem, so you can frame your work in the next phase and refer and connect to the team and the larger challenges facing your school. Therefore, you need to prepare different types of resource to help you frame the problem you are working to solve.

At the end of the phase, all team members should be clear and aligned on a common problem you are working to solve and should have a shared context for the problem.

MINDSETS OF LAUNCH THE CHALLENGE PHASE

• Work together to understand the context
• Look deeply to understand potential problems and opportunities
• Stay optimistic that you can solve the problem
• Hold back on solving the problem during this phase

INTEGRATION

INTRODUCTION

TEAM WORKSHOP TOOLS

#1 Smooth Sailing

WMT: The Smooth Sailing worksheet helps your team identify your school's strengths and weaknesses.

WMT: When you have completed this task, your team should be aligned around potential problems and opportunities.

#2 Quantitative Data Analysis

WMT: The Quantitative Data Analysis worksheet helps your team see quantitative data to identify potential problems and opportunities.

WMT: When you have completed this task, your team should be aligned around potential problems as well as those stakeholders who are most affected by the problem.

#3 Identify a Problem to Explore

WMT: The Identify a Problem to Explore worksheet helps your team bring together both their reflections and analysis of data to identify a problem to solve.

WMT: When you have completed this task, your team should be aligned around potential problems and opportunities to address during your design work.

#4 Stakeholder Mapping

WMT: The Stakeholder Mapping worksheet helps your team identify the different stakeholder groups that relate to the problem as well as potential solutions that are most underrepresented.

WMT: When you have completed this task, your team should be aligned around potential stakeholders to engage in the next phase of the process.
Smooth Sailing

Instructions: Imagine your school is a sailboat. Use that analogy to think of strengths, advantages, challenges and threats specifically related to improving the learning outcomes identified in the Schools2030 initiative (see the first page of this section for reference).

1. ADVANTAGES: CONDITIONS THAT HELP YOUR CAUSE
   Example: Most students come to school every day.
   Students participate in afterschool activities.

2. STRENGTHS: ASSETS OF YOUR SCHOOL
   Example: Teachers are dedicated.
   Students are dedicated to their studies.

3. CHALLENGES: DEFICITS OF YOUR SCHOOL
   Example: Students do not have access to computers at school.
   Students cannot articulate goals they have for themselves.

4. OBVIOUS THREATS: CONDITIONS THAT HURT YOUR CAUSE
   Example: Students do not come to school when the weather is cold.
   Students do not have enough teachers.

5. NON-OBVIOUS THREATS: CONDITIONS THAT HURT YOUR CAUSE
   Example: Teachers might leave their job at the school.
   Some students may have to leave school to earn money.

LAUNCH
EXPLORE
DEFINE
GENERATE
MAKE
TEST
ITERATE
TEST
IMPLEMENT
TELL
**Quantitative Data Analysis**

Instructors: Using the PROMISE app, identify the quantitative data points you find most interesting or troubling. This facilitates learning outcomes and the holistic learning outcomes (seen at the bottom of the page for reference). Using an equity lens (looking out for those who do not get everything they need to succeed and thrive), think about how you can use the quantitative data to identify populations of students who are underperforming or outperforming at your school.

1. **INTERESTING QUANTITATIVE DATAPOINTS:** Analyze the data in the PROMISE app to find the most interesting or troubling quantitative data points related to the holistic learning outcomes.

   Students do not indicate that they should have a say in their education.

2. **ANALYZING WITH AN EQUITY LENS:**
   Now, look at the most interesting or troubling data points you found and analyze again, looking for populations of students who are underperforming or outperforming in order to solve it.

   **Students who are from a minority group are, nonetheless, likely to advocate for themselves.**

   What do you need to learn more about to better understand the problem you chose?

   How is the problem connected to the holistic learning outcomes identified through the PROMISE app?

   One of the Holistic Learning Outcomes is self-efficacy.

3. **DEFINE THE PROBLEM:**
   Based on the data you selected, define the problem that your team would like to learn more about in order to solve it.

   **Students do not have the skills to advocate for themselves.**

   What is the problem?

   What do you need to learn more about to better understand the problem you chose?

   How is the problem connected to the holistic learning outcomes identified through the PROMISE app?

---

**Quantitative Data Analysis**

Instructors: Using the PROMISE app, identify the quantitative data points you find most interesting or troubling. This facilitates learning outcomes and the holistic learning outcomes (seen at the bottom of the page for reference). Using an equity lens (looking out for those who do not get everything they need to succeed and thrive), think about how you can use the quantitative data to identify populations of students who are underperforming or outperforming at your school.

1. **INTERESTING QUANTITATIVE DATAPOINTS:** Analyze the data in the PROMISE app to find the most interesting or troubling quantitative data points related to the holistic learning outcomes.

   Students do not indicate that they should have a say in their education.

2. **ANALYZING WITH AN EQUITY LENS:**
   Now, look at the most interesting or troubling data points you found and analyze again, looking for populations of students who are underperforming or outperforming in order to solve it.

   **Students who are from a minority group are, nonetheless, likely to advocate for themselves.**

   What do you need to learn more about to better understand the problem you chose?

   How is the problem connected to the holistic learning outcomes identified through the PROMISE app?

   One of the Holistic Learning Outcomes is self-efficacy.

3. **DEFINE THE PROBLEM:**
   Based on the data you selected, define the problem that your team would like to learn more about in order to solve it.

   **Students do not have the skills to advocate for themselves.**

   What is the problem?

   What do you need to learn more about to better understand the problem you chose?

   How is the problem connected to the holistic learning outcomes identified through the PROMISE app?
Identify a Problem to Explore

Instructions: Now that you have reflected on the strengths and challenges of your school, as well as looked at quantitative data, see the worksheet to identify a problem that you would like to explore during this design challenge. You will continue to explore this challenge before you develop a solution.

1. **Analyze Smooth Sailing Activity**
   - Based on the first activity, Decide-Sliding, that ask your team to reflect on your school, what are the top three challenges facing your school related to the holistic learning outcomes that you would like to address during this design challenge?
   - 1. Students Cannot articulate goals they have for themselves.
   - 2. 
   - 3.

2. **Analyze Quantitative Data Analysis Activity**
   - Based on the second activity, Quantitative Data Analysis, what are your guesses about what is at the center of the problem that your team is looking at quantitative data? What are the three most important challenges facing your school related to the holistic learning outcomes that you would like to address during this design challenge?
   - 1. Students do not have the skills necessary to advocate for themselves.
   - 2. 
   - 3.

3. **Find Patterns**
   - In the problems that were highlighted in the first and second exercises that is connected to the holistic learning outcomes identified in the PROMISE app? Select that problem to explore during this design challenge. Describe the problem below as you understand it right now.
   - Students do not have the skills to advocate for themselves.

4. **Interfacing**
   - What are your guesses about what is at the center of the problem?
   - Students do not have the skills necessary to advocate for themselves.

5. **Learn More**
   - What are you most curious to learn more about regarding this problem?
   - I need to learn more about how students make personal goals and whether they feel empowered to advocate for themselves.

6. **Make Connections**
   - Why do students connected to the holistic learning outcomes identified using the PROMISE app? Select that problem to explore during this design challenge.
   - One of the Holistic Learning Outcomes is self-efficacy.

7. **Identify**
   - Describe this challenge.

8. **Describe**
   - 3 steps to handling this challenge.

9. **Analyze**
   - Based on the first activity, Decide-Sliding, that ask your team to reflect on your school, what are the top three challenges facing your school related to the holistic learning outcomes that you would like to address during this design challenge?

10. **Interfacing**
    - What are your guesses about what is at the center of the problem?

11. **Learn More**
    - What are you most curious to learn more about regarding this problem?

12. **Make Connections**
    - Why do students connected to the holistic learning outcomes identified using the PROMISE app? Select that problem to explore during this design challenge.

13. **Analyze**
    - Based on the first activity, Decide-Sliding, that ask your team to reflect on your school, what are the top three challenges facing your school related to the holistic learning outcomes that you would like to address during this design challenge?

14. **Interfacing**
    - What are your guesses about what is at the center of the problem?

15. **Learn More**
    - What are you most curious to learn more about regarding this problem?

16. **Make Connections**
    - Why do students connected to the holistic learning outcomes identified using the PROMISE app? Select that problem to explore during this design challenge.
Secondary Research

1. **TITLE OF RESOURCE:**
   How to build the foundation for self-advocacy in young children

2. **SUMMARIZE THE RESOURCE IN 3-4 SENTENCES.**
   "When kids have confidence, it makes it easier for them to speak up when they need help."

3. **MAKE A LIST OF THE FIVE MOST IMPORTANT IDEAS IN THE RESOURCE.**
   - "Younger kids can be taught how to speak up for themselves."
   - "Giving responsibility to young children helps build the foundation for self-advocacy."
   - "Self-efficacy is one of the learning outcomes."
   - "You can help students build self-advocacy skills."

4. **NEXT, ANSWER THE QUESTIONS BELOW.**
   - How does this resource relate to the challenge you identified?
   - Strategies for building self-advocacy in students
     - What questions or areas of inquiry does this resource make you think of as it relates to your problem?
   - How can we build these skills in students?
     - How does this resource relate to the holistic learning outcomes identified in the Schools2030 initiative?
     - Self-efficacy is one of the learning outcomes.
   - Make a list of the five most important ideas in the resource:
     - ""
Mapping Stakeholder

Instructions: Stakeholders are the people for whom you are designing. Take some time to chart all of the people who might be involved in a problem and the problem you have identified. Think of different roles within the different stakeholder maps. Then think of specific people who match each of these roles. Once completed, think about the stakeholders who are most important and least represented when it comes to the problem you are wanting to explore. Put their names on the spectrum below.

1. Teachers with loss status (gender, experience, etc.)
   - Parents who live far from the school
   - Students who live far from the school
   - Community groups

2. Students with loss status (gender, class, disability, etc.)
   - Teachers who work outside the home
   - Parents who work outside the home

MUST REPRESENTED
# LAUNCH TRANSITION SUMMARY

## TEAM WORKSHOP TOOLS

### #1 Smooth Sailing

What are the three most important advantages and strengths you identified?

What are the three most important challenges you identified?

What are the three most important threats you identified?

### #2 Quantitative Data Work Sheet

What is the problem you identified?

What do you need to learn more about?

### #3 Identify a Problem to Explore

What are one or two problems you want to explore based on the Smooth Sailing worksheet and the Quantitative Data worksheet?

What are you most curious to learn more about regarding this problem?

Why is this problem connected to the holistic learning outcomes identified in the PREMISE app?

## LAUNCH TRANSITION ALIGNMENT

### CRITERIA FORMING TO THE CHALLENGES

The rubric below assesses the learner’s use of all the stages of the decision-making cycle, at the completion of each phase of the challenge.

#### HOLISTIC LEARNING OUTCOMES

- Core Academic Proficiencies
  - Literacy
  - Mathematics
- Applied Academic Proficiencies
  - Science
  - Social Studies
  - Arts & culture
- Digital literacy, technology & media

#### SAILING THE CHALLENGE PHASE

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Outcome</th>
<th>Rubric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore</td>
<td>Understanding the problem</td>
<td>Are you familiar with?</td>
<td>2. Identify.</td>
</tr>
<tr>
<td>Define</td>
<td>Problem definition</td>
<td>How do you define or frame the problem?</td>
<td>3. Identify.</td>
</tr>
<tr>
<td>Plan</td>
<td>Solution presentation</td>
<td>Are you comfortable moving forward?</td>
<td>4. Identify.</td>
</tr>
<tr>
<td>Create</td>
<td>Solution implementation</td>
<td>Are you strongly aligned with the solution?</td>
<td>5. Identify.</td>
</tr>
</tbody>
</table>

#### CHOOSING YOUR LEARNING PATHWAY

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Description</th>
<th>Outcome</th>
<th>Rubric</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROFICIENCY MAP</td>
<td>Identifying the connections to multiple proficiencies and skills</td>
<td>Identify</td>
<td>1. Identify.</td>
</tr>
<tr>
<td>ASSESSMENT FOR PROFICIENCY</td>
<td>Assessing the learner’s understanding of the challenges</td>
<td>Identify</td>
<td>2. Identify.</td>
</tr>
<tr>
<td>PORTFOLIO PROJECT</td>
<td>Compiling a collection of works that demonstrate the learner’s progress</td>
<td>Identify</td>
<td>3. Identify.</td>
</tr>
</tbody>
</table>

Now, take a look at your results in the different criteria to determine if you are ready to move on to the next phase. For the criterion where you are least confident, try reworking out to your facilitator for feedback. If you have more than two areas where your group isn’t confident, work to improve before moving on.
LAUNCH TRANSITION REFLECTION

**REFLECTION ON PROCESS**
Independently, reflect on how your team is working together by answering the questions below. Then share your reflections as a team.

- What is the most important insight you gained during this phase of the design challenge?

- About which part of this phase of the design challenge do you feel most confident?

- About which part of this phase of the design challenge do you feel least confident?

- What was the most difficult part to collaborate on for your team?

- How can you improve how your team works together in the next phase?

**SHARE OUT OF PROCESS**
When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleague to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below:

EXPLORE

SCHOOLS 2030 | HUMAN-CENTERED DESIGN TOOLKIT
EXPLORE INTRODUCTION

OVERVIEW OF EXPLORE THE PROBLEM PHASE

This is the “EXPLORE” phase and is designed to help your team understand the experiences, emotions and motivations of other stakeholders. This is an important design research tool, particularly when you are designing for people you do not know well or are design research for whom you are designing. Preparation for this part of the process can be done collaboratively with other school groups. The primary of the design challenge will include preparing to interview, interview questions and additional techniques, interview observation tools, and observation and journey mapping. Also included is the optional activity of visiting a school to shadow in a related field. Preparation and reflection tools are provided for the shadow experience.

OBJECTIVES OF EXPLORE THE PROBLEM PHASE

The goal of this phase is to engage with the most relevant stakeholders, begin to understand their experiences related to the problem you are seeking to solve. This phase is focused on shadowing, interviews, and gaining new perspectives through one-on-one conversations. At the end of this phase, all team members should have engaged in three interviews (at least one must be a student) and captured notes from those interviews. Team members should also complete an observation and journey map. The school shadow is an optional additional step.

MINDSETS OF EXPLORE THE PROBLEM PHASE

- Get inspired by people - actively listen to a source of creative information
- Put aside biases and assumptions about what you think the problem is - listen to the stakeholders
- Look carefully to understand potential problems and opportunities
- Stay optimistic that you can solve the problem
- Hold back on solving the problem during the phase

TEAM WORKSHOP TOOLS

1. Preparing to Interview 30 minutes

WHAT IS THE TOOL?
The Preparing to Interview worksheet is a guide for conducting empathy interviews as part of your design research.

WHAT DOES IT DO?
When you have completed this tool, your team should be aligned around potential problems and opportunities.

WHAT IS YOUR GOAL?
It is to capture and reflect on your empathy interviews and bring them to the next workshop. The notes you gather will inform the next phase of the design challenge.

2. Interview Reflection 15-30 minutes per interview

WHAT IS THE TOOL?
The Interview Reflection worksheet helps you reflect on what you heard from the people you interviewed.

WHAT DOES IT DO?
It is an opportunity to capture and reflect on your empathy interviews and bring them to the next workshop. The notes you gather will inform the next phase of the design challenge.

3. Interviewing & Observation Mapping 30 minutes

WHAT IS THE TOOL?
The Observation & Journey Mapping worksheet helps you capture notes from your observation experience. A journey map helps you synthesize what you observed at a time.

WHAT DOES IT DO?
You will use this guide to help you focus on your empathy interview. You do not need to ask all the questions. Pick the ones to help you in your initial research. Then you can also modify the questions as needed.

4. Preparing to Shadow 30 minutes to prepare, 30-45 minutes per experience

WHAT IS THE TOOL?
The worksheet helps you to write starter questions for your empathy interview. You do not need to ask all the questions. It is focused on allowing our conversation and gaining new perspectives through one-on-one conversations. At the end of this phase, all team members should have engaged in three interviews (at least one must be a student) and completed notes from those interviews. Team members should also complete an observation and journey map. The school shadow is an optional additional step.

5. Preparing to Shadow 30 minutes to prepare, 30-45 minutes per experience

WHAT IS THE TOOL?
The worksheet helps you to write starter questions for your empathy interview. You do not need to ask all the questions.

WHAT DOES IT DO?
You will use this guide to help you focus on your empathy interview. You do not need to ask all the questions. Pick the ones to help you in your initial research. Then you can also modify the questions as needed.

6. Additional Interviewing Techniques 10 minutes to prepare

WHAT IS THE TOOL?
The Additional Interviewing Techniques worksheet gives you additional tools for engaging stakeholders, particularly young students or those who have a hard time sharing their answers to your questions. You do not need to use every technique. Choose techniques that are most relevant and appropriate for your context.

WHAT IS YOUR GOAL?
Your goal is to gain deeper understanding of the problem. A variety of techniques can help you engage with different stakeholders.

HOLISTIC LEARNING OUTCOMES

- Proficiencies
  - Literacy
  - Numeracy & Mathematics
- Applied Academic Proficiencies
  - Science
  - Art
  - English
  - Society & Culture
  - Digital literacy, technology & media

Being Our Best (our individual work)
- Self-awareness
- Self-regulation
- Resilience
- Empathy
- Ethical decision-making
- Creativity
- Critical Thinking

Working With Others (our interaction)
- Collaboration
- Communication
- Teamwork
- Empathy
- Relationship building
- Recording lessons
- Leadership

Improving Our World (our community/our world)
- Problem-solving
- Communication
- Critical thinking
- Respect for difference
- Respect for the environment
Preparing to Interview

1. PREPARING TO INTERVIEW
   - You'll conduct three interviews with different stakeholders. At least one must be with a student. Schedule 30 to 60 minutes per interview.
   - When you make arrangements with those you want to interview, be sure to give them context for this project. Share with the person that you will be seeing them questions about the topic that you do not want them to answer.
   - Use the interview questions that are provided on the following page to start the conversation. Aim for a conversation to discover more about the problem.
   - You are not just looking for answers to questions. If you are feeling confused, then ask if you have your own follow-up questions, feel free to do so.
   - Start with 6-8 questions. Select questions that feel relevant to the problem you identified in the Scoping the Challenge worksheet. Feel free to write your own questions as well.
   - Do not feel that you have the task all the questions in the list do not need to follow a particular sequence. You may have a point of order, but you should get a conversation started.
   - Review list of supplemental questions and select one that may be interesting to follow up if the interview is going well.
   - When you are interviewing, be sure to take notes on what you hear and notice about the participant. Write down specific information.
   - For young children or those who may be reluctant to share their thoughts and feelings, use the methods described in Additional Interviewing Techniques page of the workbook. You do not need to complete all the activities - select the methods that work.
   - After you have completed your interviews, set aside time to headine [make short summaries of the highlights of your day].
   - Take space to capture your main takeaway points and any surprises or missed steps. Write down any questions on the page you were reading. Feel free to have more than one page on each page.
   - Review the Interview Reflection tool provided in this workbook to reflect on your interview.

2. SELECTING STAKEHOLDERS TO INTERVIEW
   - Return to the Community Mapping online Launch Phase to review the stakeholders you identified. Use the tool to select three stakeholders to interview who are most relevant to the problem you are exploring.
   - Select specific people who represent a variety of stakeholders. Pick at least two people to interview who are often underrepresented. You may also interview at least one student.
   - Remember that the people you interview may be reviving openness up to you. Do your best to be an active listener focused on their thoughts, nodding, asking relevant questions, reframing from offering your own thoughts. Ask them if you are interviewing at this time will ensure that you maintain their privacy.
   - Give them everything you can to reduce the power differential. Get down on their level, be warm and casual and try not to be intimidating. Encourage them that you are genuinely interested in learning from them.
   - Think about people to interview who are open and comfortable sharing their thoughts and feelings. Select extremes – someone who is the best student, a student who is very disregarded, a vocal parent, a brand new teacher, someone whose background and experiences may affect their responses. Are they open and comfortable sharing their thoughts and feelings?
   - Have a more extreme point of view, if we design for their needs, we often create solutions that are broadly appealing.
   - Write the names of the specific people you want to interview below.

