SCHOOLS 2030 **HUMAN-CENTERED DESIGN** TOOLKIT

Developed by

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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 human needs and behaviors in the systems being designed, followed by decision-making that is based on that understanding. It relies heavily on collaboration from a team, participation from potential end users and stakeholders, a willingness to find the solution through iterative cycles of learning, and a focus on action over planning.

Using the 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. By creating a community-driven collaborative process that engages stakeholders in the work of co-creation and iterative feedback, human-centered design can help to identify solutions that will solve real problems and meet important (but sometimes misunderstood) needs.

HUMAN-CENTERED DESIGN IN SCHOOLS

Human-centered design methodologies have gained increasing attention in K12 education in recent years. From educators using the process as a pedagogical framework for real world, project-based learning to school leaders leveraging the process as a driver of innovation, progressive leaders of education reform around the world have taken up human-centered design as a mechanism for positive change.

As we build awareness that school systems are complex human-centered environments that are actively designed, we continue to see the desire to equip leaders and teams with tools that are used by professional designers in order to creatively solve problems and actively imagine new futures.

HUMAN-CENTERED DESIGN MINDSETS

The mindsets of human-centered design help practitioners to utilize the tools and meet the objectives of the phases.

- 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
- Show don't tell
- Many cycles of prototyping are necessary to develop an idea
- Feedback is a gift to improve your ideas

WHAT IS THE TOOLKIT?

This toolkit is designed to support a design-based innovation process for schools participating in the Schools2030 initiative. This 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 PROMISE app and through reflection. This process will be open-ended and adaptable to the cultural contexts and resource constraints and opportunities of each unique school.

Your goal in conducting this design process for your school or classroom is to identify the root causes of the learning gaps for your students in order to design and test solutions that address those root causes and thus increase learning outcomes. We will be referencing the Schools2030 holistic learning outcomes as our guidelines for what learning outcomes to try to improve.

See the next page for a list of what is included in the toolkit and how to use each type of page in a phase. On the last page of this section is a list of holistic learning outcomes as well as a glossary of terms.

WHO WILL USE THE TOOLKIT?

You! Your school is embarking on this 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 this design challenge. Each phase of the challenge has a section with specific tools and activities for you to complete. Though the human-centered design process is not necessarily a linear one, we recommend that you work through these activities starting at the beginning. Please do not skip any steps! There is one optional activity -- Shadowing a Student -- that is well 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 skips steps, we do invite you to adapt and modify the tools to best suit your cultural context. Please work with your facilitator to make those modifications to ensure that any changes still achieve your goals 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 Schools2030 initiative.

WHO IS ON THE TEAM?

Human-centered design is 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 to work through the tools and activities in this toolkit. Every tool in this toolkit can be completed independently. If you are working alone and you see the mention of a team, feel free to proceed on your own.

GOOD LUCK AND HAPPY DESIGNING!

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 goals 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 tool to help you evaluate whether you are ready to move on and to reflect on what you have learned.

KEY ICONS

- Single person activity
- Group activity
- Introduction
- Tools
- Transitions

LAUNCH THE CHALLENGE
#1 Smooth Sailing
#2 Quantitative Data Analysis
#3 Identify a Problem to Explore
#4 Secondary Research
#5 Stakeholder Mapping

EXPLORE THE PROBLEM
#1 Preparing to Interview
#2 Interview Questions
#3 Additional Interview Techniques
#4 Interview Notes & Reflection
#5 Observation & Journey Mapping
#6 Preparing to Shadow - **optional**
#7 Shadow Notes & Reflection - **optional**

DEFINE THE PROBLEM
#1 Observations & Guesses
#2 Point of View
#3 How Might We Questions

GENERATE SOLUTIONS
#1 Prepare to Brainstorm
#2 Solo Brainstorm
#3 Group Brainstorm
#4 Idea Selection

MAKE YOUR PROTOTYPE
#1 Combine Ideas
#2 Building Blocks
#3 Storyboard Your Idea
#4 Design a Prototype
#5 Tips for Designing and Testing a Prototype

TEST YOUR PROTOTYPE
#1 Test a Prototype
#2 Testing a Prototype Reflection
#3 Reflection Grid
#4 What Did You Learn?
#5 Idea Evaluation
#6 Evaluating Prototypes to Get to Next Steps
#7 What's Next?

ITERATE
#1 Combine Reflections & Ideas
#2 Building to Iterate
#3 Storyboard Your Iteration
#4 Design Another Prototype

TEST ANOTHER PROTOTYPE
#1 Test a Prototype
#2 Testing a Prototype Reflection
#3 Reflection Grid
#4 What Did You Learn?
#5 Idea Evaluation

PREPARE TO IMPLEMENT
#1 Refine Your Idea
#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 based on the information you get from the PROMISE app. Review these learning outcomes here and throughout your design work to keep them at the center of your design work.

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

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Age 5	*Age 10*	*Age 15*
1. Literacy	1. Literacy	1. Literacy
2. Numeracy & Mathematics	2. Numeracy & Mathematics	2. Numeracy & Mathematics
3.	3.	3.
4.	4.	4.
5.	5.	5.

GLOSSARY OF TERMS

As you 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.
- **Brainstorm:** A process for creating a large number of ideas.
- **Concept:** A robust idea that has been developed through multiple rounds of prototyping.
- **Equity:** An approach where every person, regardless of who they are, is given what she or he needs in order to survive and thrive.
- **Fieldwork:** The work that you will complete independently through interviewing students and families and testing prototypes in the classroom and beyond.
- **Generate:** The process of creating something.
- **Headline:** A brief (few words) description - just like a newspaper headline.
- **HMW:** How Might We is a question structure used in brainstorming. It emphasizes the collaborative and exploratory nature of brainstorming,
- **Inequity:** A circumstance in which some people get more resources than others; those with less do not have what they need to survive and thrive.
- **Iterate:** Make improvements to an idea based on feedback.
- **Needs:** The motivations or desires of a stakeholder.
- **Pilot:** The beginning of implementing an initiative when the idea is still being developed and refined.
- **POV:** A Point of View statement is a framework for communicating the new problems and needs of a specific stakeholder.
- **PROMISE app:** A digital application designed to be a source of quantitative data for your school.
- **Prototype:** An early experiment that allows you to test your idea before investing a lot of time and money. A series of prototypes happen before a pilot.
- **Quantitative Data:** Communicating information through numerical representation.
- **Qualitative Research:** Information gathered from interacting with those whom you are trying to understand.
- **Reflection:** The process of thinking about your own work in order to improve it.
- **Resolution:** The amount of effort and resources required to reach a certain standard of craftsmanship.
- **Scale:** The number of stakeholders that a solution reaches.
- **Sketch:** A quick, imperfect drawing that helps you visualize your ideas.
- **Solutions:** An intervention that, through your design work, you believe will meet the needs of the stakeholder.
- **Stakeholders:** The people for whom you are designing.
- **Synthesize:** He process of analyzing information in order to make sense of it and find new meanings.
- **Test:** The process of trying out your prototype with real stakeholders in order to learn more about the solution.
- **Workshop:** The opportunity to convene in a larger group - either regional or school-based - to do collaborative design work.

ORIENTATION

SCHOOLS 2030 HUMAN-CENTERED DESIGN **TOOLKIT**

ORIENTATION

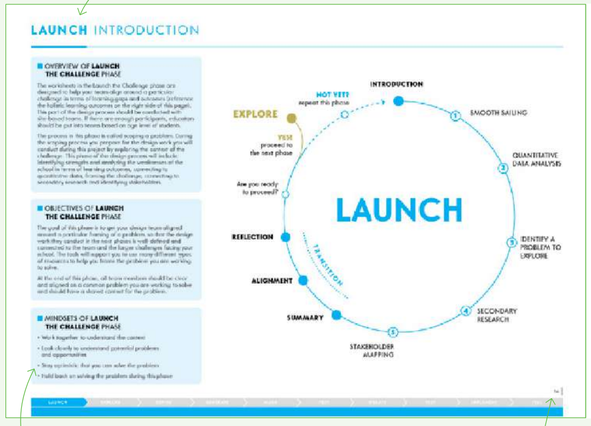
TOOLKIT ORIENTATION: **PHASE INTRODUCTION PAGES**

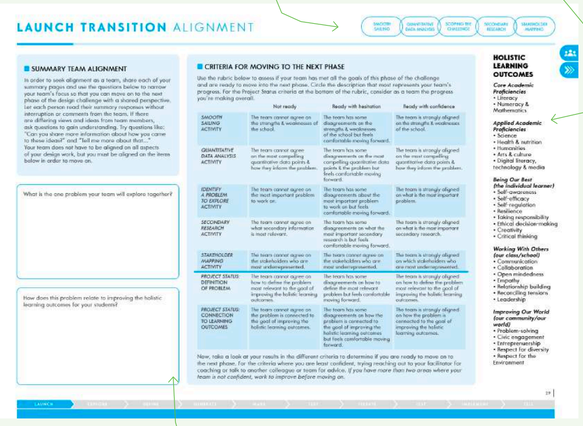
Review the diagram below to get oriented to the Introduction page for each phase. The Introduction pages are designed to give you context for this phase of the design challenge.

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.

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

HOLISTIC LEARNING OUTCOMES
Use the list of holistic learning outcomes identified in the Schools2030 initiative as a reference throughout your design work.





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.

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.

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.

ORIENTATION

TOOLKIT ORIENTATION: TOOL PAGES

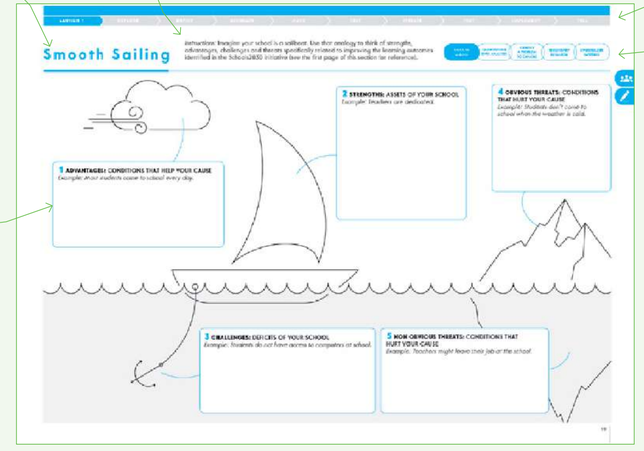
Review the diagram below to get oriented to how the tool pages are designed. Each phase of the design challenge will have several tools that you will need to complete before moving on to the next phase.

TITLE OF THE TOOL
This is the title of the tool. In this case the tool is called "Smooth Sailing."

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

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.

EACH STEP OF THE TOOL
Each step of the tool is labeled with a number as well as a title. Each step of the tool has prompts and/or examples of what you need to create to complete the step.



TOOLS FROM THIS PHASE
These ovals indicate all the tools you will use in this phase of the design challenge. They are in order. Read them from left to right. The black oval indicates which tool you are currently working on.

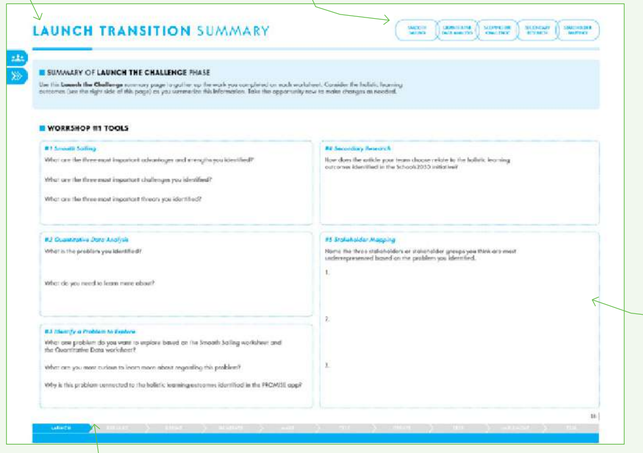
TOOL ORIENTATION
These tools are designed to be read from left to right. Each step in the process is numbered to help you navigate between the steps.

TOOLKIT ORIENTATION: PHASE SUMMARY PAGES

Review the diagram below to get oriented to the Summary page for each phase. The Summary pages are designed to help you individually gather up the work you completed in this phase so that you can share it with your team.

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 "Summary" is the page.

TOOLS FROM THIS PHASE
These ovals 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 ask you to 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."

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.

ORIENTATION

TOOLKIT ORIENTATION: PHASE ALIGNMENT PAGES

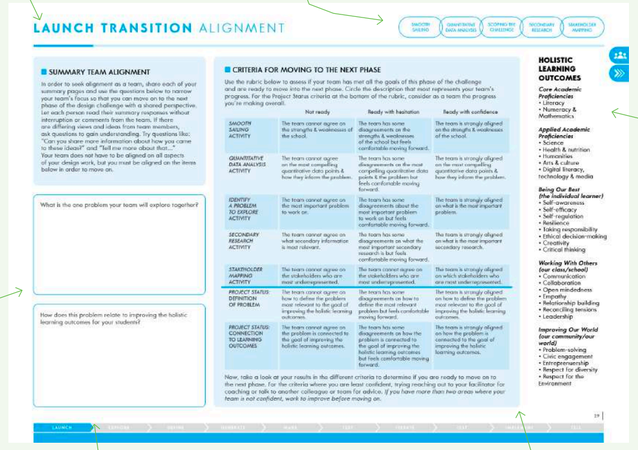
Review the diagram below to get oriented to the Transition page for each phase. The Transition pages are designed to help your team converge on a shared direction that your work is headed in. These pages are also designed to help your team evaluate your work from this phase and determine if you are ready to move to the next phase.

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 "Transition" is the page.

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

HOLISTIC LEARNING OUTCOMES
Use the list of holistic learning outcomes identified in the Schools2030 initiative as a reference throughout your design work.

TEAM ALIGNMENT
This section is designed to help your team have a conversation about the aspects of your work that you need to align around. Use the tips mentioned to help resolve conflicts in this process. If your team cannot align in these areas, ask for help from your facilitator, school leader or another team.



CRITERIA FOR MOVING FORWARD
These rubrics are designed to help your team evaluate the work you have produced during this phase and assess whether you are ready to move forward as a group. If you do not feel confident in moving forward based on this 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.

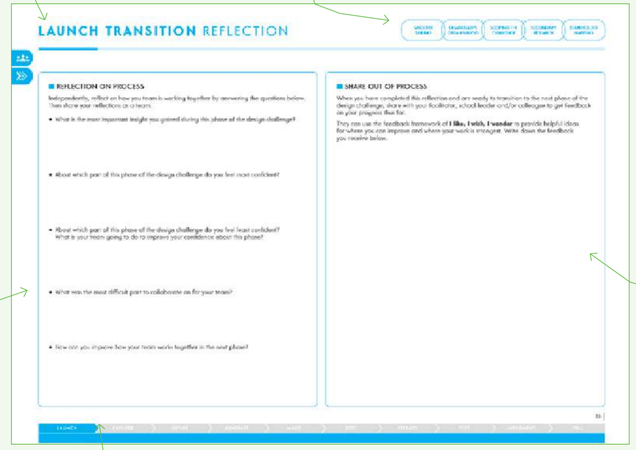
TOOLKIT ORIENTATION: PHASE REFLECTION PAGES

Review the diagram below to get oriented to the Reflection page for each phase. The Reflection pages are designed to help you reflect on how your team is working together in order to improve. These pages are also designed to help you share your work with your facilitator, school leader or a colleague in order to gather feedback.

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 "Reflection" is the page.

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

REFLECTION ON PROCESS
This section is designed to help you reflect on how your team is working together through the design challenge. Use this as an opportunity to think through how you might help your team improve and where you want to continue what you are already doing well.



SHARE OUT OF PROCESS
This box is designed to encourage you to share your work with your facilitator, school leader or colleague and capture feedback that they share with you.

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.

LAUNCH

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

SCHOOLS 2030 HUMAN-CENTERED DESIGN **TOOLKIT**

LAUNCH INTRODUCTION

OVERVIEW OF **LAUNCH THE CHALLENGE** PHASE

The worksheets in the Launch the Challenge phase are designed to help your team align around a particular challenge in terms of learning gaps and outcomes (reference the holistic learning outcomes on the right side of this page). This part of the design process should be conducted with site-based teams. If there are enough participants, educators should be put into teams based on age level of students.

The process in this phase is called scoping a problem. During the scoping process you prepare for the design work you will conduct during this project by exploring the context of the challenge. This phase of the design process will include: identifying strengths and analyzing the weaknesses of the school in terms of learning outcomes, connecting to quantitative data, framing the challenge, connecting to secondary research and identifying stakeholders.

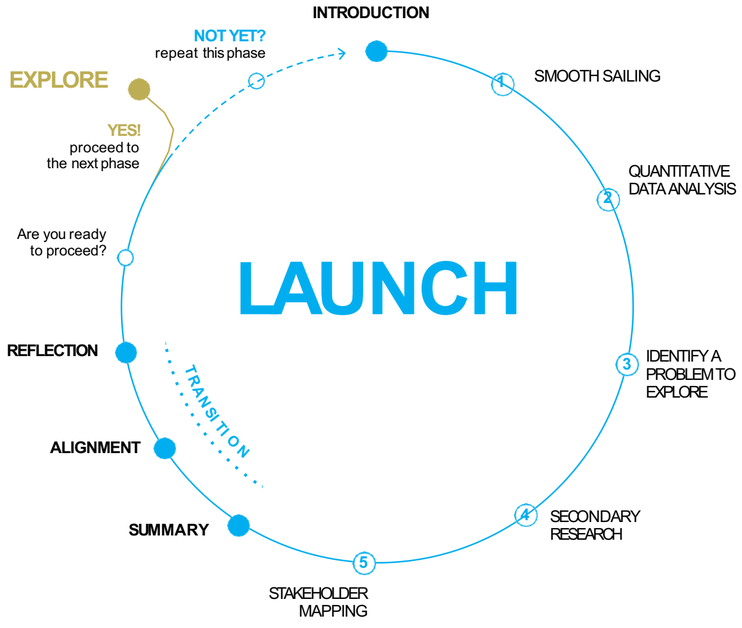
OBJECTIVES OF **LAUNCH THE CHALLENGE** PHASE

The goal of this phase is to get your design team aligned around a particular framing of a problem, so that the design work they conduct in the next phases is well-defined and connected to the team and the larger challenges facing your school. The tools will support you to use many different types of resources to help you frame the problem you are working to solve.

At the end of this 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 closely to understand potential problems and opportunities
- Stay optimistic that you can solve the problem
- Hold back on solving the problem during this phase



TEAM WORKSHOP TOOLS

#1 Smooth Sailing — *30-45 minutes*

WHAT The **Smooth Sailing** worksheet helps your team identify your school's strengths and weaknesses.

WHY When you have completed this tool, your team should be aligned around potential problems and opportunities.

#2 Quantitative Data Analysis — *30-45 minutes*

WHAT The **Quantitative Data Analysis** worksheet helps your team use quantitative data to identify problems and the groups most affected by those problems.

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

#3 Identify a Problem to Explore — *30-45 minutes*

WHAT 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.

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

#4 Secondary Research — *30-45 minutes*

WHAT The **Secondary Research** worksheet helps your team review research and examples of solutions that address the problem you are working to solve.

WHY When you have completed this tool, your team should be inspired by proven examples and solutions that address the problem they have identified.

#5 Stakeholder Mapping — *30-45 minutes*

WHAT The **Stakeholder Mapping** worksheet helps your team identify the different stakeholder groups that relate to the problem as well as whose voices are most underrepresented.

WHY When you have completed this tool, your team should be aligned around potential stakeholders to engage in the next phase of the process.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

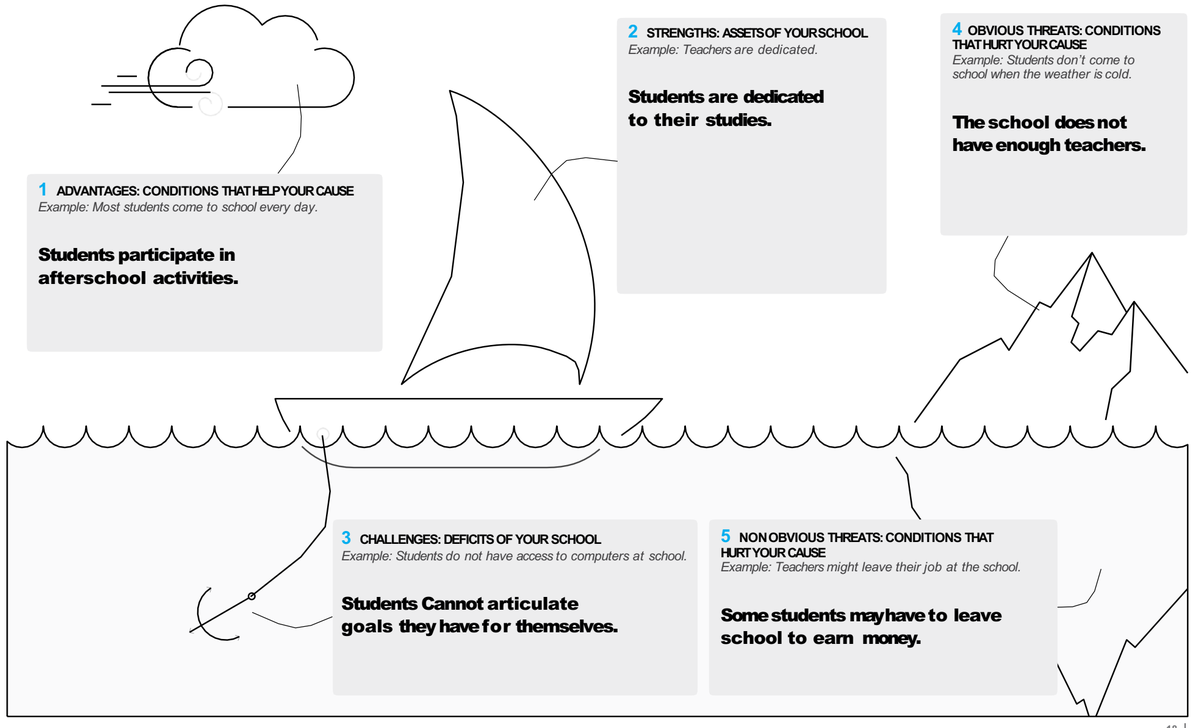
Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

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 don't come to school when the weather is cold.

The school does not have enough teachers.

5 NON OBVIOUS THREATS: CONDITIONS THAT HURT YOUR CAUSE
Example: Teachers might leave their job at the school.

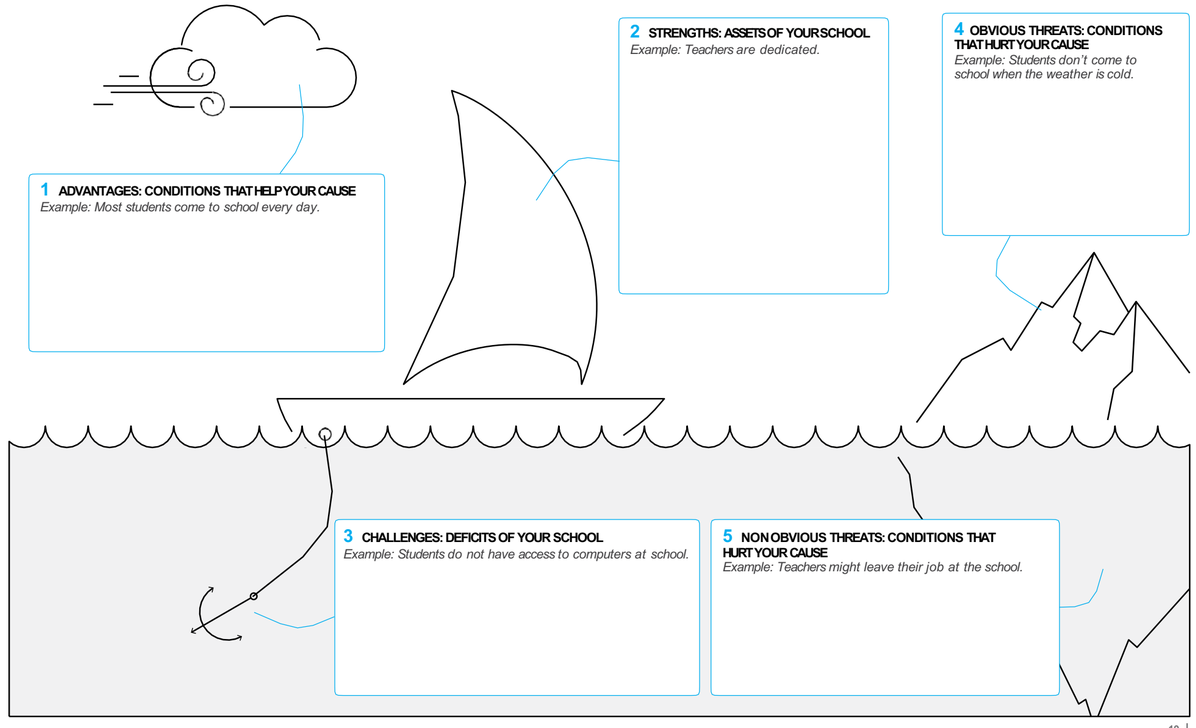
Some students may have to leave school to earn money.

LAUNCH 1 | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

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).

SMOOTH SAILING | QUANTITATIVE DATA ANALYSIS | IDENTIFY A PROBLEM TO EXPLORE | SECONDARY RESEARCH | STAKEHOLDER MAPPING



1 ADVANTAGES: CONDITIONS THAT HELP YOUR CAUSE
Example: Most students come to school every day.

2 STRENGTHS: ASSETS OF YOUR SCHOOL
Example: Teachers are dedicated.

3 CHALLENGES: DEFICITS OF YOUR SCHOOL
Example: Students do not have access to computers at school.

4 OBVIOUS THREATS: CONDITIONS THAT HURT YOUR CAUSE
Example: Students don't come to school when the weather is cold.

5 NON OBVIOUS THREATS: CONDITIONS THAT HURT YOUR CAUSE
Example: Teachers might leave their job at the school.

Quantitative Data Analysis

Instructions: Using the PROMISE app, identify the quantitative data points you find most interesting or troubling in regards to the holistic learning outcomes (see the first page of this section for reference). Using an equity lens (looking out for those who do not get everything they need to survive and thrive) think about how you can use the quantitative data to identify populations of students who are outperforming or under-performing at your school.

1 INTERESTING QUANTITATIVE DATA POINTS:

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 and troubling data points you found and analyze again, looking for populations of students who are outperforming or under-performing in different areas. Describe those populations below as well as inequities you see. See the glossary for a definition of equity.

Students who are from a minority group are even less likely to advocate for themselves.

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.

What's the problem?

Students do not have the skills to advocate for themselves.

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

I need to learn more about how students make personal goals and whether they feel empowered to advocate for themselves.

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

One of the Holistic Learning Outcomes is self-efficacy.

Quantitative Data Analysis

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Now, look at the most interesting and troubling data points you found and analyze again, looking for populations of students who are outperforming or underperforming in different areas. Describe those populations below as well as inequities you see. See the glossary for a definition of equity.

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.

What's 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, use this 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, *Smooth Sailing,* that asked 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 *QUANTITATICE DATA ANALYSIS* ACTIVITY

Based on the second activity, *Quantitative Data Analysis,* what are your guesses about what is at the center of this problem? asked your team to look 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 indicate that they should have a say in their education.**
2.
3.

3 FIND PATTERNS

Is there one problem that was highlighted in both 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 INFER MEANING

What are your guesses about what is at the center of this 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 is this problem connected to the holistic learning outcomes identified using the PROMISE app?

One of the Holistic Learning Outcomes is self-efficacy.

LAUNCH 3 | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

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, use this 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.

SMOOTH SAILING | QUANTITATIVE DATA ANALYSIS | IDENTIFY A PROBLEM TO EXPLORE | SECONDARY RESEARCH | STAKEHOLDER MAPPING

1 ANALYZE *SMOOTH SAILING* ACTIVITY

Based on the first activity, *Smooth Sailing,* that asked 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.
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 this problem? asked your team to look 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.
2.
3.

3 FIND PATTERNS

Is there one problem that was highlighted in both 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.

4 INFER MEANING

What are your guesses about what is at the center of this problem?

5 LEARN MORE

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

6 MAKE CONNECTIONS

Why is this problem connected to the holistic learning outcomes identified using the PROMISE app?

Secondary Research

Instructions: First, select a resource that discusses research related to the problem you identified. Read the resource and complete the reflection questions below.

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."**
-
-
-
-

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

5 WHAT INFORMATION DO YOU WANT TO BE SURE TO REMEMBER THROUGHOUT THE DESIGN CHALLENGE? WHAT DO YOU WANT TO LEARN MORE ABOUT?

You can help students build self-advocacy skills.

LAUNCH 4 | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Secondary Research

Instructions: First, select a resource that discusses research related to the problem you identified. Read the resource and complete the reflection questions below.

SMOOTH SAILING | QUANTITATIVE DATA ANALYSIS | IDENTIFY A PROBLEM TO EXPLORE | SECONDARY RESEARCH | STAKEHOLDER MAPPING

1 TITLE OF RESOURCE:

2 SUMMARIZE THE RESOURCE IN 3-4 SENTENCES.

3 MAKE A LIST OF THE FIVE MOST IMPORTANT IDEAS IN THE RESOURCE.

-
-
-
-
-
-
-

4 NEXT, ANSWER THE QUESTIONS BELOW.

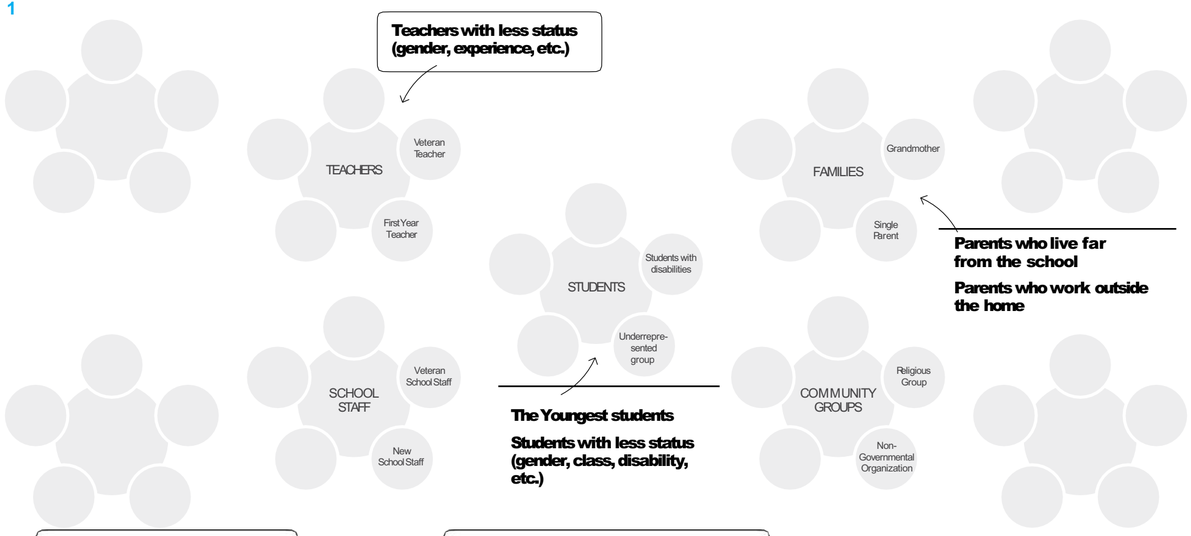
- How does this resource relate to the challenge you identified?
- What questions or areas of inquiry does this resource make you think of as it relates to your problem?
- How does this resource relate to the holistic learning outcomes identified in the Schools2030 initiative?

5 WHAT INFORMATION DO YOU WANT TO BE SURE TO REMEMBER THROUGHOUT THE DESIGN CHALLENGE? WHAT DO YOU WANT TO LEARN MORE ABOUT?

Stakeholder Mapping

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

1



2

Students with less status (gender, class, disability, etc.)

The Youngest students

Teachers with less status (gender, experience, etc.)

Parents who work outside the home

Parents who live far from the school

LEAST REPRESENTED — MOST REPRESENTED

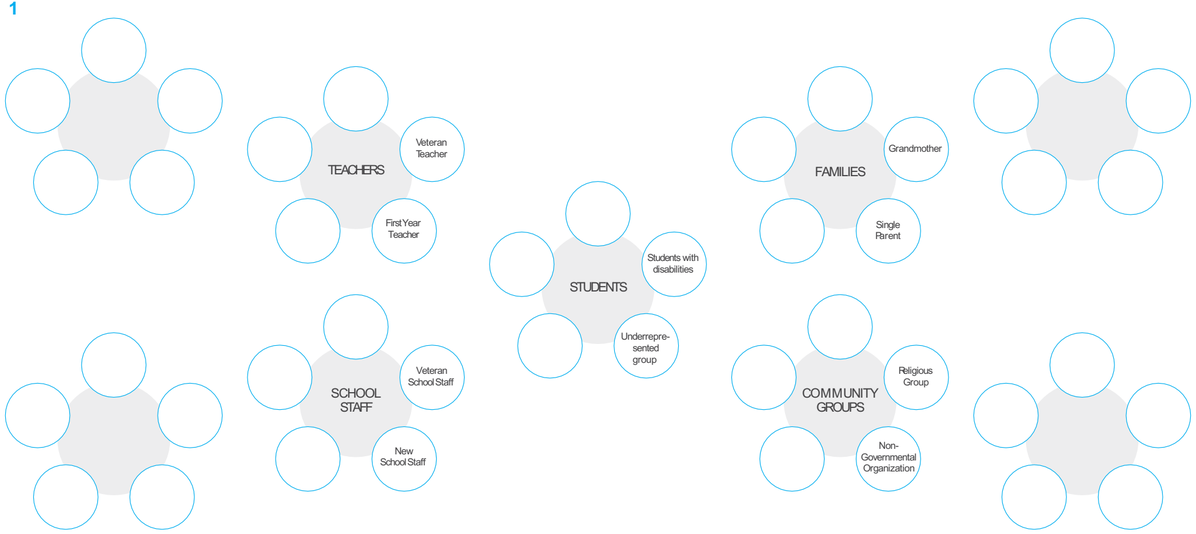
LAUNCH 5 | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Stakeholder Mapping

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

SMOOTH SAILING | QUANTITATIVE DATA ANALYSIS | IDENTIFY A PROBLEM TO EXPLORE | SECONDARY RESEARCH | STAKEHOLDER MAPPING

1



2

LEAST REPRESENTED — MOST REPRESENTED

LAUNCH TRANSITION SUMMARY

SUMMARY OF **LAUNCH THE CHALLENGE** PHASE

Use this **Launch the Challenge** summary page to gather up the work you completed on each worksheet. Consider 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.

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 Analysis

What is the problem you identified?

What do you need to learn more about?

#3 Identify a Problem to Explore

What one problem do 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 PROMISE app?

#4 Secondary Research

How does the article your team choose relate to the holistic learning outcomes identified in the Schools2030 initiative?

#5 Stakeholder Mapping

Name the three stakeholders or stakeholder groups you think are most underrepresented based on the problem you identified.

1.

2.

3.

LAUNCH TRANSITION ALIGNMENT

SUMMARY TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?" and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

What is the one problem your team will explore together?

How does this problem relate to improving the holistic learning outcomes for your students?

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase of the challenge 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 you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
SMOOTH SAILING ACTIVITY	The team cannot agree on the strengths & weaknesses of the school.	The team has some disagreements on the strengths & weaknesses of the school but feels comfortable moving forward.	The team is strongly aligned on the strengths & weaknesses of the school.
QUANTITATIVE DATA ANALYSIS ACTIVITY	The team cannot agree on the most compelling quantitative data points & how they inform the problem.	The team has some disagreements on the most compelling quantitative data points & the problem but feels comfortable moving forward.	The team is strongly aligned on the most compelling quantitative data points & how they inform the problem.
IDENTIFY A PROBLEM TO EXPLORE ACTIVITY	The team cannot agree on the most important problem to work on.	The team has some disagreements about the most important problem to work on but feels comfortable moving forward.	The team is strongly aligned on what is the most important problem.
SECONDARY RESEARCH ACTIVITY	The team cannot agree on what secondary information is most relevant.	The team has some disagreements on what the most important secondary research is but feels comfortable moving forward.	The team is strongly aligned on what is the most important secondary research.
STAKEHOLDER MAPPING ACTIVITY	The team cannot agree on the stakeholders who are most underrepresented.	The team cannot agree on the stakeholders who are most underrepresented.	The team is strongly aligned on which stakeholders who are most underrepresented.
PROJECT STATUS: DEFINITION OF PROBLEM	The team cannot agree on how to define the problem most relevant to the goal of improving the holistic learning outcomes.	The team has some disagreements on how to define the most relevant problem but feels comfortable moving forward.	The team is strongly aligned on how to define the problem most relevant to the goal of improving the holistic learning outcomes.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	The team cannot agree on the problem is connected to the goal of improving the holistic learning outcomes.	The team has some disagreements on how the problem is connected to the goal of improving the holistic learning outcomes but feels comfortable moving forward.	The team is strongly aligned on how the problem is connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

LAUNCH 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 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?

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

OVERVIEW OF **EXPLORE THE PROBLEM** PHASE

Worksheets in the Explore the Problem phase are designed to help your team understand the experiences, emotions and motivations of others. Designers use specific design research methods to learn more about the needs of the stakeholders for whom they are designing. Preparation for this part of the process can be done collaboratively with other school groups.

This phase of the design challenge will include: preparing to interview, interview questions and additional techniques, interview reflection tools, and observation and journey mapping tools. Also included is the optional activity of visiting a school to shadow a student. Preparation and reflection tools are provided for the shadow experience.

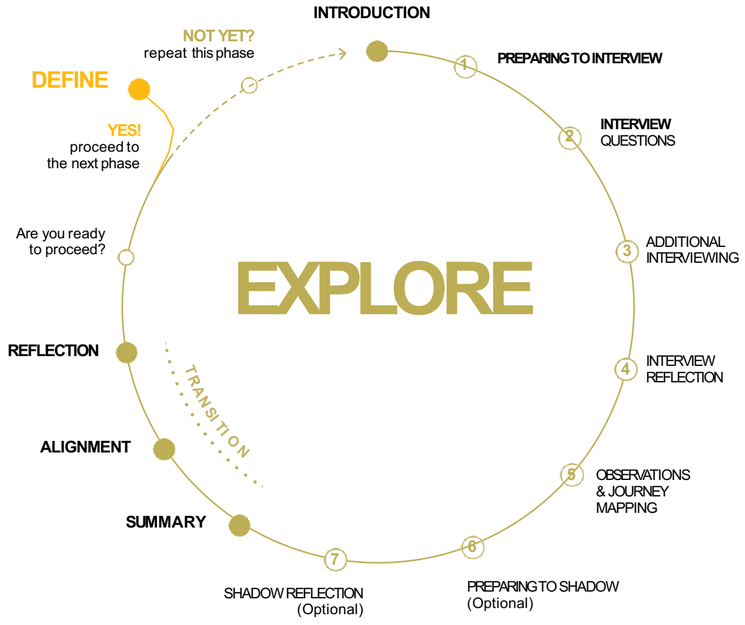
OBJECTIVES OF **EXPLORE THE PROBLEM** PHASE

The goal of this phase is to engage with the most relevant (and most underrepresented) stakeholders in your school related to the problem you are working to solve. This phase is focused on having dynamic conversations 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 - active listening is a source of creative inspiration
- Put aside biases and assumptions about what you think the problem is - listen to the stakeholder.
- Look carefully to understand potential problems and opportunities
- Stay optimistic that you can solve the problem
- Hold back on solving the problem during this phase



TEAM WORKSHOP TOOLS

#1 Preparing to Interview — *30 minutes*

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

WHAT IS YOUR GOAL?
When you have completed this tool, your team should be aligned around potential problems and opportunities.

INDIVIDUAL FIELDWORK TOOLS

#2 Interview Questions — *30 minutes to prepare, 30 minutes per interview*

WHAT IS THIS TOOL?
The **Interview Questions** worksheet helps you with starter questions for your empathy interviews. You do not need to ask all the questions. Pick 5 that are most relevant to start. You can also modify the questions as needed.

WHAT IS YOUR GOAL?
It is very important when you are conducting empathy interviews to ask open-ended questions that are related to the problem you are solving; do not ask the stakeholder to solve the problem. Use these questions to get started.

#3 Additional Interviewing — *Techniques 15 minutes to prepare*

WHAT IS THIS 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 a deeper understanding of the problem. A variety of techniques can help you engage with different stakeholders.

#4 Interview Reflection — *15-30 minutes per interview*

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

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

#5 Observations & Journey Mapping — *30 minutes to reflect*

WHAT IS THIS TOOL?
The **Observation & Journey Mapping** worksheet helps you capture notes from your observation exercise. A journey map helps you synthesize what you observed based on time.

WHAT IS YOUR GOAL?
By observing one of your students and completing a journey map, you will get a new perspective on the student experience in your classroom.

#6 Preparing to Shadow OPTIONAL — *30 minutes to prepare, all day to shadow*

WHAT IS THIS TOOL?
Shadowing a Student is an optional activity where you make arrangements to visit another school and shadow a student for a day. The Preparing to Shadow worksheet helps you prepare for that experience.

WHAT IS YOUR GOAL?
By shadowing a student at another school, you will get new perspectives and inspiration for how to solve your problem back at home.

#7 Shadow Reflection - OPTIONAL — *30 minutes*

WHAT IS THIS TOOL?
The **Shadow Reflection** worksheet helps you capture the notes and reflections from your shadow experience.

WHAT IS YOUR GOAL?
It is important to take notes and reflect on your shadow experience and bring those notes with you to the next workshop. Those notes will inform your next phase of the challenge.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Preparing to Interview

Instructions: As a part of the work of exploring this problem, you are going to interview three stakeholders. When we interview people, we can engage in a deeper conversation with them. In a conversation, we can also ask follow-up questions and really dig for the "why" behind their emotions and motivations. You are working to discover stakeholders' needs so that you can respond to them with your solutions.

1 PREPARING TO INTERVIEW

- You will 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 asking them questions about school and that they do not have to answer any questions they do not want to answer.
- Use the interview questions that are provided on the following pages 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 comfortable and want to ask your own follow-up questions, feel free to do so.
  - Start with 6-8 questions. Select questions that you feel are relevant to the problem you identified on the *Scoping the Challenge* worksheet. Feel free to write your own questions as well.
  - Do not feel that you have the ask all the questions on the list nor do you need to follow a particular sequence. We have provided a lot of questions to help you get a sense for potential opportunities for inquiry.
  - Review our list of supplemental questions and select ones that may be interesting to follow up with if the conversation slows.
- When you are interviewing, be sure to take notes on what you hear and notice about the participant. Write specific information and exact quotations.
- For young children or those who may be reluctant to share their thoughts and feelings, use the methods described on *Additional Interviewing Techniques* page of the workbook. You do not need to complete all the activities - select the methods that are most relevant to you and your stakeholders.
- After you have completed your interviews, set aside time to headline (make short summaries of the highlights of) your notes.
  - Take square post-its and capture your main takeaway points and any surprises or contradictions, one on each post-it. Stick each post-it you write on the page you were reviewing. Feel free to have more than one post-it on each page.
  - Also, use the *Interview Reflection* tool provided in this workbook to reflect on your interviews.

2 SELECTING STAKEHOLDERS TO INTERVIEW

- Return to the *Community Mapping* worksheet in the Launch Phase to review the stakeholders you identified. Use this 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 must also interview at least one student.*
- Remember that the people you interview may be nervous about opening up to you. Do your best to be an active listener (focused on their thoughts, nodding, asking follow-up questions, refraining from offering your own thoughts. Assure the people you are interviewing that you will maintain their privacy.
- Do 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 extreme users - extreme users (the best student, a student who is very disengaged, a vocal parent, a brand new teacher) often have behaviors and feelings that are more amplified. This means they can better articulate their point of view. Designers have found that even though these people 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:

Stakeholder group: Student

- Interview #2

Name:

Stakeholder group:

- Interview #3

Name:

Stakeholder group:

3 TIPS FOR INTERVIEWING

- These interviews are not the same as focus groups. You want to connect with a stakeholder one-on-one so that you can really focus on hearing their perspectives and following up on their stories.
- You can't reliably ask a person, "What do you need?" Designers have found that is a difficult question to answer. Instead, we like to learn about a stakeholder's life experiences through stories from their lives. By sharing stories, designers have found that stakeholders are more likely to share their emotions and motivations.
- Every interview has an arc - a beginning, middle and end. Start by introducing yourself and your project.
- Ask a few easy questions. E.g. Tell me a little about yourself. What do you love to do in your free time?
- Ask open-ended questions that elicit stories. E.g. Tell me about your favorite class in school.
- Don't offer answers to your own questions.
- Follow up on interesting things that you hear or observe. Look for body language cues, listen for pauses, nervous laughter, etc.
- 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 stakeholder while being sensitive to their emotional boundaries. A good way to ask "why" is to say, "Tell me more about…"
- Don't be afraid of silence. Often the person will fill the silence with a deeper thought.
- This process may be uncomfortable but it is critical to the success of the project that you discover new insights about your stakeholder. Do everything you can to make them 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 quotations and notes.

Interview Questions

Instructions: Use the interview questions provided to get the conversation started with different stakeholder groups. Before you begin the interview, select five from this page and three from the next page that are most relevant to the problem you are exploring. Feel free to modify questions to be culturally appropriate.

STUDENTS

- [ ] 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 your least favorite class subject. Why?
- [ ] Tell me about a project that you loved working on. Why?
- [ ] Tell me about a project where you learned the most. Why?
- [x] Is there something you wish you could learn about that you aren't learning right now? Tell me more about that.
- [x] Tell me about a time when you saw a connection between what you learned at school and your future.
- [x] What are your goals for your future?
- [ ] Tell me about a time you applied something you learned at school in your own life.
- [ ] Do you see connections between what you've learned in different classes? Why or why not?

Include several questions about the holistic learning outcomes you are hoping to increase:

- [x] **Tell me about someone who you look up to.**
- [ ]
- [ ]

TEACHERS

- [ ] Tell me about what activities you are involved in at school. What about outside of school?
- [ ] Tell me about what you like to do in your free time.
- [ ] Tell me about your favorite class this year. Why?
- [ ] Tell me about your least favorite class this year. Why?
- [ ] Tell me about a project that you loved teaching. Why?
- [ ] Tell me about a project where you think the students learned the most. Why?
- [ ] Is there something you wish you could teach that you aren't teaching right now? Tell me more about that.
- [ ] Tell me about a time when you felt that the students saw connections between what they learned and their future.
- [ ] What are your goals for your students' learning?

Include several questions about the holistic learning outcomes you are hoping to increase:

- [ ]
- [ ]
- [ ]

FAMILIES

- [ ] Tell me about what activities you are involved in at school.
- [ ] Tell me about what you like to do in your free time.
- [ ] How does your child describe her or his school day?
- [ ] Tell me about your child's favorite class this year. What class do you think has taught them the most? Why?
- [ ] Tell me about your child's least favorite class this year. Why?
- [ ] Tell me about a project where you think your child learned the most. Why?
- [ ] Is there something you wish your child could learn that he or she is not learning right now? Tell me more about that.
- [ ] Tell me about a time when you felt that your child saw a connection between what they learned and their future.
- [ ] What are your goals for your child's learning?
- [ ] What are your goals for your child's future?
- [ ] How would you describe your childhood?
- [ ] How much schooling do you have?
- [ ] How would you describe YOUR experiences in school? Primary? Secondary?

Include several questions about the holistic learning outcomes you are hoping to increase:

- [ ]
- [ ]
- [ ]

Interview Questions

Instructions: Use the interview questions provided to get the conversation started with different stakeholder groups. Before you begin the interview, select five from this page and three from the next page that are most relevant to the problem you are exploring. Feel free to modify questions to be culturally appropriate.