   - Interview 1
     - Name: Student
     - Interview 2
     - Name: Stakeholder group: Student
     - Interview 3
     - Name: Stakeholder group:

3. TIPS FOR INTERVIEWING
   - These interviews are not just as focus groups. You want to connect with a stakeholder one-on-one and you can really focus on their perspectives and follow up on their stories.
   - You can’t really ask a person, “What do you need?” Designers have found that is difficult to people to come to that you really need to learn about a stakeholder’s life experience through stories from their life. By telling stories, designers have found that stakeholders were more likely to share their experiences and motivations.
   - Everything has an arc – a beginning, middle, and end. Start by introducing yourself and your project.
   - Ask a few open questions.
     - E.g. Tell me about yourself. What do you do in your free time?
   - Ask open-ended questions that solicit stories.
     - E.g. Tell me about your favorite day in school.
   - Don’t offer answers to your own questions.
   - Follow up interesting things that they hear or observe. Look for body language cues, lean in to their stories and the conversations will flow.
   - Talk about feelings.
     - E.g. Tell me more. What did you mean when you said that?
   - Look for the deeper why.” Dig deep to really understand what motivates your stakeholders who are being negative to not your emotional boundaries.
   - A good way to ask why “Tell me more about.”
   - Don’t be afraid of silence. Often the person will fill the silence with a deeper thought.
   - This may be uncomfortable but it is critical to the success of the project that you discover their thoughts about your stakeholder. Use everything you can to make him comfortable and willing to open up and share.
   - If you can, interview with a partner so that one person can focus on connecting with the person you are interviewing and one person can focus on capturing questions and notes.
Tell me about what activities you are involved in at school. What about outside of school?

Tell me about your favorite class subject. Why?

Tell me about a project you've worked on. Why?

Tell me about a project where you learned the most. Why?

Tell me about a time when you saw something that you weren't learning right now. Tell me more about that.

Tell me about a time when you felt that the teacher saw a connection between what they learned and their future.

Tell me about what you learned most from. What are your goals for your student's learning?

Tell me about what activities you are involved in at school. What about outside of school?

Tell me about your least favorite class subject. Why?

Tell me about your least favorite class this year. Why?

Tell me about a project where you think the students learned the most. Why?

Tell me about something you wish you could learn that your class isn't learning right now? Tell me more about that.

Tell me about a time when you felt that the teacher wasn't involved in your time.

Tell me about a time when you felt that the teacher didn't love you. What are your goals for your student's learning?

Tell me about a time when you felt that the teacher didn't love you. What are your goals for your student's learning?

Tell me about a time when you felt that the teacher was loved. What are your goals for your student's learning?

Tell me about a time when you felt that the teacher was loved. What are your goals for your student's learning?

Tell me about a time when you felt that the teacher wasn't involved in your time. What are your goals for your student's learning?

Tell me about a time when you felt that the teacher wasn't loved. What are your goals for your student's learning?
Supplemental Interview Questions

FAMILIES

Tell me about your most réalized day (related to school).

Tell me about your child's classroom environment, what accommodations, compliments, guest speakers, or teachers, etc. Tell me more.

Tell me how your child learned with you about school?

Tell me about your child's least satisfied with school?

Tell me about your child's favorite time of school?

Tell me about your child's favorite place or your child's favorite class?

Tell me about a student who you admire?

Tell me about your child's favorite teacher or who you admire at school?

Tell me about your child's favorite time of day at school?

Tell me about your child's most exhausted?

Tell me about your child's most exciting?

Tell me about your child's most satisfied with school?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's favorite time of day at school?

Tell me about your child's least satisfied with school?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's least satisfied with school?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's most satisfied with your child's education?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?

Tell me about your child's least satisfied with your child's education?

Tell me about your child's least satisfied with your child's experience?

Tell me about your child's most satisfied with your child's experience?
Sometimes a person you are interviewing is struggling to communicate or isn’t able to express her or his ideas. These people may be shy or very young. Use these techniques to engage stakeholders in different ways.

**Additional Interviewing Techniques**

**USE PLAY OR DRAWING**
- Ask the student to show you their favorite and least favorite thing about school, either through playing with toys or drawing pictures.
- Ask them, “Tell me more about why you did that…” 
- Talk about what this means…”
- Be sure to take notes and write down specific quotations that you hear.

**READ A STORY**
- Read a story about school or look at a picture book together.
- Ask them, “What do you like about this? Why?”
- What do you dislike about this? Why?”
- How does this remind you of our school?”
- How does it not remind you of our school?”
- Be sure to take notes and write down specific quotations that you hear.

**IMAGE SORT**
- Photocopy ten to twelve pictures of items or places that are relevant to the student (playground, train station, home, the ocean, a cake, etc.)
- The pictures cannot be drawn or they do not need to be exact.
- Ask the student to pick out images that remind them of how they feel about school.
- These images do not need to be directly relevant.
- They are meant to prompt the student’s creative and emotional reflection.
- Ask them, “Why did you choose this image?”
- How does this remind you of our school?”
- How does it not remind you of our school?”
- Be sure to take notes and write down specific quotations that you hear.

**ASK STUDENTS TO CHOOSE FACES THAT REPRESENT THEIR FEELINGS**
- Give the student a sheet with different faces on it—see below as an example.
- Ask them, “Point to the face that represents how you feel about school.”
- “Tell me more about why you choose that face.”
- “You can also ask, ‘Tell me about your best day at school.’”
- “Pick the face that represents that day.”
- “Tell me about why you choose that face.”
- “You can also ask, ‘Tell me about a scary day at school.’”
- “Pick the face that represents that day.”
- “Tell me about why you choose that face.”
- “Let the student interpret what each face means to them and explain to you what they are thinking.”
- Be sure to take notes and write down specific quotations that you hear.

**ASK STUDENTS TO INTERVIEW A FRIEND**
- Ask the student to find a friend to interview about school. Tell them you want to learn more about their experience with school and you want to see it through their eyes.
- Observe and listen as the student interviews their friend.
- Afterwards, debrief with the interview. Ask them, “Tell me more about why you asked that question…What did you think of their answer? Do you relate to that? Why or why not?”
- Be sure to take notes and write down specific quotations that you hear.

**TUNNEL TOUR**
- Ask the student to show you their favorite and least favorite things about school by taking you on a tour.
- Ask them, “Tell me more about why you brought me here…” What do you like about this? Why?”
- “What do you dislike about this? Why?”
- Be sure to take notes and write down specific quotations that you hear.
Interview Notes #1

INTERVIEW QUESTIONS

1. If you are using additional interview techniques, write them here.
2. Is there something you wish you could learn about that you aren’t learning right now?
3. Tell me more about that.
4. Tell me a time when you saw a connection between what you learned at school and your future.
5. What are your goals for your future?
6. Are you exploring any additional areas?
7. What do you see as a student today?
8. What did you hear when he talked about his future goals?
9. What did you hear about your career?
10. At the end of the interview, always ask this final question: ‘Is there anything more you would like to share with me?’

ADDITIONAL INTERVIEW TECHNIQUES

- Use the following statements to guide your interview questions:
  - Prepare to capture the most interesting things you hear and observe. Listen and take notes for your interviews. The more notes you take, the better your ‘data’ will be in the design challenge.
  - What do you see as the end of the interview?
  - What did you hear about your career?
  - What are your goals for your future?
  - Are you exploring any additional areas?
  - What do you wish you could learn about that you aren’t learning right now?
  - What are your goals for your future?

WHAT DID YOU SEE?

- Look for evidence of enthusiasm, excitement, joy in the person’s body language and facial expressions.
- I saw a student look down and look sad when he talked about his future goals.

WHAT DID YOU HEAR?

- Write down specific questions. Listen for answers, emotions, and behaviors.
- Take and record quotations to use during later conversations. The more notes you take, the better your ‘data’ will be in the design challenge.
- What did you hear when he talked about his future goals?
- What do you see as a student today?
- What did you hear about your career?
- What are your goals for your future?
- Are you exploring any additional areas?

ADDITIONAL INTERVIEW TECHNIQUES

- If you are using additional interview techniques, write them here.
- Use the following statements to guide your interview questions:
  - Prepare to capture the most interesting things you hear and observe. Listen and take notes for your interviews. The more notes you take, the better your ‘data’ will be in the design challenge.
  - What do you see as the end of the interview?
  - What did you hear about your career?
  - What are your goals for your future?
  - Are you exploring any additional areas?
  - What do you wish you could learn about that you aren’t learning right now?
  - What are your goals for your future?

INTERVIEW QUESTIONS

1. If you are using additional interview techniques, write them here.
2. Is there something you wish you could learn about that you aren’t learning right now?
3. Tell me more about that.
4. Tell me about that.
5. Tell me a time when you saw a connection between what you learned at school and your future.
6. What are your goals for your future?
7. Are you exploring any additional areas?
8. What do you see as a student today?
9. What did you hear when he talked about his future goals?
10. At the end of the interview, always ask this final question: ‘Is there anything more you would like to share with me?’

ADDITIONAL INTERVIEW TECHNIQUES

- Use the following statements to guide your interview questions:
  - Prepare to capture the most interesting things you hear and observe. Listen and take notes for your interviews. The more notes you take, the better your ‘data’ will be in the design challenge.
  - What do you see as the end of the interview?
  - What did you hear about your career?
  - What are your goals for your future?
  - Are you exploring any additional areas?
  - What do you wish you could learn about that you aren’t learning right now?
  - What are your goals for your future?

WHAT DID YOU SEE?

- Look for evidence of enthusiasm, excitement, joy in the person’s body language and facial expressions.
- I saw a student look down and look sad when he talked about his future goals.

WHAT DID YOU HEAR?

- Write down specific questions. Listen for answers, emotions, and behaviors.
- Take and record quotations to use during later conversations. The more notes you take, the better your ‘data’ will be in the design challenge.
- What did you hear when he talked about his future goals?
- What do you see as a student today?
- What did you hear about your career?
- What are your goals for your future?
- Are you exploring any additional areas?

ADDITIONAL INTERVIEW TECHNIQUES

- If you are using additional interview techniques, write them here.
Instructions: Review the notes you captured from your interview. Use this worksheet to begin the process of synthesizing what you heard and observed.

1. **Describe Who You Interviewed**
   - Who did you interview?
   - Age, gender, role, likes, dislikes, strengths, weaknesses.

   Joe, an energetic middle school student who does not succeed academically in school but loves playing sports.

2. **What Stories Did You Hear?**
   - One time a neighbor of Joe's came home from college. Joe was fascinated by her experiences and decided that he wanted to go to college too.

3. **What Emotions Did You Observe?**
   - Joe was frustrated that the adults in his life don't listen to his goals.

4. **What Are the Five Most Important Things You Learned That Are Relevant to the Problem You Are Exploring?**
   - “I do not have any choice about what I do for my career. I have to follow what my parents say.”
   - “My teachers do not listen when I talk about my goals for my future.”
   - Students do not feel hopeful about their future options.
   - Sometimes parent voices dominate student voices.

   Students do not feel hopeful about their future options.
   - Teachers do not know how to teach students how to advocate for themselves.
   - Sometimes parent voices dominate student voices.
Interview Notes #2

Instructions: Use the worksheet to prepare for your interviews and to take notes during your interviews. Unlike interview questions provided to get the conversation started with different stakeholders, you will be asked to follow up on interesting things you hear. You can ask, "Tell me more about..." Be sure to keep notes about the specific dates and quotes you hear from your interviews. Use post-it notes to capture the most interesting things you hear and observe. Listen and look for emotions and motivations. Also, listen for things that are surprising to you as well as contradictory information. The more notes you take, the better your ideas will be in the design challenge.

**INTERVIEW QUESTIONS**

Write five from the first interview question page and three from the supplemental interview question page. Choose the questions that are most relevant to the problem you are exploring here. Feel free to modify questions to fit culturally appropriate.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10.

At the end of the interview, always ask the final question: 
- "Is there anything more you would like to share with us?"

**ADDITIONAL INTERVIEW TECHNIQUES**

If you are using additional interview techniques, write them here.

**WHAT DID YOU HEAR?**

Write down specific quotations. Listen for attitudes, emotions, motivations, and behaviors. Listen for contradictions or contradictory information.

**WHAT DID YOU SEE?**

Look for emotions, sadness, excitement, joy in the person’s body language and facial expressions.

**WHAT DID YOU DO?**

Use the worksheet to begin the process of synthesizing what you heard and observed.

Interview Reflection #2

Instructions: Review the notes you captured from your interviews. Use the worksheet to begin the process of synthesizing what you heard and observed.

1. **DESCRIBE WHO YOU INTERVIEWED**
   - Who did you interview?
   - Age, gender, role, likes, dislikes, strengths, weaknesses

2. **WHAT STORIES DO YOU HEAR?**

3. **WHAT EMOTIONS DO YOU OBSERVE?**

4. **WHAT ARE THE FIVE MOST IMPORTANT THINGS YOU LEARNED THAT ARE RELEVANT TO THE PROBLEM YOU ARE EXPLORING?**
**Interview Notes #3**

**Interview Questions**

Green line from the first interview question page and three from the supplemental interview question page. Choose the questions that are most relevant to the problem you are exploring. Feel free to modify questions to fit your particular case.

- What happened during the interview?
- What did you hear?
- What did you see?
- What did you hear?
- What emotions did you observe?
- What are the most important things you learned that are relevant to the problem you are exploring?

**Additional Interview Techniques**

If you are using additional interview techniques, write them here.

---

**Interview Reflection #3**

**Instructions:** Review the notes you captured from your interview. Use this worksheet to begin the process of synthesizing what you heard and observed.

1. **Describe who you interviewed?**
   - Name: [ ]
   - Age: [ ]
   - Gender: [ ]
   - Occupation: [ ]
   - Where do you interview: [ ]
   - What are they like?

2. **What stories do you hear?**
   - Feel for emotions: sadness, excitement, joy in the person's body language and facial expressions.

3. **What emotions did you observe?**
   - Feel for emotions: sadness, excitement, joy in the person's body language and facial expressions.

4. **What are the most important things you learned that are relevant to the problem you are exploring?**
   - Feel for emotions: sadness, excitement, joy in the person's body language and facial expressions.
**Observations & Journey Mapping**

Instructions: Journey maps are a method of design that can help you gain more insight into a stakeholder’s experience. Pick one student to observe over the course of a day. Use the framework to map how engaged you think the student was during different parts of the day. Include arriving at school, morning class, lunch, afternoon class, breaks, and dismissal.

**I noticed that my student was very engaged.** When he was learning a topic that he understood was relevant to his future. “My sister told me she uses algebra when she is ordering food for our family store.” He was visibly excited and leaning toward me to learn.

**I noticed that my student was very disengaged.** In topics that didn’t interest him. He said at one point, “Why are we learning this?” and put his head down on the table when we were studying health topics.

Take note of anything that you notice as you listen and observe. This might include potential areas of opportunity or questions about which you might want to learn more.
Preparing to Shadow - Optional

1 PREPARING TO SHADOW

Any component of the human-centered design process is developing a deep understanding of the needs and motivations of the people for whom you are solving problems. For this exercise, you will immerse yourself in the experience of another school to help you gather inspiration and insights into areas of you are working on at your own school.

Here’s what you need to do:

- Spend a full day shadowing a student. Ideally you would start from before the student arrives at school to right at the end. It might be difficult to organize observing them at home (and it is okay if it doesn’t work). It is important to understand how the student’s full day is affected by their experiences at school.

Your goal:

- Your goal in experiencing the student’s day: what it feels like when you are engaged and when you are not, what you are thinking, what you are like. Try to get out of your own experiences at your school.

The point of this exercise is about helping you understand what it feels like to be a student - not to observe and critique the student. It is okay if the student’s experience is altered a bit because you are shadowing.

Focus on how they feel in classes, during breaks and at the end of the day.

Approach the day with a curious, open mind. Your job during your immersion day is to evaluate or judge what you saw and experience. Rather, your goal is to get off your own agenda and your own assumptions and observe the student experience as the student yourself.

We have provided tips to help you take notes, try to make specific observations and avoid generalizations.

By observing with empathy, you will increase your chances of discovering opportunities for solutions that respond to the needs of your stakeholders.

2 TIPS FOR SHADOWING

Try to blend in and allow the student’s day to naturally unfold. It will be different because of your presence, of course, but work hard to not influence the experience too much. Don’t wear your normal professional attire. Wear comfortable clothes and shoes.

Really try to experience what the student experiences. Relive what the halls during break, eating lunch in the cafeteria, going to every class, etc.

This also means talking to colleagues or adults, not going to the break room, not doing things that only adults in the building are allowed to do.

Take lots of notes. Capture detailed descriptions of everything you experience.

Two pictures is interesting events, experiences, etc. These pictures will help you remember key moments or intriguing relations.

3 PLANNING FOR YOUR SHADOW

1. Find a school that would be willing to have you observe a student for the day.

2. Ask the school to help you select a student. Tell them to think about selecting a student who represents a particular set of experiences you want to learn more about (high-achieving, disengaged, learning disabled, etc).

3. Check in with the student before the shadow day. Explain the project and purpose of your shadow. Make sure the student knows that you will be shadowing. Let the teacher know that this is not about critiquing their classroom or about experiencing life as a student.

4. Clear your schedule for the day. Find people to fill in for your regular duties at your own school.

5. Meet the student at the beginning of the day. Spend a little time getting to know your student and breaking the ice.

6. Take pictures, if the student is comfortable and the parents agree.

7. Take notes to capture your observations of different parts of your student’s day. Include lunch, recess, breaks and transitions.

8. At the end of the day, complete the Reflection worksheet. Use the Reflection worksheet to help you identify what inspiration and insights you gained.

Instructions:

1. Before you leave your home, observe and ask:

- What was the last thing you ate?

- What are you wearing?

- What extracurricular activities do you participate in?

- What are your goals for today?

- What are you looking forward to today?

- What are you dreading today?

2. While you are at school, observe and ask:

- How do you feel about the current class?

- How do you feel about the upcoming class?

- How do you feel about the teacher?

- How do you feel about the students in your class?

- Are there any challenges you are facing in your academic journey?

- Are there any positive aspects of your experience today?

- What would you change about your school day today?
**Shadow Notes - Optional**

Instructions: Keep notes about the specific stories and quotations you hear from your shadow experience. Use post-its to capture the most interesting things you hear and observe. Listen and look for emotions and motivations, especially your own. Also, listen for ideas that are surprising to you as well as contradictory information. The more notes you take, the better your ideas will be later in the design challenge.

**WHAT DID YOU HEAR?**

“I don't like days when we do not get to do art.”

**WHAT DID YOU SEE?**

I saw the student I shadowed get very excited when she was with her friends during a break.

**WHAT DID YOU FEEL?**

I felt exhausted by the end of the day. It was hard to sit in a seat for so many hours listening.

---

**Shadow Notes - Optional**

Instructions: Keep notes about the specific stories and quotations you hear from your shadow experience. Use post-its to capture the most interesting things you hear and observe. Listen and look for emotions and motivations, especially your own. Also, listen for ideas that are surprising to you as well as contradictory information. The more notes you take, the better your ideas will be later in the design challenge.

**WHAT DID YOU HEAR?**

**WHAT DID YOU SEE?**

**WHAT DID YOU FEEL?**
Instructions: Review the notes you captured from your shadow experience. Use this worksheet to begin the process of synthesizing what you heard, observed, experience and felt.

1. Describe who you shadowed?
   - Age, gender, role, likes, dislikes, strengths, weaknesses.

2. What stories did you hear?
   - Sara, a studious student, who loves art and sports.
   - Sara told me about the project that made her proud - a painting of her little sister. She was proud because her family put the painting on the wall of their house.

3. What emotions did you observe?
   - Sara was bored and disengaged by the end of the day.

4. How did you feel?
   - By the end of the day, I was exhausted. Students have to sit a lot all day!

5. What are the five most important things you learned that are relevant to the problem you are exploring?
   - I don't like days when we do not get to do art.
   - I saw the student give up during an essay test and put her head on the desk. I saw the teacher try to motivate her to keep going but with no success.
   - I saw the student I shadowed get very excited when she was with her friends during a break.
   - I felt exhausted by the end of the day. It was hard to sit in a seat for so many hours listening.
EXPLORE TRANSITION SUMMARY

1. **Individual Field Tools**
   - What are the three most important things you learned during your first interview?
   - 9. Observation & Journey Mapping
   - What are the three most important things you learned during your second interview?
   - 9. Interview 
   - 9. Interview 
   - 9. Interview 

2. **INTERVIEW 3**
   - What are the three most important things you learned during your third interview?
   - 9. Shadow Reflection - OPTIONAL
   - 9. Interview Reflection - OPTIONAL

3. **SUMMARY**
   - This section is for you to reflect on your overall learning experience.
   - What did you learn about yourself?
   - How did you grow as a person?
   - What transferable skills did you develop?

**PROJECT EXPERT CONNECTION TO OUTCOMES**
- Your design research methods are not concerned with the goal of improving the design of the product but with sharing your experiences.
- Your design research methods are focused on gathering, analyzing, and synthesizing data relevant to the problem you are trying to solve.

**PROJECT EXPERT.RestController TO OUTCOMES**
- Your design research methods are not concerned with the goal of improving the design of the product but with sharing your experiences.
- Your design research methods are focused on gathering, analyzing, and synthesizing data relevant to the problem you are trying to solve.