STUDENTS

- [ ] 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 your least favorite class subject. Why?
- [ ] Tell me about a project that you loved working on. Why?
- [ ] Tell me about a project where you learned the most. Why?
- [ ] Is there something you wish you could learn about that you aren't learning right now? Tell me more about that.
- [ ] Tell me about a time when you saw a connection between what you learned at school and your future.
- [ ] What are your goals for your future?
- [ ] Tell me about a time you applied something you learned at school in your own life.
- [ ] Do you see connections between what you've learned in different classes? Why or why not?

Include several questions about the holistic learning outcomes you are hoping to increase:

- [ ]
- [ ]
- [ ]

TEACHERS

- [ ] Tell me about what activities you are involved in at school. What about outside of school?
- [ ] Tell me about what you like to do in your free time.
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- [ ] Tell me about a project that you loved teaching. Why?
- [ ] Tell me about a project where you think the students learned the most. Why?
- [ ] Is there something you wish you could teach that you aren't teaching right now? Tell me more about that.
- [ ] Tell me about a time when you felt that the students saw connections between what they learned and their future.
- [ ] What are your goals for your students' learning?

Include several questions about the holistic learning outcomes you are hoping to increase:

- [ ]
- [ ]
- [ ]

FAMILIES

- [ ] Tell me about what activities you are involved in at school.
- [ ] Tell me about what you like to do in your free time.
- [ ] How does your child describe her or his school day?
- [ ] Tell me about your child's favorite class this year. What class do you think has taught them the most? Why?
- [ ] Tell me about your child's least favorite class this year. Why?
- [ ] Tell me about a project where you think your child learned the most. Why?
- [ ] Is there something you wish your child could learn that he or she is not learning right now? Tell me more about that.
- [ ] Tell me about a time when you felt that your child saw a connection between what they learned and their future.
- [ ] What are your goals for your child's learning?
- [ ] What are your goals for your child's future?
- [ ] How would you describe your childhood?
- [ ] How much schooling do you have?
- [ ] How would you describe YOUR experiences in school? Primary? Secondary?

Include several questions about the holistic learning outcomes you are hoping to increase:

- [ ]
- [ ]
- [ ]

Supplemental Interview Questions

Instructions: Select questions relevant to the problem you are trying to solve from these supplemental interview questions provided. Feel free to draft your own questions and/or modify these questions to be culturally appropriate.

STUDENTS

- [ ] How does your family support your learning? Tell me more.
- [ ] Are there conflicts you have with your family about school? Why?
- [ ] Tell me about your holidays and breaks from school. What do you usually do? What do you like about breaks? What do you dislike?
- [x] Tell me about your favorite thing about being a student.
- [x] Tell me about one thing you wish was different about being a student.
- [ ] When do you feel most productive at school? Why?
- [ ] When do you feel least productive at school? Why?
- [ ] When do you feel like you are learning the most? Why?
- [ ] When do you feel like you are learning the least? Why?
- [ ] Have you ever chosen to spend time outside of class to learn more about a topic? Tell me more.
- [ ] When do you feel most successful at school? Why?
- [ ] When do you feel least successful at school? Why?
- [ ] Tell me about your favorite kind of assignment. Why?
- [ ] What is your favorite time of day at school? Why?
- [ ] When do you feel most excited? Why?
- [ ] When do you feel most exhausted? Why?
- [ ] Who is your favorite teacher? Why?
- [ ] Which teacher has taught you the most or influenced you positively? Why?
- [ ] When, where, how do you connect with friends at school? Tell me more.
- [ ] When, where, how do you connect with friends at home? Tell me more.
- [ ] What is your favorite place to learn at school? Why?
- [ ] What is your least favorite place to learn at school? Why?
- [ ] Describe what your ideal school day would look like. Tell me more.

TEACHERS

- [ ] Tell me about your most stressful day this year.
- [ ] How much are families engaged in your classroom (feedback, meetings, compliments, complaints, guest speakers, co-teachers, etc.)? Tell me more.
- [ ] Are there conflicts you have with your own family about your work at school? Why?
- [ ] Tell me about your favorite thing about being a teacher.
- [ ] Tell me about one thing you wish was different about being a teacher.
- [ ] When do you feel most productive at school? Why?
- [ ] When do you feel least productive at school? Why?
- [ ] When do you feel like you are making the most impact? Why?
- [ ] When do you feel like you are making the least impact? Why?
- [ ] When do you feel most satisfied with your role at school? Why?
- [ ] When do you feel least satisfied with your role at school? Why?
- [ ] What is your favorite project you assigned? Why?
- [ ] Tell me about your favorite kind of assignment. Why?
- [ ] What is your favorite time of day at school? Why?
- [ ] What is your favorite time of day in general? Why?
- [ ] When do you feel most excited? Why?
- [ ] When do you feel most exhausted? Why?
- [ ] What is your favorite day of the week? Why?
- [ ] Tell me about a student for whom you felt you made a difference.
- [ ] When, where, how do you connect with colleagues at school? Tell me more.
- [ ] What is your favorite place to teach? Why?
- [ ] What is your least favorite place to teach? Why?
- [ ] How do you spend your free time at school? Tell me more.
- [ ] Describe what your ideal school day would look like. Tell me more.
- [ ] Describe how you might allow students to have more control over their own learning. Tell me more.

FAMILIES

- [ ] Tell me about your most stressful day (related to school) this year.
- [ ] How much are you engaged in your child's classroom (feedback, meetings, compliments, complaints, guest speakers, co-teachers, etc.)? Tell me more.
- [ ] Are there conflicts you have with your child about school? Why?
- [ ] Tell me about your favorite thing about having a child enrolled at your school.
- [ ] Tell me about one thing you wish was different about having a child enrolled at your school.
- [ ] When do you feel your child is most productive at school? Why?
- [ ] When do you feel your child is least productive at school? Why?
- [ ] When do you feel like you are making the most impact on your child's education? Why?
- [ ] When do you feel like you are making the least impact on your child's education? Why?
- [ ] When do you feel most satisfied with your child's experience at school? Why?
- [ ] When do you feel least satisfied with your child's experience at school? Why?
- [ ] What is your favorite project your child was assigned? Why?
- [ ] Tell me about a teacher who you felt you made a difference for your child.
- [ ] When, where, how does your child connect with his or her friends at school? Tell me more.
- [ ] Describe what your ideal school day for your child would look like. Tell me more.
- [ ] Do you feel that your child has ownership over his or her learning? Why or why not?

LAUNCH | EXPLORE 2 | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Supplemental Interview Questions

Instructions: Select questions relevant to the problem you are trying to solve from these supplemental interview questions provided. Feel free to draft your own questions and/or modify these questions to be culturally appropriate.

PREPARING TO INTERVIEW | INTERVIEW QUESTIONS | ADDITIONAL INTERVIEWING TECHNIQUES | INTERVIEW REFLECTION | OBSERVATIONS & JOURNEY MAPPING | PREPARING TO SHADOW | SHADOW REFLECTION

STUDENTS

- [ ] How does your family support your learning? Tell me more.
- [ ] Are there conflicts you have with your family about school? Why?
- [ ] Tell me about your holidays and breaks from school. What do you usually do? What do you like about breaks? What do you dislike?
- [ ] Tell me about your favorite thing about being a student.
- [ ] Tell me about one thing you wish was different about being a student.
- [ ] When do you feel most productive at school? Why?
- [ ] When do you feel least productive at school? Why?
- [ ] When do you feel like you are learning the most? Why?
- [ ] When do you feel like you are learning the least? Why?
- [ ] Have you ever chosen to spend time outside of class to learn more about a topic? Tell me more.
- [ ] When do you feel most successful at school? Why?
- [ ] When do you feel least successful at school? Why?
- [ ] Tell me about your favorite kind of assignment. Why?
- [ ] What is your favorite time of day at school? Why?
- [ ] When do you feel most excited? Why?
- [ ] When do you feel most exhausted? Why?
- [ ] Who is your favorite teacher? Why?
- [ ] Which teacher has taught you the most or influenced you positively? Why?
- [ ] When, where, how do you connect with friends at school? Tell me more.
- [ ] When, where, how do you connect with friends at home? Tell me more.
- [ ] What is your favorite place to learn at school? Why?
- [ ] What is your least favorite place to learn at school? Why?
- [ ] Describe what your ideal school day would look like. Tell me more.

TEACHERS

- [ ] Tell me about your most stressful day this year.
- [ ] How much are families engaged in your classroom (feedback, meetings, compliments, complaints, guest speakers, co-teachers, etc.)? Tell me more.
- [ ] Are there conflicts you have with your own family about your work at school? Why?
- [ ] Tell me about your favorite thing about being a teacher.
- [ ] Tell me about one thing you wish was different about being a teacher.
- [ ] When do you feel most productive at school? Why?
- [ ] When do you feel least productive at school? Why?
- [ ] When do you feel like you are making the most impact? Why?
- [ ] When do you feel like you are making the least impact? Why?
- [ ] When do you feel most satisfied with your role at school? Why?
- [ ] When do you feel least satisfied with your role at school? Why?
- [ ] What is your favorite project you assigned? Why?
- [ ] Tell me about your favorite kind of assignment. Why?
- [ ] What is your favorite time of day at school? Why?
- [ ] What is your favorite time of day in general? Why?
- [ ] When do you feel most excited? Why?
- [ ] When do you feel most exhausted? Why?
- [ ] What is your favorite day of the week? Why?
- [ ] Tell me about a student for whom you felt you made a difference.
- [ ] When, where, how do you connect with colleagues at school? Tell me more.
- [ ] What is your favorite place to teach? Why?
- [ ] What is your least favorite place to teach? Why?
- [ ] How do you spend your free time at school? Tell me more.
- [ ] Describe what your ideal school day would look like. Tell me more.
- [ ] Describe how you might allow students to have more control over their own learning. Tell me more.

FAMILIES

- [ ] Tell me about your most stressful day (related to school) this year.
- [ ] How much are you engaged in your child's classroom (feedback, meetings, compliments, complaints, guest speakers, co-teachers, etc.)? Tell me more.
- [ ] Are there conflicts you have with your child about school? Why?
- [ ] Tell me about your favorite thing about having a child enrolled at your school.
- [ ] Tell me about one thing you wish was different about having a child enrolled at your school.
- [ ] When do you feel your child is most productive at school? Why?
- [ ] When do you feel your child is least productive at school? Why?
- [ ] When do you feel like you are making the most impact on your child's education? Why?
- [ ] When do you feel like you are making the least impact on your child's education? Why?
- [ ] When do you feel most satisfied with your child's experience at school? Why?
- [ ] When do you feel least satisfied with your child's experience at school? Why?
- [ ] What is your favorite project your child was assigned? Why?
- [ ] Tell me about a teacher who you felt you made a difference for your child.
- [ ] When, where, how does your child connect with his or her friends at school? Tell me more.
- [ ] Describe what your ideal school day for your child would look like. Tell me more.
- [ ] Do you feel that your child has ownership over his or her learning? Why or why not?

Additional Interviewing Techniques

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.

USE PLAY OR DRAWING

- Ask the student to show you their favorite and least favorite things about school, either through playing with toys or drawing pictures.
- Ask them, "Tell me more about why you did that... Tell me 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

- Print out 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 can be generic - they do not need to be of your community, school, etc.
- Ask the student to pick out images that remind them of how they feel when they are at 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.

LAUNCH | EXPLORE 3 | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

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 your worst 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 interviewer. 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.

TAKE A 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

Instructions: Use this worksheet to prepare to conduct your interviews and to take notes during your interviews. Use the interview questions provided to get the conversation started with different stakeholder groups. Follow up on interesting things you hear. You can ask, "Tell me more about…" Be sure to keep notes about the specific stories and quotations you hear from your interviews. Use post-its to capture the most interesting things you hear and observe. Listen and look for emotions and motivations. 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.

INTERVIEW QUESTIONS
Select 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. Rewrite them here. Feel free to modify questions to be culturally appropriate.

1.
2.
3. **Is there something you wish you could learn about that you aren't learning right now?**
4. **Tell me more about that.**
5. **Tell me about 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.
8.
9.
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
If you are using additional interview techniques, write them here.

WHAT DID YOU HEAR?
Write down specific quotations. Listen for stories, emotions, motivations and behaviors.
Listen for surprising or contradictory information.

"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 to me when I talk about my goals for my future."

WHAT DID YOU SEE?
Look for emotions (sadness, 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.

LAUNCH | EXPLORE 4 | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Interview Notes #1

Instructions: Use this worksheet to prepare to conduct your interviews and to take notes during your interviews. Use the interview questions provided to get the conversation started with different stakeholder groups. Follow up on interesting things you hear. You can ask, "Tell me more about…" Be sure to keep notes about the specific stories and quotations you hear from your interviews. Use post-its to capture the most interesting things you hear and observe. Listen and look for emotions and motivations. 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.

PREPARING TO INTERVIEW | INTERVIEW QUESTIONS | ADDITIONAL INTERVIEWING TECHNIQUES | INTERVIEW REFLECTION | OBSERVATIONS & JOURNEY MAPPING | PREPARING TO SHADOW | SHADOW REFLECTION

INTERVIEW QUESTIONS
Select 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. Rewrite them here. Feel free to modify questions to be culturally appropriate.

1.
2.
3.
4.
5.
6.
7.
8.
9.
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
If you are using additional interview techniques, write them here.

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.

Interview Reflection #1

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 he 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 to me when I talk about my goals for my future."

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.

LAUNCH | EXPLORE 4 | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Interview Reflection #1

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

PREPARING TO INTERVIEW | INTERVIEW QUESTIONS | ADDITIONAL INTERVIEWING TECHNIQUES | INTERVIEW REFLECTION | OBSERVATIONS & JOURNEY MAPPING | PREPARING TO SHADOW | SHADOW REFLECTION

1 DESCRIBE WHO YOU INTERVIEWED

Who did you interview?
Age, gender, role, likes, dislikes, strengths, weaknesses.

2 WHAT STORIES DID YOU HEAR?

3 WHAT EMOTIONS DID YOU OBSERVE?

4 WHAT ARE THE FIVE MOST IMPORTANT THINGS YOU LEARNED THAT ARE RELEVANT TO THE PROBLEM YOU ARE EXPLORING?

Interview Notes #2

Instructions: Use this worksheet to prepare to conduct your interviews and to take notes during your interviews. Use the interview questions provided to get the conversation started with different stakeholder groups. Follow up on interesting things you hear. You can ask, "Tell me more about…" Be sure to keep notes about the specific stories and quotations you hear from your interviews. Use post-its to capture the most interesting things you hear and observe. Listen and look for emotions and motivations. 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.

INTERVIEW QUESTIONS
Select 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. Rewrite them here. Feel free to modify questions to be culturally appropriate.

1.

2.

3.

4.

5.

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7.

8.

9.

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

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.

Interview Reflection #2

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.

2 WHAT STORIES DID YOU HEAR?

3 WHAT EMOTIONS DID YOU OBSERVE?

4 WHAT ARE THE FIVE MOST IMPORTANT THINGS YOU LEARNED THAT ARE RELEVANT TO THE PROBLEM YOU ARE EXPLORING?

Interview Notes #3

Instructions: Use this worksheet to prepare to conduct your interviews and to take notes during your interviews. Use the interview questions provided to get the conversation started with different stakeholder groups. Follow up on interesting things you hear. You can ask, "Tell me more about…" Be sure to keep notes about the specific stories and quotations you hear from your interviews. Use post-its to capture the most interesting things you hear and observe. Listen and look for emotions and motivations. 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.

INTERVIEW QUESTIONS
Select 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. Rewrite them here. Feel free to modify questions to be culturally appropriate.

1.

2.

3.

4.

5.

6.

7.

8.

9.

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

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.

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

Who did you interview?
Age, gender, role, likes, dislikes, strengths, weaknesses.

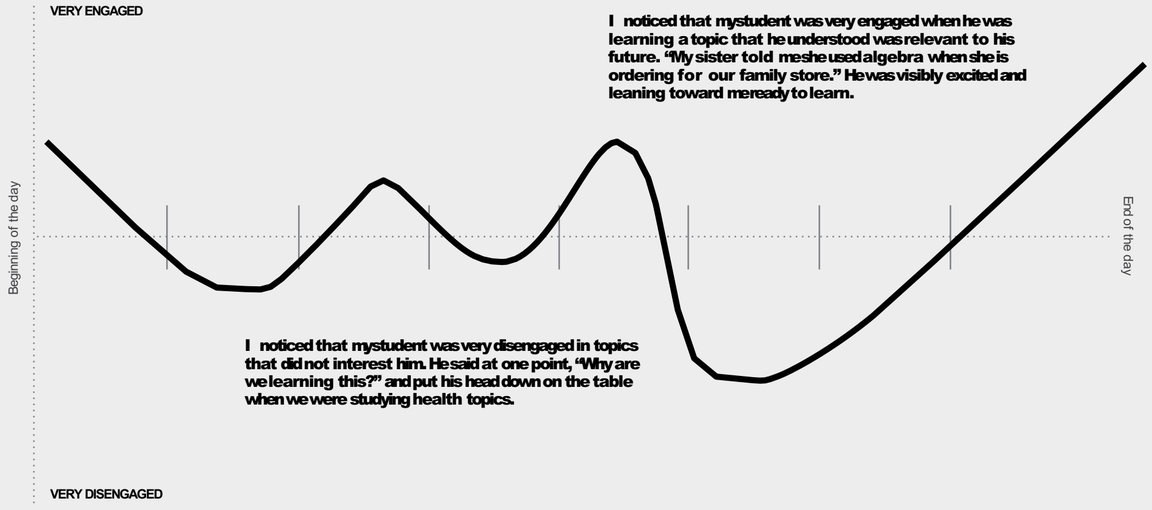
2 WHAT STORIES DID YOU HEAR?

3 WHAT EMOTIONS DID YOU OBSERVE?

4 WHAT ARE THE FIVE MOST IMPORTANT THINGS YOU LEARNED THAT ARE RELEVANT TO THE PROBLEM YOU ARE EXPLORING?

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.



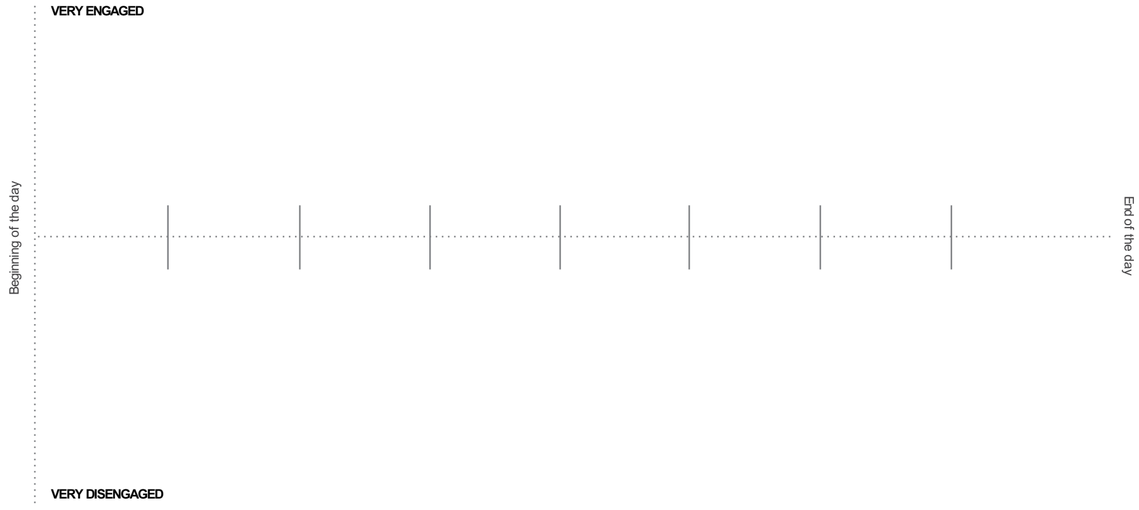
Take note of anything that you notice as you listen and observe.
This might include potential areas of opportunity or questions about which you might want to learn more.

LAUNCH | EXPLORE 5 | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

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.

PREPARING TO INTERVIEW | INTERVIEW QUESTIONS | ADDITIONAL INTERVIEWING TECHNIQUES | INTERVIEW REFLECTION | OBSERVATIONS & JOURNEY MAPPING | PREPARING TO SHADOW | SHADOW REFLECTION



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

Instructions: As a part of the process of exploring this problem, you have the ***option*** of visiting a school for an immersive observation experience. When you immerse in another context, you can gain inspiration and insight by engaging in the same experiences as your stakeholder.

1 PREPARING TO SHADOW

A key 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 student experience at 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 or right as they arrive. While 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 life is affected by their experiences at school. You will end the shadowing as the student leaves campus.

Your goal:
Your goal is to experience the student's day: what it feels like, when you are engaged and when you are not, when you are stressed, what transitions are like, etc. Try to get out of your own experiences at your school and walk with the student through their day.

The point of this exercise is about helping you understand what it feels like to be a student - not to observe and evaluate the student. It is okay if the student's experience is altered a bit because you are shadowing. Focus on how you 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 not to evaluate or judge what you see and experience. Rather, your goal is let go of your own agenda and your own assumptions about the student experience and immerse yourself in what it is really like to be a student at another school.

You are not trying to solve problems or intervene today. Your goal is to fully observe and participate. We have provided tools 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. This means wandering the halls during break, eating lunch in the cafeteria, going to every class, etc.

This also means no 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.

Take pictures of interesting events, experiences, etc. These pictures will help you remember key moments or interesting tensions.

3 PLANNING FOR YOUR SHADOW

1. Find a school that would be willing to have you shadow a student for the day.
2. Ask the school to help select a student to shadow. Ask them to think about selecting a student who represents a particular set of experiences you want to learn more about (high-achieving, disengaged, new to the school, a leader in the school, etc.).
3. Check in with the student before the shadow day. Explain the project and purpose of your shadow. Make sure the student's teachers know that you will be shadowing. Let the teacher know that this is not about critiquing their classroom; it is 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.

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?

Shadow Reflection - Optional

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

Who did you shadow?
Age, gender, role, likes, dislikes, strengths, weaknesses.

sara, a studious student,
who loves art and sports.

2 WHAT STORIES DID YOU HEAR?

Sara told me about the project that made her the most 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.

LAUNCH | EXPLORE 7 | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Shadow Reflection - Optional

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.

PREPARING TO INTERVIEW | INTERVIEW QUESTIONS | ADDITIONAL INTERVIEWING TECHNIQUES | INTERVIEW REFLECTION | OBSERVATIONS & JOURNEY MAPPING | PREPARING TO SHADOW | SHADOW REFLECTION

1 DESCRIBE WHO YOU SHADOWED

Who did you shadow?
Age, gender, role, likes, dislikes, strengths, weaknesses.

2 WHAT STORIES DID YOU HEAR?

3 WHAT EMOTIONS DID YOU OBSERVE?

4 HOW DID YOU FEEL?

5 WHAT ARE THE FIVE MOST IMPORTANT THINGS YOU LEARNED THAT ARE RELEVANT TO THE PROBLEM YOU ARE EXPLORING?

EXPLORE TRANSITION SUMMARY

SUMMARY OF **EXPLORE THE PROBLEM** PHASE

Use this **Explore the Problem** summary page to gather up the work you completed on each worksheet. Consider 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.

INDIVIDUAL FIELDWORK TOOLS

#2 Interview Questions & Additional Techniques

What were the three best questions you asked or techniques you used that lead to new understanding or ideas?

1.

2.

3.

#3 Interview 2nd Reflection

What are the three most important things you learned during your **second interview**?

1.

2.

3.

#3 Interview 1st Reflection

What are the three most important things you learned during your **first interview**?

1.

2.

3.

#3 Interview 3rd Reflection

What are the three most important things you learned during your **third interview**?

1.

2.

3.

#5 Observations & Journey Mapping

What are the three most important things you learned during your observation?

1.

2.

3.

#7 Shadow Reflection - OPTIONAL

What are the three most important things you learned during your shadow?

1.

2.

3.