**CRITERIA MOVING TO THE NEXT PHASE**

**TELEVISION ALIGNMENT**

**IN THE EVERY-Academic Proficiencies**
- Core Academic Proficiencies
  - Numeracy & Mathematics
  - Applied Academic Proficiencies
  - Science
  - Health & Wellness
  - Arts & Culture
  - Career, life, technology & media

**Listening**
- (The individual learner)
  - Self-identification
  - Self-regulation
  - Self-monitoring
  - Self-reflection
  - Critical thinking
  - Healthy & nutritional habits

**Working With Others**
- (Our community)
  - Communication
  - Collaboration
  - Critical thinking
  - Open-mindedness
  - Empathy
  - Relationship building
  - Leadership

**Improving Our World**
- (Our community/your world)
  - Problem solving
  - Critical thinking
  - Enterprise
  - Respect for diversity
  - Respect for the environment
EXPLORE TRANSITION REFLECTION

EXPLORE TRANSITION REFLECTION

• REFLECTION ON PROCESS
  Independently, reflect on how your team is working together by answering the questions below. Then share your reflections as a team.
  • What is the most important insight you gained during this phase of the design challenge?
  • About which part of this phase of the design challenge do you feel most confident?
  • About which part of this phase of the design challenge do you feel least confident?
  • What was the most difficult part to collaborate on for your team?
  • How can you improve how your team works together in the next phase?

• SHAREOUT OF PROCESS
  When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleague to get feedback on your progress thus far.
  They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below:

SHAREOUT OF PROCESS

When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleague to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below:

• DEFINE
  SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT

DEFINE

SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
DEFINE INTRODUCTION

- OBJECTIVES OF DEFINE PHASE
  - The goal of this phase is to identify the needs of your stakeholders based on what you’ve heard and see about their experiences, motivations and aspirations. At the end of this phase, all team members should be clear on several HMW statements that they will use to inform their design work. The team will also generate How Might We questions that they will use to generate solutions.

- MINDSETS OF DEFINE PHASE
  - Seek new perspectives on old problems
  - Look carefully to understand potential problems and opportunities
  - Stay optimistic that you can solve the problem
  - See opportunities in constraints
  - Get comfortable with navigating contradictory information
  - Hold back on solving the problem while in this phase

TEAM WORKSHOP TOOLS

1. HMW Statements & Guesses
   - Overview: An HMW statement is a worksheet designed to help you highlight compelling observations and generate potential solutions by focusing on what you don’t know.

2. Point of View
   - Overview: A worksheet designed to help you take your observations and generate a Point of View statement that preserves the emotions of the stakeholder for whom you are designing.

3. Your PVQ statement will help your team rally around a real person’s story and their needs in regard to your design challenge.

4. How Might We Questions
   - Overview: How Might We Questions are designed to help your team turn your PVQ statement into how might we questions that will drive your transforming process.

TEAM WORKSHOP TOOLS

- Observations & Guesses
  - Overview: Observations & Guesses is a worksheet designed to help you identify compelling observations and generate potential solutions.

- Point of View
  - Overview: A worksheet designed to help you take your observations and generate a Point of View statement that preserves the emotions of the stakeholder for whom you are designing.

- Your PVQ statement will help your team rally around a real person’s story and their needs in regard to your design challenge.

- How Might We Questions
  - Overview: How Might We Questions are designed to help your team turn your PVQ statement into how might we questions that will drive your transforming process.
Instructions: Review your notes from the interviews you conducted as well as the observation you made. Listen, Map, and Shadow, circle or highlight things you think are important.

**Observations**

*Notices:*
What did you hear? What did you see? Think of surprises, conflicts or contradictions.

*I noticed that my student was very engaged when he was learning a topic that he understood was relevant to his future.*

*I don’t like days when we don’t get to do art.* — Shadow

*My teacher doesn’t listen to me. I talk about my goals for my future.* — Interview

*My sister told me she used algebra when she was ordering our family store.*

*I noticed that my teacher was very engaged when he was learning a topic that he understood was relevant to his future.*

*My teachers don’t listen to me. I talk about my goals for my future.* — Interview

*I don’t like days when we don’t get to do art.* — Shadow

*My teachers don’t listen to me. I talk about my goals for my future.* — Interview

*I noticed that my teacher was very engaged when he was learning a topic that he understood was relevant to his future.*

*Notices:*
What did you hear? What did you see? Think of surprises, conflicts or contradictions.
Observations & Guesses

Instructions: Pick the top five most interesting things you heard or saw from the previous worksheet and move the post-it to the left side of this worksheet. Next, make a guess for why you think each thing you noticed is important. Write each guess on a post-it and stick it on the right side of the sheet.

**WE NOTICED:** (What did you hear? What did you see? Think of surprises, conflicts or contradictions.)

**WE THINK THIS IS IMPORTANT BECAUSE:** (What is your guess about why this matters?)

---

**I DON'T LIKE DAYS WHEN WE DON'T GET TO DO ART.** - Shadow

**MY SISTER TOLD ME SHE USED ALGEBRA WHEN SHE IS ORDERING FOR OUR FAMILY STORE.** - Journey

**SARA ENJOYS SCHOOL WHEN SHE GETS TO STUDY TOPICS THAT ARE INTERESTING TO HER. SHE ENJOYS HAND-ON ACTIVITIES WHERE SHE CAN EXPRESS HERSELF.**

**JOE IS MORE ENGAGED IN HIS STUDIES WHEN HE BELIEVES WHAT HE IS LEARNING IS RELEVANT TO HIS FUTURE AND CONNECTED TO THE REAL WORLD.**

**SARA ENJOYS SCHOOL WHEN SHE GETS TO STUDY TOPICS THAT ARE INTERESTING TO HER. SHE ENJOYS HAND-ON ACTIVITIES WHERE SHE CAN EXPRESS HERSELF.**

**JOE IS MORE ENGAGED IN HIS STUDIES WHEN HE BELIEVES WHAT HE IS LEARNING IS RELEVANT TO HIS FUTURE AND CONNECTED TO THE REAL WORLD.**
**Point-of-View 1**

1. **WE MET:** Describe one person you interviewed.

   JOE, AN ENERGETIC MIDDLE SCHOOL STUDENT WHO DOES NOT SUCCEED ACADEMICALLY IN SCHOOL BUT LOVES PLAYING SPORTS.

2. **WE NOTICED:** What did you hear or see? Think of surprises, conflicts or contradictions.

   "MY SISTER TOLD ME SHE USES A DRUG:" JOURNEY MAP

3. **WE THINK THIS IS IMPORTANT BECAUSE:** What is your guess about why this matters?

   STUDENTS ARE MORE ENGAGED IN THEIR STUDIES WHEN THEY BELIEVE THAT WHAT THEY ARE LEARNING IS RELEVANT TO THEIR FUTURE AND CONNECTED TO THE REAL WORLD.

4. **NEEDS WAY TO:** Describe what your stakeholder needs.

   JOE NEEDS WAY TO UNDERSTAND THE CONNECTIONS BETWEEN WHAT HE IS STUDYING TODAY AND HIS FUTURE.

   If the needs statement feels too big and overwhelming, ask yourselves: What's stopping him from meeting this need? Then rewrite the need around what you identified as a barrier.

   If the needs statement feels too much like a solution, ask yourselves: Why would we want to do this? Then rewrite the need around the motivation.

5. **POINT OF VIEW STATEMENT:** Pull it all together.

   JOE

   [describing someone struggling with]

   FEELING MOTIVATED TO WORK HARD AT HIS STUDIES

   [his problem]

   HE DOESN'T SEE THE CONNECTION TO HIS FUTURE

   [why this matters]

   She/He needs a way to

   UNDERSTAND THOSE CONNECTIONS TO HIS

   FUTURE TO HELP INCREASE HIS SELF-EFFICACY

   [need statement]

**Point-of-View 1**

1. **WE MET:** Describe one person you interviewed.

   JOE, AN ENERGETIC MIDDLE SCHOOL STUDENT WHO DOES NOT SUCCEED ACADEMICALLY IN SCHOOL BUT LOVES PLAYING SPORTS.

2. **WE NOTICED:** What did you hear or see? Think of surprises, conflicts or contradictions.

   "MY SISTER TOLD ME SHE USES A DRUG:" JOURNEY MAP

3. **WE THINK THIS IS IMPORTANT BECAUSE:** What is your guess about why this matters?

   STUDENTS ARE MORE ENGAGED IN THEIR STUDIES WHEN THEY BELIEVE THAT WHAT THEY ARE LEARNING IS RELEVANT TO THEIR FUTURE AND CONNECTED TO THE REAL WORLD.

4. **NEEDS WAY TO:** Describe what your stakeholder needs.

   JOE NEEDS WAY TO UNDERSTAND THE CONNECTIONS BETWEEN WHAT HE IS STUDYING TODAY AND HIS FUTURE.

   If the needs statement feels too big and overwhelming, ask yourselves: What's stopping him from meeting this need? Then rewrite the need around what you identified as a barrier.

   If the needs statement feels too much like a solution, ask yourselves: Why would we want to do this? Then rewrite the need around the motivation.

5. **POINT OF VIEW STATEMENT:** Pull it all together.

   JOE

   [describing someone struggling with]

   FEELING MOTIVATED TO WORK HARD AT HIS STUDIES

   [his problem]

   HE DOESN'T SEE THE CONNECTION TO HIS FUTURE

   [why this matters]

   She/He needs a way to

   UNDERSTAND THOSE CONNECTIONS TO HIS

   FUTURE TO HELP INCREASE HIS SELF-EFFICACY

   [need statement]
“How Might We” Questions

Instructions: First, generate a How Might We question based on the Point of View statement you wrote on the previous page. Focus on the needs you identified. Think of the large box at the top as the HWI that will meet your stakeholder’s most important need. Then be built from your POVs. Next, answer the prompts below and use your answers to create new HWI questions.

**POSSIBLE VERBS TO USE:** help motivate empower educate provide incentivate prompt change increase challenge reduce restore shift spark accelerate customize build amplify

### HOW WE... (what that implies change) + STAKEHOLDER + (OPPORTUNITY)?

How might we help Jane prepare for her interview? (POV)

**HOW WE MIGHT HELP JOE TO UNDERSTAND THE CONNECTIONS BETWEEN HIS STUDYING TODAY AND HIS FUTURE?**

HMM ...

**HOW WE MIGHT HELP STUDENTS UNDERSTAND THEIR GOALS?**

HMM ...

**HOW WE MIGHT HELP STUDENTS UNDERSTAND THEIR GOALS?**

HMM ...

**HOW WE MIGHT HELP JOE FEEL EXCITED ABOUT HIS FUTURE?**

HMM ...

**HOW WE MIGHT HELP JOE FEEL INTERESTED IN HIS FUTURE?**

HMM ...

**HOW WE MIGHT HELP JOE FEEL INTERESTED IN HIS FUTURE?**

HMM ...
DEFINE TRANSITION SUMMARY

SUMMARY: DEFINE THE PROBLEM PHASE

Use the Define the Problem summary page to gather up the work you completed during each phase of the process. Reflecting about the holistic learning outcomes (see the right side of this page) as you summarize the information. Take the opportunity now to make changes as needed.

TEAM WORKSHOP TOOLS

#1 Observations & Guesses

What are the two most important things you noticed and the related guesses you created?

#2 Point of View Statement

What is the best POV statement you wrote?

#3 How Might We Questions

What are the three most generate HMW questions that you selected?

1. [needs statement]

2. [needs statement]

3. [needs statement]

DEFINE TRANSITION ALIGNMENT

CRITERIA: FORMING TO HEND/EXPT

Use the criteria below to assess your team has not met all the goals of the phase. And are ready to move into the next phase. Circle the description that most represents your team’s progress:

For the Holistic Rubric at the bottom of the criteria, consider in what phase you are making progress:

For each rubric, mark an X in the column where you feel your team is aligned.

TEAM ALIGNMENT

In order to make aligned as a team, share each of your summary pages and use the questions below to review your team’s issues so that you can move on to the next phase.

1. How are you defining and understanding the problem you are trying to solve?

2. How are you developing a clear problem statement for your project?

3. How are you iterating (testing, learning, and adjusting) on your HMW questions?

For each rubric, mark an X in the column where you feel your team is aligned.

NOW, take a look at your results in the different criteria to determine if you are ready to move on to the next phase. For the criteria when you are least confident, try engaging your facilitator or graduate colleague in deep discussion. If you have more than two areas where you need to make adjustments, start by focusing on one.
DEFINE TRANSITION REFLECTION

• REFLECTION ON PROCESS
  Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.
  • What is the most important insight you gained during this phase of the design challenge?
  • About which part of this phase of the design challenge do you feel most confident?
  • About which part of this phase of the design challenge do you feel least confident?
  • What was the most difficult part to collaborate on for your team?
  • How can you improve how your team works together in the next phase?

• SHAREOUT OF PROCESS
  When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleague to get feedback on your progress thus far.
  They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

SHARE OUT OF PROCESS

When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleague to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

GENERATE SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT

SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
**INTRODUCTION**

The worksheet in the Generate Solutions phase of the process is focused on generating as many solutions as possible. Once many solutions have been generated, members of your team will need one to four minutes forward to prototyping.

**OBJECTIVES OF GENERATE SOLUTIONS PHASE**

The goal of this phase is to use the HMW statements and HAM questions to generate many solutions. By generating lots of solutions, you will get to innovative solutions. From there, the team will use criteria to select ideas that have clustered into themes.

At the end of this phase, all team members should be clear on 1-4 ideas that they are interested in prototyping.

**MINDSETS OF GENERATE SOLUTIONS PHASE**

- Many ideas lead to good ideas
- Careful judgment and criticism of ideas
- Idea generation is not the time for evaluating ideas
- Brainstorming is a collaborative team activity
- Allow yourself to think of wild ideas
- See opportunities in constraints
- This phase is the time to solve the problem

---

**TEAM WORKSHOP TOOLS**

1. **Prototype to Brainstorm**
   - WHAT IS THE TOOL? Generate to Brainstorm is a worksheet designed to help your team prepare to facilitate a collaborative brainstorm.
   - WHAT IS YOUR GOAL? This will help you move the idea generation phase.
   - WHEN TO USE? Brainstorming is an activity that will help you select ideas for the team.
   - LENGTH: 15 minutes

2. **Solo Brainstorm**
   - WHAT IS THE TOOL? Solo Brainstorming is a worksheet designed to help you generate ideas on your own before you generate them as a group.
   - WHAT IS YOUR GOAL? This will help you generate ideas on your own.
   - WHEN TO USE? This will help you share and build ideas as a team.
   - LENGTH: 15 minutes

3. **Group Brainstorm**
   - WHAT IS THE TOOL? Group Brainstorming is a worksheet designed to help your team capture ideas generated during your brainstorm.
   - WHAT IS YOUR GOAL? Brainstorming as a team helps generate lots of solutions from different perspectives.
   - WHEN TO USE? This will help you build upon the ideas of others to get to more innovative solutions.
   - LENGTH: 45-60 minutes to brainstorm

4. **Idea Selection**
   - WHAT IS THE TOOL? Idea Selection is a worksheet designed to help you select the ideas you want to advance using specific criteria.
   - WHAT IS YOUR GOAL? This tool will help you identify one to four ideas you are planning to continue to develop through prototyping.
   - WHEN TO USE? This tool is most likely to address the problem you are exploring.
   - LENGTH: 35 minutes
Prepare to Brainstorm

Materials Needed:
• 3 HMW questions, each written on the top of a separate piece of chart paper
• Wide space for 3 pieces of chart paper
• A timer
• 1 felt marker (or felttip) per person
• 1 pad of square post-it per person
• 1 set of circular stickers per person
• Creative and collaborative thinker!

Rules of Brainstorming:
• Generate as many ideas as possible — for quantity over quality at this point in the process.
• Encourage out of the box, wild ideas that have never been tried before.
• Build the ideas of others — say, “Yes, and...”
• Don’t be negative about other people’s ideas — it’s your turn!
• Let go of your expertise — even if you have already tried something, maybe it would be worth trying again.
• Stay focused and work as a team.
• Show and say your ideas so that your teammates can remember it and use it as inspiration.

Brainstorming Procedures:
1 Pre-Brainstorming
Set the Space
• Ask team, choose your three best HMW questions you created from the previous session.
• Revitalize each on a piece of separate chart paper big enough hand-lettering that everyone on your team can read them when they are posted on the wall.
• Stick the three pieces of chart paper on the wall in an area where everyone on your team can stroll around. If you do not have adequate wall space, color-code your ideas in the following pages of the toolkit.
• Make sure everyone on the team has a pad of square post-it notes and a thick black marker (or felttip).
• Set the timer for ten minutes.
• If you are not able to hang chart paper on the wall, use the Group Brainstorm page further into this section of the toolkit.

Solo Brainstorm:
In order to get ready to participate in your group brainstorm, use the Solo Brainstorm sheet to generate three ideas on your own using your team’s HMW questions.

2 Conduct a Group Brainstorming
Start with the first HMW Question:
• Have everyone gather around and look at one sheet of chart paper — you will only brainstorm on one question at a time.
• Have a member of the team read the HMW question out loud and make sure that everyone understands the question.
• Start the timer for three minutes.
• Everyone writes together to generate as many ideas as possible.
• Follow the Rules of Brainstorming above.
• For each idea that is generated, the team member who generated it should write it down (one per post-it) and then aloud on the chart paper, while also saying it aloud.
• Don’t explain or debate — just say it going.
• If you are running out of ideas, write creatively prompts below.
• After the timer goes off, switch to another HMW question and repeat these steps.

Creativity Prompts:
• How would a sports coach solve this problem?
• How would a superhero solve this problem?
• Draw inspiration from a festival or celebration.
• How would you solve the problem if you had unlimited resources?
• How would you solve the problem tomorrow?

3 Post-Brainstorming
Sort & Select
• Once you have completed three rounds of brainstorming (one for each HMW question), take a few minutes and sort the ideas you’ve generated into groups. The HMW questions don’t matter any more — you can group and idea from question #1 with an idea from question #2.
• Look for patterns and similar ideas to group — think about kinds of ideas: events, people, format (i.e. games, the internet, etc.). You are looking for thematic similarity not identical matches.
• Once the ideas have been sorted, give everyone three circular stickers. Each sticker represents a vote. Each person gets three votes based on the following criteria:
  • Most likely to delight the stakeholder (one vote)
  • Most likely to meet the requirements (one vote)
  • Most likely to impact holistic learning outcomes (one vote)
• Have everyone stick their circular stickers on a specific post-it, not part of a group.
• Once everyone has voted, take a step back and identify the three ideas with the highest number of votes.
• Take down these three ideas as well as the post-it they are clustered around these ideas. You will transfer these ideas into the idea selection page of the toolkit.

Brainstorming Tips:
• Keep it tight energy — play music and have everyone stand if possible.
• Practice being in an open-minded, optimistic mindset — we can do anything!
• Be aware that very idea written down, said aloud, and stuck to the wall.
• Refer to the Rules of Brainstorming if you get off track.
# Solo Brainstorm

**RULERS OF BRAINSTORMING...**
- Generate as many ideas as possible - go for quantity over quality at this point in the process
- Encourage out of the box, wild ideas that have never been tried before
- Build on the ideas of others - say, “Yes, and!”
- Don’t be negative about other people’s ideas - or your own!

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>WHO...</strong></td>
<td>GIVE MORE CHOICES ABOUT WHAT THEY WANT TO STUDY</td>
</tr>
<tr>
<td>2. <strong>WHERE...</strong></td>
<td>ELEVATE STUDENT VOICES ABOUT WHAT THEY WANT TO STUDY</td>
</tr>
</tbody>
</table>

**CREATING A CLASS WHERE CHILDREN CAN EXPRESS THEMSELVES:**

1. Create a climate where students can be free to express their ideas without fear of judgment.
2. Encourage students to share their ideas and express themselves in different ways.
3. Provide opportunities for students to practice their communication skills.

**SHED YOUR IDEA:**

- **WHO...** Identify the audience for your idea.
- **WHERE...** Determine the location where your idea will be implemented.
- **WHAT...** Describe the idea in detail, including how it will be implemented and its expected outcomes.

**DESIGN YOUR IDEA IN 1-2 SENTENCES:**

- **Who, what, where, when, why.**
- **Create an interest survey to determine student interests.**
- **Brainstorm** with the group to further refine the idea.

**IMPLEMENT YOUR IDEA:**

- **Adjust...** Make necessary adjustments to the idea based on feedback from the group.
- **Test...** Pilot the idea in a smaller setting to test its feasibility.
- **Refine...** Refine the idea based on pilot testing results.

**SHARE YOUR IDEA:**

- **Discuss...** Discuss the idea with a broader audience.
- **Present...** Present the idea to the rest of the group.
- **Discuss...** Discuss the idea with the group to gather feedback and make necessary adjustments.
Group Brainstorm #1

HOW MIGHT WE EMPOWER JOE TO ADVOCATE FOR WHAT HE NEEDS TO LEARN FOR HIS FUTURE?

JOE SETS GOALS THAT HE SHARES WITH HIS TEACHER

JOE HAS A PERSONAL VISION STATEMENT FOR HIS FUTURE

RULES OF BRAINSTORMING...

- Generate as many ideas as possible - go for quantity over quality at this point in the process
- Encourage out of the box, wild ideas that have never been tried before
- Ballon the ideas of others - say, “Yes, and!”
- Don’t be negative about other people’s ideas - or your own!
- Let go of your expertise - even if you have already tried something, maybe it would be worth trying again
- Stay focused and work as a team
- Show and say your idea so that your teammates can remember it and use it as inspiration

JOE HAS A LIST OF SKILLS HE WANTS TO LEARN THAT THE TEACHER RESPONDS TO

JOE AND HIS TEACHER MEET ONE ON ONE TO DISCUSS HIS GOALS

JOE AND HIS PARENTS HAVE A CONFERENCE WITH HIS TEACHER

JOE EVALUATES HIS CLASSES BASED ON HOW CONNECTED TO HIS FUTURE HE FEELS THEY ARE.

JOE HAS A PORTFOLIO OF SKILLS CONNECTED TO HIS FUTURE

RULES OF BRAINSTORMING...

- Generate as many ideas as possible - go for quantity over quality at this point in the process
- Encourage out of the box, wild ideas that have never been tried before
- Ballon the ideas of others - say, “Yes, and!”
- Don’t be negative about other people’s ideas - or your own!
- Let go of your expertise - even if you have already tried something, maybe it would be worth trying again
- Stay focused and work as a team
- Show and say your idea so that your teammates can remember it and use it as inspiration
Instructions: Use this page to capture all the ideas you generate for your first HMW question (if you do not have wall space). Write the HMW question at the top of the box. Set the timer for 10 minutes and generate as many ideas as possible. Don’t forget the Rules of Brainstorming!

**Rules of Brainstorming**

• Generate as many ideas as possible - go for quantity over quality at this point in the process
• Encourage out of the box, wild ideas that have never been tried before
• Build on the ideas of others - say, “Yes, and!”
• Don’t be negative about other people’s ideas - or your own!
• Let go of your expertise - even if you have already tried something, maybe it would be worth trying again
• Stay focused and work as a team
• Show and say your idea so that your teammates can remember it and use it as inspiration

IDEA POST-IT
Instruct: Once you have sorted the ideas that your team generated during the brainstorm into groups, each individual person has a chance to choose three ideas to advance using the criteria below (and the holistic learning outcomes to the right of this page). Take a few minutes to identify the three ideas you want to select and describe them here. Then put a dot next to each idea on the wall. Use the dots to help your team identify which ideas to advance. Once everyone on the team has completed this step, you will vote as a group which ideas move forward.

Idea Selection

Most Likely to Advance

Most Likely to Succeed at Closing Learning Gaps

Most Likely to Create Learning Opportunities

Idea: Describe your idea. What problem will your idea address? Why does the matter? What will you need in order to implement this idea (space, role, events, time, policy, communication objects, etc.)?

Why do you think this idea will advance the student’s learning?

Why do you think this idea will improve holistic learning outcomes?

Why do you think this idea will solve the need you identified in your PD?

How do you think this idea will solve the need you identified in your PD?

Idea: Describe your idea. What problem will your idea address? Why does the matter? What will you need in order to implement this idea (space, role, events, time, policy, communication objects, etc.)?

Why do you think the idea will create learning opportunities?

Why do you think this idea will advance the student’s learning?

Why do you think this idea will solve the need you identified in your PD?

Idea: Describe your idea. What problem will your idea address? Why does the matter? What will you need in order to implement this idea (space, role, events, time, policy, communication objects, etc.)?

Why do you think the idea will create learning opportunities?

Why do you think this idea will advance the student’s learning?

Why do you think this idea will solve the need you identified in your PD?

Idea: Describe your idea. What problem will your idea address? Why does the matter? What will you need in order to implement this idea (space, role, events, time, policy, communication objects, etc.)?

Why do you think the idea will create learning opportunities?

Why do you think this idea will advance the student’s learning?

Why do you think this idea will solve the need you identified in your PD?

Idea: Describe your idea. What problem will your idea address? Why does the matter? What will you need in order to implement this idea (space, role, events, time, policy, communication objects, etc.)?

Why do you think the idea will create learning opportunities?

Why do you think this idea will advance the student’s learning?

Why do you think this idea will solve the need you identified in your PD?

Idea: Describe your idea. What problem will your idea address? Why does the matter? What will you need in order to implement this idea (space, role, events, time, policy, communication objects, etc.)?

Why do you think the idea will create learning opportunities?

Why do you think this idea will advance the student’s learning?

Why do you think this idea will solve the need you identified in your PD?
SUMMARY OF GENERATE SOLUTIONS PHASE

Use this Generate Solutions summary page to gather up the work you completed during each phase of the process. Reflecting on the holistic learning outcomes (see the right side of this page) as you summarize this information. Take the opportunity now to make changes as needed.

TEAMWORKSHOP TOOLS

#4 Idea Selection
What are the three ideas you selected?
1. Most likely to be adopted by stakeholders:
2. Most likely to succeed at closing learning gap:
3. Most likely to create learning opportunities:

TEAMALIGNMENT

In order to seek alignment as a team, share each of your summary pages with the other team members to see if you came to the same conclusions. Let each person read their summary response without interruption or comment from others. If there are differing views and ideas from team members, ask questions to gain understanding. To gain questions like...

"Can you share more information about how you came to these ideas?"
"Tell me more about that...
"What brought you to that conclusion at the end of your design work, but you may alter the ideas after this before closing on any..."

HOW DOES YOUR TEAM'S IDEA RELATE TO IMPROVING THE HOLISTIC LEARNING OUTCOMES FOR YOUR STUDENTS?

Now, take a look at your results in the different criteria to determine if you are ready to move on to the next phase. For example, you need to fully understand and be ready to move on to the next phase.

#3 Group Brainstorm
What are the three most realistic ideas that were generated?
1. 
2. 
3. 

#2 Solo Brainstorm
What are the three ideas you generated?
1. 
2. 
3. 

TEAMALIGNMENT FORMING TO THE NEXT PHASE

Use this rubric below to assess your team's ideas and all the goals of the phases of the process and are ready to move into the next phase. Circle the description that most represents your team's progress. To guide the process, consider if the rubric considers the goals of each phase. If your team has moved on to the next phase, you may alter the ideas after this before closing on any...
**GENERATE TRANSITION REFLECTION**

**SHARE OUT OF PROCESS**

When you have completed the reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleagues to get feedback on your progress thus far. They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

**REFLECTION ON PROCESS**

Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- What is the most important insight you gained during this phase of the design challenge?

- About which part of this phase of the design challenge do you feel most confident?

- About which part of this phase of the design challenge do you feel least confident? What is your team going to do to improve your confidence about this phase?

- What was the most difficult part to collaborate on for your team?

- How can you improve how your team works together in the next phase?
MAKE INTRODUCTION

INTRODUCTION

MAKE INTRODUCTION

TELEPHONE

COMMITTEE

APPLY FOR

MAKE OVERVIEW

OVERVIEW OF MAKE YOUR PROTOTYPE PHASE

The phases in the Make Your Prototype phase are designed to help your team conduct representations of your solutions. These representations are intended to aid brainstorming, whereas specific prototypes are a concept and require more time and effort in the development of an actual prototype that can be shared and demonstrated in site-based tests or other schools.

For the design challenge, your team will engage in brainstorming, prototyping, testing, and reflecting on your ideas. Stegoing your additional ideas and designing a prototype with this test these assumptions.

OBJECTIVES OF MAKE YOUR PROTOTYPE PHASE

These phases in the Make Your Prototype phase are designed to help your team conduct representations of your solutions. These representations are intended to aid brainstorming, whereas specific prototypes are a concept and require more time and effort in the development of an actual prototype that can be shared and demonstrated in site-based tests or other schools.

At the end of this phase, all team members should be clear on how the team is going to conduct a prototype to test an assumption embedded in the team's solution.

MINDES OF MAKE YOUR PROTOTYPE PHASE

- Stay open-minded so you can solve the problem
- Prototype easily and often in order to learn about your idea
- Start small to make big change
- Solve don’t fail
- Many cycles of prototyping are necessary to develop an idea

MAKE OVERVIEW

OVERVIEW OF MAKE YOUR PROTOTYPE PHASE

The phases in the Make Your Prototype phase are designed to help your team conduct representations of your solutions. These representations are intended to aid brainstorming, whereas specific prototypes are a concept and require more time and effort in the development of an actual prototype that can be shared and demonstrated in site-based tests or other schools.

For the design challenge, your team will engage in brainstorming, prototyping, testing, and reflecting on your ideas. Stegoing your additional ideas and designing a prototype with this test these assumptions.

OBJECTIVES OF MAKE YOUR PROTOTYPE PHASE

These phases in the Make Your Prototype phase are designed to help your team conduct representations of your solutions. These representations are intended to aid brainstorming, whereas specific prototypes are a concept and require more time and effort in the development of an actual prototype that can be shared and demonstrated in site-based tests or other schools.

At the end of this phase, all team members should be clear on how the team is going to conduct a prototype to test an assumption embedded in the team's solution.

MINDES OF MAKE YOUR PROTOTYPE PHASE

- Stay open-minded so you can solve the problem
- Prototype easily and often in order to learn about your idea
- Start small to make big change
- Solve don’t fail
- Many cycles of prototyping are necessary to develop an idea

MAKE TEAMWORKSHOP TOOLS

TEAM WORKSHOP TOOLS

TIPS FOR DESIGNING & TESTING A PROTOTYPE

WHAT IS THIS TOOL?

Storyboard Your Idea is a worksheet designed to help your team think through your idea using a timelines. What happens at the beginning, middle, and end? WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.

WHAT IS YOUR GOAL?

Storyboarding your idea is a tool to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholders.
**Combine Ideas**

**Instructions:** First, your group needs to select the most promising ideas from all the ideas selected to advance. Next, let’s look at all the similar ideas you generated during the entire brainstorm. Review these ideas and look for any related ideas that could be combined together to support the idea you have selected. After you have selected all the ideas you want to combine, rewrite a new post-it that headlines the new, bigger idea.

**SELECT MULTIPLE IDEAS THAT YOU GENERATED THAT YOU WANT TO COMBINE INTO SINGLE SOLUTION.**

30 minutes to cluster and select; 15 minutes to combine.

**JOE GETS A PAID JOB**

**JOE HAS A MENTOR**

**JOE LEARNS ABOUT NEW CAREERS**

**AFTER SCHOOL CAREER EXPLORATION PROGRAM**

Rewrite your new idea in the form of a newspaper headline:

**JOE HAS AN APPRENTICESHIP AFTER SCHOOL**

**SELECTED IDEA POST-IT**

---

**Combine Ideas**

**Instructions:** First, your group needs to select the most promising ideas from all the ideas selected to advance. Next, let’s look at all the similar ideas you generated during the entire brainstorm. Review these ideas and look for any related ideas that could be combined together to support the idea you have selected. After you have selected all the ideas you want to combine, rewrite a new post-it that headlines the new, bigger idea.

**SELECT MULTIPLE IDEAS THAT YOU GENERATED THAT YOU WANT TO COMBINE INTO SINGLE SOLUTION.**

30 minutes to cluster and select; 15 minutes to combine.

Rewrite your new idea in the form of a newspaper headline:

**LAUNCH**

**DEFINE**

**GENERATE**

**MAKE**

**TEST**

**ITERATE**

**EXPLORE**

**EXPLORE**

**TEST**

**IMPLEMENT**

**TELL**

**TEST**

**ITERATE**
## Building Blocks

### EVENTS
What times when a group of people convene for a specific purpose might need to be created?

**RECRUITMENT EVENT FOR STUDENTS AND PARENTS TO GENERATE INTEREST IN THE PROGRAM**

### BUDGET
How much money need to be allocated for this idea? (April 2023)

**JOE IS INTERESTED IN AN AFTER SCHOOL PROGRAM**

### JOE HAS CAREER INTERESTS IN CONSIDERATION WITH THE PROGRAM MANAGER.

### TIME
How might the program allocation or time need to change for this idea?

**PROMPT:** WILL THE PROGRAMS AND APPRENTICESHIP WILL CHANCE OR SELF-PACE?

### SPACE
How might new spaces need to be used or created for this idea?

**AN APPRENTICESHIP WILL HELP JOE MAKE DECISIONS TOWARDS THEIR FUTURE**

### ROLES
What new roles might need to be created for this idea?

**A PROGRAM MANAGER WILL BE HIRED TO RECRUIT MENTORS AND APPRENTICESHIPS, ETC.**

### OBJECTS/PRODUCTS/TOOLS
What new artifacts or objects might need to be created or been?

**COMMUNICATION:**
What new forms of communication will need to take place?

---

Instructions: Now that you’ve got a big idea from your brainstorm, let’s expand upon it. Below are nine categories to help you think about the variety of elements that will make up your solution. Deepen and add detail. After you’ve expanded the idea, reflect on the assumptions you made in your planning about why this solution is going to solve the problem. **BUILDING PLACE**

### COMMUNICATION
What was the idea, for a specific purpose, a specific idea, or created a new idea?

**WHAT OBJECTS/PRODUCTS/TOOLS FOR THIS IDEA?**

### TIME
How might the program allocation or time need to change for this idea?

**WHAT TIME WILL THE PROGRAMS AND APPRENTICESHIP WILL CHANCE OR SELF-PACE?**

### SPACE
How might new spaces need to be used or created for this idea?

**WHAT SPACE WILL THE PROGRAMS AND APPRENTICESHIP WILL CHANCE OR SELF-PACE?**

### ROLES
What new roles might need to be created for this idea?

**WHAT ROLES WILL THE PROGRAMS AND APPRENTICESHIP WILL CHANCE OR SELF-PACE?**

### OBJECTS/PRODUCTS/TOOLS
What new artifacts or objects might need to be created or been?

**WHAT NEW OBJECTS/PRODUCTS/TOOLS WILL THE PROGRAMS AND APPRENTICESHIP WILL CHANCE OR SELF-PACE?**

---

Instructions: Now that you’ve got a big idea from your brainstorm, let’s expand upon it. Below are nine categories to help you think about the variety of elements that will make up your solution. Deepen and add detail. After you’ve expanded the idea, reflect on the assumptions you made in your planning about why this solution is going to solve the problem.
**Selection:** Draw a storyboard that maps out the experience you are hoping to create for your stakeholder. Take the assumptions you generated in the last exercise and match them to the phases of the experience that is most relevant. Generate new assumptions as well.

**PRE-EXPERIENCE**

Joe and his parents attend a recruitment event. Joe’s parents sign him up for the program.

**ASSUMPTIONS:**
- Joe’s parents will be able to attend a recruitment event.
- Joe is interested in an after-school program.

**DURING EXPERIENCE, PHASE 1**

Joe meets his mentor for the first time and goes to his mentor’s office.

**ASSUMPTIONS:**
- Joe will connect with an adult with shared interests and will open up about his goals.

**DURING EXPERIENCE, PHASE 2**

Joe learns about the program and the skills required for the job.

**ASSUMPTIONS:**
- An apprenticeship will help Joe make connections to his future.

**DURING EXPERIENCE, PHASE 3**

Joe learns about the program and the skills required for the job.

**ASSUMPTIONS:**
- An apprenticeship will help Joe make connections to his future.

**POST-EXPERIENCE**

Joe reflects and shares about what he learned.

**ASSUMPTIONS:**
- Joe will participate in an apprenticeship.
- Joe will enhance self-efficacy.
Design a Prototype

**ASSUMPTIONS:**

**JOE IS INTERESTED IN AN AFTER SCHOOL PROGRAM.**

**PROTOTYPE 1:**

**HOLD A SMALL SCHOOL CAREER FAIR AND INVITE JOE TO ATTEND.**

**What are you trying to learn?**

**What will you do?**

**How will you make sense of what happened?**

**ASSUMPTIONS:**

**JOE HAS CAREER INTERESTS HE CAN SHARE WITH THE PROGRAM MANAGER.**

**PROTOTYPE 2:**

**WE WILL INTERVIEW JOE TO ASK THE QUESTIONS ABOVE, REGARDLESS OF WHETHER HE ATTENDS THE CAREER FAIR.**

**What are you trying to learn?**

**What will you do?**

**How will you make sense of what happened?**

**ASSUMPTIONS:**

**PILOT**

Once you have completed your prototypes, you will combine ideas into a small pilot that you will test in real time and measure. We will focus on this during the implementation phase.

**PROTOTYPE 1:**

**What will you do?**

**What are you trying to learn?**

**How will you make sense of what happened?**

**ASSUMPTIONS:**

**PROTOTYPE 2:**

**What will you do?**

**What are you trying to learn?**

**How will you make sense of what happened?**

**ASSUMPTIONS:**

**PROTOTYPE 3:**

**What will you do?**

**What are you trying to learn?**

**How will you make sense of what happened?**

**ASSUMPTIONS:**

Instructions: Now that you have developed your idea, it is time to get ready to test it with stakeholders. Before we implement on idea, we always test it through small tests (“prototypes”) designed to test our assumptions about why the stakeholder will like the idea and why the idea is going to meet their needs. Prototypes are small-scale, they would involve a small number of students (or other stakeholders), and require only a short amount of time, both to prepare and implement.
1 DESIGNING A PROTOTYPE

- Prototypes are quick experiments designed to test the assumptions behind the idea you generated. Your goal is to learn more about your idea not to validate your idea as correct.
- Good prototypes ask specific questions and create activities to help you find the answers to these questions.
- Good prototypes do not require a lot of time or investment to prepare. When designing your prototype, think of all the ways that you can test your assumptions without spending a lot of time planning and preparing.
- Good prototypes do not require a lot of money. When designing your prototype, think of all the ways you can test your assumptions without spending a lot of money or using a lot of resources.
- Good prototypes are small. Here’s an example: If you want to test a prototype of a 100 person event, start by throwing a party for ten. Eventually you will need to make your prototypes closer to the scale of the full implementation of the idea, but in the beginning test those assumptions with a small group. If you want to create a solution for an entire grade level, start with engaging three or four students. Then test the solution with a whole class. That move to testing the solution with the entire class.

- By starting small to test assumptions and gather information about whether your idea will meet the needs of the stakeholders, you are going downward to test a few ideas and not major changes before you proceed. When you launch an initiative at scale, you have the risk of pivot or close-up.
- Good prototypes should not feel risky. By starting small, you are engaging a group of trusted individuals to give you honest feedback before you scale your idea to the whole group.
- Good prototypes take place in the real world. Instead of modeling up an idea, take your small scale prototype to real stakeholders to try out.
- Prototyping is different than prototyping an idea. Prototyping is about answering questions about the idea itself and how it will impact the stakeholders. Prototyping is about figuring out how an idea will work once it is at scale.

2 TESTING A PROTOTYPE

- Before to focus your prototype around the questions you are trying to answer.
- Think carefully about who will test your prototype. Think about the stakeholders to groups you need to engage. Think about those stakeholders who are underrepresented.
- Use this tool in this phase to make a plan for what will happen, what you need and who will help you lead your prototype.
- After you test your prototype, be sure to take time to interview your participants to ask them what they liked, what they didn’t like and how the experience made them feel.
- Ask them to think about the prototype as a solution that you implement in the future.
- Would they enjoy participating? Why or why not?
- Would this solution solve a problem they face? Why or why not?
- Would this solution need new skills? Why or why not?
- Be sure to ask then if there is anything else they would like to share.
- Based on what you learn from your participants, make iterations to your prototype and try again. Prototyping should be a rapid process of quick, new, experimentation.

3 REFLECTING AFTER THE TEST

- After you have completed the test of your prototype and have interviewed the participants, be sure to take some time to reflect and analyze the prototype of your idea.
- What worked about the prototype? How well will these things grow into a full solution?
- What didn’t work about your prototypes? What will you do to make changes?
- What new questions arised for you during the test of your prototype? What will you do to learn the answers to those questions?
- What ideas came up for you as you were testing your prototype and talking to your stakeholders? How might you incorporate these ideas into the next iteration of your prototype?
- Think about how your prototype will meet the needs of your stakeholders. Think back to your Plan of View statement and reflect on how your idea will meet the needs you identified.
Make outcomes

Use

#3 Storyboard Your Life

What are the three most important moments in the experience your student created?

1. 

2. 

3. 

#4 Design a Prototype

What are the three most important logistics to consider?

1. 

2. 

3. 

Describe the prototype your team will develop.

What will you do?

What are you going to learn?

How will you make sense of what happened?

How do you think your team’s prototype will lead you to a solution that will improve the holistic learning outcomes for your student?