EXPLORE TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?"and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

What are the twelve most important things your team learned from the Explore phase?

-
-
-
-
-
-
-
-
-
-
-
-

How does your team's exploration of the problem connect to improving the holistic learning outcomes for your students?

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase of the challenge 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 you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
INTERVIEW QUESTIONS ACTIVITY	You and your team have not chosen your five questions for each of your interviews.	You and your team have chosen your questions but need to modify them for your context.	You and your team have selected your questions and modified them for your context. You feel ready to interview!
ADDITIONAL TECHNIQUES ACTIVITY	You and your team have not chosen your additional techniques for each of your interviews.	You and your team have chosen your techniques but need to modify them for your context.	You and your team have selected your techniques and modified them for your context. You feel ready to interview!
INTERVIEW REFLECTION S ACTIVITY	You have not conducted your interviews or you have but you did not take notes.	You have conducted interviews and taken notes but have not completed your reflection.	You have conducted your interviews, taken notes and completed your reflections.
OBSERVATIONS & JOURNEY MAPPING ACTIVITY	You have not conducted your observation or you have but you did not take notes.	You have completed your observation and have taken notes but have not completed your reflection.	You have completed your observations, taken notes and completed your reflections.
SHADOW REFLECTION ACTIVITY	THIS STEP IS OPTIONAL. You have not completed your shadow or you have but you did not take notes.	THIS STEP IS OPTIONAL. You have completed your shadow and taken notes but have not completed your reflection.	THIS STEP IS OPTIONAL. You have completed your shadow, taken notes and completed your reflections.
PROJECT STATUS: DEPTH OF INSIGHTS INTO STAKEHOLDERS	You have not heard new perspectives on your problem from the stakeholders you interviewed, observed or shadowed.	You have heard a few new perspectives on yourproblem from the stakeholders you interviewed, observed or shadowed.	You have learned a lot and have gained rich new understanding into your stakeholders through your design research methods.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	Your design research methods are not connected to the goal of improving the holistic learning outcomes.	Your design research methods are somewhat connected to the goal of improving the holistic learning outcomes but your team feels comfortable moving forward.	Your design research methods are clearly connected to the goal of improving 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

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?

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.

DEFINE

DEFINE INTRODUCTION

OVERVIEW OF **DEFINE THE PROBLEM** PHASE

The worksheets in the **Define the Problem** phase of the challenge are focused on developing a point of view about the needs of your stakeholder. During this stage of the challenge, designers narrow from lots of information to a statement that is inspiring and specific. This part of the challenge can be done in school-based teams or collaboratively with other schools.

This phase of the design challenge will include: analyzing your design research activities (interviews, observations and shadows), inferring an interesting insight to build a Point of View statement and writing How Might We questions.

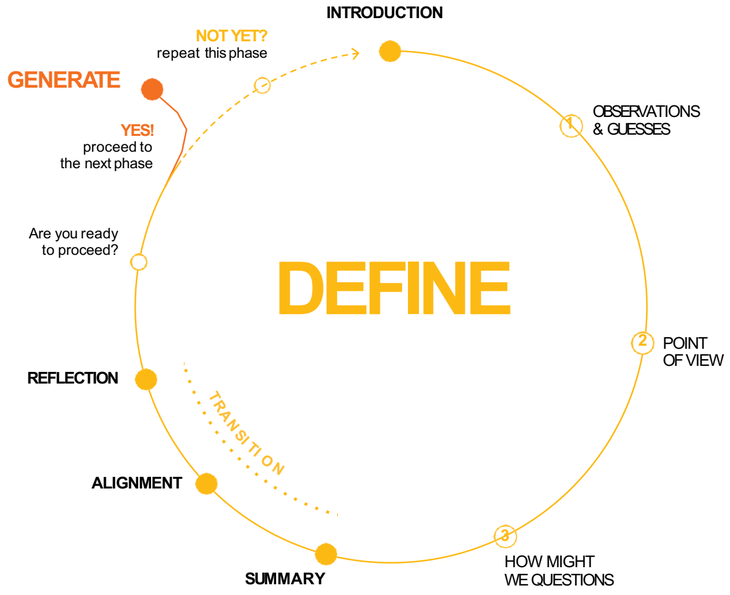
OBJECTIVES OF **DEFINE THE PROBLEM** PHASE

The goal of this phase is to identify the needs of your stakeholders based on what you heard and saw about their experiences, motivations and emotions.

At the end of this phase, all team members should be clear on several new Point of View 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 THE PROBLEM** 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 during this phase



TEAM WORKSHOP TOOLS

#1 Observations & Guesses — *45-60 minutes*

WHAT IS THIS TOOL?

Observations & Guesses is a worksheet designed to help you highlight compelling observations (look for surprises, tensions and contradictions) and infer these observations into guesses about what they mean.

WHAT IS YOUR GOAL?

This tool can help you make meaning of the qualitative data you gathered through your design research activities.

#2 Point of View — *30-45 minutes*

WHAT IS THIS TOOL?

Point of View is a worksheet designed to help you take your observations and guesses and turn them into a statement that preserves the emotions of the stakeholder for whom you want to design.

WHAT IS YOUR GOAL?

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

#3 How Might We Questions — *30-45 minutes*

WHAT IS THIS TOOL?

How Might We Questions are designed to help your team turn your POV statement into How Might We questions that will drive your brainstorming process.

WHAT IS YOUR GOAL?

HMW questions help you to rally your team around a question that captures the needs and emotions of your user. HMW questions also expand the problem in a way that creates a generative atmosphere for new ideas.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Observations

Instructions: Review your notes from the interviews you conducted as well as the observation you made (Journey Map and Shadow). Circle or highlight things you heard or saw that struck you as important.

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

"I DON'T LIKE DAYS WHEN WE DO NOT GET TO DO ART."
- SHADOW

"MY TEACHERS DO NOT LISTEN TO ME WHEN I TALK ABOUT MY GOALS FOR MY FUTURE"
- INTERVIEW

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 USED ALGEBRA WHEN SHE IS ORDERING FOR OUR FAMILY STORE."

LAUNCH | EXPLORE | DEFINE 1 | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Observations

Instructions: Review your notes from the interviews you conducted as well as the observation you made (Journey Map and Shadow). Circle or highlight things you heard or saw that struck you as important.

OBSERVATIONS & GUESSES | POINT OF VIEW | HMW QUESTIONS

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

NOTICE POST-IT

Observations & Guesses

Instructions: Pick the top five most interesting things you heard or saw from the previous worksheet and move the post-its 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 note 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.)

"I DONT LIKE DAYS WHEN WE DO NOT GET TO DO ART."
- SHADOW

"MY SISTER TOLD ME SHE USED ALGEBRA WHEN SHE IS ORDERING FOR OUR FAMILY STORE."
- JOURNEY MAP

INFER

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

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

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

LAUNCH | EXPLORE | DEFINE 1 | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Observations & Guesses

Instructions: Pick the top five most interesting things you heard or saw from the previous worksheet and move the post-its 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 note and stick it on the right side of the sheet.

OBSERVATIONS & GUESSES | POINT OF VIEW | HMW QUESTIONS

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

NOTICE POST-IT

INFER

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

GUESS POST-IT

Point-of-View 1

Instructions: Refer to the previous worksheet, and select one pair of notice and guesses. This will form the core of your Point of View statement. POVs help a design team rally around one specific stakeholder and the problem they face. This helps move a problem toward actionable steps. Next, think of needs statements for that stakeholder. Don't come up with solutions yet, instead focus on problems they need to overcome. Create two POVs individually. Then, share with your team to choose one as a group on which to focus your design work.

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 USED ALGEBRA WHEN SHE IS ORDERING FOR OUR FAMILY STORE."- 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 A WAY TO:
Describe what your stakeholder needs.

JOE NEEDS A 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 us 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
Put it all together.

JOE _____ is struggling with
[stakeholder]

FEELING MOTIVATED TO WORK HARD AT HIS STUDIES
_____
[their problem]

because **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
_____.
[needs statement]

Point-of-View 1

Instructions: Refer to the previous worksheet, and select one pair of notice and guesses. This will form the core of your Point of View statement. POVs help a design team rally around one specific stakeholder and the problem they face. This helps move a problem toward actionable steps. Next, think of needs statements for that stakeholder. Don't come up with solutions yet, instead focus on problems they need to overcome. Create two POVs individually. Then, share with your team to choose one as a group on which to focus your design work.

1 WE MET:
Describe one person you interviewed.

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

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

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

If the needs statement feels too big and overwhelming, ask yourselves: What's stopping us 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
Put it all together.

_____ is struggling with
[stakeholder]

_____
[their problem]

because _____.
[why this matters]

She/He needs a way to _____

_____.
[needs statement]

Point-of-View 2

Instructions: Refer to the previous worksheet, and select one pair of notice and guesses. This will form the core of your Point of View statement. POVs help a design team rally around one specific stakeholder and the problem they face. This helps move a problem toward actionable steps. Next, think of needs statements for that stakeholder. Don't come up with solutions yet, instead focus on problems they need to overcome. Create two POVs individually. Then, share with your team to choose one as a group on which to focus your design work.

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 USED ALGEBRA WHEN SHE IS ORDERING FOR OUR FAMILY STORE."- 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 A WAY TO:
Describe what your stakeholder needs.

JOE NEEDS A 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 us 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
Put it all together.

JOE _____ is struggling with
[stakeholder]

FEELING MOTIVATED TO WORK HARD AT HIS STUDIES
_____
[their problem]

because 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 _____.
[needs statement]

LAUNCH | EXPLORE | DEFINE 2 | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Point-of-View 2

Instructions: Refer to the previous worksheet, and select one pair of notice and guesses. This will form the core of your Point of View statement. POVs help a design team rally around one specific stakeholder and the problem they face. This helps move a problem toward actionable steps. Next, think of needs statements for that stakeholder. Don't come up with solutions yet, instead focus on problems they need to overcome. Create two POVs individually. Then, share with your team to choose one as a group on which to focus your design work.

OBSERVATIONS & GUESSES | POINT OF VIEW | HMW QUESTIONS

1 WE MET:
Describe one person you interviewed.

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

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

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

If the needs statement feels too big and overwhelming, ask yourselves: What's stopping us 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
Put it all together.

_____ is struggling with
[stakeholder]

_____
[their problem]

because _____.
[why this matters]

She/He needs a way to _____

_____.
[needs 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 HMW that will meet your stakeholder's most important need. This can be built from your POV statement. Next, answer the prompts below and use your answers to create new HMW questions.

POSSIBLE VERBS TO USE... help, encourage, motivate, empower, educate, create, provide, inspire, incentivize, prompt, remind, change, increase, decrease, challenge, restore, shift, ignite, spark, support, customize, develop, build, amplify, accelerate

HOW MIGHT WE... (VERB THAT IMPLIES CHANGE) + (STAKEHOLDER) + (OPPORTUNITY)?
How might we help Maria prepare for her day while walking to school?

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

If the HMW question feels too big and overwhelming, ask yourselves: What's stopping us from meeting this need?

Then, rewrite the HMW around what you identified as a barrier.

If the HMW question feels too much like a solution, ask yourselves: Why would we want to do this?

Then rewrite the HMW around the motivation.

Is there something good about your school you might make better?

HMW...

HOW MIGHT WE STRENGTHEN RELATIONSHIPS WITH OUR STUDENTS TO HELP US UNDERSTAND THEIR GOALS?

Is there something negative at the school that you might improve?

HMW...

HOW MIGHT WE GIVE JOE MORE CHOICES ABOUT WHAT HE IS STUDYING?

Is there an assumption you are making that you might question?

HMW...

HOW MIGHT WE ELEVATE STUDENT'S' VOICES ABOUT WHAT THEY WANT TO STUDY?

How might you draw inspiration from an analogy?

HMW...

HOW MIGHT WE SEND JOE INTO THE FUTURE TO SEE WHERE HIS PATH NOW IS LEADING HIM?

Is there a specific aspect of this challenge that you want to focus on?

HMW...

HOW MIGHT WE CREATE EXPERIENCES THAT HELP JOE SEE THE CONNECTIONS BETWEEN WHAT HE IS LEARNING TODAY AND HIS FUTURE?

Rewrite your original HMW to focus on the holistic learning gaps learning outcomes.

HMW...

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

Rewrite your original HMW to focus on decreasing stress.

HMW...

HOW MIGHT WE INCREASE JOE'S HOPE FOR HIS FUTURE?

Rewrite your original HMW to focus on increasing joy.

HMW...

HOW MIGHT WE HELP JOE FEEL EXCITED ABOUT HIS FUTURE?

LAUNCH | EXPLORE | DEFINE 3 | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

"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 HMW that will meet your stakeholder's most important need. This can be built from your POV statement. Next, answer the prompts below and use your answers to create new HMW questions.

OBSERVATIONS & GUESSES | POINT OF VIEW | HMW QUESTIONS

POSSIBLE VERBS TO USE... help, encourage, motivate, empower, educate, create, provide, inspire, incentivize, prompt, remind, change, increase, decrease, challenge, restore, shift, ignite, spark, support, customize, develop, build, amplify, accelerate

HOW MIGHT WE... (VERB THAT IMPLIES CHANGE) + (STAKEHOLDER) + (OPPORTUNITY)?
How might we help Maria prepare for her day while walking to school?

If the HMW question feels too big and overwhelming, ask yourselves: What's stopping us from meeting this need?

Then, rewrite the HMW around what you identified as a barrier.

If the HMW question feels too much like a solution, ask yourselves: Why would we want to do this?

Then rewrite the HMW around the motivation.

Is there something good about your school you might make better?

HMW...

Is there something negative at the school that you might improve?

HMW...

Is there an assumption you are making that you might question?

HMW...

How might you draw inspiration from an analogy?

HMW...

Is there a specific aspect of this challenge that you want to focus on?

HMW...

Rewrite your original HMW to focus on the holistic learning gaps learning outcomes.

HMW...

Rewrite your original HMW to focus on decreasing stress.

HMW...

Rewrite your original HMW to focus on increasing joy.

HMW...

DEFINE TRANSITION SUMMARY

SUMMARY OF **DEFINE THE PROBLEM** PHASE

Use this **Define the Problem** summary page to gather up the work you completed during each phase of the process. Be thinking about 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.

TEAM WORKSHOP TOOLS

#1 Observations & Guesses

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

1.

2.

#2 Point of View Statement

What is the best POV statement you wrote?

_____

_____

[stakeholder]

is struggling with _____

_____

_____

[their problem]

because _____

_____

_____.

[why this matters]

She/He needs a way to _____

_____

_____.

[needs statement]

#3 How Might We Questions

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

1.

2.

3.

DEFINE TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?" and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

What is the POV statement your team will move forward?

_____

[stakeholder]

is struggling with

_____

[their problem]

because _____

_____.

[why this matters]

She/He needs a way to _____

_____.

[needs statement]

What are the three HMWs that are connected to the POV that your team will move forward?

1.

2.

3.

How does your team's POV statement and HMW questions connect to improving the holistic learning outcomes for your students?

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase of the challenge 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 you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
OBSERVATIONS & GUESSES ACTIVITY	The team cannot agree on the process of unpacking design research & inferring insights.	The team has some disagreements on the process of unpacking design research & inferring insights but feels comfortable moving forward.	The team is strongly aligned on the process of unpacking design research & inferring insights.
POINT OF VIEW ACTIVITY	The team cannot agree on the most important insights to create a POV statement around.	The team has some disagreements about the most important insights to create a POV statement around but feels comfortable moving forward.	The team is strongly aligned on what are the most important insights to create a POV statement around.
HMW QUESTIONS ACTIVITY	The team cannot agree on the most generative HMW questions.	The team has some disagreements on the most generative HMW questions but feels comfortable moving forward.	The team is strongly aligned on the most generative HMW questions.
PROJECT STATUS: DEFINITION OF PROBLEM	The team cannot agree on how to define the problem based on insights from the stakeholder.	The team has some disagreements on how to define the problem based on insights from the stakeholder but feels comfortable moving forward.	The team is strongly aligned on how to define the problem based on insights from the stakeholder.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	The team cannot agree on how the problem statement is connected to the goal of the holistic improving learning outcomes.	The team has some disagreements on how the problem statement is connected to the goal of improving the holistic learning outcomes but feels comfortable moving forward.	The team is strongly aligned on how the problem statement is connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

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 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?

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

GENERATE INTRODUCTION

OVERVIEW OF GENERATE SOLUTIONS PHASE

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

This is a collaborative process and should be completed in teams. These teams can be school-based or from other schools.

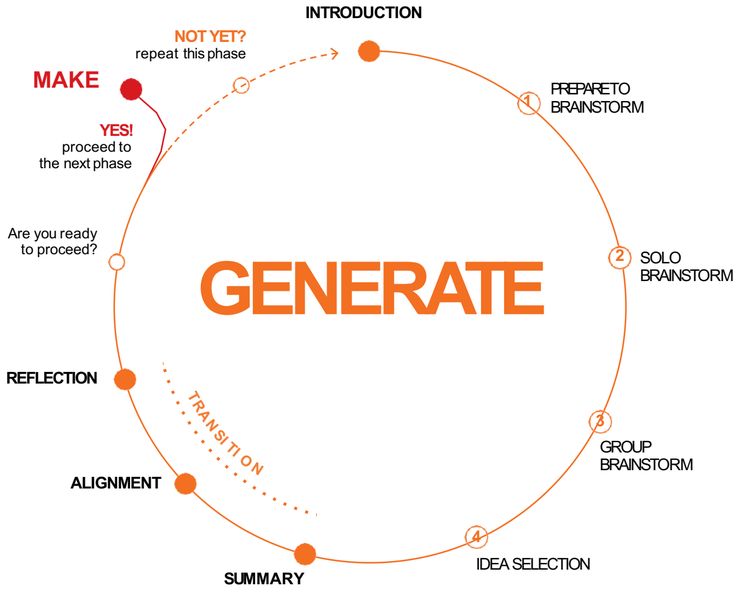
OBJECTIVES OF GENERATE SOLUTIONS PHASE

The goal of this phase is to use the POV statements and HMW 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
- Defer 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 Prepare to Brainstorm — 15 minutes to prepare

WHAT IS THIS TOOL?

Prepare to Brainstorm is a worksheet designed to help your team prepare to facilitate a collaborative brainstorm.

WHAT IS YOUR GOAL?

This tool can help you make meaning of the qualitative data you gathered through your design research activities.

#2 Solo Brainstorm — 15 minutes

WHAT IS THIS 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?

By first generating ideas on your own, this will help you share and build ideas as a team.

#3 Group Brainstorm — 45-60 minutes to brainstorm

WHAT IS THIS TOOL?

Group Brainstorm are worksheets designed to help your team capture ideas generated during your brainstorm.

WHAT IS YOUR GOAL?

Brainstoming as a team helps generate lots of solutions from different perspectives. It also helps you build upon the ideas of others to get to more innovative solutions.

#4 Idea Selection — 30 minutes

WHAT IS THIS TOOL?

Idea Selection is a worksheet designed to help you select the ideas you want to advance using specific criteria.

WHAT IS YOUR GOAL?

As a team you will need to identify one to four ideas you are planning to continue to develop through prototyping. This activity helps you reflect on which ideas are most likely to address the problem you are exploring.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Prepare to Brainstorm

Instructions: Now that you have explored and defined the problem, you are ready to brainstorm. Brainstorming is an active, collaborative process that will not be completed in this toolkit, but rather on the wall in your space. Use the guidelines below to help your team generate potential solutions to the problem you identified. If you do not have adequate wall space, you can collect ideas in this toolkit.

MATERIALS NEEDED...

- 3 HMW questions, each on written on the top of a separate piece of chart paper
- Wall space for 3 pieces of chart paper
- A timer
- 1 thick black marker (sharpie) per person
- 1 pad of square post-its per person
- 1 set of circular stickers per person
- Creative and collaborative brains!

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

BRAINSTORM PROCEDURES

1 PRE-BRAINSTORM

Set the Space

- As a team, choose your three best HMW questions you created from the previous section.
- Rewrite them each on a piece of separate chart paper in big enough handwriting 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 crowd around. If you do not have adequate wall space, collect your ideas in the following pages of the toolkit.
- Make sure every member of the team has a pad of square post-it notes and a thick black marker (sharpie).
- Set the timer for ten minutes.
- If you are not able to hang chart paper on the wall, use the *Group Brainstorm* page further in 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 BRAINSTORM

- Start with the first HMW question.
- Have everyone gather around that 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 or stopwatch.
- Everyone works 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 stick it on the chart paper while also saying it aloud. Don't explain or debate - just keep going.
- If you are running out of ideas, use the creativity prompts below.
- After the timer goes off, switch to another HMW question and repeat these steps.

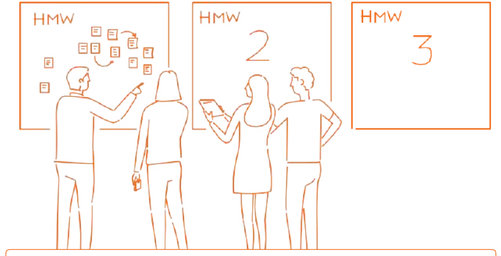
CREATIVITY PROMPTS

- 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 this problem if you had unlimited resources?
- How would you solve this problem tomorrow?

3 POST-BRAINSTORM

Sort & Select

- Once you have completed three rounds of brainstorming (one for each HMW question), take a few minutes and sort the ideas you have generated into groups. The HMW questions don't matter any more - you can group one idea from question #1 with another idea from question #3.
- 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 succeed at improving holistic learning outcomes (one vote)
  - Most likely to create learning opportunities (one vote)
- Have everyone stick their circular sticker on a specific post-it, not just a group.
- Once everyone has voted, take a step back and identify the three ideas with the highest number of votes.
- Take down those three ideas as well as the post-its that are clustered around those ideas. You will transfer these ideas into the Idea Selection page of the toolkit.



BRAINSTORMING TIPS

- Keep it high energy - play music and have everyone stand if possible.
- Practice being in an open-minded, optimistic mindset - we can do anything!
- Be sure that every idea is written down, said aloud and stuck to the wall.
- Refer to the Rules of Brainstorming if you get off-track.

Solo Brainstorm

Instructions: Before you begin brainstorming as a team, try to generate a few ideas on your own using the HMW questions you wrote. Don't forget the rules of brainstorming - hold yourself accountable to those rules as you come up with ideas. Once you have an idea, sketch in the box below. Sketching does not need to be a masterpiece, just a quick representation of you idea. Then, give your idea a title and describe it in detail. When you start your brainstorm as a team, have each person share their first three ideas in order to spark new thinking for the group.

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

1 HMW...

HELP JOE TO UNDERSTAND THE CONNECTIONS BETWEEN WHAT HE IS STUDYING TODAY AND HIS FUTURE?

SKETCH YOUR IDEA.

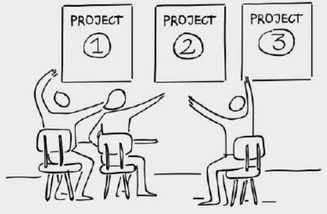
DESCRIBE YOUR IDEA IN 1-2 SENTENCES.
Who, what, where, when, why.

MATCH JOE WITH A MENTOR WHO WORKS IN A JOB JOE IS INTERESTED IN. THE MENTOR SHARES WITH JOE THE ACADEMIC SKILLS NEEDED TO DO THAT JOB.

2 HMW...

GIVE JOE MORE CHOICES ABOUT WHAT HE IS STUDYING?

SKETCH YOUR IDEA.



DESCRIBE YOUR IDEA IN 1-2 SENTENCES.
Who, what, where, when, why.

CREATE A CLASS WHERE JOE GETS TO TRY THREE DIFFERENT PROJECTS BASED ON HIS INTERESTS.

3 HMW...

ELEVATE STUDENTS' VOICES ABOUT WHAT THEY WANT TO STUDY?

SKETCH YOUR IDEA.

DESCRIBE YOUR IDEA IN 1-2 SENTENCES.
Who, what, where, when, why.

CREATE AN INTEREST SURVEY THAT STUDENTS COMPLETE SO THAT TEACHERS KNOW THEIR INTERESTS.