TEAM ALIGNMENT

In order to seek alignment as a team, share each of your summary pages with the questions below to narrow your teams focus so that you can move on to the next phase.

1. Are you ready?
2. Are you ready?
3. Are you ready?

To start the new phase, you must complete the following:

- #3 Storyboard Your Life
- #4 Design a Prototype
- #5 Make a Summary

Now, take a look at your results in the different criteria to determine if you are ready to move into the next phase. For the criteria where you are least confident, try researching tools to help your facilitator.

If you have more than two areas where your team is not confident, wait to improve before moving on.
MAKE TRANSITION REFLECTION

## REFLECTION ON PROCESS

Independently, reflect on how you’re working together by answering the questions below. Then share your reflections as a team.

- What is the most important insight you gained during this phase of the design challenge?

- About which part of this phase of the design challenge do you feel most confident?

- About which part of this phase of the design challenge do you feel least confident? What is your team going to do to improve your confidence about this phase?

- What was the most difficult part to collaborate on for your team?

- How can you improve how your team works together in the next phase?

## SHAREOUT OF PROCESS

When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleagues to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
TEST INTRODUCTION

TEAM WORKSHOP TOOLS

<table>
<thead>
<tr>
<th>#1 Task Prototype</th>
<th>30-minute complete</th>
<th>1-hour to test prototype</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT'S THE TOOL?</strong></td>
<td>The Task Prototype worksheet is designed to help you plan this phase of testing your prototype.</td>
<td><strong>WHAT IS YOUR GOAL?</strong></td>
</tr>
</tbody>
</table>

TEAM WORKSHOP TOOLS

<table>
<thead>
<tr>
<th>#1 Idea Evaluation</th>
<th>30-minute complete</th>
<th>1-hour to test prototype</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT'S THE TOOL?</strong></td>
<td>Idea Evaluation is a worksheet designed to help you evaluate your prototype based on your stakeholder testing.</td>
<td><strong>WHAT IS YOUR GOAL?</strong></td>
</tr>
</tbody>
</table>

INDIVIDUAL FIELDWORK TOOLS

<table>
<thead>
<tr>
<th>#1 Reflecting &amp; Revising prototype</th>
<th>30-minute per prototype</th>
<th>1-hour to test prototype</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT'S THE TOOL?</strong></td>
<td>Reflecting &amp; Revising prototype is a worksheet designed to help you to prepare to test your prototype and then reflect on what you learned from testing your prototype.</td>
<td><strong>WHAT IS YOUR GOAL?</strong></td>
</tr>
</tbody>
</table>

INDIVIDUAL FIELDWORK TOOLS

<table>
<thead>
<tr>
<th>#1 Evaluating Prototypes to Get to Next Steps</th>
<th>20-minute complete</th>
<th>1-hour to test prototype</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT'S THE TOOL?</strong></td>
<td>Evaluating Prototypes to Get to Next Steps is a worksheet designed to help your team decide what your next steps are in terms of taking on your concept.</td>
<td><strong>WHAT IS YOUR GOAL?</strong></td>
</tr>
</tbody>
</table>

INDIVIDUAL FIELDWORK TOOLS

<table>
<thead>
<tr>
<th>#1 What's Next?</th>
<th>20-minute complete</th>
<th>1-hour to test prototype</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT'S THE TOOL?</strong></td>
<td>What's Next worksheet asks you to reflect on where are you in your design challenge and what your next steps should be.</td>
<td><strong>WHAT IS YOUR GOAL?</strong></td>
</tr>
</tbody>
</table>
Test a Prototype

1. WHAT ASSUMPTIONS WILL YOU BE TESTING WITH YOUR PROTOTYPE?
   JOE IS INTERESTED IN AN AFTER-SCHOOL PROGRAM.
   JOE HAS CAREER INTERESTS HE IS SHARE WITH THE PROGRAM MANAGER.

2. GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO MAKE PARTICIPATE IN YOUR PROTOTYPE.
   JOE SEES OTHER MIDDLE SCHOOL STUDENTS.

3. WHO MIGHT HELP YOU TEST THE PROTOTYPE?
   THRE LOCAL BUSINESS LEADERS AND ANOTHER TEACHER.

4. WHERE WILL YOU TEST THE PROTOTYPE?
   IN MY CLASSROOM.

5. HOW WILL YOU SET UP THE SPACE?
   ALL THE CHAIRS IN A CIRCLE FACING EACH OTHER.

6. WHAT MATERIALS WILL YOU NEED?
   A CAREER EXPLORATION GUIDE FOR STUDENTS TO TAKE NOTES.

7. ANYTHING ELSE YOU NEED TO PREPARE?
   A CAREER EXPLORATION GUIDE FOR STUDENTS TO TAKE NOTES.

8. WHAT ARE THE STEPS THAT YOU NEED TO COMPLETE IN ORDER TO TEST YOUR PROTOTYPE?
   1. CONTACT BUSINESS LEADERS
   2. INFORM PARENTS
   3. INVITE STUDENTS
   4. MAKE CAREER EXPLORATION GUIDE
   5. SET UP ROOM
   6. HOLD EVENT
   7. DEBRIEF WITH STUDENTS ABOUT WHAT THEY LEARNED
   8. SEND THANK YOU NOTES

Test a Prototype

1. WHAT ASSUMPTIONS WILL YOU BE TESTING WITH YOUR PROTOTYPE?
   JOE IS INTERESTED IN AN AFTER-SCHOOL PROGRAM.
   JOE HAS CAREER INTERESTS HE IS SHARE WITH THE PROGRAM MANAGER.

2. GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO MAKE PARTICIPATE IN YOUR PROTOTYPE.
   JOE SEES OTHER MIDDLE SCHOOL STUDENTS.

3. WHO MIGHT HELP YOU TEST THE PROTOTYPE?
   THRE LOCAL BUSINESS LEADERS AND ANOTHER TEACHER.

4. WHERE WILL YOU TEST THE PROTOTYPE?
   IN MY CLASSROOM.

5. HOW WILL YOU SET UP THE SPACE?
   ALL THE CHAIRS IN A CIRCLE FACING EACH OTHER.

6. WHAT MATERIALS WILL YOU NEED?
   A CAREER EXPLORATION GUIDE FOR STUDENTS TO TAKE NOTES.

7. ANYTHING ELSE YOU NEED TO PREPARE?
   A CAREER EXPLORATION GUIDE FOR STUDENTS TO TAKE NOTES.

8. WHAT ARE THE STEPS THAT YOU NEED TO COMPLETE IN ORDER TO TEST YOUR PROTOTYPE?
   1. CONTACT BUSINESS LEADERS
   2. INFORM PARENTS
   3. INVITE STUDENTS
   4. MAKE CAREER EXPLORATION GUIDE
   5. SET UP ROOM
   6. HOLD EVENT
   7. DEBRIEF WITH STUDENTS ABOUT WHAT THEY LEARNED
   8. SEND THANK YOU NOTES
Instructions: First, identify the assumptions you have made about the user. Formulate questions that you will ask the person you are testing your prototype. Take notes on what you learn from that person.

1. **ASSUMPTION**
   - What is the assumption that this prototype is designed to test?
   - **JOE HAS CAREER INTERESTS HE CAN SHARE WITH THE PROGRAM MANAGER.**
   - **WOULD YOU BE INTERESTED IN A REGULAR CAREER EXPLORATION PROGRAM AFTER SCHOOL? DO YOU LEARN ABOUT A CAREER THAT INTERESTS YOU TODAY? WHAT ARE YOU GOALS FOR YOUR CAREER?

   **PROTOTYPE TESTING NOTES**
   - What did you hear?
     - Write down specific quotations. Listen for stories, emotions, motivations and behaviors. 
     - Listen for surprising or contradictory information.
   - What did you see?
     - Look for emotions (sadness, excitement, joy) in the person’s body language and facial expressions.
   - **JOE DOES HAVE A CAREER GOAL - HE WANTS TO BE A DOCTOR.**

2. **ASSUMPTION**
   - What is the assumption that this prototype is designed to test?
   - **JOE WAS VERTIGENOUS WHEN HE WAS TALKING TO A SCIENTIST WHO CAME TO SPEAK AT THE CAREER FAIR.**

   **PROTOTYPE TESTING NOTES**
   - What did you see?
     - Look for emotions (sadness, excitement, joy) in the person’s body language and facial expressions.
   - **JOE WAS ENGAGED WHEN HE WAS TALKING TO A SCIENTIST WHO CAME TO SPEAK AT THE CAREER FAIR.**

Instructions: First, identify the assumptions you have made about the user. Formulate questions that you will ask the person you are testing your prototype. Take notes on what you learn from that person.

1. **ASSUMPTION**
   - What is the assumption that this prototype is designed to test?
   - **JOE HAS CAREER INTERESTS HE CAN SHARE WITH THE PROGRAM MANAGER.**
   - **WOULD YOU BE INTERESTED IN A REGULAR CAREER EXPLORATION PROGRAM AFTER SCHOOL? DO YOU LEARN ABOUT A CAREER THAT INTERESTS YOU TODAY? WHAT ARE YOU GOALS FOR YOUR CAREER?

   **PROTOTYPE TESTING NOTES**
   - What did you hear?
     - Write down specific quotations. Listen for stories, emotions, motivations and behaviors. 
     - Listen for surprising or contradictory information.
   - What did you see?
     - Look for emotions (sadness, excitement, joy) in the person’s body language and facial expressions.
   - **JOE DOES HAVE A CAREER GOAL - HE WANTS TO BE A DOCTOR.**

2. **ASSUMPTION**
   - What is the assumption that this prototype is designed to test?
   - **JOE WAS VERTIGENOUS WHEN HE WAS TALKING TO A SCIENTIST WHO CAME TO SPEAK AT THE CAREER FAIR.**

   **PROTOTYPE TESTING NOTES**
   - What did you see?
     - Look for emotions (sadness, excitement, joy) in the person’s body language and facial expressions.
   - **JOE WAS ENGAGED WHEN HE WAS TALKING TO A SCIENTIST WHO CAME TO SPEAK AT THE CAREER FAIR.**
Instructions: Take a look at the notes you collected from testing your prototype. Use the worksheet to organize your thoughts, reactions and questions. Use this tool that you would like to address as you create your next prototype.

**Reflection**

**LIKES**
What did you see that is working well?

- STUDENTS LIKED MEETING LOCAL BUSINESS LEADERS
- STUDENTS LIKED MEETING PEOPLE WITH JOBS THEY ARE INTERESTED IN

**CHANGES**
What did you see that is not working well?

- THE CONNECTION WITH THE ADULT WAS MORE IMPORTANT THAN THE CAREER MATCH
- COULD WE CREATE A TRAINING FOR MENTORS?

**QUESTIONS**
What did you see that raised questions for you?

- MATCH STUDENTS BASED ON PERSONAL CONNECTION RATHER THAN CAREERS
- HELP MENTORS BUILD SKILLS AROUND CONNECTING WITH YOUNG PEOPLE

**IDEAS**
What ideas come to you as you observed?

- STUDENTS LIKED MEETING LOCAL BUSINESS LEADERS
- STUDENTS LIKED MEETING PEOPLE WITH JOBS THEY ARE INTERESTED IN

**LAUNCH**
EXPLORE
DEFINE
GENERATE
MAKE
TEST
IMPLEMENT
TELL

**ITERATE**
TEST
IMPLEMENT
TELL
Instructions: Reflect on what assumptions you tested, what you learned and how you will iterate on your idea.

1. **Assumption**
   What was the assumption that this prototype was designed to test?

   **Students and Mentors Need Games to Get to Know Each Other**

   **What Did You Learn?**
   What did you learn from your stakeholders about the assumption you were testing?

   **What Will You Do?**
   How will you iterate on your idea based on stakeholder feedback?

2. **Assumption**
   What was the assumption that this prototype was designed to test?

   **Activities Did Help the Students and Mentors Get to Know Each Other**

   **What Did You Learn?**
   What did you learn from your stakeholders about the assumption you were testing?

   **What Will You Do?**
   How will you iterate on your idea based on stakeholder feedback?

   **Saturday's Were Okay with the School but Hard for the Mentors**

   **What Did You Learn?**
   What did you learn from your stakeholders about the assumption you were testing?

   **What Will You Do?**
   How will you iterate on your idea based on stakeholder feedback?

   **Trying THESE Meetings After School at the Mentors' Workplace.**

   **What Did You Learn?**
   What did you learn from your stakeholders about the assumption you were testing?

   **What Will You Do?**
   How will you iterate on your idea based on stakeholder feedback?
Instructions: Use the worksheet to reflect on how well your prototype met the needs of the stakeholder in relation to the scale of the intervention. Next, use the questions to reflect on how your solution will increase learning outcomes for students.

<table>
<thead>
<tr>
<th>Stages of PROTOTYPE REFLECTION</th>
<th>Meets Many Needs</th>
<th>Meets Only a Few Needs</th>
<th>Did Not Meet the Stakeholder’s Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT’S NEXT?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IDEA EVALUATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DEFINE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GENERATE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MAKE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TEST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ITERATE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TEST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IMPLEMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TELL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WHAT DID YOU LEARN?**

**IDEA EVALUATION**

1. After reflecting on the test of your prototype, how do you think your idea aligns with your POV statement? Why?

YES, I believe the After School Career Exploration Program will directly help Joe connect what he is learning today with what he needs for his future career.

2. After reflecting on the test of your prototype, how well do you think your idea will improve the holistic learning outcomes for students? Why?

I believe the After School Career Exploration Program will help students to develop career goals for themselves which will, in turn, help them to advocate for their goals and become more self-efficacious.

**IDEA EVALUATION**

1. After reflecting on the test of your prototype, how do you think your idea aligns with your POV statement? Why?

2. After reflecting on the test of your prototype, how well do you think your idea will improve the holistic learning outcomes for students? Why?
Evaluating Prototypes to Get to Next Steps

How might we spread the impact?
How might we make it a policy?
How might we disseminate the status quo?

Will increase learning outcomes

How might we accelerate the impact?
How might we simplify the impact?

Might not increase learning outcomes

How might we disrupt the status quo?
How might we rethink the status quo?


during

to

might we spread

you

HMW

Your research might also consider how we might scale the solution in every aspect of school.

Might we spread the solution in every aspect of school?

If you landed in box 1, you need to keep brainstorming or reframe to the other aspect you generated during your first brainstorm. You might also consider conducting focus groups or surveys to better understand the problem you are trying to solve. You can also write HMW questions focused on scaling up as well as disrupting the status quo.

BOX 27 If you landed in box 2, you need to brainstorm how you might scale up your idea.

If you landed in box 3, you need to think about what kind of initiative you want to start.

We need to continue to prototype to ensure that the after-school program increases students’ self-efficacy.

If you landed in box 4, you need to keep brainstorming or reframe to the other aspect you generated during your first brainstorm. You might also consider conducting focus groups or surveys to better understand the problem you are trying to solve. You can also write HMW questions focused on scaling up as well as disrupting the status quo.

BOX 27 If you landed in box 3, you need to brainstorm how you might scale up your idea.

If you landed in box 4, you need to keep brainstorming or reframe to the other aspect you generated during your first brainstorm. You might also consider conducting focus groups or surveys to better understand the problem you are trying to solve. You can also write HMW questions focused on scaling up as well as disrupting the status quo.

How might we spread the impact?
How might we make it a policy?
How might we disrupt the status quo?

Will increase learning outcomes

How might we accelerate the impact?
How might we simplify the impact?

Might not increase learning outcomes

How might we disrupt the status quo?
How might we rethink the status quo?


during
Instructions: Use this worksheet to reflect on where you are in the design challenge - what’s working, what’s not and how you feel about your project generally. Next, think through next steps you might take to advance your project.

**REFLECTION GRID**

1. **What's Next?**
   - "I’m ready to implement!"
   - "I’m still exploring."

2. **Why?**
   - We are not sure that this career exploration program increases student self-efficacy and engagement at school.
   - "I’m still exploring."

3. **What should I do next?**
   - Secondary research
   - Interview more people
   - Generate new ideas
   - Design & test more prototypes
   - Project planning
   - Other?

4. **Why?**
   - We need to continue to prototype to that we ensure that the afterschool program increases students' self-efficacy.
   - "I’m stuck..."

5. **Make a recommendation for next steps for your team.**
   - Interview students who have participated in prototypes
   - Create 2-3 apprenticeship prototypes
   - Debrief with participants in those prototypes
   - Design & test more prototypes
   - Project planning
   - Other?

---

**TESTING PROTOTYPE REFLECTION**

1. **What's Next?**
   - "I’m ready to implement!"

2. **Why?**
   - Secondary research
   - Interview more people
   - Generate new ideas
   - Design & test more prototypes
   - Project planning
   - Other?

3. **What should I do next?**
   - We need to continue to prototype to that we ensure that the afterschool program increases students' self-efficacy.
   - "I’m still exploring."

4. **Why?**
   - "I’m stuck..."

5. **Make a recommendation for next steps for your team.**
   - "I’m still exploring."

---

**WHAT DID YOU LEARN?**

1. "I’m ready to implement!"
2. Secondary research
3. Interview more people
4. Generate new ideas
5. Design & test more prototypes

---

**IDEA EVOLUTION**

1. "I’m ready to implement!"
2. Secondary research
3. Interview more people
4. Generate new ideas
5. Design & test more prototypes

---

**EVALUATION PROTOTYPES**

1. "I’m ready to implement!"
2. Secondary research
3. Interview more people
4. Generate new ideas
5. Design & test more prototypes

---

**WHY'S NEXT?**

1. "I’m ready to implement!"
2. Secondary research
3. Interview more people
4. Generate new ideas
5. Design & test more prototypes

---

"I’m still exploring."
"I’m stuck..."
TEST TRANSITION SUMMARY

TEAM WORKSHOP TOOLS

#5 Idea Evaluation
After reflecting on your prototype, what do you think of your idea?

#6 Evaluating Prototypes to Get to Next Steps
What is your next step for your prototype?

INDIVIDUAL FIELDWORK TOOLS

#2 Testing Reflection
What are the three most important changes you learned from your prototype?

#4 What did you learn?
What are the most important changes you want to make to your idea?

#6 What’s next?
What is the best next step for your design work?

TEST TRANSITION ALIGNMENT

In order to see alignment as a team, share each of your summary pages and use this question to number your team’s focus so you can move on to the next page.

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess your team has met all the goals of the phase and are ready to move into the next phase. Circle the description that most represents your team’s progress.

NICK TEAM, select one idea to pursue. Write together.

How does your team’s idea relate to improving the holistic learning outcomes for your students?

1. Not ready
2. Ready with hesitation
3. Ready with confidence

NICK PROTOTYPE
You are struggling to refine and test your prototype.

TESTING PROTOCOL
You need to complete your prototype and complete the reflection.

RESEARCH PROTOCOL
You need to complete your prototype and complete the reflection.

INSERT PROTOCOL
You are struggling to identify the impacts you need to work on and begin to identify.

FIELD TEST PROTOCOL
You are struggling to evaluate your idea against your POI statement and complete boards to guide learning outcomes.

FIELD TEST ACTIVITY
You are struggling to adjust your POI statement and complete boards to guide learning outcomes.

ABSENCE ACTIVITY
You are struggling to adjust your POI statement and complete boards to guide learning outcomes.

PROJECT CONNECTED TO LEARNING OUTCOMES
You do not feel connected to your POI statement in the goal of answering the goal of developing learning outcomes.

PROPOSED CONNECTION TO LEARNING OUTCOMES
You do not feel connected to your POI statement in the goal of answering the goal of developing learning outcomes.

HOLISTIC LEARNING OUTCOMES
Core Academic Proficiencies

- Numeracy & Mathematics
- Applied Academic Proficiencies
- Science
- Health & Nutrition
- Arts & Culture
- Digital Tools, Technology & Media

Being Our Best
The individual learner
- Self-expression
- Self-regulation
- Resilience
- Career responsibility
- Making connections
- Creativity
- Critical thinking

Working With Others
- Communication
- Cooperation
- Open-mindedness
- Empathy
- Relationship building
- Reflecting on tensions
- Leadership

Improving Our World
- Problem-solving
- Civic engagement
- Entrepreneurship
- Innovation
- Respect for the Environment
**TEST TRANSITION REFLECTION**

**REFLECTION ON PROCESS**

Independently, reflect on how your team is working together by answering the questions below. Then share your reflections as a team.

- What is the most important insight you gained during this phase of the design challenge?
- About which part of this phase of the design challenge do you feel most confident?
- What is your team going to do to improve your confidence about this phase?
- What was the most difficult part to collaborate on for your team?
- How can you improve how your team works together in the next phase?

**SHAREOUT OF PROCESS**

When you have completed the reflection and are ready to transition to the next phase of the design challenge, share your findings, insights, and questions with your facilitator, school leader, and/or colleagues to get feedback.