LAUNCH | EXPLORE | DEFINE | GENERATE 2 | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Solo Brainstorm

Instructions: Before you begin brainstorming as a team, try to generate a few ideas on your own using the HMW questions you wrote. Don't forget the rules of brainstorming - hold yourself accountable to those rules as you come up with ideas. Once you have an idea, sketch in the box below. Sketching does not need to be a masterpiece, just a quick representation of you idea. Then, give your idea a title and describe it in detail. When you start your brainstorm as a team, have each person share their first three ideas in order to spark new thinking for the group.

PREPARE TO BRAINSTORM | SOLO BRAINSTORM | GROUP BRAINSTORM | IDEA SELECTION

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

1 HMW...

SKETCH YOUR IDEA.

DESCRIBE YOUR IDEA IN 1-2 SENTENCES.
Who, what, where, when, why.

2 HMW...

SKETCH YOUR IDEA.

DESCRIBE YOUR IDEA IN 1-2 SENTENCES.
Who, what, where, when, why.

3 HMW...

SKETCH YOUR IDEA.

DESCRIBE YOUR IDEA IN 1-2 SENTENCES.
Who, what, where, when, why.

Group Brainstorm #1

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!

HMW... 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

JOE HAS AN APPRENTICESHIP AFTER SCHOOL

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

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 AND HIS TEACHER MEET ONE ON ONE TO DISCUSS HIS GOALS

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
- 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

LAUNCH | EXPLORE | DEFINE | GENERATE 3 | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Group Brainstorm #1

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!

PREPARE TO BRAINSTORM | SOLO BRAINSTORM | GROUP BRAINSTORM | IDEA SELECTION

HMW... _____

IDEA POST-IT

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

Group Brainstorm #2

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!

HMW... _____

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

Group Brainstorm #3

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!

HMW... _____

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 Selection

Instructions: Once you have sorted the ideas that your team generated during the brainstorm into groups, each individual person gets 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 decide as a group which idea to move forward.

MOST LIKELY TO DELIGHT THE STAKEHOLDER

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

IDEA POST-IT

Why do you think this idea will delight the stakeholder?

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

MOST LIKELY TO SUCCEED AT CLOSING LEARNING GAPS

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

IDEA POST-IT

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

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

MOST LIKELY TO CREATE LEARNING OPPORTUNITIES

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

JOE HAS AN APPRENTICESHIP AFTER SCHOOL

Why do you think this idea will create learning opportunities?

JOE WILL LEARN FROM HIS MENTOR ABOUT WHAT HE NEEDS TO BECOME AN EYE DOCTOR.

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

THIS WILL HELP JOE SEE THE CONNECTIONS BETWEEN WHAT HE IS LEARNING TODAY AND WHAT HE NEEDS TO KNOW IN THE FUTURE.

Why do you think this idea will create learning opportunities?

JOE WILL HAVE THE OPPORTUNITY TO LEARN ABOUT A JOB FROM AN EXPERT IN THE FIELD. BY PARTICIPATING IN AN APPRENTICESHIP, JOE WILL GET HANDS-ON EXPERIENCE AND WILL LEARN WHAT SKILLS HE WILL NEED IN THE FUTURE.

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

THE OPPORTUNITY FOR JOE TO PARTICIPATE IN AN APPRENTICESHIP WILL DIRECTLY HELP JOE MAKE CONNECTIONS BETWEEN WHAT HE IS LEARNING TODAY AND WHAT HE NEEDS FOR HIS FUTURE.

LAUNCH | EXPLORE | DEFINE | GENERATE 4 | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

Idea Selection

Instructions: Once you have sorted the ideas that your team generated during the brainstorm into groups, each individual person gets 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 decide as a group which idea to move forward.

PREPARE TO BRAINSTORM | SOLO BRAINSTORM | GROUP BRAINSTORM | IDEA SELECTION

MOST LIKELY TO DELIGHT THE STAKEHOLDER

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

IDEA POST-IT

Why do you think this idea will delight the stakeholder?

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

MOST LIKELY TO SUCCEED AT CLOSING LEARNING GAPS

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

IDEA POST-IT

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

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

MOST LIKELY TO CREATE LEARNING OPPORTUNITIES

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

IDEA POST-IT

Why do you think this idea will create learning opportunities?

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

HOLISTIC LEARNING OUTCOMES

Knowledge

Academic Proficiencies
- Reading
- Writing
- Speaking
- Mathematics
- Science
- Humanities

Interdisciplinary Proficiencies
- Technology and media
- Arts and culture
- Health and nutrition
- Leadership
- Civic engagement
- Entrepreneurship

Skills
- 21st Century Growth Mindset
- Critical thinking
- Problem solving
- Creativity
- Communication
- Collaboration

Values
- Pluralistic Dispositions
- Self-awareness
- Resilience
- Open mindedness
- Empathy
- Respect for diversity

Attitudes
- Ethical Dispositions
- Taking responsibility
- Relationship building
- Ethical decision making
- Reconciling tensions
- Self-efficacy
- Respect for the Environment

GENERATE TRANSITION SUMMARY

SUMMARY OF **GENERATE SOLUTIONS** PHASE

Use this **Generate Solutions** summary page to gather up the work you completed during each phase of the process. Be thinking about 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.

TEAM WORKSHOP TOOLS

#2 Solo Brainstorm

What are the three ideas you generated?

1.

2.

3.

#3 Group Brainstorm

What do you think are the three most exciting ideas that were generated?

1.

2.

3.

#4 Idea Selection

What are the three ideas you selected?

1. Most likely to delight the stakeholder:

2. Most likely to succeed at closing learning gaps:

3. Most likely to create learning opportunities:

GENERATE TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?" and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

As a team, select one idea to advance. Write it below.

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

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase 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 criteria at the bottom of the rubric, consider as a team the progress you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
PREPARE TO BRAINSTORM ACTIVITY	The team is not prepared to brainstorm.	The team has some hesitations about brainstorming but feels comfortable moving forward.	The team is strongly aligned and ready to brainstorm.
SOLO BRAINSTORM ACTIVITY	You were not able to generate any ideas.	You are not confident about the quality of the ideas you generated but feel comfortable moving forward.	You are confident about the quality of the ideas you generated.
IDEA SELECTION ACTIVITY	You were not able to select ideas that met the criteria. Your team was not able to agree on which idea to advance.	You are not confident about your reasons for selecting ideas but feel comfortable moving forward.	You are confident about the ideas you selected and why. Your team is aligned around which idea to advance.
PROJECT STATUS: QUALITY OF IDEAS	The team did not generate solutions that meet the stakeholder's need or they did not generate solutions that are new and novel.	The team has some disagreements about how much the ideas meet the needs of the stakeholders but feels comfortable moving forward.	The team generated solutions that both meet the needs of the stakeholders and are new and novel.
PROJECT STATUS: SORT & SELECT PROCESS	The team cannot agree on which ideas are the most promising to move forward based on the criteria given.	The team has some disagreements about which ideas are the most promising to move forward based on the criteria given but feels comfortable moving forward.	The team is strongly aligned on which ideas are the most promising to move forward based on the criteria given.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	The team cannot agree on if the solutions are connected to the goal of improving the holistic learning outcomes.	The team has some disagreements on if the solutions are connected to the goal of improving the holistic learning outcomes but feels comfortable moving forward.	The team is strongly aligned about whether the solutions are connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

GENERATE TRANSITION REFLECTION

REFLECTION ON PROCESS

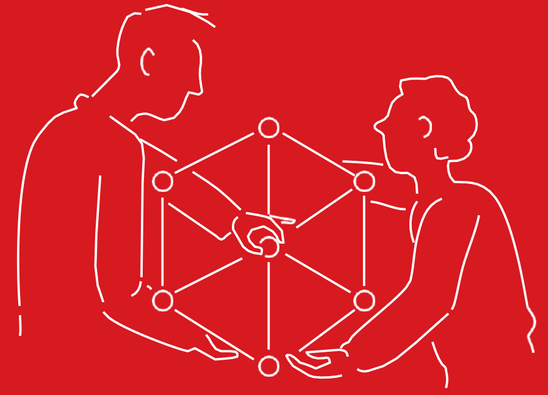
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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 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?

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.



MAKE

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL

SCHOOLS 2030 HUMAN-CENTERED DESIGN **TOOLKIT**

MAKE INTRODUCTION

n OVERVIEW OF MAKE YOUR PROTOTYPE PHASE

The worksheets in the **Make Your Prototype** phase are designed to help your team construct representations of your solutions. These representations are intended to elicit feedback, answer specific questions about a concept and test assumptions embedded in the ideas. This can be done in site-based teams or with other schools.

This phase of the design challenge will include: combining ideas into larger concepts, expanding your ideas with specific elements, surfacing the assumptions you are making with your solution, sketching out additional ideas and designing a prototype designed to test those assumptions.

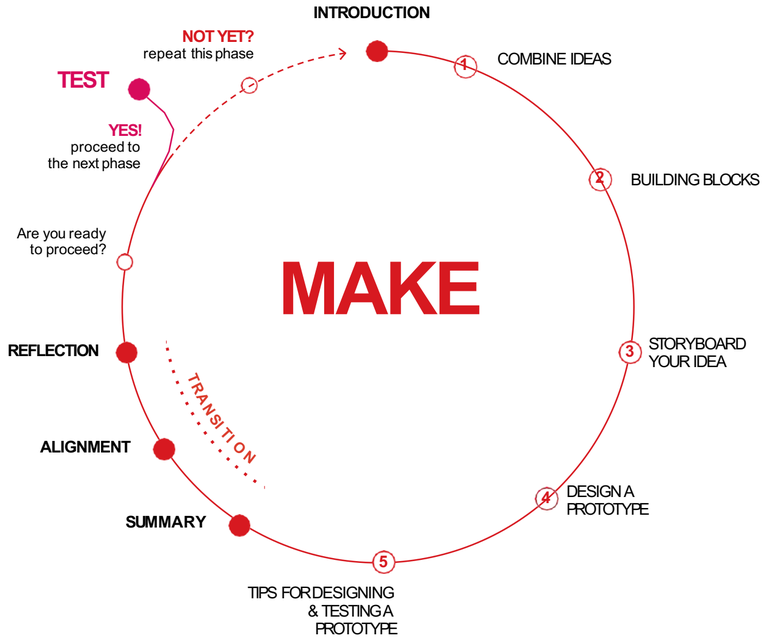
n OBJECTIVES OF MAKE YOUR PROTOTYPE PHASE

The goal of this phase is to get your design team aligned around what assumptions you are making about your solution so that you can design low-resolution prototypes (low time investment, low cost, small scale).

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

n MINDSETS OF MAKE YOUR PROTOTYPE 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 change
- Show don't tell
- Many cycles of prototyping are necessary to develop an idea



n TEAM WORKSHOP TOOLS

#1 Combine Ideas

WHAT IS THIS TOOL?
Combine Ideas is a worksheet designed to help identify ideas you've generated in your brainstorm in order to synthesize those ideas into a single concept.

WHAT IS YOUR GOAL?
This tool helps you cluster and combine ideas into a broader concept.

30 minutes to cluster and select, 15 minutes to combine

#2 Building Blocks

WHAT IS THIS TOOL?
Building Blocks is a worksheet designed to help your team identify all the elements of your idea that need to be developed.

WHAT IS YOUR GOAL? Your concept is more complex than a single post-it. Use this tool to help your develop your concept more fully by adding specific details.

30-45 minutes

#3 Storyboard Your Idea

WHAT IS THIS TOOL?
Storyboard Your Idea is a worksheet to help your team think through your idea in terms of a timeline. What happens at the beginning, the middle and then end?

WHAT IS YOUR GOAL?
By thinking through your idea in terms of a timeline, you will be able to further reflect on the assumptions you are making and generate new assumptions as well.

30-45 minutes

#4 Design a Prototype

WHAT IS THIS TOOL?
Design a Prototype is a worksheet designed to help 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 meet their need.

WHAT IS YOUR GOAL?
As you brainstorm, the ideas you generate are full of assumptions about why those ideas will solve your stakeholder's problem or meet their need. Your prototype needs to test those assumptions early in order to get authentic, relevant stakeholder feedback.

30-45 minutes

#5 Tips for Designing & Testing a Prototype

WHAT IS THIS TOOL?
Tips for Designing & Testing a Prototype is a worksheet designed to help your team prepare to design and test the assumptions you are making about why your idea will meet the needs of your stakeholder.

WHAT IS YOUR GOAL?
As you brainstorm, the ideas you generate are full of assumptions about why those ideas will solve your stakeholder's problem or fill their need. Designing and testing a low investment, low risk prototype will help you test those assumptions and make changes to your idea before you implement it at scale.

15 minutes

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Combine Ideas

Instructions: First your group needs to select the most promising idea from all the ideas selected to advance. Next, let's look at all the similar ideas you generated during the entire brainstorm. Review those ideas and look for any related ideas that could be combined together to support the idea your team 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 HAS A MENTOR

JOE GETS A PAID JOB

JOE LEARNS ABOUT NEW CAREERS

SELECTED IDEA POST-IT

JOE HAS AN APPRENTICESHIP AFTER SCHOOL

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

AFTER SCHOOL CAREER EXPLORATION PROGRAM

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE 1 | TEST | ITERATE | TEST | IMPLEMENT | TELL

Combine Ideas

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

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE | TIPS FOR DESIGNING & TESTING A PROTOTYPE

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

30 minutes to cluster and select, 15 minutes to combine

RELATED IDEA POST-IT

SELECTED IDEA POST-IT

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

Building Blocks

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. Be specific 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.

Place the post-it with your idea here.

AFTER SCHOOL CAREER EXPLORATION PROGRAM

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

RITUALS
What specific behaviors or actions that happen routinely to mark a specific moment might need to be created?

TIME
How might the allocation if time need to change for this idea?

EVERY WEDNESDAY AFTER SCHOOL STUDENTS WILL ATTEND THE PROGRAM

POLICY
What policies would need to shift or be created?

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

MESSAGES WILL BE SENT HOME ABOUT WHAT STUDENTS ARE LEARNING IN THE PROGRAM

BUDGET
How might money need to be allocated for this idea?

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

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 for this idea?

ASSUMPTIONS
What beliefs do you have about why this idea will meet your stakeholders' needs? Will the students respond positively? Why? Will the intervention improve learning outcomes? How?

- **JOE IS INTERESTED IN AN AFTER SCHOOL PROGRAM.**
- **JOE HAS CAREER INTERESTS HE CAN SHARE WITH THE PROGRAM MANAGER.**
- **IF JOE PARTICIPATES IN AN APPRENTICESHIP HE WILL HAVE MORE SELF-EFFICACY**
- **AN APPRENTICESHIP WILL HELP JOE MAKE CONNECTIONS TO HIS FUTURE**

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE 2 | TEST | ITERATE | TEST | IMPLEMENT | TELL

Building Blocks

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. Be specific 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.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE | TIPS FOR DESIGNING & TESTING A PROTOTYPE

Place the post-it with your idea here.

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

RITUALS
What specific behaviors or actions that happen routinely to mark a specific moment might need to be created?

TIME
How might the allocation if time need to change for this idea?

POLICY
What policies would need to shift or be created?

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What new forms of communication will need to take place?

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How might money need to be allocated for this idea?

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

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

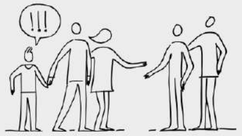
OBJECTS/PRODUCTS/TOOLS
What new artifacts or objects might need to be created for this idea?

ASSUMPTIONS
What beliefs do you have about why this idea will meet your stakeholders' needs? Will the students respond positively? Why? Will the intervention improve learning outcomes? How?

Storyboard Your Idea

Instructions: 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 phase 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 WOULD BE ABLE TO ATTEND A RECRUITMENT EVENT.
JOE IS INTERESTED IN AN AFTERSCHOOL PROGRAM.

DURING EXPERIENCE, PHASE 2

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

WELCOME EXPERIENCE

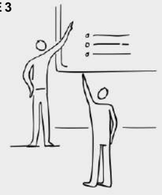
THE KICK-OFF OF THE PROGRAM HAPPENS ON A WEDNESDAY AFTER SCHOOL. STUDENTS COME TO GET ORIENTED TO THE PROGRAM.

ASSUMPTIONS:

JOE IS ABLE TO ATTEND APPRENTICESHIP MEETINGS AFTER SCHOOL.

DURING EXPERIENCE, PHASE 3

JOE LEARNS FROM HIS MENTOR ABOUT THE SKILLS REQUIRED FOR THE JOB



ASSUMPTIONS:

AN APPRENTICESHIP WILL HELP JOE MAKE CONNECTIONS TO HIS FUTURE

DURING EXPERIENCE, PHASE 1

JOE SHARES HIS CAREER GOALS WITH THE PROGRAM MANAGER.

ASSUMPTIONS:

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

POST-EXPERIENCE

AT THE END OF THE PROGRAM, JOE REFLECTS AND SHARES ABOUT WHAT HE LEARNED

ASSUMPTIONS:

IF JOE PARTICIPATES IN AN APPRENTICESHIP HE WILL HAVE MORE SELF-EFFICACY

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE 3 | TEST | ITERATE | TEST | IMPLEMENT | TELL

Storyboard Your Idea

Instructions: 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 phase of the experience that is most relevant. Generate new assumptions as well.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE | TIPS FOR DESIGNING & TESTING A PROTOTYPE

PRE-EXPERIENCE

ASSUMPTIONS:

WELCOME EXPERIENCE

ASSUMPTIONS:

DURING EXPERIENCE, PHASE 1

ASSUMPTIONS:

DURING EXPERIENCE, PHASE 2

ASSUMPTIONS:

DURING EXPERIENCE, PHASE 3

ASSUMPTIONS:

POST-EXPERIENCE

ASSUMPTIONS:

Design a Prototype

Instructions: Now that you have developed your idea, it is time to get ready to test it with stakeholders. Before we implement an 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. Take the assumptions you generated in the second activity and as a team select the three most important assumptions to test. Design prototypes to test those assumptions. These prototypes are small-scale: they should involve a small number of students (or other stakeholders), and require only a short amount of time, both to prepare and implement.

ASSUMPTIONS:

JOE IS INTERESTED IN AN AFTER SCHOOL PROGRAM.

ASSUMPTIONS:

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

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

?

PROTOTYPE 1:

What will you do?

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

What are you trying to learn?

WILL JOE COME? DOES HE EXPRESS INTEREST IN LEARNING ABOUT CAREERS? DOES HE HAVE IDEAS FOR HIS FUTURE ALREADY?

How will you make sense of what happened?

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

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?

?

PILOT

Once you have completed your prototypes, you will combine ideas into a pilot that is bigger in size, time and resources. We will focus on this during the implementation phase.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE 4 | TEST | ITERATE | TEST | IMPLEMENT | TELL

Design a Prototype

Instructions: Now that you have developed your idea, it is time to get ready to test it with stakeholders. Before we implement an 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. Take the assumptions you generated in the second activity and as a team select the three most important assumptions to test. Design prototypes to test those assumptions. These prototypes are small-scale: they should involve a small number of students (or other stakeholders), and require only a short amount of time, both to prepare and implement.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE | TIPS FOR DESIGNING & TESTING A PROTOTYPE

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

?

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?

?

PILOT

Once you have completed your prototypes, you will combine ideas into a pilot that is bigger in size, time and resources. We will focus on this during the implementation phase.

Tips for Designing & Testing Prototypes

Instructions: Once you have generated an idea, it is time to test the assumptions behind the idea about why the solution is going to meet the needs of your stakeholder. We test these assumptions through prototypes - rapid, simple experiments that do not require a lot of resources.

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 those questions.
- Good prototypes do not require a lot of time 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 size 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. Then move to testing the solution with the entire grade level.
- By starting small to test assumptions and get information about whether your idea will meet the need of the stakeholder, you are giving yourself room to have an idea fail or need major changes before you proceed. When you launch an initiative at scale, you have less room to pivot or change course.
- 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 mocking up an idea, take your small scale prototype to real stakeholders to try out.
- Prototyping is different than piloting an idea. Prototyping is about answering questions about the idea itself and how it will impact the stakeholder. Piloting is about figuring out how an idea will work once it is at scale.

LAUNCH EXPLORE DEFINE GENERATE MAKE 5 TEST ITERATE TEST IMPLEMENT TELL

2 TESTING A PROTOTYPE

- Be sure to focus your prototype around the questions you are trying to answer.
- Think carefully about who will test your prototype. Think about the stakeholder groups you need to engage. Think about those stakeholders who are underrepresented.
- Use the tools in this phase to make a plan for what will happen, what you need and who will help you test your prototype.
- After you test your protoype, 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 meet a need they have? Why or why not?
  - Be sure to ask them 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, low investment experiments.

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 those things grow into a full solution?
  - What didn't work about your prototype? What will you do to make changes?
  - What new questions arose 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 those ideas into the next iteration of your prototype?
- Think about how your prototype will meet the needs of your stakeholders. Think back to your Point of View statement and reflect on how your idea will meet the need you identified.

MAKE TRANSITION SUMMARY

SUMMARY OF MAKE YOUR PROTOTYPE PHASE

Use this **Make Your Prototype** summary page to gather up the work you completed during each phase of the process. Be thinking about 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.

TEAM WORKSHOP TOOLS

#1 Combine Ideas

What is the new solution you generated?

#2 Building Blocks

What are the three most important assumptions you generated?

1.

2.

3.

#3 Storyboard Your Idea

What are the three most important moments in the experience your solution creates?

1.

2.

3.

#4 Design a Prototype

What are the three most important logistics to consider?

1.

2.

3.

MAKE TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?"and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

What are the two assumptions that your team wants to test through prototyping?

1.

2.

Describe the prototype your team will develop:

What will you do?

What are you trying to learn?

How will you make sense of what happened?

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

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase of the challenge 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 you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
COMBINE IDEAS ACTIVITY	The team cannot agree on how to combine ideas into a single concept.	The team has some disagreements on how to combine ideas into a single concept but feels comfortable moving forward.	The team is strongly aligned on how to combine ideas into a single concept.
BUILDING BLOCKS ACTIVITY	You are struggling to develop your idea further and/or you are struggling to surface the assumptions you are making.	You are struggling to develop your idea further and/or you are struggling to surface the assumptions you are making but are making progress.	You are feeling confident about developing your idea further and are confident surfacing the assumptions you are making.
STORYBOARD YOUR IDEA ACTIVITY	You and the team are struggling to describe your idea in terms of a timeline.	You and the team are not confident in your storyboard, but feel comfortable moving forward.	You and the team can confidently describe your idea in terms of a timeline of events. You have successfully identified the assumptions you are making.
DESIGN A PROTOTYPE ACTIVITY	You and the team are struggling to design a small, low resolution prototype to test the assumptions they are making,	You and the team are unsure if the prototype is going to test the assumptions you are making, but you feel comfortable moving forward.	You and the team have confidently designed low resolution prototypes that will effectively test the assumptions you are making.
PROJECT STATUS: QUALITY OF THE PROTOTYPE	The prototypes that were designed are not low resolution and/or will not effectively test the assumptions embedded in the idea.	There is some concern if the prototype is low resolution enough and/or will not effectively test the assumptions embedded in the idea, but you feel comfortable moving forward.	You and the team are confident that the prototypes are low resolution and will effectively test the assumptions embedded in the idea.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	The team cannot agree on how the solution being prototyped is connected to the goal of improving the holistic learning outcomes.	The team has some disagreements on how the solution being prototyped is connected to the goal of improving the holistic learning outcomes but feels comfortable moving forward.	The team is confident that the solutions being prototyped is connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

MAKE TRANSITION REFLECTION

REFLECTION ON PROCESS

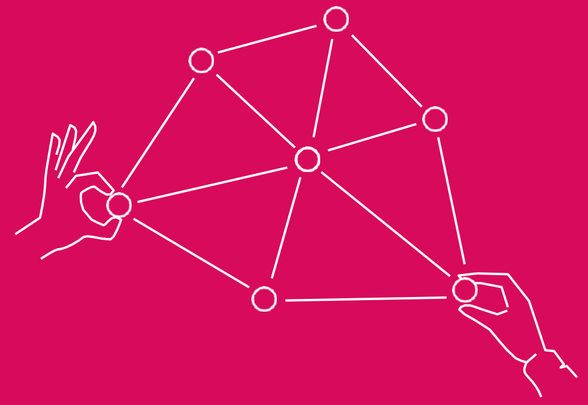
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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 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?