- They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

---

**ITERATE**

SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
ITERATE INTRODUCTION

Overview of the Iterate Phase
The Iterate phase will help you advance your solution through the first round of hypothesis testing. This phase should be completed by those working on projects that can be done in school/team/individual or with others.

Phases of design challenge include: identifying gaps from your reflection about your first round of testing; constructing a prototype based on those ideas with specific elements, identifying the assumptions you are making with your solution and making a prototype to test those assumptions.

Objectives of the Iterative Phase
The goal of this phase is to help you advance your idea by incorporating feedback from the first round of testing. While also testing new assumptions you are making about your idea. This phase will help you build a quick prototype (low time investment, low cost, small scale).

Mindsets of Iterative Phase
• Stay optimistic that you can solve the problem
• Prototype early and often in order to learn about your idea
• Start small to make big changes
• Slow don't tell
• Many cycles of prototyping are necessary to develop an idea.

INTRODUCTION

TEST

YES! proceed to the next phase

Are you ready to proceed?

NOT YET? repeat this phase

COMBINE REFLECTIONS & IDEAS

ALIGNMENT

SUMMARY

BUILD TO TOLERATE

STORY BOARD YOUR ITERATION

DESIGN ANOTHER PROTOTYPE

ITERATE TEAM WORKSHOP TOOLS

1. Construct Reflections & Ideas

What to do:
Construct Reflections & Ideas is a worksheet designed to help you combine ideas from your first round of testing in order to advance your solution.

What’s your Goal?
Please help group and combine new ideas into a broader concept.

Time: 30-45 minutes

2. Building to Iterate

What to do:
The Building to Iterate worksheet helps your team identify all the elements of your concept that need to be developed as well as the assumptions embedded in that concept.

What’s Your Goal?
Your concept in a prototype comes from a single point-It. Use this tool to help you develop your concept more fully.

Time: 30-45 minutes

3. Storyboard Your Iteration

What to do:
Storyboard Your Iteration is a worksheet designed to help your team think through your idea in terms of a timeline. What happens at the beginning, the middle and the end?

What’s Your Goal?
By thinking through your ideas in terms of a timeline, you will be able to further reflect on the assumptions you are making end generate new assumptions as well.

Time: 30-45 minutes

4. Design Another Prototype

What to do:
The Design Another Prototype worksheet helps your team design low-resolution prototypes to test the assumptions you are making about why your concept is going to solve your stakeholder’s problem or fill their need.

What’s Your Goal?
As you continue to prototype, the ideas you generate are full of assumptions about why those ideas will solve your stakeholder’s problem or fill their need. Your prototype needs to test those assumptions early in order to get authentic, relevant stakeholder feedback.

Time: 30-45 minutes

Holistic Learning Outcomes

Core Academic Proficiencies
• Entrepreneurship
• Problem solving
• Communication
• Collaboration
• Relationship building
• Empathy
• Critical thinking
• Digital literacy, technology & media

Applied Academic Proficiencies
• Self-regulation
• Self-efficacy
• Health & nutrition
• Science
• Health & nutrition
• Critical thinking
• Empathy
• Teamwork
• Problem solving

• Taking responsibility
• Resilience
• Self

• Empathy
• Leadership

Workshop Objectives
• Learner/individual
- Communication
- Critical thinking
- Health & nutrition
- Teamwork
- Problem solving
- Critical thinking
- Preparing learners to lead

• Classroom
- Taking responsibility
- Self-regulation

Improving Our World (our context/our world)
• Problem solving
• Civic engagement
• Entrepreneurship
• Respect for diversity
• Respect for the Environment

• Leadership
• Digital literacy, technology & media
• Health & nutrition
• Science
Instructions: Now that you’ve reflected on what you learned from your prototype during the Test phase, let’s combine your reflections to make a new possible solution. Write down everything you learned and want to include from your Reflection Grid from the last phase. Based on your reflections, you may want to iterate on your previous solution, you may want to review the other ideas you sketched out, or you may want to brainstorm totally new ideas. If you stay with your original idea, push it to be bolder or larger-scale.

SELECT MULTIPLE IDEAS FROM YOUR REFLECTION OR NEW IDEAS THAT YOU GENERATED THAT YOU WANT TO COMBINE.

JOE ENJOYED MEETING CARING, INTERESTING LEADERS IN HIS COMMUNITY

CAREER MENTORS

CAREER MENTORS

REWRITE YOUR NEW IDEA IN THE FORM OF A NEWSPAPER HEADLINE.
Instructions now that you’ve tested a prototype, use what you learned to iterate. You might decide to expand upon your initial idea or take a new direction of prototyping. Here’s about pushing your ideas to new and more inclusive ones.

**CAREER MENTORS**

- You might explore how to re-design prototyping to reach more students. Below are nine categories to help you do this. Explore the table and the associated questions for each category and walk through those you’ve expanded the idea, refine on the recommendations you made in your planning. If you are starting with a new idea, answer the second set of questions about your description.

---

**ITERATIONS**

**WHAT SPECIFIC BEHAVIORS OR ACTIVITIES**

- How might new spaces need to be used or created for this idea?
- How might new spaces need to be created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?

**WHAT SPECIFIC BEHAVIORS OR ACTIVITIES**

- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?

**WHAT SPECIFIC BEHAVIORS OR ACTIVITIES**

- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?
- How might new spaces need to be used or created for this idea?

---

**POLICY**

- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?

**POLICY**

- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?
- What policies would need to shift or be created?

---

**OBJECT/PRODUCTS/TOOLS**

- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?

**OBJECT/PRODUCTS/TOOLS**

- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?
- What new artifacts or objects might need to be created for this idea?

---

**COMMUNICATION**

- What new forms of communication will need to take place?
- What new forms of communication will need to take place?

**COMMUNICATION**

- What new forms of communication will need to take place?
- What new forms of communication will need to take place?
**Storyboard Your Iteration**

*PRE-EXPERIENCE*

**ASSUMPTIONS:**
- Joe is interested in having a mentor.
- Joe is able to attend mentor meetings on weekends.

**WELCOME EXPERIENCE**

**ASSUMPTIONS:**
- Joe will be open with a new person.
- Joe and his mentor need to have an introduction activity to kick off the mentorship.

**DURING EXPERIENCE, PHASE 1**

**ASSUMPTIONS:**
- Joe and his mentor will enjoy building something together; this will help them get to know each other.
- Joe will share the program manager about all of his positive experiences with the mentor.

**POST-EXPERIENCE**

**ASSUMPTIONS:**
- These activities will help Joe and his mentor bond.

*PRE-EXPERIENCE*

**ASSUMPTIONS:**
- Joe is interested in having a mentor.
- Joe is able to attend mentor meetings on weekends.

**WELCOME EXPERIENCE**

**ASSUMPTIONS:**
- Joe will be open with a new person.
- Joe and his mentor need to have an introduction activity to kick off the mentorship.

**DURING EXPERIENCE, PHASE 1**

**ASSUMPTIONS:**
- Joe and his mentor will enjoy building something together; this will help them get to know each other.
- Joe will share the program manager about all of his positive experiences with the mentor.

**POST-EXPERIENCE**

**ASSUMPTIONS:**
- These activities will help Joe and his mentor bond.
ASSUMPTIONS:

1. Students and mentors need games to get to know each other.
2. There will be space at the school on Saturdays.
3. The match event can happen on a Saturday.

Prototype 1:
What will you do?
What are you trying to learn?
How will you make sense of what happened?

Prototype 2:
What will you do?
What are you trying to learn?
How will you make sense of what happened?

Prototype 3:
What will you do?
What are you trying to learn?
How will you make sense of what happened?

Prototype 4:

Pilot:
Once you have completed your prototypes, you will combine ideas into a pilot that includes pulse, pain and scenarios, and test it in the implementation phase.

ASSUMPTIONS:

1. What will you do?
2. What are you trying to learn?
3. How will you make sense of what happened?
# TEAMALIGNMENT

## INTRODUCTION

In order to seek alignment as a team, share each of your summary pages and use the questions below to narrow your team’s focus. When you’ve narrowed it to the next phase, your team will have the tools, context, and a plan to make your project go smoothly. Let each person read their summary response without interruption or comment from the team. If there are differing views and ideas from team members, ask questions to gain understanding. To questions like “Can you share more information about how you came to these ideas?” “Tell me more about that…”

## COMBINE IDEAS (our community/our world)

- Taking responsibility
- Resilience
- Self-confidence
- Self-efficacy
- Self-regulation
- Collaboration
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

## PROTOTYPE MAKING (our class/school)

- Media
- Digital literacy, technology & media
- Arts & culture
- Health & nutrition
- Proficiencies
- Literacy
- Holistic learning
- Metacognition
- Problem solving
- Engagement
- Interpersonal skills
- Respect for the environment

## CRITERIA FORMING TO THE NEXT PHASE

Use the rubric below to assess your team has met all the goals of the phase of the challenge and are ready to move into the next phase. Circle the description that most represents your team’s progress. For example: Blue circle all the bottom of this page, red circle all the top of this page, green circle the middle of this page.

## MAKE

First place: 
Second place: 
Third place:

## DESIGN ANOTHER PROTOTYPE

How do you plan your team’s prototyping will lead you to a solution that will improve the holistic learning outcomes for your students?

## DESIGN YOUR PROTOTYPE

Describe the prototype your team will develop?

What will you do?

## BUILT TO BEAR

What are the three most important assumptions you generated?

1. 
2. 
3.

## BUILD STORYBOARD

- What are the two assumptions that your team will test through prototyping?
- What are you testing?
- What are you testing?
- How will you make sense of what happened?

## BUILDING STORYBOARD ACTIVITY

The prototype will be a single concept, not a single page, or a single concept. Draw a concept plan for the prototype you will test with assistance from your students

## CIRCLE THE OUTCOMES

How will you test the assumptions that were agreed upon to see if you will move effectively to the next phase?

## PROJECT STATUS GATHERING OF THE PROTOTYPE

There has been some agreement on the solution, but there are no clear barriers to the next phase.

## PROJECT STATUS CONCLUSION TO LEARNING OUTCOMES

The team cannot agree on how the solution being implemented is in line with the goal of improving the learning outcomes.

Now, take a look at your results in the different criteria to determine if you are ready to move onto the next phase. For the criteria where you are least confident, try reworking back to your facilitator for further clarification. If you are not sure, you can take a break, come back, and re-evaluate. If you have more than two areas where your team is not confident, work to improve before moving on.
ITERATE TRANSITION REFLECTION

**REFLECTION ON PROCESS**
Independently, reflect on how your team is working together by answering the questions below. Then share your reflections as a team.

• What is the most important insight you gained during this phase of the design challenge?

• About which part of the phase of the design challenge do you feel most confident?

• About which part of the phase of the design challenge do you feel least confident? What is your team going to do to improve your confidence about this phase?

• What was the most difficult part to collaborate on for your team?

• How can you improve how your team works together in the next phase?

**SHAREOUT OF PROCESS**
When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleagues to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

TEST ANOTHER

SCHOOLS 2020 HUMAN-CENTERED DESIGN TOOLKIT
**INTRODUCTION**

**OVERVIEW OF TEST ANOTHER INTRODUCTION**

The worksheet in the Test Another Prototype phase is designed to help you learn on both of your solutions.

Specific questions about a concept test assumptions embedded in the idea. The work of these workshops can be done collaboratively with school-based teams or other schools. Prototyping will be conducted by individual educators.

The phase of the design process will include preparing you to test your prototype and reflect on what you learned, and evaluating your ideas based on the stakeholder's needs.

**OBJECTIVES OF TEST ANOTHER INTRODUCTION**

- To develop a set of hypotheses for the prototype.
- To identify potential stakeholders for the prototype.
- To create a plan for testing the prototype.
- To analyze the results of testing the prototype.

**MINDSETS OF TEST ANOTHER INTRODUCTION**

- Personal development
- Professional development
- Community development
- Environmental development

**GROUP OUTCOMES**

- ♦ Personal development
- ♦ Professional development
- ♦ Community development
- ♦ Environmental development

**TEAM WORKSHOP TOOLS**

**WHAT IS THE TOOL?**

- The Test Another Prototype worksheet is designed to help you learn on both of your prototypes.
- Prototype questions require a little bit of planning. The tool helps you think through these logistics.

**WHAT IS YOUR GOAL?**

- Help students understand the importance of testing prototypes.

**INDIVIDUAL FIELDWORK TOOLS**

**WHAT IS THE TOOL?**

- Test Another Prototype Reflection is a worksheet designed to help you test your prototype and reflect on what you learned from testing your prototype.
- The tool helps you to test your prototype and then capture what you learned from testing.

**WHAT IS YOUR GOAL?**

- Help students understand the importance of testing prototypes.

**WHAT DID YOU LEARN?**

- Help students understand the importance of testing prototypes.

**TEAM WORKSHOP TOOLS**

**WHAT IS THE TOOL?**

- The Test Another Prototype worksheet is designed to help you learn on both of your prototypes.
- Prototype questions require a little bit of planning. The tool helps you think through these logistics.

**WHAT IS YOUR GOAL?**

- Help students understand the importance of testing prototypes.

**INDIVIDUAL FIELDWORK TOOLS**

**WHAT IS THE TOOL?**

- Test Another Prototype Reflection is a worksheet designed to help you test your prototype and reflect on what you learned from testing your prototype.
- The tool helps you to test your prototype and then capture what you learned from testing.

**WHAT IS YOUR GOAL?**

- Help students understand the importance of testing prototypes.
**Test a Prototype**

*Instructions:*

1. **5. WHAT ASSUMPTIONS WILL YOU MAKE TESTING WITH YOUR PROTOTYPE?**
2. **6. WHAT MATERIALS WILL YOU NEED?**
   1. CONTACT POTENTIAL MENTORS
   2. INFORM PARENTS
   3. INVITE STUDENTS
   4. GATHER NAME Tag SUPPLIES
   5. SETUP ROOM
   6. HOLD EVENT
   7. DEBRIEF WITH STUDENTS ABOUT WHAT THEY LEARNED AND WHAT THEY LIKE
   8. SEND THANK YOU NOTES

3. **3. WHO MIGHT HELP YOU TEST THE PROTOTYPE?**
4. **4. WHERE WILL YOU TEST THE PROTOTYPE?**
   1. IN THE CAFETERIA AT SCHOOL
   2. IN THE LIBRARY AT SCHOOL
   3. IN THE GYM AT SCHOOL
   4. IN THE ART ROOM AT SCHOOL
   5. IN THE MUSIC ROOM AT SCHOOL

5. **2. GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO HAVE PARTICIPATE IN YOUR PROTOTYPE:**
   1. Joe, John, Mary, and Tom
   2. Lucy, Sam, and Alex
   3. Julia, Susan, and David
   4. Bob, Julie, and Karen
   5. Emily, Charlie, and Linda

6. **7. ANYTHING ELSE YOU NEED TO PREPARE?**
   1. SNACKS
   2. THANK YOU NOTES FOR THE MENTORS
   3. SUPPLIES FOR MAKING NAMETAGS AND BUILDING A TOWER

7. **WHERE WILL YOU TEST THE PROTOTYPE?**
   1. IN THE CAFETERIA AT SCHOOL
   2. IN THE LIBRARY AT SCHOOL
   3. IN THE GYM AT SCHOOL
   4. IN THE ART ROOM AT SCHOOL
   5. IN THE MUSIC ROOM AT SCHOOL

8. **1. WHAT ARE THE STEPS THAT YOU NEED TO COMPLETE IN ORDER TO TEST YOUR PROTOTYPE?**
   1. CONTACT POTENTIAL MENTORS
   2. INFORM PARENTS
   3. INVITE STUDENTS
   4. GATHER NAME Tag SUPPLIES
   5. SET UP ROOM
   6. HOLD EVENT
   7. DEBRIEF WITH STUDENTS ABOUT WHAT THEY LEARNED AND WHAT THEY LIKE
   8. SEND THANK YOU NOTES

---

**Test a Prototype**

*Instructions:*

1. **5. WHAT ASSUMPTIONS WILL YOU MAKE TESTING WITH YOUR PROTOTYPE?**
2. **6. WHAT MATERIALS WILL YOU NEED?**
   1. CONTACT POTENTIAL MENTORS
   2. INFORM PARENTS
   3. INVITE STUDENTS
   4. GATHER NAME Tag SUPPLIES
   5. SET UP ROOM
   6. HOLD EVENT
   7. DEBRIEF WITH STUDENTS ABOUT WHAT THEY LEARNED AND WHAT THEY LIKE
   8. SEND THANK YOU NOTES

3. **3. WHO MIGHT HELP YOU TEST THE PROTOTYPE?**
4. **4. WHERE WILL YOU TEST THE PROTOTYPE?**
   1. IN THE CAFETERIA AT SCHOOL
   2. IN THE LIBRARY AT SCHOOL
   3. IN THE GYM AT SCHOOL
   4. IN THE ART ROOM AT SCHOOL
   5. IN THE MUSIC ROOM AT SCHOOL

5. **2. GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO HAVE PARTICIPATE IN YOUR PROTOTYPE:**
   1. Joe, John, Mary, and Tom
   2. Lucy, Sam, and Alex
   3. Julia, Susan, and David
   4. Bob, Julie, and Karen
   5. Emily, Charlie, and Linda

6. **7. ANYTHING ELSE YOU NEED TO PREPARE?**
   1. SNACKS
   2. THANK YOU NOTES FOR THE MENTORS
   3. SUPPLIES FOR MAKING NAMETAGS AND BUILDING A TOWER

7. **WHERE WILL YOU TEST THE PROTOTYPE?**
   1. IN THE CAFETERIA AT SCHOOL
   2. IN THE LIBRARY AT SCHOOL
   3. IN THE GYM AT SCHOOL
   4. IN THE ART ROOM AT SCHOOL
   5. IN THE MUSIC ROOM AT SCHOOL

8. **1. WHAT ARE THE STEPS THAT YOU NEED TO COMPLETE IN ORDER TO TEST YOUR PROTOTYPE?**
   1. CONTACT POTENTIAL MENTORS
   2. INFORM PARENTS
   3. INVITE STUDENTS
   4. GATHER NAME Tag SUPPLIES
   5. SET UP ROOM
   6. HOLD EVENT
   7. DEBRIEF WITH STUDENTS ABOUT WHAT THEY LEARNED AND WHAT THEY LIKE
   8. SEND THANK YOU NOTES
Instructions: First, identify the assumptions you have designed your prototype to test. Next, write down questions that you will ask the person who is testing your prototype. Take notes on what you learn from that person.

1. **Assumption:**
   - What is the assumption that this prototype is designed to test?
   - **Students and Mentors Need Games to Get to Know Each Other**
   - What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?
   - **What Was It Like to Play the “Get to Know You” Games? Did It Make It Easier to Get to Know Your Mentors/Mentees?**
   - What did you see? Look for emotions (sadness, excitement, joy) in the person’s body language and facial expressions.
   - **Lots of Laughter and Smiles!**

2. **Assumption:**
   - What is the assumption that this prototype is designed to test?
   - **There Will Be Space at the School on Saturdays**
   - What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?
   - **Can We Hold Events at School Next Saturday?**

Prototype Testing Notes:
- Write down specific quotations. Listen for stories, emotions, motivations and behaviors. Make sure you are being exploratory or contradictory.
- What did you hear?
- What did you see?

Test Your Prototype!
Instructions: Take a look at the notes you collected from testing your prototype. Use this worksheet to organize your thoughts, reactions, and questions. Use this tool to make sense of what you experienced and capture areas of potential opportunity that you would like to address as you create your next prototype.

**Reflection**

**Likes**
What did you see that is working well?

**Changes**
What did you see that is not working well?

---

**The students and adults enjoyed spending time getting to know each other**

**Saturdays were logistically hard for the mentors.**

**Could we have the same kind of event after school?**

*What did you see that raised questions for you?*

*What ideas came to you as you observed?*
**What did you learn?**

**1. Assumption**
What was the assumption that this prototype was designed to test?

**Students and mentors need games to get to know each other**

**What did you learn?**
What did you learn from your stakeholders about the assumption you were testing?

**Activities did help the students and mentors get to know each other**

**What will you do?**
How will you iterate on your idea based on stakeholder feedback?

**2. Assumption**
What was the assumption that this prototype was designed to test?

**There will be space at the school on Saturdays**

**What did you learn?**
What did you learn from your stakeholders about the assumption you were testing?

**Saturdays were okay with the school but hard for the mentors**

**What will you do?**
How will you iterate on your idea based on stakeholder feedback?

**What did you learn?**
What did you learn from your stakeholders about the assumption you were testing?

**What will you do?**
How will you iterate on your idea based on stakeholder feedback?
Idea Evaluation

1. After reflecting on your prototype, how do you think your idea aligns with your PDG statement? Why?

Yes! I believe the After school career exploration program will directly help Joe connect what he is learning today with what he needs for his future career.

2. After reflecting on your prototype, how well do you think your idea will improve the holistic learning outcomes for students? Why?

I believe the After school career exploration program will help students to expand their horizons and develop career goals for themselves which will in turn help them to advocate for their goals and become more self-efficacious.

3. Based on what you learned from your second round of prototyping, what do you want to be sure to communicate about your idea and why it will meet your stakeholder’s needs when you write your pitch?

I believe the After school career exploration program will inspire students to think breadth about their potential careers and mentors who will inspire and help the students to follow their dreams.

Small change

Big change

Did Not Meet the Stakeholder’s Needs

Did Meet the Stakeholder’s Needs

Instructions: LAUNCH worksheet to reflect on how well your prototype met the needs of the stakeholder in relation to the state of the prototype. Next, use the questions to reflect on how well your solution will increase the holistic learning outcomes for students.

Evaluation

Idea

Needs

Stakeholder’s

Did

Not

LAUNCH

Meet

the

EXPLORE

Small

in

Instructions:

change

relation

increase

DEFINE

Use

the

this

scale

X

worksheet

of

learning

the

GENERATE

prototype.

to

outcomes

reflect

Next,

how

for

students.

well

Did

the

k

MAKE

eholder’s

your

questions

prototype

to

reflect

met

2

1

3

1

3

2

1

Based

on

what

you

learned

from

your

second

round

of

prototyping,

what

do

you

want

to

be

sure
to

communicate

about

your

idea

and

why

it

will

meet

your

stakeholder’s

needs

when

you

write

your

pitch?

Based

on

what

you

learned

from

your

second

round

of

prototyping,

what

do

you

want

to

be

sure
to

communicate

about

your

idea

and

why

it

will

meet

your

stakeholder’s

needs

when

you

write

your

pitch?
TEST ANOTHER TRANSITION SUMMARY

**SUMMARY OF TEST ANOTHER TRANSITION Prototype page:**

Use the Test Another Transition summary page to gather up the work you completed during the phase. By thinking about the holistic learning outcomes (see the right side of the page) you can summarize this information. Take the opportunity now to make changes as needed.

**TEAM WORKSHOP TOOLS**

1. Test a Prototype
   - What are the most important logistics to consider for your prototype?

2. Testing Prototypes Reflection
   - What are the three most important things you learned from testing your prototypes?
   1. 
   2. 
   3. 

3. #3 Reflection Grid
   - What are the most important insights that you identified from your reflections?

4. #4 What Did You Learn?
   - What are the most important changes you want to make to your idea?

**INDIVIDUAL FIELDFORK TOOLS**

5. #5 Idea Generation
   - After reflecting on your prototype, how do you think your idea aligns with your POA statement? Why?

**TEAM WORKSHOP TOOLS**

6. #6 Prototype
   - You are struggling to align your prototype and hypothesis, or finding that your prototype does not support your hypothesis. What do you need to do?

7. #7 Revise and Modify
   - You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?

8. #8 Prototype Reflection or Reflection Grid
   - You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?

9. #9 Reflect on Your Prototype
   - You are struggling to identify the misconceptions, research, and test and how to test them.

10. #10 Evaluate X Activity
    - You are struggling to [activity], or your POA statement and your goals of improving your learning outcomes.

**PROJECT FOCUS: CURRICULAR OUTCOMES**

11. #11 Test
    - You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?

12. #12 Review and Reflect
    - You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?

**TEST ANOTHER TRANSITION ALIGNMENT**

**CRITERIA-FORMING TO THE NEXT PHASE**

Use this rubric below to assess your team has met all the goals of the phases of the process and are ready to move into the next phase. Circle the description that most represents your team’s progress. For the Project Status chart at the bottom of the rubric, consider as a team the progress you’re making towards these.

- Not ready
- Ready with translation
- Ready with confidence

<table>
<thead>
<tr>
<th>IDEA</th>
<th>Prototype</th>
<th>Activity</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>You are struggling to align your prototype and hypothesis, or finding that your prototype does not support your hypothesis. What do you need to do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are struggling to identify the misconceptions, research, and test and how to test them.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are struggling to [activity], or your POA statement and your goals of improving your learning outcomes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are not confident in your prototype and want to incorporate feedback from your reflections. What do you need to do?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HOLISTIC LEARNING OUTCOMES**

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Health & Nutrition
- Arts & Culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Resilience
- Taking responsibility for learning, setting manageable goals
- Critical thinking

Working With Others (our classroom)
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Leadership

Improving Our World (our community/our world)
- Problem-solving
- Civic engagement
- Environmental awareness
- Respect for the Environment
TEST ANOTHER TRANSITION REFLECTION

**REFLECTION ON PROCESS**

Independently, reflect on how your team is working together by answering the questions below. Then, share your reflections as a team.

- What is the most important insight you gained during this phase of the design challenge?

- About which part of the phase of the design challenge do you feel most confident?

- About which part of the phase of the design challenge do you feel least confident? What is your team going to do to improve your confidence about this phase?

- What was the most difficult part to collaborate on for your team?

- How can you improve how your team works together in the next phase?

**SHAREOUT OF PROCESS**

When you have completed this reflection and are ready to transition to the next phase of the design challenge, share your reflections as a team with your facilitator, school leader and/or colleagues to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

IMPLEMENT SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
IMPLEMENTATION INTRODUCTION

OVERVIEW OF PREPARE TO IMPLEMENT PHASE

The worksheet is the Prepare to Implement phase are designed to help your team begin to think about how you might work to implement your solution if you were to receive funding. At this phase of the design challenge, you will brainstorm ideas for possible solutions. This worksheet is designed to help you gain funding for the project you are working to implement. A concept is a robust idea that has been developed through multiple rounds of prototyping. The work of this phase can be done collaboratively with school-based teams only. This phase of the design process will include refining your ideas and project planning.

OBJECTIVES OF PREPARE TO IMPLEMENT PHASE

The goal of this phase is to get your design team aligned around what the next steps are and how the next steps will be required to implement your concept. Also consider your long-term goals for improving the holistic learning outcomes for your team.

At the end of this phase, all team members should be clear on what needs to happen next.

MUSKETS OF PREPARE TO IMPLEMENT PHASE

• Work together to understand the context
• Look closely to understand potential problems and opportunities
• Stay optimistic that you can solve the problem

IMPLEMENT

INTRODUCTION

REFINE YOUR IDEA

PROJECT PLANNING

ALIGNMENT

REFLECTION

TELL

.not yet? repeat this phase

Are you ready to proceed?

YES! proceed to the next phase

IMPLEMENTATION TIMELINE

1. Phases (45-minute slots)

#1 Refine Your Idea

WHAT IS THIS TOOL?

Refine Your Idea worksheet designed to help you begin to think about your prototype as a concept you are implementing.

WHAT IS YOUR GOAL?

Designing an idea radically different than implementing a concept. Translating to implementation can be difficult for teams. Use this framework to help your team make the transition.

45-60 minutes

#2 Project Planning

WHAT IS THIS TOOL?

The Project Planning worksheet is designed to help your team transition from an exploratory design mode to implementation mode and map out the next steps required to implement your solution.

WHAT IS YOUR GOAL?

A team transitioning from open-ended design work to implementing an idea requires a significant shift in how the team is working. Use the framework to support that shift.

45-60 minutes

#3 Project Planning Timeline

WHAT IS THIS TOOL?

The Project Planning Timeline worksheet is designed to map out the next steps required to implement your solution based on a timeline.

WHAT IS YOUR GOAL?

Identify the steps to break down the implementation of your concept into specific parts with deadlines. When you have completed these steps, your team should be aligned around the next steps needed.

45-60 minutes

TEAM WORKSHOP TOOLS

1. Phases (45-minute slots)

#1 Refine Your Idea

WHAT IS THIS TOOL?

Refine Your Idea worksheet designed to help you begin to think about your prototype as a concept you are implementing.

WHAT IS YOUR GOAL?

Designing an idea radically different than implementing a concept. Translating to implementation can be difficult for teams. Use this framework to help your team make the transition.

45-60 minutes

#2 Project Planning

WHAT IS THIS TOOL?

The Project Planning worksheet is designed to help your team transition from an exploratory design mode to implementation mode and map out the next steps required to implement your solution.

WHAT IS YOUR GOAL?

A team transitioning from open-ended design work to implementing an idea requires a significant shift in how the team is working. Use the framework to support that shift.

45-60 minutes

#3 Project Planning Timeline

WHAT IS THIS TOOL?

The Project Planning Timeline worksheet is designed to map out the next steps required to implement your solution based on a timeline.

WHAT IS YOUR GOAL?

Identify the steps to break down the implementation of your concept into specific parts with deadlines. When you have completed these steps, your team should be aligned around the next steps needed.

45-60 minutes

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies

• Listening
• Speaking
• Reading
• Writing

Applied Academic Proficiencies

• Information & Communication Technologies
• Health & Nutrition
• Arts & culture
• Interdisciplinary, technology & media

Working With Others

• Relationship building
• Collaboration

Improving Our World

• Critical thinking
• Open-mindedness
• Empathy

Civic engagement

• Self
• Self
• Self
• Self
• Self

Improving Our World

• Our community/our world

• Problem-solving
• Critical thinking
• Empathy
• Relationship building
• Leadership

Being Our Best

• Moral & ethical reasoning
• Respect

• Self efficacy
• Self regulation

• Taking responsibility
• Problem-solving
• Creativity
• Critical thinking

• Reconciling tensions
• Relationship building

Ways of Knowing

• Knowledge
• Understanding
• Inquiry

• Reconstructing
• Conceptualising

• Arts & culture
• Mathematics
• Science

Self Awareness

• Self
• Self
• Self
• Self

• Arts & culture
• Mathematics
• Science

Proficiencies

• Literacy

• Applied Academic Proficiencies

• Literacy

• Core Academic Proficiencies

• Literacy

• Applied Academic Proficiencies

• Literacy

• Core Academic Proficiencies
Refine Your Idea

Instructions: Now that you’ve expanded on your big ideas, take some time to refine it into a concept.

Summarize the idea in a sentence. State the objective of the concept - what are the goals you hope to achieve? Then, develop the concept further. Synthesize what you learned when you were expanding on your initial idea. Finally, brainstorm indicators that will demonstrate if the idea is working.

1 CONCEPT TITLE
CAREER MENTORS

2 CONCEPT HEADLINE
CREATING RELATIONSHIPS WITH PROFESSIONALS TO STUDENTS GROW

3 CONCEPT DESCRIPTION
In your concept a series of small interventions, a larger programmatic idea or broader cultural shift.

4 OBJECTIVES
What behavior changes do you hope your concept will create?

STUDENTS WILL TALK ABOUT THEIR DREAMS FOR THEIR CAREERS

STUDENTS WILL BE ABLE TO CONNECT WHAT THEY ARE LEARNING TODAY WITH WHAT THEY NEED TO KNOW IN THE FUTURE.

STUDENTS WILL DEMONSTRATE MORE SELF-EFFICACY AND WILL ADVocate FOR THEIR LEARNING.

STUDENTS WILL PURSUE THEIR STUDENT CAREER GOALS.

STUDENTS WILL INFLUENCE WHAT THEY ARE LEARNING IN SCHOOL.

STUDENTS HAVE MORE CONNECTIONS IN THE BUSINESS COMMUNITY.

5 IMPLEMENTATION

5 INDICATORS
How will you know if your concept is working?

EVENTS

RECRUITMENT EVENT

Program Manager

Mentor Match

Time

Wednesdays/After School

Space

Communication

Informing Parents of Program

Objects/Artifacts

6 INDICATORS
How will you know if your concept is working?

ENHANCED EVENTS

9 INDICATORS
How will you know if your concept is working?

EnVision your larger concept will be expanded.

When will you expand?

How will you know your idea is working?

6 INDICATORS
How will you know if your concept is working?

8 OBJECTIVES
What behavior changes do you hope your concept will create?

EnVision your larger concept will be expanded.

When will you expand?

How will you know your idea is working?

6 INDICATORS
How will you know if your concept is working?

EnVision your larger concept will be expanded.

When will you expand?

How will you know your idea is working?

6 INDICATORS
How will you know if your concept is working?

EnVision your larger concept will be expanded.

When will you expand?

How will you know your idea is working?
### POTENTIAL SPACE MANAGER

**PROGRAM A**: STUDENTS CREATING THIS LAUNCH NEW

**What** will this be?

**How** will it launch?

**Who** will be responsible for leading this project?

**When** will it launch?

**What** resources will be needed?

**How much** will it cost?

**How** will this concept be implemented and/or disseminated?

**A NEW PROGRAM MANAGER**

**THROUGH A NEW AFTER-SCHOOL PROGRAM**

**5,000 FOR SUPPLIES AND THE PROGRAM MANAGER SALARY**

**WHAT OTHER RESOURCES ARE NEEDED?**

**SPACE POTENTIAL MENTORS**

**WHEN WILL IT LAUNCH?**

### POTENTIAL SPACE MANAGER

**PROGRAM A**: STUDENTS CREATING THIS LAUNCH NEW

**What** will this be?

**How** will it launch?

**Who** will be responsible for leading this project?

**When** will it launch?

**What** resources will be needed?

**How much** will it cost?

**How** will this concept be implemented and/or disseminated?

**A NEW PROGRAM MANAGER**

**THROUGH A NEW AFTER-SCHOOL PROGRAM**

**5,000 FOR SUPPLIES AND THE PROGRAM MANAGER SALARY**

**WHAT OTHER RESOURCES ARE NEEDED?**

**SPACE POTENTIAL MENTORS**

**WHEN WILL IT LAUNCH?**
**Project Planning Timeline**

### Step 1: What? Who?
- **HEAD OF SCHOOL**
- **PROGRAM MANAGER**

**Deadline:**
- THREE MONTHS BEFORE SCHOOL BEGINS

### Step 2: What? Who?
- **PROGRAM MANAGER**
- **TEACHERS**

**Deadline:**
- TWO MONTHS BEFORE SCHOOL BEGINS

### Step 3: What? Who?
- **PROGRAM MANAGER**
- **TEACHERS**

**Deadline:**
- ONE MONTH BEFORE SCHOOL BEGINS

### Step 4: Who?
- **FAMILIES**
- **PROGRAM MANAGER**

**Deadline:**
- TWO WEEKS BEFORE SCHOOL BEGINS

### Step 5: Who?
- **PROGRAM MANAGER**
- **TEACHERS**

**Deadline:**
- ONE WEEK BEFORE SCHOOL BEGINS

### Step 6: Who?
- **FAMILIES**
- **PROGRAM MANAGER**

**Deadline:**
- ONE WEEK AFTER SCHOOL BEGINS
IMPLEMENT TRANSITION SUMMARY

Implementation Plan

Use the Prepare to Implement summary page to gather up the work you completed during this phase. Reflecting on the holistic learning outcomes (see the right side of this page) as you summarize the information. Take the opportunity to now make changes as needed.

WORKSHOP #4 TOOLS

1. Reflect Your Model
Summarize the most important reflections from this exercise.

2. Project Planning
Summarize the most important reflections from this exercise.

3. Project Planning Timeline
Summarize the most important reflections from this exercise.

REFINE/ACTIVITY
The team cannot agree on how to further refine your concept.
The team has some disagreements on how to further refine your concept, but they have finalized moving forward.

PROJECT PLA/NING
The team cannot agree on the components of the project planning document.
The team has some disagreements on the components of the project planning document, but they have finalized moving forward.

PROJECT ACCOMPLISHMENT
You and the team are struggling to complete the project in time due to lack of direction.

PROJECT ISSUES QUALITY OF SOLUTION
The team has not developed as solution that can be implemented in your setting.

PROJECT ISSUES CONNECTING TO LEARNING OUTCOMES
The team has not agreed on the components of the tool they will use to promote the goal of improving the holistic learning outcomes.

Now, take a look at your results in the different criteria to determine if you are ready to move on to the next phase. For the criteria where you are least confident, try reflecting out to your facilitator for coaching or talk to another colleague or team for advice. If you have more than two areas where your team is confident, work to improve before moving on.

IMPLEMENT TRANSITION ALIGNMENT

TEAM ALIGNMENT

In order to seek alignment as a team, share each of your summery pages with the group. Then, each person read their summary response without interruption or commentary from the team. If there are differing views and ideas from team members, ask questions to gain understanding. To questions like...

“Can you share more information about how you came to these ideas?”

“Tell me more about this...

- How did you determine the results of your design work?
- How do you feel about the results of your design work?

- You must align the design ideas on the designer’s ability to deliver on these.

LAUNCH

Refine the most important to implement.

PREPARE

To implement:

#3

N

SUMMARY

#4

TEST

REFINE

#5

TRANSITION

ALIGNMENT

CRITERIA: FORMING TO THE NEXT PHASE

Use the rubric below to assess your team have met all the goals of the phase and are ready to move into the next phase. Circle the description that most represents your team’s progress.

For the Project Status criteria at the bottom of the rubric, consider as a team the progress your project has made.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies

• Numeracy & Mathematics

• Applied Academic Proficiencies

• Health & Nutrition

• Career & Technical Education

• Arts & Culture

• Digital Literacy, Technology & Media

Being Our Best (the individual learner)

• Well-being

• Self-efficacy

• Self-regulation

• Taking responsibility

• Financial literacy

• Critical thinking

Working With Others (our relationships)

• Communication

• Collaboration

• Teamwork

• Grit mindset

• Empathy

• Reliability building

• Time management

Improving Our World (our community/our world)

• Problem-solving

• Civic engagement

• Entrepreneurship

• Leadership

• Respect for the Environment

APPLIANCE & RESOLUTION

• Civic engagement

• Improving Our World

• Relationship building

• Creativity

• Ethical decision making

• Taking responsibility

• Resilience

• Self

• Digital literacy, technology & media

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies

• Numeracy & Mathematics

• Applied Academic Proficiencies

• Health & Nutrition

• Career & Technical Education

• Arts & Culture

• Digital Literacy, Technology & Media

Being Our Best (the individual learner)

• Well-being

• Self-efficacy

• Self-regulation

• Taking responsibility

• Financial literacy

• Critical thinking

Working With Others (our relationships)

• Communication

• Collaboration

• Teamwork

• Grit mindset

• Empathy

• Reliability building

• Time management

Improving Our World (our community/our world)

• Problem-solving

• Civic engagement

• Entrepreneurship

• Leadership

• Respect for the Environment

APPLIANCE & RESOLUTION

• Civic engagement

• Improving Our World

• Relationship building

• Creativity

• Ethical decision making

• Taking responsibility

• Resilience

• Self

• Digital literacy, technology & media

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies

• Numeracy & Mathematics

• Applied Academic Proficiencies

• Health & Nutrition

• Career & Technical Education

• Arts & Culture

• Digital Literacy, Technology & Media

Being Our Best (the individual learner)

• Well-being

• Self-efficacy

• Self-regulation

• Taking responsibility

• Financial literacy

• Critical thinking

Working With Others (our relationships)

• Communication

• Collaboration

• Teamwork

• Grit mindset

• Empathy

• Reliability building

• Time management

Improving Our World (our community/our world)

• Problem-solving

• Civic engagement

• Entrepreneurship

• Leadership

• Respect for the Environment

APPLIANCE & RESOLUTION

• Civic engagement

• Improving Our World

• Relationship building

• Creativity

• Ethical decision making

• Taking responsibility

• Resilience

• Self

• Digital literacy, technology & media

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies

• Numeracy & Mathematics

• Applied Academic Proficiencies

• Health & Nutrition

• Career & Technical Education

• Arts & Culture

• Digital Literacy, Technology & Media

Being Our Best (the individual learner)

• Well-being

• Self-efficacy

• Self-regulation

• Taking responsibility

• Financial literacy

• Critical thinking

Working With Others (our relationships)

• Communication

• Collaboration

• Teamwork

• Grit mindset

• Empathy

• Reliability building

• Time management

Improving Our World (our community/our world)

• Problem-solving

• Civic engagement

• Entrepreneurship

• Leadership

• Respect for the Environment

APPLIANCE & RESOLUTION

• Civic engagement

• Improving Our World

• Relationship building

• Creativity

• Ethical decision making

• Taking responsibility

• Resilience

• Self

• Digital literacy, technology & media
REFLECTION ON PROCESS

Independently, reflect on how your team is working together by answering the questions below. Then share your reflections as a team:

• What is the most important insight you gained during this phase of the design challenge?

• About which part of the phase of the design challenge do you feel most confident?

• About which part of the phase of the design challenge do you feel least confident? What are you planning to do to improve your confidence about this phase?

• What was the most difficult part to collaborate on for your team?

• How can you improve how your team works together in the next phase?

SHAREOUT OF PROCESS

When you’ve completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and colleagues to get feedback on your progress thus far.