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.



TEST

TEST INTRODUCTION

n OVERVIEW OF **TEST YOUR PROTOTYPE** PHASE

The worksheets in the **Test Your Prototype** phase are designed to help you construct tangible tests of your solutions. These tests are intended to elicit feedback, answer specific questions about a concept and test assumptions embedded in the ideas. The work of these workshops can be done collaboratively with school-based teams or other schools. Prototyping will be conducted by individual educators.

This phase of the design challenge will include: preparing you to test your prototype and reflect on what you learned, evaluating your idea based on the stakeholder's needs and determining the best next steps.

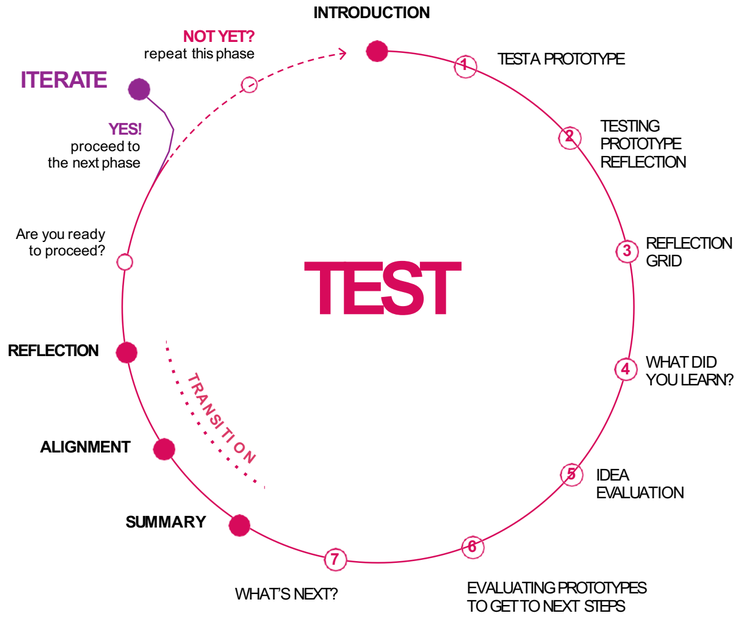
n OBJECTIVES OF **TEST YOUR PROTOTYPE** PHASE

The goal of this phase is to test your low-resolution prototype with stakeholders to get authentic feedback.

At the end of this phase, you should be clear about whether the solution you brainstormed has the potential to meet the needs you identified in your POV statement. You should also have a clear sense of how you want to iterate your next prototype.

n MINDSETS OF **TEST YOUR PROTOTYPE** 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 change
- Show don't tell
- Many cycles of prototyping are necessary to develop an idea
- Feedback is a gift to improve your ideas



n TEAM WORKSHOP TOOLS

#1 Test a Prototype — *30 minutes to prepare, 1-2 hours to test a prototype*

WHAT IS THIS TOOL?
The **Test a Prototype** worksheet is designed to help you plan the logistics of testing your prototypes.

WHAT IS YOUR GOAL?
Testing prototypes requires a little bit of planning. This tool helps you think through those logistics.

n INDIVIDUAL FIELDWORK TOOLS

#2 Testing Prototype Reflection — *30-45 minutes per prototype*

WHAT IS THIS TOOL?
Testing Prototype Reflection is a worksheet designed to help you to prepare to test your prototype and then reflect on what you learned from testing your prototype.

WHAT IS YOUR GOAL?
Use this tool to help you get ready to test your prototype and then capture what you learned from testing.

#3 Reflection Grid — *30-45 minutes per prototype*

WHAT IS THIS TOOL?
The **Reflection Grid** is a worksheet designed to help you make sense of what you learned from testing your prototype.

WHAT IS YOUR GOAL?
The primary goal of testing a prototype is to reflect and learn about your idea and whether it meets the needs of the stakeholder or not. Use this tool to capture what you learned from testing.

#4 What Did You Learn? — *30-45 minutes*

WHAT IS THIS TOOL?
The **What Did You Learn?** worksheet asks you to reflect on what assumptions you are making about why your idea will solve your stakeholder's problem. This tool also asks you to continue to iterate based on what you learn from your testing.

WHAT IS YOUR GOAL?
When you have completed this tool, you will have clarity on how you are going to test the assumptions embedded in your solution.

n TEAM WORKSHOP TOOLS

#5 Idea Evaluation — *30-45 minutes*

WHAT IS THIS TOOL?
Idea Evaluation is a worksheet designed to help you to evaluate your prototype based on your stakeholder testing.

WHAT IS YOUR GOAL?
As you continue to work through the design challenge, it is important to continue to revisit your original stakeholder's POV and ask how well your solution will improve the holistic learning outcomes for students.

#6 Evaluating Prototypes to Get to Next Steps — *30-45 minutes*

WHAT IS THIS TOOL?
Evaluating Prototypes to Get to Next Steps is a worksheet designed to help your team identify what your best next steps are in terms of iterating on your concept.

WHAT IS YOUR GOAL?
When you have completed this tool, you will have good insight into what the best next steps are for the next iteration of your idea.

#7 What's Next? — *30-45 minutes*

WHAT IS THIS TOOL?
The **What's Next?** worksheet asks you to reflect on where you are in your design challenge and what your next steps should be.

WHAT IS YOUR GOAL?
Human-centered design is not a linear process. You may find that you need to return to the Explore the Problem phase of the process after you test an initial prototype. You may also choose to continue to develop your concept through prototyping.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Test a Prototype

Instructions: Now that you've decided what prototype you want to conduct in order to test your assumptions, use this worksheet to help you plan the testing your prototype. Remember, a good prototype involves a small number of stakeholders and requires little time to prepare and implement.

1 WHAT ASSUMPTIONS WILL YOU BE TESTING WITH YOUR PROTOTYPE?

JOE IS INTERESTED IN AN AFTER SCHOOL PROGRAM.

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

2 GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO HAVE PARTICIPATE IN YOUR PROTOTYPE.

JOE &TEN OTHER MIDDLE SCHOOL STUDENTS

3 WHO MIGHT HELP YOU TEST THE PROTOTYPE?

THREE 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 AN OVAL 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

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST 1 | ITERATE | TEST | IMPLEMENT | TELL

Test a Prototype

Instructions: Now that you've decided what prototype you want to conduct in order to test your assumptions, use this worksheet to help you plan the testing your prototype. Remember, a good prototype involves a small number of stakeholders and requires little time to prepare and implement.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION | EVALUATING PROTOTYPES | WHAT'S NEXT?

1 WHAT ASSUMPTIONS WILL YOU BE TESTING WITH YOUR PROTOTYPE?

2 GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO HAVE PARTICIPATE IN YOUR PROTOTYPE.

3 WHO MIGHT HELP YOU TEST THE PROTOTYPE?

4 WHERE WILL YOU TEST THE PROTOTYPE?

5 HOW WILL YOU SET UP THE SPACE?

6 WHAT MATERIALS WILL YOU NEED?

7 ANYTHING ELSE YOU NEED TO PREPARE?

8 WHAT ARE THE STEPS THAT YOU NEED TO COMPLETE IN ORDER TO TEST YOUR PROTOTYPE?

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

Testing a Prototype Reflection

Instructions: First, identify the assumptions you have designed your prototype to test. Next, write debrief 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?

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

What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?

WOULD YOU BE INTERESTED IN A REGULAR CAREER EXPLORATION PROGRAM AFTER SCHOOL? DID YOU LEARN ABOUT A CAREER THAT INTERESTS YOU TODAY? WHAT ARE YOU GOALS FOR YOUR CAREER?

2 ASSUMPTION

What is the assumption that this prototype is designed to test?

What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?

TEST YOUR PROTOTYPE!

PROTOTYPE TESTING NOTES

What did you hear?
Write down specific quotations. Listen for stories, emotions, motivations and behaviors. Listen for surprising or contradictory information.

JOE DOES HAVE A CAREER GOAL - HE WANTS TO BE A DOCTOR.

What did you see?
Look for emotions (sadness, excitement, joy) in the person's body language and facial expressions.

JOE WAS VERY ENGAGED WHEN HE WAS TALKING TO A SCIENTIST WHO CAME TO SPEAK AT THE CAREER FAIR.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST 2 | ITERATE | TEST | IMPLEMENT | TELL

Testing a Prototype Reflection

Instructions: First, identify the assumptions you have designed your prototype to test. Next, write debrief questions that you will ask the person who is testing your prototype. Take notes on what you learn from that person.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION | EVALUATING PROTOTYPES | WHAT'S NEXT?

1 ASSUMPTION

What is the assumption that this prototype is designed to test?

What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?

2 ASSUMPTION

What is the assumption that this prototype is designed to test?

What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?

TEST YOUR PROTOTYPE!

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.

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.

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

+ △

? !

MATCH STUDENTS BASED ON PERSONAL CONNECTION RATHER THAN CAREERS

HELP MENTORS BUILD SKILLS AROUND CONNECTING WITH YOUNG PEOPLE

COULD WE CREATE A TRAINING FOR MENTORS?

QUESTIONS
What did you see that raised questions for you?

IDEAS
What ideas came to you as you observed?

Reflection

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.

LIKES
What did you see that is working well?

CHANGES
What did you see that is not working well?

+ △

? !

QUESTIONS
What did you see that raised questions for you?

IDEAS
What ideas came to you as you observed?

What did you learn?

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?

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?

ENSURE THERE ARE ALWAYS GET TO KNOW YOU ACTIVITIES FOR THE STUDENTS AND MENTORS

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?

TRY HAVING THESE MEETINGS AFTER SCHOOL AT THE MENTOR'S WORKPLACE.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST 4 | ITERATE | TEST | IMPLEMENT | TELL

What did you learn?

Instructions: Reflect on what assumptions you tested, what you learned and how you will iterate on your idea.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION | EVALUATING PROTOTYPES | WHAT'S NEXT?

1 ASSUMPTION
What was the assumption that this prototype was designed to test?

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?

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

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 well your solution will increase learning outcomes for students.

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 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?

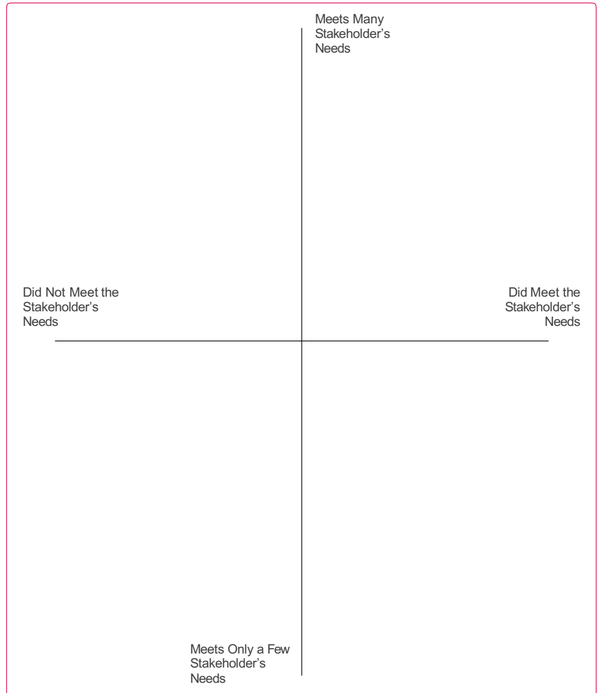
I BELIEVE THE AFTER SCHOOL CAREER EXPLORATION PROGRAM WILL HELP STUDENTS TO DEVELOP CAREER GOALS FOR THEMSELVES WHICH WILL IN TURN HELP THEM TO ADVOCATE FOR THEIR GOALS AND BECOME MORE SELF-EFFICACIOUS.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST 5 | ITERATE | TEST | IMPLEMENT | TELL

Idea Evaluation

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 well your solution will increase learning outcomes for students.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION | EVALUATING PROTOTYPES | WHAT'S NEXT?

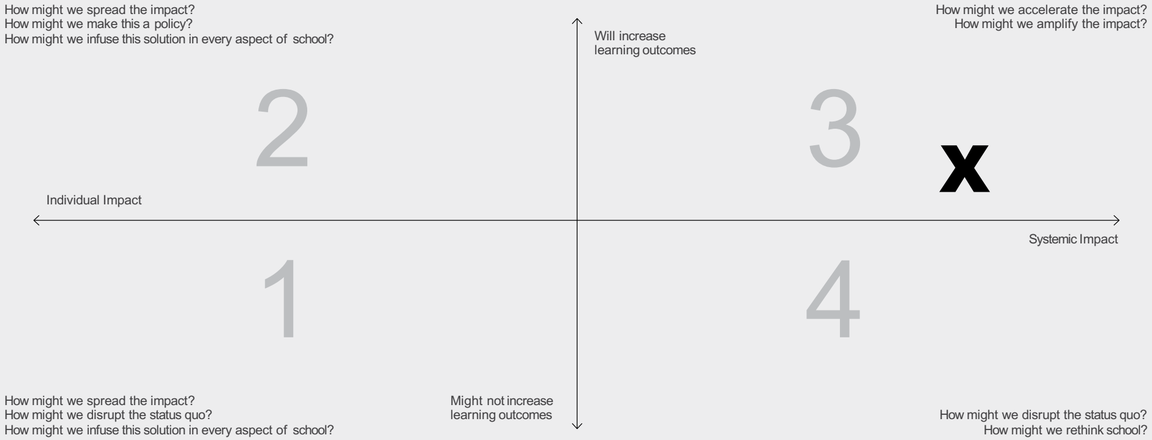


1 After reflecting on the test of your prototype, how do you think your idea aligns with your POV statement? Why?

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

Instructions: Use the worksheet to reflect on how well your idea will increase the holistic learning outcomes for students across the school. Based on where you place your idea, think about next steps.



BOX 1? If you landed in Box 1, you need to keep brainstorming or return to the other ideas you generated during your first brainstorm. You might also consider conducting more design research before preparing to brainstorm. You can also write HMW questions focused on scaling up as well as disrupting the status quo.

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

BOX 3? If you landed in Box 3, it is time to further develop your concept. Begin to think about what kind of initiative you want to start.

WE NEED TO CONTINUE TO PROTOTYPE TO THAT WE ENSURE THAT THE AFTERSCHOOL PROGRAM INCREASES STUDENTS' SELF EFFICACY

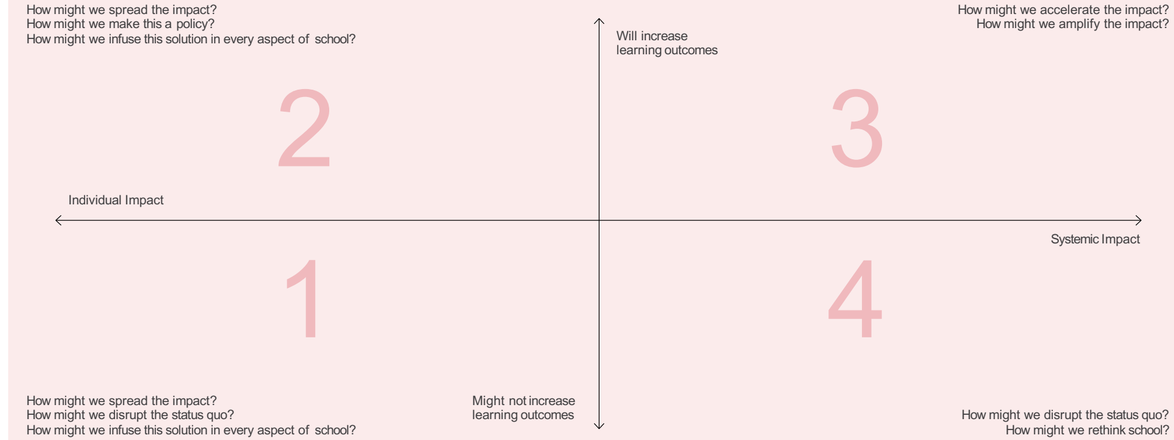
BOX 4? If you landed in Box 4, you need to keep brainstorming or return to the other ideas you generated during your first brainstorm. You might also consider conducting more design research before preparing to brainstorm. You can also write HMW questions focused on disrupting the status quo.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST 6 | ITERATE | TEST | IMPLEMENT | TELL

Evaluating Prototypes to Get to Next Steps

Instructions: Use the worksheet to reflect on how well your idea will increase the holistic learning outcomes for students across the school. Based on where you place your idea, think about next steps.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION | EVALUATING PROTOTYPES | WHAT'S NEXT?



BOX 1? If you landed in Box 1, you need to keep brainstorming or return to the other ideas you generated during your first brainstorm. You might also consider conducting more design research before preparing to brainstorm. You can also write HMW questions focused on scaling up as well as disrupting the status quo.

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

BOX 3? If you landed in Box 3, it is time to further develop your concept. Begin to think about what kind of initiative you want to start.

BOX 4? If you landed in Box 4, you need to keep brainstorming or return to the other ideas you generated during your first brainstorm. You might also consider conducting more design research before preparing to brainstorm. You can also write HMW questions focused on disrupting the status quo.

What's Next?

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.

1

"I'm ready to implement!"

X "I'm still exploring."

"I'm stuck..."

2

Why?

WE ARE NOT YET SURE THAT THIS CAREER EXPLORATION PROGRAM INCREASE STUDENT SELF EFFICACY AND ENGAGEMENT AT SCHOOL

3

What should I do next?

- Secondary research
- Interview more people
- Generate new ideas
- X 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

5

Make a recommendation for next steps for your team.

INTERVIEW STUDENTS WHO HAVE PARTICIPATE IN PROTOTYPES

CREATE 2-3 APPRENTICESHIP PROTOTYPES

DEBRIEF WITH

PARTICIPATE IN THOSE PROTOTYPES

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST 7 | ITERATE | TEST | IMPLEMENT | TELL

What's Next?

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.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION | EVALUATING PROTOTYPES | WHAT'S NEXT?

1

"I'm ready to implement!"

"I'm still exploring."

"I'm stuck..."

2

Why?

3

What should I do next?

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

4

Why?

5

Make a recommendation for next steps for your team.

TEST TRANSITION SUMMARY

SUMMARY OF TEST YOUR PROTOTYPE PHASE

Use this **Test Your Prototype** summary page to gather up the work you completed during each phase of the process. Be thinking about 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.

TEAM WORKSHOP TOOLS

#1 Test a Prototype

What are the most important logistics to consider for your prototype?

#3 Reflection Grid

What are the most important insights that you identified from your reflection?

INDIVIDUAL FIELDWORK TOOLS

#2 Testing Prototype Reflection

What are the three most important things you learned from testing your prototype?

1.

2.

3.

#4 What Did You Learn?

What are the most important changes you want to make to your idea?

TEAM WORKSHOP TOOLS

#5 Idea Evaluation

After reflecting on how your prototype went, how do you think your idea aligns with your POV statement? Why?

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

#6 Evaluating Prototypes to Get to Next Steps

What is your evaluation of your prototype?

#7 What's Next?

What is the best next step for your design work?

TEST TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?" and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

As a team, select one idea to advance. Write it below.

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

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase 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 criteria at the bottom of the rubric, consider as a team the progress you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
TEST A PROTOTYPE ACTIVITY	You are struggling to plan the timeline and logistics related to testing your prototype.	You are hesitant about your plan to test your prototype but you feel comfortable moving forward.	You feel confident about your plan to test your prototype.
TESTING PROTOTYPE REFLECTION & REFLECTION GRID ACTIVITY	You did not test your prototype and/or you did not complete the Testing Prototype Reflection or Reflection Grid.	You tested your prototype and completed the reflection but was not able to gain insights into testing the assumptions you identified.	You tested your prototype and completed the reflections and gained strong new insights into how your prototype will meet the needs of your stakeholders.
WHAT DID YOU LEARN? ACTIVITY	You are struggling to identify the assumptions you need to test and how to test them.	You are hesitant about the assumptions you have identified and will work to improve them.	You feel confident identifying the assumptions you need to test and how to test them.
IDEA EVALUATION ACTIVITY	You are struggling to evaluate your idea against your POV statement and your goals of improving the holistic learning outcomes.	You are hesitant about your evaluation of your idea and will work to improve it.	You are confident in your evaluation of your idea against your POV statement and your goals of improving the holistic learning outcomes.
EVALUATING PROTOTYPES ACTIVITY	You are struggling to evaluate your prototype to identify your next steps.	You are hesitant about your evaluation of your prototype and will work to improve it.	You are confident in your evaluation of your prototype and your next steps.
WHAT'S NEXT? ACTIVITY	You are struggling to identify your next steps and why.	You are hesitant about your next steps but feel comfortable moving forward.	You are confident in your next steps for your next iteration.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	You do not feel confident that your solution is connected to the goal of improving the holistic learning outcomes.	You are hesitant about how your solution is connected to the goal of improving the holistic learning outcomes and are working to improve it.	You are confident that your solution is connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

REFLECTION ON PROCESS

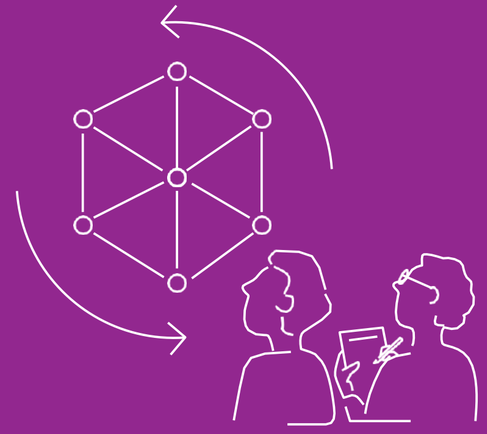
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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?

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.



ITERATE

ITERATE INTRODUCTION

n OVERVIEW OF ITERATE PHASE

The worksheets in the **Iterate** phase will help you advance your solution through another round of low-resolution prototypes. This can be done in school-based teams or with other schools.

This phase of the design challenge will include: combining ideas from your reflection about your first round of prototypes into larger concepts, expanding your ideas with specific elements, identifying the assumptions you are making with your solution and making a prototype to test those assumptions.

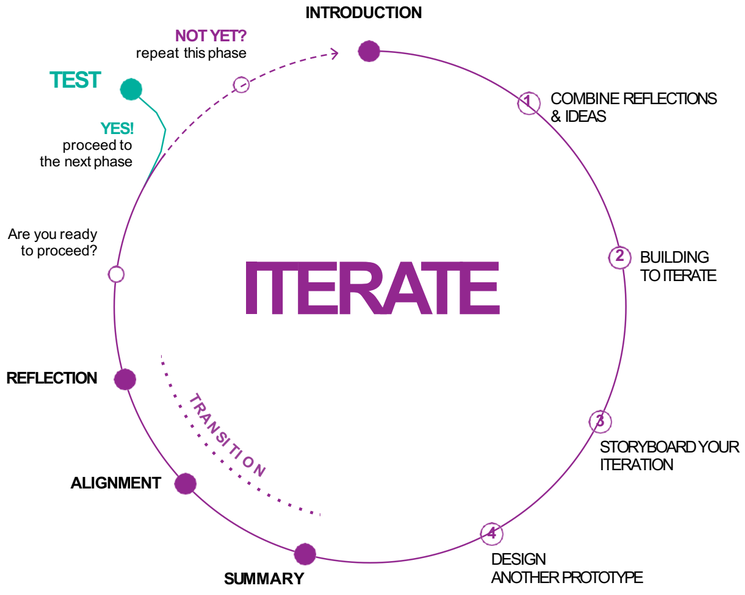
n OBJECTIVES OF ITERATE PHASE

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 solution. From there, you will design low-resolution prototypes (low time investment, low cost, small scale).