They can use the feedback framework of ‘I like, I wish, I wonder’ to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.
TELL INTRODUCTION

OVERVIEW

The worksheets in the Tell Your Community phase are designed to help you synthesize insights from your design work and prepare to share your insights and ideas in a human-centered way. The work of this phase can be done collaboratively with school-based teams or other stakeholders.

This phase of the design process will involve developing a stakeholder-centered story to tell and a pitch to share.

OBJECTIVES

The goal of this phase is to help you develop two approaches to communicating your ideas: one about your solution and why it should be the next priority to meet the stakeholder’s needs and one that the learning gaps you identified. This inquiry approach focuses on sharing a stakeholder-specific way of communicating about your ideas.

At the end of this phase, you should be clearer on how you plan to communicate about your solution and its potential.

MINDSETS OF TELL YOUR COMMUNITY PHASE

- Get inspired by people
- Feedback is a gift to improve your ideas
- Many cycles of testing are necessary to develop an idea

OBJECTIVES OF TELL YOUR COMMUNITY PHASE

- Tell
- Communicate
- Share

PHASE OBJECTIVES

- Are you ready to proceed?
- Reflection

SUMMARY

- Analyze
- Identify

ALIGNMENT

- Present
- Pitch

STORYTELLING

- Connect

CONCLUSION

- NOT YET? repeat this phase
- Yes! proceed to the next phase

TEAM WORKSHOP TOOLS

#1 Storytelling

WHAT IS THIS TOOL?

Human-centered design is an approach to creative problem-solving that pairs the needs and emotions of the stakeholder at the center of the process. Because we are focused on the needs and emotions of the stakeholder, this tool help us to structure our process of pitching ideas as a story with a main character, a narrative and a story arc - a beginning, middle and end. Storytelling is a worksheet designed to help you create a human-centered story about your design project.

WHAT IS YOUR GOAL?

By telling a character-driven story and using the framework for synthesizing your learning and pitching a new concept, we find that we create more compelling and engaging pitches.

#2 Pitching

WHAT IS THIS TOOL?

Pitching is a worksheet designed to help you communicate why your solution will have an impact for the stakeholders and the student’s holistic learning outcomes.

WHAT IS YOUR GOAL?

When you have completed this tool, you will be ready to pitch your idea to your community as well as potential funders.

TELL YOUR COMMUNITY PHASE

- Tell
- Communicate
- Share

OBJECTIVES

- Tell
- Communicate
- Share

Phases:

- PROBE
- ANALYSIS
- INSPIRE
- MINDS
- SHARE

By telling a character-driven story and using the framework for synthesizing your learning and pitching a new concept, we find that we create more compelling and engaging pitches.

#2 Pitching

WHAT IS THIS TOOL?

Pitching is a worksheet designed to help you communicate why your solution will have an impact for the stakeholders and the student’s holistic learning outcomes.

WHAT IS YOUR GOAL?

When you have completed this tool, you will be ready to pitch your idea to your community as well as potential funders.

TELL YOUR COMMUNITY PHASE

- Tell
- Communicate
- Share

OBJECTIVES

- Tell
- Communicate
- Share

Phases:

- PROBE
- ANALYSIS
- INSPIRE
- MINDS
- SHARE

By telling a character-driven story and using the framework for synthesizing your learning and pitching a new concept, we find that we create more compelling and engaging pitches.

#2 Pitching

WHAT IS THIS TOOL?

Pitching is a worksheet designed to help you communicate why your solution will have an impact for the stakeholders and the student’s holistic learning outcomes.

WHAT IS YOUR GOAL?

When you have completed this tool, you will be ready to pitch your idea to your community as well as potential funders.

TELL YOUR COMMUNITY PHASE

- Tell
- Communicate
- Share

OBJECTIVES

- Tell
- Communicate
- Share

Phases:

- PROBE
- ANALYSIS
- INSPIRE
- MINDS
- SHARE

By telling a character-driven story and using the framework for synthesizing your learning and pitching a new concept, we find that we create more compelling and engaging pitches.

#2 Pitching

WHAT IS THIS TOOL?

Pitching is a worksheet designed to help you communicate why your solution will have an impact for the stakeholders and the student’s holistic learning outcomes.

WHAT IS YOUR GOAL?

When you have completed this tool, you will be ready to pitch your idea to your community as well as potential funders.

TELL YOUR COMMUNITY PHASE

- Tell
- Communicate
- Share

OBJECTIVES

- Tell
- Communicate
- Share

Phases:

- PROBE
- ANALYSIS
- INSPIRE
- MINDS
- SHARE

By telling a character-driven story and using the framework for synthesizing your learning and pitching a new concept, we find that we create more compelling and engaging pitches.

#2 Pitching

WHAT IS THIS TOOL?

Pitching is a worksheet designed to help you communicate why your solution will have an impact for the stakeholders and the student’s holistic learning outcomes.

WHAT IS YOUR GOAL?

When you have completed this tool, you will be ready to pitch your idea to your community as well as potential funders.
Joe, an energetic middle school student who did not succeed academically in school but loves playing sports. His sister told him she needed algebra when she’s ordering for her family store. – Journeymap

An after-school career exploration program where students like Joe meet local business leaders who serve as mentors for them. The mentors will help the students make connections between what they are learning today and the skills they will need in their careers.

What mattered most to Joe was the relationship with a successful local leader. Not necessarily that they had shared career interests.

Then we learned: How have your prototypes evolved? What assumptions were you testing in your prototypes?

What have you learned about your concept?

What did you do?

Student prototype

What concept did you create? What assumptions were you testing in your prototypes?

What were you trying to solve?

We noticed...

What was the surprising observation you made? What did you discover?

Implicit feedback

What will we test?

Define

What will we attempt to build?

Explore

What will we do?

Design

What will we learn?

Make

What will we implement?

React

How will we learn from our mistakes?

Learn
Pitching

1. WHAT IS YOUR IDEA? A FUTURE-ORIENTED MENTORING PROGRAM
2. WHO IS YOUR AUDIENCE FOR YOUR PROGRAM? SCHOOLS 2030

3. WHAT IS THE PROBLEM? Why is it a problem worth solving? Who is impacted? What are the consequences if this goes unaddressed?

4. WHAT IS YOUR SOLUTION? How are you going to address this problem in a new and insightful way? What’s involved in your solution?

5. WHAT IS THE POTENTIAL MID-TERM IMPACT? How will your solution create positive outcomes for at least 20 students in the near future?

STUDENTSGIVE THEIR MENTORS PROGRAM FOR MIDDLE SCHOOL STUDENTS TO HELP THEM BUILD RELATIONSHIPS WITH POSITIVE ADULTS.

STUDENTSWILL BUILD THEIR SKILLS WITH ADVOCATING FOR THEMSELVES WITH ADULTS.

6. WHY DOES THIS MATTER? Why are you invested in creating this change? Why should your audience be invested? THIS WILL INCREASE HOLISTIC LEARNING OUTCOMES FOR STUDENTS BY HELPING THEM TO PROVE MORE EFFECTIVE.

7. WHAT IS THE TIMELINE? Can you implement a pilot of this idea in the next two school terms? If so, how far out?

8. WHAT RESOURCES DO YOU NEED? What personnel might you need? What materials will you need? ENOUGH MONEY TO MAKE A PROGRAM WORK.

9. BASED ON WHAT YOU SAID ABOVE, HOW MUCH FINANCIAL SUPPORT DO YOU NEED? What’s the budget for this initiative?

10. WHAT IS THE POTENTIAL LONG-TERM IMPACT? How might your solution be replicated in other classrooms, grade levels and schools?

11. WHEN DO YOU PLAN TO LAUNCH THIS INITIATIVE? What’s the pilot launch date?

12. WHAT SUPPORT DO YOU NEED? Might personnel or materials be provided by potential funders for this initiative?

13. BASED ON WHAT YOU SAID ABOVE, HOW MUCH FINANCIAL SUPPORT DO YOU NEED? What’s the budget for this initiative?

14. WHAT IS YOUR IDEAS’ THEORETICAL FRAMEWORK? How will your solution be replicated in other classrooms, grade levels and schools?
TELL TRANSITION SUMMARY

SUMMARY OF TELL YOUR COMMUNITY PHASE:
Use the Tell Your Community summary page to gather up the work you completed during this phase. Reflection about the holistic learning outcomes (see the right side of this page) you summarize this information. Take the opportunity now to make changes as needed.

WORKSHOP #4 TOOLS

#1 Storyboarding
Summarize the story you wrote about your stakeholder, their problem and why your solution adds value. What are the most important ideas that you want to share with your community and potential funders?

#2 Pitching
Summarize the pitch you wrote about your stakeholder, their problem and why your solution adds value. What are the most important ideas that you want to share with the community and potential funders?

#3 Iterating
You wrote an outline on the affordable, effective holistic learning outcomes that are the foundation of your design ideas and how they impact the stakeholders and the needs and impacts the holistic learning outcomes.

#4 Aligning
Your team has written an effective pitch that communicates your story and how it impacts the stakeholders and the needs and impacts the holistic learning outcomes.

#5 Pitches
You have written an effective pitch that communicates your story and how it impacts the stakeholders and the needs and impacts the holistic learning outcomes.

#6 Transitions
You have written an effective pitch that communicates your story and how it impacts the stakeholders and the needs and impacts the holistic learning outcomes.

#7 Transitions
You have written an effective pitch that communicates your story and how it impacts the stakeholders and the needs and impacts the holistic learning outcomes.

#8 Alignments
You have written an effective pitch that communicates your story and how it impacts the stakeholders and the needs and impacts the holistic learning outcomes.

What is the best pitch outline your team wants to use to present to the School2030 initiative?

How does your team’s pitch communicate why you believe your concept will improve the holistic learning outcomes for your students?

TELL TRANSITION ALIGNMENT

TRANSITION

In order to seek alignment as a team, share each of your summary pages and use the questions below to narrow your team’s focus as to what you can move on to in the next phase.

#1 Are you all on the same page and are you communicating about your design challenge?

#2 Are you ready to discuss your solutions and the potential of your design ideas and how they impact the stakeholders and their needs and impacts the holistic learning outcomes?

#3 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

#4 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

#5 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

#6 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

#7 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

#8 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

#9 Are you ready to discuss the stakeholders and their needs and impacts the holistic learning outcomes?

Now, look at the box of criteria of the different criteria to determine if you are ready to move on to the next phase. For the criteria where you are least confident, try reaching out to your facilitator for coaching or talk to another colleague or team for advice. If you have more than two areas where your team scored confident, work to improve before moving on.
**TELL TRANSITION | REFLECTION**

**REFLECTION ON PROCESS**
Independently, reflect on how your team is working together by answering the questions below. Then share your reflections as a team.

- What is the most important insight you gained during this phase of the design challenge?
- About which part of this phase of the design challenge do you feel most confident?
- About which part of this phase of the design challenge do you feel least confident?
- About which part of this phase of the design challenge do you feel most confident?
- What was the most difficult part to collaborate on for your team?
- What is your team going to do to improve your confidence about this phase?
- How can you improve how your team works together in the next phase?

**SHARE OUT OF PROCESS**
When you have completed this reflection and are ready to transition to the next phase of the design challenge, share with your facilitator, school leader and/or colleagues to get feedback on your progress thus far.

They can use the feedback framework of I like, I wish, I wonder to provide helpful ideas for where you can improve and where your work is strongest. Write down the feedback you receive below.

**CONCLUSION**

SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
CONCLUSION

You made it! You have completed your design challenge and are ready to pitch your idea to the Schools2030 team. We hope you learned a lot throughout the process, both about your school and yourself.

We wanted to give you an opportunity to reflect on what you learned throughout this challenge. Please take a few moments to reflect on your experience.

HUMAN-CENTERED DESIGN MINDSETS

- Work together to understand the context
- Look carefully to understand potential problems and opportunities
- Stay optimistic that you can solve the problem
- Hold back on solving the problem until the time is right
- Get inspired by people – active listening is a source of creative inspiration
- Put aside biases and assumptions about what you think the problem is – listen to the stakeholder.
- Seek new perspectives on old problems
- See opportunities in constraints
- Get comfortable with navigating contradictory information
- Many ideas lead to good ideas
- Defer judgment and criticism of ideas until the time is right
- Idea generation is not the time for evaluating ideas
- Brainstorming is a collaborative team activity
- Allow yourself to think of wild ideas
- Prototype early and often in order to learn about your idea
- Start small to make big change
- Slow down to learn
- Many cycles of prototyping are necessary to develop an idea
- Feedback is a gift to improve your idea.

PROCESS REFLECTION

- What is the most important insight you gained during the design challenge?
- How will the way of working change the way you work on a day-to-day basis?
- What do you hope to do next using human-centered design?
- About which part of the design challenge do you feel most confident?
- About which part of the design challenge do you feel least confident?
- How will this way of working change the way you work on a day-to-day basis?
APPENDIX

SCHOOLS 2030 HUMAN-CENTERED DESIGN TOOLKIT
n HOLISTIC LEARNING OUTCOMES DEFINITIONS

Core Academic Proficiencies

The level of competency in an academic area that a student needs to achieve in order to lead a successful, productive and fulfilling life.

• Literacy: Learners have the ability to engage with others verbally in order to communicate meaning. Learners have the ability to pursue knowledge and understanding of the natural and social world following a systematic methodology, based on evidence. Learners have the ability to apply their knowledge and understanding of the natural and social world, in order to produce new knowledge.

• Numeracy & Mathematics: Learners have the ability to pursue knowledge and understanding of the natural and social world following a systematic methodology, based on evidence. Learners have the ability to apply their knowledge and understanding of the natural and social world, in order to produce new knowledge.

• Humanities: Learners have the ability to pursue knowledge and understanding of the natural and social world following a systematic methodology, based on evidence. Learners have the ability to apply their knowledge and understanding of the natural and social world, in order to produce new knowledge.

• Health and nutrition: Learners have the ability to pursue knowledge and understanding of the natural and social world following a systematic methodology, based on evidence. Learners have the ability to apply their knowledge and understanding of the natural and social world, in order to produce new knowledge.

• Arts and culture: Learners have the ability to pursue knowledge, understanding and competency in all the appropriate ways related to communication, computation and expression. Learners have the ability to analyze sources of information and determine if they are trustworthy and appropriate.

Being Our Best (the individual learner)

The cognitive, social and emotional skills needed in order to lead a successful, productive and fulfilling life.

• Self-awareness: Learners develop the ability to self-reflect on their thoughts, recognizing their beliefs, biases, and feelings and getting an understanding of their behaviour. Learners practice self-regulation alongside self-awareness, bringing about a greater awareness to thought and action.
• Creative thinking: Learners develop the ability to pursue knowledge, understanding and competency in all the appropriate ways related to communication, computation and expression. Learners have the ability to analyze sources of information and determine if they are trustworthy and appropriate.
• Self-efficacy: Learners have an accurate assessment and belief in the ability to accomplish a goal. Learners have the ability to take action to accomplish that goal and to seek help when needed.
• Self-regulation: Learners have the ability to regulate their emotions and behaviors. Learners have the ability to modulate their emotions and behaviors based on the context they find themselves in.
• Resilience: Learners demonstrate the ability to cope with failure and mistakes, persevering and overcoming them.
• Taking responsibility: Learners take ownership of their actions and the repercussions of their own ideas, values and beliefs. Learners develop an ethic of personal responsibility for the choices and actions they take as an ethical person, and the ability to evaluate their ethical stance and make ethical decisions.
• Critical decision-making: Learners have the ability to evaluate options based on a predetermined set of values-based considerations and choose the option most aligned to that set of values. Learners demonstrate respect for themselves, others and the environment.
• Creativity: Learners have the ability to leverage one’s imagination, creative thinking, and problem solving skills in order to create something that did not previously exist.
• Critical thinking: Learners reflect critically on learning experiences, processes and their own ideas, values and beliefs. Learners identify and ask significant questions, including those related to norms, values, meanings, and limits.

Working With Others (our class/school)

The cognitive, social and emotional skills needed in order to successfully work with others in the community to improve circumstances for everyone.

• Communication: Learners have the ability to translate an idea into a format that helps others understand their point of view. Learners understand the impact of their words and actions on others.
• Collaboration: Learners work together with others who hold different perspectives, exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal. Learners demonstrate elected responsibility in collaborative work and value the individual contributions made by each team member.
• Critical decision-making: Learners demonstrate respect and appreciation for the ideas, perspectives and values of others. Learners show their own responsible and positive engagement with diversity and difference, including working constructively with people from diverse backgrounds.
• Empathy: Learners listen to others and try to experience what others feel. Learners need to work very deeply with understanding and care about the well-being of their friends, families, communities, and the planet.
• Relationship building: Learners develop integrity, honesty, and consistency to build and demonstrate trustworthiness in situations. Learners build trust by sharing themselves and seeking to understand others. Individuals develop and sustain meaningful relationships with people different from themselves.

• Reconciling Tensions: Learners demonstrate the ability to cope with failure and mistakes, persevering and overcoming them.
• Relationship building: Learners have the ability to translate an idea into a format that helps others understand their point of view. Learners understand the impact of their words and actions on others.
• Collaboration: Learners work together with others who hold different perspectives, exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal. Learners demonstrate elected responsibility in collaborative work and value the individual contributions made by each team member.
• Critical decision-making: Learners demonstrate respect and appreciation for the ideas, perspectives and values of others. Learners show their own responsible and positive engagement with diversity and difference, including working constructively with people from diverse backgrounds.
• Empathy: Learners listen to others and try to experience what others feel. Learners need to work very deeply with understanding and care about the well-being of their friends, families, communities, and the planet.
• Relationship building: Learners develop integrity, honesty, and consistency to build and demonstrate trustworthiness in situations. Learners build trust by sharing themselves and seeking to understand others. Individuals develop and sustain meaningful relationships with people different from themselves.

• Reconciling Tensions: Learners demonstrate the ability to cope with failure and mistakes, persevering and overcoming them.
• Relationship building: Learners have the ability to translate an idea into a format that helps others understand their point of view. Learners understand the impact of their words and actions on others.
• Collaboration: Learners work together with others who hold different perspectives, exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal. Learners demonstrate elected responsibility in collaborative work and value the individual contributions made by each team member.
• Critical decision-making: Learners demonstrate respect and appreciation for the ideas, perspectives and values of others. Learners show their own responsible and positive engagement with diversity and difference, including working constructively with people from diverse backgrounds.
• Empathy: Learners listen to others and try to experience what others feel. Learners need to work very deeply with understanding and care about the well-being of their friends, families, communities, and the planet.
• Relationship building: Learners develop integrity, honesty, and consistency to build and demonstrate trustworthiness in situations. Learners build trust by sharing themselves and seeking to understand others. Individuals develop and sustain meaningful relationships with people different from themselves.

Improving Our World (our community/world)

The cognitive, social and emotional skills needed in order to contribute to a healthy, equitable society that reflects a wide variety of beliefs and ideals.

• Problem-solving: Learners analyze and solve problems with consideration of diverse perspectives and ethical implications to make sound decisions. Learners correct their ethics and values to their thinking and decision-making processes.
• Critical decision-making: Learners have the ability to translate an idea into a format that helps others understand their point of view. Learners understand the impact of their words and actions on others.
• Collaboration: Learners work together with others who hold different perspectives, exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal. Learners demonstrate elected responsibility in collaborative work and value the individual contributions made by each team member.
• Critical decision-making: Learners demonstrate respect and appreciation for the ideas, perspectives and values of others. Learners show their own responsible and positive engagement with diversity and difference, including working constructively with people from diverse backgrounds.
• Empathy: Learners listen to others and try to experience what others feel. Learners need to work very deeply with understanding and care about the well-being of their friends, families, communities, and the planet.
• Relationship building: Learners develop integrity, honesty, and consistency to build and demonstrate trustworthiness in situations. Learners build trust by sharing themselves and seeking to understand others. Individuals develop and sustain meaningful relationships with people different from themselves.

• Reconciling Tensions: Learners demonstrate the ability to cope with failure and mistakes, persevering and overcoming them.
• Relationship building: Learners have the ability to translate an idea into a format that helps others understand their point of view. Learners understand the impact of their words and actions on others.
• Collaboration: Learners work together with others who hold different perspectives, exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal. Learners demonstrate elected responsibility in collaborative work and value the individual contributions made by each team member.
• Critical decision-making: Learners demonstrate respect and appreciation for the ideas, perspectives and values of others. Learners show their own responsible and positive engagement with diversity and difference, including working constructively with people from diverse backgrounds.
• Empathy: Learners listen to others and try to experience what others feel. Learners need to work very deeply with understanding and care about the well-being of their friends, families, communities, and the planet.
• Relationship building: Learners develop integrity, honesty, and consistency to build and demonstrate trustworthiness in situations. Learners build trust by sharing themselves and seeking to understand others. Individuals develop and sustain meaningful relationships with people different from themselves.