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

n MINDSETS OF ITERATE 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
- Show don't tell
- Many cycles of prototyping are necessary to develop an idea



n TEAM WORKSHOP TOOLS

#1 Combine Reflections & Ideas — *30-45 minutes*

WHAT IS THIS TOOL?
Combine Reflections & Ideas is a worksheet designed to help you combine ideas from your first round of testing in order to advance your solution.

WHAT IS YOUR GOAL?
This tool helps you group and combine new ideas into a broader concept.

#2 Building to Iterate — *30-45 minutes*

WHAT IS THIS TOOL?
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 IS YOUR GOAL?
Your concept is more complex than a single post-it. Use this tool to help your develop your concept more fully.

#3 Storyboard Your Iteration — *30-45 minutes*

WHAT IS THIS TOOL?
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 then end?

WHAT IS YOUR GOAL?
By thinking through your idea in terms of a timeline, you will be able to further reflect on the assumptions you are making and generate new assumptions as well.

#4 Design Another Prototype — *30-45 minutes*

WHAT IS THIS TOOL?
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 meet their need.

WHAT IS 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.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Combine Reflections & Ideas

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 solutions. 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

JOE HAS CAREER INTERESTS BUT THE RELATIONSHIP WAS MOST IMPORTANT

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

CAREER MENTORS

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE 1 | TEST | IMPLEMENT | TELL

Combine Reflections & Ideas

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 solutions. If you stay with your original idea, push it to be bolder or larger-scale.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE

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

REFLECTION/IDEA POST-IT

REFLECTION/IDEA POST-IT

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

Building to Iterate

Instructions: Now that you've tested a prototype, use what you learned to iterate. You might decide to expand upon your first idea. In your next round of prototypes, think about pushing your idea to be bolder and more innovative. Or, you might explore how to design your prototype to reach more students. Below are nine categories to help you think about the variety of elements that will make up a potential prototype. Be specific and add detail. After you've expanded the idea, reflect on the assumptions you made in your planning. If you are starting with a new idea, answer the second set of questions about your assumptions.

Place the post-it with your idea here.

CAREER MENTORS

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

THERE WILL BE AN EVENT WHERE STUDENTS MEET MENTORS TO GET MATCHED WITH

RITUALS
What specific behaviors or actions that happen routinely to mark a specific moment might need to be created?

THE STUDENTS AND MENTORS WILL PLAY GET TO KNOW YOU GAMES

TIME
How might the allocation if time need to change for this idea?

THIS KICK OFF EVENT WILL HAPPEN ON A SATURDAY

POLICY
What policies would need to shift or be created?

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

WE WILL COMMUNICATE THE MATCHES TO PARENTS

BUDGET
How might money need to be allocated for this idea?

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

THIS WILL TAKE PLACE AT THE SCHOOL

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

WE WILL NEED A PROGRAM MANAGER TO MAKE THE MATCHES

OBJECTS/PRODUCTS/TOOLS
What new artifacts or objects might need to be created for this idea?

ASSUMPTIONS
What beliefs do you have about why this idea will meet your stakeholders' needs? Will the students respond positively? Why? Will the intervention improve learning outcomes? How?

- **STUDENTS AND MENTORS NEED GAMES TO GET TO KNOW EACH OTHER**
- **THE MATCH EVENT CAN HAPPEN ON A SATURDAY**
- **PARENTS WILL BE OKAY WITH THE MENTORS THEIR STUDENTS ARE MATCHED WITH**
- **THERE WILL BE SPACE AT THE SCHOOL ON SATURDAYS**

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE 2 | TEST | IMPLEMENT | TELL

Building to Iterate

Instructions: Now that you've tested a prototype, use what you learned to iterate. You might decide to expand upon your first idea. In your next round of prototypes, think about pushing your idea to be bolder and more innovative. Or, you might explore how to design your prototype to reach more students. Below are nine categories to help you think about the variety of elements that will make up a potential prototype. Be specific and add detail. After you've expanded the idea, reflect on the assumptions you made in your planning. If you are starting with a new idea, answer the second set of questions about your assumptions.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE

Place the post-it with your idea here.

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

RITUALS
What specific behaviors or actions that happen routinely to mark a specific moment might need to be created?

TIME
How might the allocation if time need to change for this idea?

POLICY
What policies would need to shift or be created?

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

BUDGET
How might money need to be allocated for this idea?

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

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

OBJECTS/PRODUCTS/TOOLS
What new artifacts or objects might need to be created for this idea?

ASSUMPTIONS
What beliefs do you have about why this idea will meet your stakeholders' needs? Will the students respond positively? Why? Will the intervention improve learning outcomes? How?

Storyboard Your Iteration

Instructions: Now that you have tested your idea, draw another 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 phase of the experience that is most relevant. Generate new assumptions as well.

PRE-EXPERIENCE

ASSUMPTIONS:

JOE IS INTERESTED IN HAVING A MENTOR.
JOE IS ABLE TO ATTEND MENTOR MEETINGS ON SATURDAYS

WELCOME EXPERIENCE

ASSUMPTIONS:

JOE WILL BE OPEN WITH A NEW PERSON.

DURING EXPERIENCE, PHASE 1

ASSUMPTIONS:

JOE AND HIS MENTOR NEED TO HAVE AN INTRODUCTION ACTIVITY TO KICK OFF THE MENTORSHIP.

DURING EXPERIENCE, PHASE 2

ASSUMPTIONS:

JOE AND HIS MENTOR WILL ENJOY BUILDING SOMETHING TOGETHER. THIS WILL HELP THEM GET TO KNOW EACH OTHER.

DURING EXPERIENCE, PHASE 3

ASSUMPTIONS:

THESE ACTIVITIES WILL HELP JOE AND HIS MENTOR BOND.

POST-EXPERIENCE

ASSUMPTIONS:

JOE WILL SHARE THE PROGRAM MANAGER ABOUT ALL OF HIS POSITIVE EXPERIENCES WITH THE MENTOR.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE 3 | TEST | IMPLEMENT | TELL

Storyboard Your Iteration

Instructions: Now that you have tested your idea, draw another 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 phase of the experience that is most relevant. Generate new assumptions as well.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE

PRE-EXPERIENCE

ASSUMPTIONS:

WELCOME EXPERIENCE

ASSUMPTIONS:

DURING EXPERIENCE, PHASE 1

ASSUMPTIONS:

DURING EXPERIENCE, PHASE 2

ASSUMPTIONS:

DURING EXPERIENCE, PHASE 3

ASSUMPTIONS:

POST-EXPERIENCE

ASSUMPTIONS:

Design Another Prototype

Instructions: Now that you have developed your idea, it is time to get ready to test it with stakeholders. Remember, prototypes are designed to be small and test the assumptions we are making about why the idea is going to meet the stakeholder's needs. Take the assumptions you generated in the second activity and design prototypes to test those assumptions.

ASSUMPTIONS:

STUDENTS AND MENTORS NEED GAMES TO GET TO KNOW EACH OTHER

ASSUMPTIONS:

THERE WILL BE SPACE AT THE SCHOOL ON SATURDAYS

ASSUMPTIONS:

THE MATCH EVENT CAN HAPPEN ON A SATURDAY

ASSUMPTIONS:

ASSUMPTIONS:

?

PROTOTYPE 1:

What will you do?

HAVE A "MENTOR FOR A DAY" EVENT ON SATURDAY.

What are you trying to learn?

CAN MENTORS AND STUDENTS ATTEND ON A SATURDAY? DO THE MENTORS AND STUDENTS NEED GAMES TO GET TO KNOW EACH OTHER?

How will you make sense of what happened?

WE WILL SEE WHO ATTENDS, WE WILL OBSERVE THEM GETTING TO KNOW EACH OTHER AND WE WILL INTERVIEW THE MENTORS AND STUDENTS.

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?

?

PILOT

Once you have completed your prototypes, you will combine ideas into a pilot that is bigger in size, time and resources. We will focus on this during the implementation phase.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE 4 | TEST | IMPLEMENT | TELL

Design Another Prototype

Instructions: Now that you have developed your idea, it is time to get ready to test it with stakeholders. Remember, prototypes are designed to be small and test the assumptions we are making about why the idea is going to meet the stakeholder's needs. Take the assumptions you generated in the second activity and design prototypes to test those assumptions.

COMBINE IDEAS | BUILDING BLOCKS | STORYBOARD YOUR IDEA | DESIGN A PROTOTYPE

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

ASSUMPTIONS:

?

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?

?

PILOT

Once you have completed your prototypes, you will combine ideas into a pilot that is bigger in size, time and resources. We will focus on this during the implementation phase.

ITERATE TRANSITION SUMMARY

SUMMARY OF ITERATE PHASE

Use this **Iterate** summary page to gather up the work you completed during each phase of the process.
Be thinking about 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.

TEAM WORKSHOP TOOLS

#1 Combine Reflections & Ideas

What is the new solution you generated?

#2 Building to Iterate

What are the three most important assumptions you generated?

1.

2.

3.

#3 Storyboard Your Iteration

What are the three most important moments in the experience your solution creates?

1.

2.

3.

#4 Design Another Prototype

What are the three most important logistics to consider?

1.

2.

3.

ITERATE TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?"and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

What are the two assumptions that your team wants to test through prototyping?

1.

2.

Describe the prototype your team will develop:

What will you do?

What are you trying to learn?

How will you make sense of what happened?

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

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase of the challenge 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 you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
COMBINE REFLECTIONS & IDEAS ACTIVITY	The team cannot agree on how to combine ideas into a single concept.	The team has some disagreements on how to combine ideas into a single concept but feels comfortable moving forward.	The team is strongly aligned on how to combine ideas into a single concept.
BUILDING TO ITERATE ACTIVITY	You are struggling to develop your idea further and/or you are struggling to surface the assumptions you are making.	You are struggling to develop your idea further and/or you are struggling to surface the assumptions you are making but are making progress.	You are feeling confident about developing your idea further and are confident surfacing the assumptions you are making.
STORYBOARD YOUR ITERATION ACTIVITY	You and the team are struggling to describe your idea in terms of a timeline.	You and the team are not confident in your storyboard, but feel comfortable moving forward.	You and the team can confidently describe your idea in terms of a timeline of events. You have successfully identified the assumptions you are making.
DESIGN ANOTHER PROTOTYPE ACTIVITY	You and the team are struggling to design a small, low-resolution prototype to test the assumptions they are making.	You and the team are struggling to design a small scale, low-resolution proto-type to test the assumptions they are making, but feel comfortable moving forward.	You and the team have confidently designed low resolution prototypes that will effectively test the assumptions you are making.
PROJECT STATUS: QUALITY OF THE PROTOTYPE	The prototypes that were designed are not low resolution and/or will not effectively test the assumptions embedded in the idea.	There is some concern about how well the prototype will test the assumptions embedded in the idea but feels comfortable moving forward.	You and the team are confident that the prototypes that were designed are low resolution and will effectively test the assumptions embedded in the idea.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	The team cannot agree on how the solution being prototyped is connected to the goal of improving the holistic learning outcomes.	The team has some disagreements on how the solution being prototyped is connected to the goal of improving the holistic learning outcomes but feels comfortable moving forward.	The team is confident that the solutions being prototyped is connected to improving the holistic learning outcomes identified.

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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

ITERATE TRANSITION REFLECTION

REFLECTION ON PROCESS

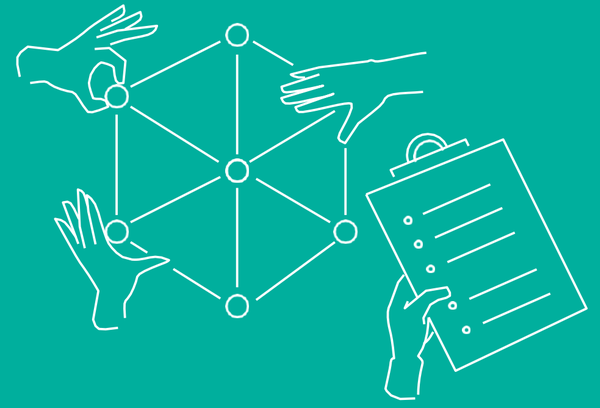
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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 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?

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.



TEST ANOTHER

TEST ANOTHER INTRODUCTION

OVERVIEW OF **TEST ANOTHER PROTOTYPE** PHASE

The worksheets in the **Test Another Prototype** phase are designed to help you construct tests of your solutions. These tests are intended to elicit feedback, answer specific questions about a concept and test assumptions embedded in the ideas. The work of these workshops can be done collaboratively with school-based teams or other schools. Prototyping will be conducted by individual educators.

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

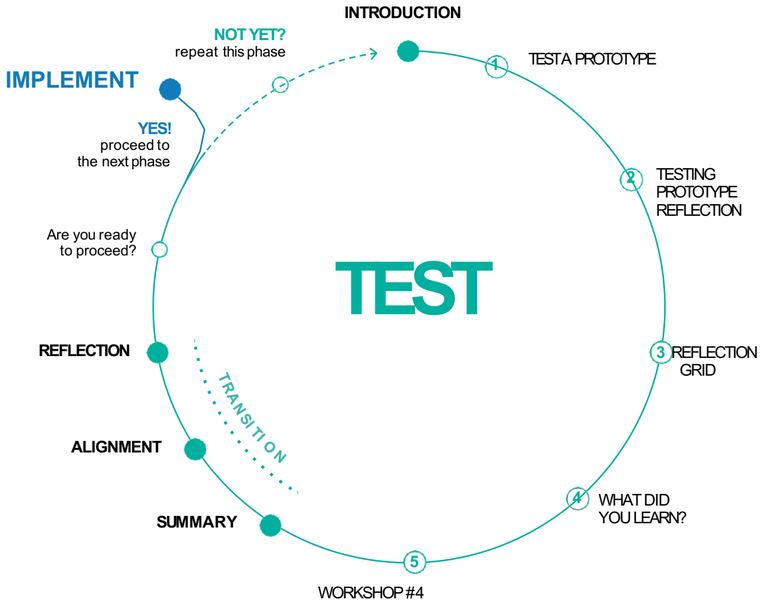
OBJECTIVES OF **TEST ANOTHER PROTOTYPE** PHASE

The goal of this phase is to test your low-resolution prototype with stakeholders to get authentic feedback.

At the end of this phase, you should be clear about whether the solution you are developing has the potential to meet the needs you identified in your POV statement and close the learning gaps identified.

MINDSETS OF **TEST ANOTHER PROTOTYPE** 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 change
- Show don't tell
- Many cycles of prototyping are necessary to develop an idea
- Feedback is a gift to improve your ideas



TEAM WORKSHOP TOOLS

#1 Test a Prototype — *30 minutes to prepare, 1-2 hours to test a prototype*

WHAT IS THIS TOOL? The **Test a Prototype** worksheet is designed to help you plan the logistics of testing your prototypes.

WHAT IS YOUR GOAL? Testing prototypes requires a little bit of planning. This tool helps you think through those logistics.

INDIVIDUAL FIELDWORK TOOLS

#2 Testing Prototype Reflection — *30-45 minutes per prototype*

WHAT IS THIS TOOL? **Testing Prototype Reflection** is a worksheet designed to help you to prepare to test your prototype and then reflect on what you learned from testing your prototype.

WHAT IS YOUR GOAL? Use this tool to help you get ready to test your prototype and then capture what you learned from testing.

#3 Reflection Grid — *30-45 minutes per prototype*

WHAT IS THIS TOOL? The **Reflection Grid** is a worksheet designed to help you make sense of what you learned from testing your prototype.

WHAT IS YOUR GOAL? The primary goal of testing a prototype is to reflect and learn about your idea and whether it meets the needs of the stakeholder or not. Use this tool to capture what you learned from testing.

#4 What Did You Learn? — *30-45 minutes*

WHAT IS THIS TOOL? The **What Did You Learn?** worksheet asks you to reflect on what assumptions you are making about why your idea will solve your stakeholder's problem. This tool also asks you to continue to iterate based on what you learn from your testing.

WHAT IS YOUR GOAL? When you have completed this tool, you will have clarity on how you are going to test the assumptions embedded in your solution.

TEAM WORKSHOP TOOLS

#5 Idea Evaluation — *30-45 minutes per prototype*

WHAT IS THIS TOOL? **Idea Evaluation** is a worksheet designed to help you to evaluate your prototype based on your stakeholder testing.

WHAT IS YOUR GOAL? As you continue to work through the design challenge, it is important to continue to revisit your original stakeholder's POV and how well your solution will close the learning gaps identified.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Test a Prototype

Instructions: Now that you've decided what prototype you want to conduct in order to test your assumptions, use this worksheet to help you plan the process of testing your prototype. Remember, a good prototype involves a small number of stakeholders and requires little time to prepare and implement.

1 WHAT ASSUMPTIONS WILL YOU BE TESTING WITH YOUR PROTOTYPE?

STUDENTS AND MENTORS NEED GAMES TO GET TO KNOW EACH OTHER

THERE WILL BE SPACE AT THE SCHOOL ON SATURDAYS

THE MATCH EVENT CAN HAPPEN ON A SATURDAY

2 GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO HAVE PARTICIPATE IN YOUR PROTOTYPE.

JOE &TEN OTHER MIDDLE SCHOOL STUDENTS

3 WHO MIGHT HELP YOU TEST THE PROTOTYPE?

FIVE POTENTIAL MENTORS AND ANOTHER TEACHER

4 WHERE WILL YOU TEST THE PROTOTYPE?

IN THE CAFETERIA AT SCHOOL

5 HOW WILL YOU SET UP THE SPACE?

ENOUGH ROOM FOR EACH STUDENT AND THEIR MENTOR TO GET TO KNOW EACH OTHER

6 WHAT MATERIALS WILL YOU NEED?

SUPPLIES FOR MAKING NAMETAGES AND BUILDING A TOWER

7 ANYTHING ELSE YOU NEED TO PREPARE?

SNACKS

THANK YOU CARDS FOR THE MENTORS

8 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

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST 1 | IMPLEMENT | TELL

Test a Prototype

Instructions: Now that you've decided what prototype you want to conduct in order to test your assumptions, use this worksheet to help you plan the process of testing your prototype. Remember, a good prototype involves a small number of stakeholders and requires little time to prepare and implement.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION

1 WHAT ASSUMPTIONS WILL YOU BE TESTING WITH YOUR PROTOTYPE?

2 GENERATE A LIST OF PEOPLE WHO YOU WOULD LIKE TO HAVE PARTICIPATE IN YOUR PROTOTYPE.

3 WHO MIGHT HELP YOU TEST THE PROTOTYPE?

4 WHERE WILL YOU TEST THE PROTOTYPE?

5 HOW WILL YOU SET UP THE SPACE?

6 WHAT MATERIALS WILL YOU NEED?

7 ANYTHING ELSE YOU NEED TO PREPARE?

8 WHAT ARE THE STEPS THAT YOU NEED TO COMPLETE IN ORDER TO TEST YOUR PROTOTYPE?

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

Testing a Prototype Reflection

Instructions: First, identify the assumptions you have designed your prototype to test. Next, write debrief 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 MENTOR/MENTEE?

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 EVENT AT SCHOOL NEXT SATURDAY?

TEST YOUR PROTOTYPE!

PROTOTYPE TESTING NOTES

What did you hear?
Write down specific quotations. Listen for stories, emotions, motivations and behaviors. Listen for surprising or contradictory information.

MENTORS AND MENTEES SHARING THINGS ABOUT THEIR LIVES WITH EACH OTHER.

What did you see?
Look for emotions (sadness, excitement, joy) in the person's body language and facial expressions.

LOTS OF LAUGHTER AND SMILES!

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST 2 | IMPLEMENT | TELL

Testing a Prototype Reflection

Instructions: First, identify the assumptions you have designed your prototype to test. Next, write debrief questions that you will ask the person who is testing your prototype. Take notes on what you learn from that person.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION

1 ASSUMPTION

What is the assumption that this prototype is designed to test?

What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?

2 ASSUMPTION

What is the assumption that this prototype is designed to test?

What questions do you want to ask the person who is testing your prototype to learn about the assumptions you are trying to test?

TEST YOUR PROTOTYPE!

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.

Reflection

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 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.

LIKES
What did you see that is working well?

THE STUDENTS AND ADULTS ENJOYED SPENDING TIME GETTING TO KNOW EACH OTHER

CHANGES
What did you see that is not working well?

SATURDAYS WERE LOGISTICALLY HARD FOR THE MENTORS.

+ △

? !

COULD WE HAVE THE SAME KIND OF EVENT AFTER SCHOOL?

IF WE GAVE THE MENTORS ACTIVITY IDEAS, WE COULD HAVE THE STUDENTS MEET THEM FOR THE FIRST TIME AT THEIR WORK PLACES...

QUESTIONS
What did you see that raised questions for you?

IDEAS
What ideas came to you as you observed?

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST 3 | IMPLEMENT | TELL

Reflection

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 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.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION

LIKES
What did you see that is working well?

CHANGES
What did you see that is not working well?

+ △

? !

QUESTIONS
What did you see that raised questions for you?

IDEAS
What ideas came to you as you observed?

What did you learn?

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?

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?

ENSURE THERE ARE ALWAYS GET TO KNOW YOU ACTIVITIES FOR THE STUDENTS AND MENTORS

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?

TRY HAVING THESE MEETINGS AFTER SCHOOL AT THE MENTOR'S WORKPLACE.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST 4 | IMPLEMENT | TELL

What did you learn?

Instructions: Reflect on what assumptions you tested, what you learned and how you will iterate on your idea.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION

1 ASSUMPTION
What was the assumption that this prototype was designed to test?

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?

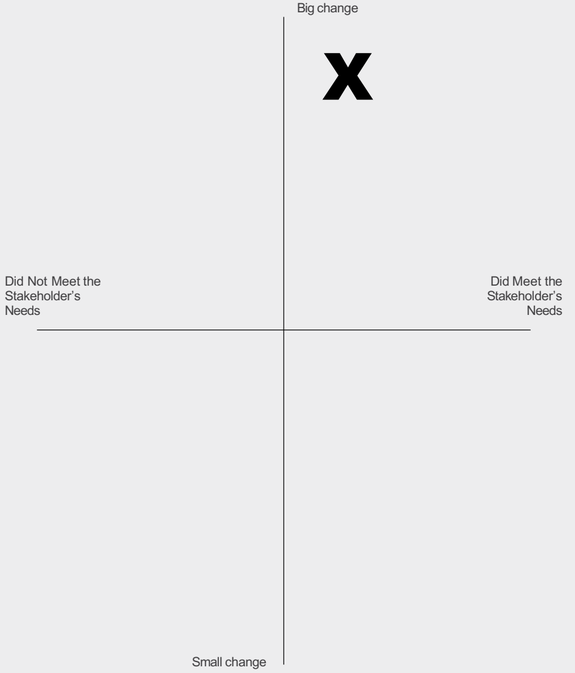
2 ASSUMPTION
What was the assumption that this prototype was designed to test?

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

Instructions: Use this worksheet to reflect on how well your prototype met the needs of the stakeholder in relation to the scale of the prototype. Next, use the questions to reflect on how well your solution will increase the holistic learning outcomes for students.



1 After reflecting on 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 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?

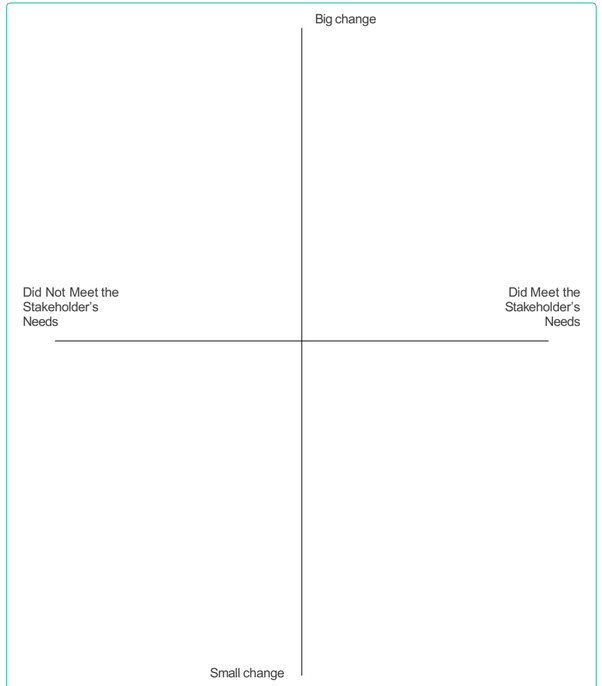
I believe the After school career exploration program will inspire students to think broadly about their potential careers and meet mentors who will inspire and help the students to follow their dreams.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST 5 | IMPLEMENT | TELL

Idea Evaluation

Instructions: Use this worksheet to reflect on how well your prototype met the needs of the stakeholder in relation to the scale of the prototype. Next, use the questions to reflect on how well your solution will increase the holistic learning outcomes for students.

TEST A PROTOTYPE | TESTING PROTOTYPE REFLECTION | REFLECTION GRID | WHAT DID YOU LEARN? | IDEA EVALUATION



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

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

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?

TEST ANOTHER TRANSITION SUMMARY

SUMMARY OF **TEST ANOTHER PROTOTYPE** PHASE

Use this **Test Another Prototype** summary page to gather up the work you completed during this phase. Be thinking about 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.

TEAM WORKSHOP TOOLS

#1 Test a Prototype

What are the most important logistics to consider for your prototype?

#2 Testing Prototype Reflection

What are the three most important things you learned from testing your prototype?

1.

2.

3.

INDIVIDUAL FELDWORK TOOLS

#3 Reflection Grid

What are the most important insights that you identified from your reflection?

#4 What Did You Learn?

What are the most important changes you want to make to your idea?

TEAM WORKSHOP TOOLS

#5 Idea Evaluation

After reflecting on your prototype, how do you think your idea aligns with your POV statement? Why?

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

TEST ANOTHER TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?"and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

As a team, determine the three most important things that you learned from testing your prototypes.

•

•

•

How will you incorporate what you learned from all the prototypes into your next iteration?

How does your next iteration guide your team's work toward developing a solution that will improve the holistic learning outcomes for your students?

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase 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 criteria at the bottom of the rubric, consider as a team the progress you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
TEST A PROTOTYPE ACTIVITY	You are struggling to plan the timeline and logistics related to testing your prototype.	You are hesitant about your plan to test your prototype but you feel comfortable moving forward.	You feel confident about your plan to test your prototype.
TESTING PROTOTYPE REFLECTION & REFLECTION GRID ACTIVITY	You did not test your prototype and/or you did not complete the Testing Prototype Reflection or Reflection Grid.	You tested your prototype and completed the reflection but was not able to gain insights into testing the assumptions you identified.	You tested your prototype and completed the reflections and gained strong new insights into how your prototype will meet the needs of your stakeholders.
WHAT DID YOU LEARN? ACTIVITY	You are struggling to identify the assumptions you need to test and how to test them.	You are hesitant about the assumptions you have identified and will work to improve.	You feel confident identifying the assumptions you need to test and how to test them.
IDEA EVALUATION ACTIVITY	You are struggling to evaluate your idea against your POV statement and your goals of improving the holistic learning outcomes.	You are hesitant about your evaluation of your idea and will work to improve.	You are confident in your evaluation of your idea against your POV statement and your goals of improving the holistic learning outcomes.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	You do not feel confident that your solution is connected to the goal of improving the holistic learning outcomes.	You are hesitant about how your solution is connected to the goal of improving the holistic learning outcomes.	You are confident that your solution is connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

REFLECTION ON PROCESS

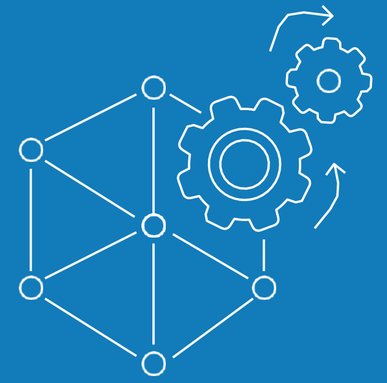
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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?

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.



IMPLEMENT

SCHOOLS 2030 HUMAN-CENTERED DESIGN **TOOLKIT**

IMPLEMENT INTRODUCTION

OVERVIEW OF PREPARE TO IMPLEMENT PHASE

The worksheets in 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 are moving from an idea you are developing to a concept you are working to implement. A concept is a robust idea that has been developed through multiple rounds of prototyping.

The work of this workshop can be done collaboratively with school-based teams only.

This phase of the design process will include: refining your idea and project planning.

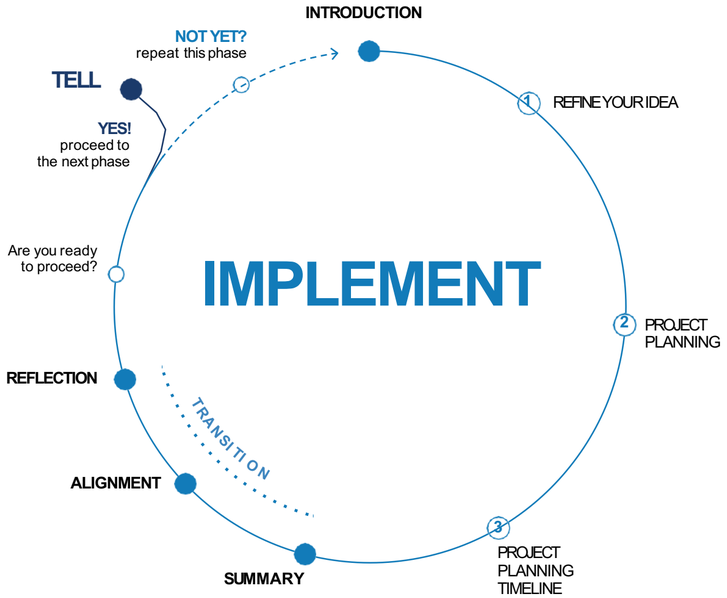
OBJECTIVES OF PREPARE TO IMPLEMENT PHASE

The goal of this phase is to get your design team aligned around what the next steps are that would be required to implement your concept. Also consider your long-term goals for improving the holistic learning outcomes for students.

At the end of this phase, all team members should be clear on what needs to happen next.

MINDSETS 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



TEAM WORKSHOP TOOLS

#1 Refine Your Idea — *45-60 minutes*

WHAT IS THIS TOOL?

Refine Your Idea is a worksheet designed to help you begin to think about your prototype as a concept you are implementing.

WHAT IS YOUR GOAL?

Prototyping an idea is radically different than implementing a concept. Transitioning to implementation can be difficult for teams. Use this framework to help your team make the transition.

#2 Project Planning — *45-60 minutes*

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?

We know that transitioning from open-ended design work to implementing an idea requires a significant shift in how the team is working. Use this framework to support that shift.
When you have completed these tools, your team should be aligned around the next steps needed.

#3 Project Planning Timeline — *45-60 minutes*

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?

Use this tool to break down the implementation of your concept into specific parts with deadlines.
When you have completed these tools, your team should be aligned around the next steps needed.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Refine Your Idea

Instructions: Now that you've expanded on your big idea, 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 generated when you were expanding on your initial idea. Finally, brainstorm indicators that will demonstrate if the idea is working.

REFINE YOUR IDEA | PROJECT PLANNING | PROJECT PLANNING TIMELINE

1 CONCEPT TITLE

CAREER MENTORS

2 CONCEPT HEADLINE

CREATING RELATIONSHIPS WITH PROFESSIONALS TO STUDENTS GROW

3 CONCEPT DESCRIPTION

Is your concept a series of small interventions, a larger programmatic idea or a broader cultural shift?

STUDENTS WILL BE MATCHED WITH A BUSINESS LEADER AND WILL SPEND EVERY WEDNESDAY WITH HER OR HIM FOR TWO MONTHS

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.

5 IMPLEMENTATION

Events

RECRUITMENT EVENT

Roles

PROGRAM MANAGER

Rituals

MENTOR MATCH

Time

WEDNESDAYS AFTER SCHOOL

Space

Policy

Communication

INFORMING PARENTS OF PROGRAM

Objects/Artifacts

6 INDICATORS

How will you know if your concept is working?

STUDENTS PURSUE THEIR STATED CAREER GOALS.

STUDENTS INFLUENCE WHAT THEY ARE LEARNING IN SCHOOL.

STUDENTS HAVE MORE CONNECTIONS IN THE BUSINESS COMMUNITY.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT 1 | TELL

Refine Your Idea

Instructions: Now that you've expanded on your big idea, 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 generated when you were expanding on your initial idea. Finally, brainstorm indicators that will demonstrate if the idea is working.

REFINE YOUR IDEA | PROJECT PLANNING | PROJECT PLANNING TIMELINE

1 CONCEPT TITLE

2 CONCEPT HEADLINE

3 CONCEPT DESCRIPTION

Is your concept a series of small interventions, a larger programmatic idea or a broader cultural shift?

4 OBJECTIVES

What behavior changes do you hope your concept will create?

5 IMPLEMENTATION

Events

Roles

Rituals

Time

Space

Policy

Communication

Objects/Artifacts

6 INDICATORS

How will you know if your concept is working?

Project Planning

Instructions: Use this worksheet to determine the details of your project and begin to draft a plan for implementing your solution.

1 THIS IS WHAT THE PROJECT IS:

- What interventions will need to be implemented?

  CREATING MENTOR MATCHES BETWEEN STUDENTS AND MENTORS

- Who will be responsible for leading this project?

  A NEW PROGRAM MANAGER

- How will this concept be implemented and/or disseminated?

  THROUGH A NEW AFTERSCHOOL PROGRAM

- How much will it cost?

  $5,000 FOR SUPPLIES AND THE PROGRAM MANAGER SALARY

- What other resources are needed?

  SPACE

  POTENTIAL MENTORS

- When will it launch?

2 THIS IS HOW THE PROJECT WILL BE IMPLEMENTED:

- What needs to stop happening?

  STUDENTS GOING HOME AFTER SCHOOL

- What needs to start happening?

  STUDENTS GOING TO THEIR MENTORS' OFFICES AFTER SCHOOL

- Which stakeholders need to participate?

  STUDENTS POTENTIAL

  MENTORS FAMILIES

- Who needs to be convinced that this idea is good?

  STUDENTS POTENTIAL

  MENTORS FAMILIES

  HEAD OF SCHOOL

- What plans need to be made before this is launched?

  HIRE A PROGRAM MANAGER

  RECRUIT MENTORS

  GET PERMISSION TO USE THE SPACE

3 THIS IS WHY THIS PROJECT SHOULD BE IMPLEMENTED:

- What is being changed or created?

  A NEW AFTERSCHOOL PROGRAM

- How might behaviors look different if the goals are achieved?

  STUDENTS WILL HAVE MORE SELF-CONFIDENCE

- How might emotions look different if the goals are achieved?

  STUDENTS WILL FIND MORE JOY IN LEARNING BECAUSE THEY SEE HOW IT IS CONNECTED TO THEIR FUTURE

- How will we know if it was successful?

  IF STUDENTS DEMONSTRATE MORE SELF-EFFICACY

- What will we measure?

  STUDENTS LEVELS OF SELF-EFFICACY

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT 2 | TELL

Project Planning

Instructions: Use this worksheet to determine the details of your project and begin to draft a plan for implementing your solution.

REFINE YOUR IDEA | PROJECT PLANNING | PROJECT PLANNING TIMELINE

1 THIS IS WHAT THE PROJECT IS:

- What interventions will need to be implemented?
- Who will be responsible for leading this project?
- How will this concept be implemented and/or disseminated?
- How much will it cost?
- What other resources are needed?
- When will it launch?

2 THIS IS HOW THE PROJECT WILL BE IMPLEMENTED:

- What needs to stop happening?
- What needs to start happening?
- Which stakeholders need to participate?
- Who needs to be convinced that this idea is good?
- What plans need to be made before this is launched?

3 THIS IS WHY THIS PROJECT SHOULD BE IMPLEMENTED:

- What is being changed or created?
- How might behaviors look different if the goals are achieved?
- How might emotions look different if the goals are achieved?
- How will we know if it was successful?
- What will we measure?

Project Planning Timeline

Instructions: Map out the next steps needed to move from concept to implementation. Possible next steps include: concept development, prototyping, secondary research, project planning, piloting.

STEP 1:

Who?

HEAD OF SCHOOL

What?

HIRES PROGRAM MANAGER

Deadline:

THREE MONTHS BEFORE SCHOOL BEGINS

STEP 2:

Who?

PROGRAM MANAGER

What?

RECRUITS POTENTIAL MENTORS

Deadline:

TWO MONTHS BEFORE SCHOOL BEGINS

STEP 3:

Who?

TEACHERS

What?

RECRUIT STUDENTS TO PARTICIPATE

Deadline:

ONE MONTH BEFORE SCHOOL BEGINS

STEP 4:

Who?

FAMILIES

What?

SIGN A PERMISSION FORM FOR THEIR STUDENTS

Deadline:

TWO WEEKS BEFORE SCHOOL BEGINS

STEP 5:

Who?

PROGRAM MANAGER

What?

PLANS KICK OFF EVENT AND GET-TO-KNOW-YOU ACTIVITIES

Deadline:

ONE WEEK BEFORE SCHOOL BEGINS

STEP 6:

Who?

PROGRAM MANAGER, STUDENTS &MENTORS

What?

LAUNCHES PROGRAM WITH A GET-TO-KNOW-YOU EVENT

Deadline:

ONE WEEK AFTER SCHOOL BEGINS

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT 3 | TELL

Project Planning Timeline

Instructions: Map out the next steps needed to move from concept to implementation. Possible next steps include: concept development, prototyping, secondary research, project planning, piloting.

REFINE YOUR IDEA | PROJECT PLANNING | PROJECT PLANNING TIMELINE

STEP 1:

Who?

What?

Deadline:

STEP 2:

Who?

What?

Deadline:

STEP 3:

Who?

What?

Deadline:

STEP 4:

Who?

What?

Deadline:

STEP 5:

Who?

What?

Deadline:

STEP 6:

Who?

What?

Deadline:

IMPLEMENT TRANSITION SUMMARY

SUMMARY OF **PREPARE TO IMPLEMENT** PHASE

Use this **Prepare to Implement** summary page to gather up the work you completed during this phase. Be thinking about 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.

WORKSHOP #4 TOOLS

#1 Refine Your Idea

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.

IMPLEMENT TRANSITION ALIGNMENT

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?" and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

As a team, determine what concept you plan to pitch to the Schools2030 initiative leadership and implement on your campus:

How does your team's concept lead to improving the holistic learning outcomes for your students?

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase 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 criteria at the bottom of the rubric, consider as a team the progress you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
REFINE YOUR IDEA ACTIVITY	The team cannot agree on how to further refine your concept.	The team has some disagreements on how to further refine your concept and will continue to work to refine the concept.	The team is strongly aligned on how to further refine your concept.
PROJECT PLANNING ACTIVITY	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 feels comfortable moving forward.	The team is strongly aligned on how to further refine your concept.
PROJECT PLANNING TIMELINE ACTIVITY	You and the team are struggling to describe your idea in terms of a timeline.	The team has some disagreements on the timeline for next steps on the project planning document, but feels comfortable moving forward.	The team is strongly aligned the timeline for next steps on the project planning document.
PROJECT STATUS: QUALITY OF SOLUTION	The team has not developed a solution that can be implemented with success.	The solution the team developed has some potential to be implemented with success.	The solution the team developed has a lot of potential to be implemented with success.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	The team cannot agree on if the solution is going help meet the goal of improving the holistic learning outcomes.	The team has some disagreements on if the solution is going to help meet the goal of improving the holistic learning outcomes. and will work to improve the solution.	The team is confident that the solution is going help meet 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

IMPLEMENT TRANSITION REFLECTION

REFLECTION ON PROCESS

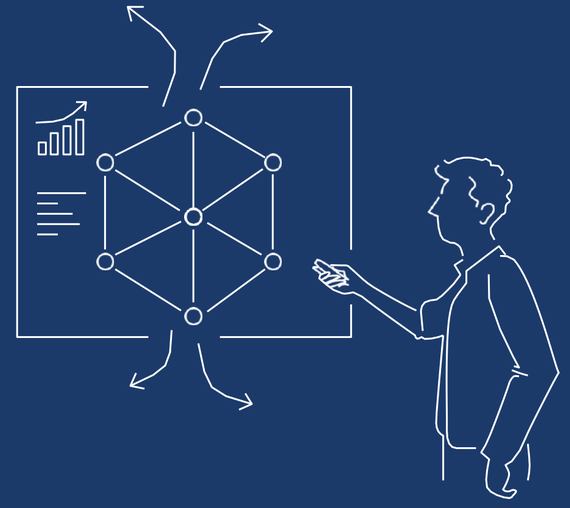
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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 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?

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.



TELL

TELL INTRODUCTION

n OVERVIEW OF **TELL YOUR COMMUNITY** PHASE

The worksheets in the **Tell Your Community** phase are designed to help you synthesize what you learned 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 schools.

This phase of the design process will include: developing a stakeholder-centered story to tell and a pitch to share.

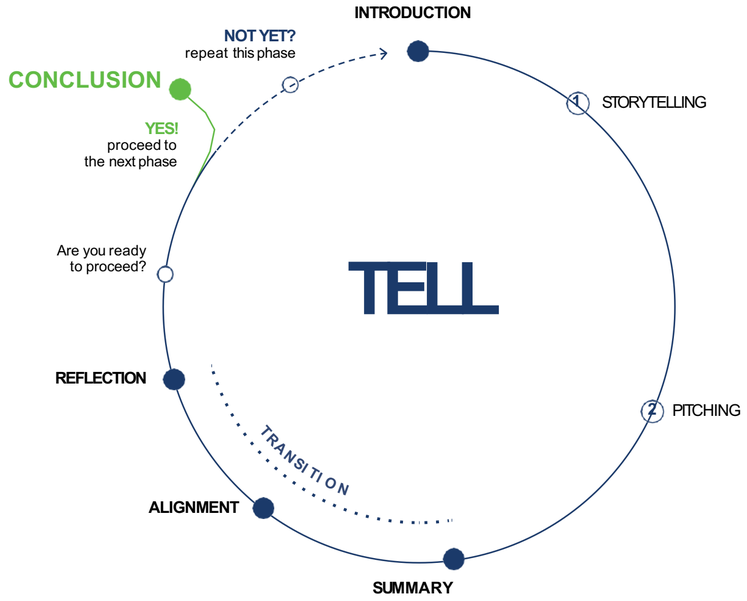
n OBJECTIVES OF **TELL YOUR COMMUNITY** PHASE

The goal of this phase is to help you develop two approaches to communicating what you learned about your solution and why it has the potential to meet the stakeholder's needs and close the learning gaps identified. The storytelling approach is focused on sharing a stakeholder-specific way of communicating about your idea. Your pitch an approach to communicating your idea that is focused on why your idea will have the greatest impact on holistic learning outcomes for students.

At the end of this phase, you should be clear on how you plan to communicate about your solution and its potential.

n 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



n TEAM WORKSHOP TOOLS

#1 Storytelling

WHAT IS THIS TOOL?

Human-centered design is an approach to creative problem-solving that puts 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, we like to structure our process of pitching idea 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 using character-driven storytelling as the framework for synthesizing your learning and pitching a new concept, we find that we create more compelling and engaging pitches.

#2 Pitching *30-45 minutes*

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 students' 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.

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

Storytelling

Instructions: Use this framework to help synthesize what you learned in the design challenge and communicate your idea in terms of the needs and emotions of your stakeholder.

30-45 minutes

STORYTELLING | PITCHING

1 WE MET...
Tell us more about your primary stakeholder.

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

2 WE NOTICED...
What was the surprising observation you made? What did you discover?

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

3 SO WE CREATED...
What concept did you create? What assumptions were you testing in your prototypes?

AN AFTER SCHOOL CAREER EXPLORATION PROGRAM, WHERE STUDENTS LIKE JOE MEET LOCAL BUSINESS LEADERS WHO SERVES 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.

4 THEN WE LEARNED...
How have your prototypes evolved? What have you learned about your concept?

WHAT MATTERED MOST TO JOE WAS THE RELATIONSHIP WITH A SUCCESSFUL LOCAL LEADER - NOT NECESSARILY THAT THEY HAD SHARED CAREER INTERESTS.

5 SO NOW WE HOPE TO IMPLEMENT...
What concept are your going to create? What outcomes are you hoping in terms of Improving the holistic learning outcomes to see as a result?

A FUTURE-ORIENTED MENTORING PROGRAM FOR MIDDLE SCHOOL STUDENTS TO HELP THEM BUILD THEIR SKILLS WITH ADVOCATING FOR THEMSELVES WITH ADULTS. THIS WILL INCREASE HOLISTIC LEARNING OUTCOMES FOR STUDENTS BY HELPING THEM TO DEMONSTRATE MORE SELF EFFICACY

Storytelling

Instructions: Use this framework to help synthesize what you learned in the design challenge and communicate your idea in terms of the needs and emotions of your stakeholder.

30-45 minutes

STORYTELLING | PITCHING

1 WE MET...
Tell us more about your primary stakeholder.

2 WE NOTICED...
What was the surprising observation you made? What did you discover?

3 SO WE CREATED...
What concept did you create? What assumptions were you testing in your prototypes?

4 THEN WE LEARNED...
How have your prototypes evolved? What have you learned about your concept?

5 SO NOW WE HOPE TO IMPLEMENT...
What concept are your going to create? What outcomes are you hoping in terms of Improving the holistic learning outcomes to see as a result?

Pitching

Instructions: Use this framework to help synthesize what you learned from your design challenge and get ready to pitch why your idea will have the greatest impact to potential funders.

STORYTELLING | PITCHING

1 WHAT IS YOUR IDEA?

A FUTURE-ORIENTED MENTORING PROGRAM

2 WHO IS YOUR AUDIENCE FOR YOUR PITCH?

SCHOOLS2030

3 WHAT IS THE PROBLEM?
Why is it a problem worth solving?
Who is involved? What are the consequences if this goes unsolved?

STUDENTS DON'T SEE CONNECTIONS BETWEEN WHAT THEY ARE LEARNING TODAY AND THEIR FUTURES. THIS CAUSES THEM TO BE DISENGAGED AT SCHOOL.

4 WHAT IS YOUR SOLUTION?
How are you going to address this problem in a new and novel way? What's involved in your solution?

A FUTURE-ORIENTED MENTORING PROGRAM FOR MIDDLE SCHOOL STUDENTS TO HELP THEM BUILD RELATIONSHIPS WITH POSITIVE ADULTS

5 WHAT IS THE POTENTIAL NEAR-TERM IMPACT?
How is your solution going to create positive learning outcomes for at least 20 students in the near future?

STUDENTS WILL 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 DEMONSTRATE MORE SELF EFFICACY

7 WHAT IS THE TIMELINE?
Can you implement a pilot of this idea in the next two school terms? If so, how? If not, why?

WITH FUNDING, WE CAN LAUNCH A PILOT AT THE BEGINNING OF NEXT SCHOOL YEAR

8 WHAT RESOURCES DO YOU NEED?
What personnel might you need?
What space might you need?
What materials might you need?

ENOUGH MONEY TO FUND A PROGRAM MANAGER

9 BASED ON WHAT YOU STATED ABOVE, HOW MUCH FINANCIAL SUPPORT DO YOU NEED?
What might the budget be for this initiative?

$5,000

10 WHAT IS THE POTENTIAL LONG-TERM IMPACT?
How might your solution be replicable in other classrooms, grade levels and schools?

STUDENTS WILL SEE THE CONNECTIONS BETWEEN WHAT THEY ARE LEARNING IN SCHOOL AND THEIR FUTURES. THEY WILL ADVOCATE FOR WHAT THEY NEED TO LEARN. THEY WILL PURSUE CAREERS THAT INTEREST THEM.

LAUNCH | EXPLORE | DEFINE | GENERATE | MAKE | TEST | ITERATE | TEST | IMPLEMENT | TELL 2

Pitching

Instructions: Use this framework to help synthesize what you learned from your design challenge and get ready to pitch why your idea will have the greatest impact to potential funders.

STORYTELLING | PITCHING

1 WHAT IS YOUR IDEA?

2 WHO IS YOUR AUDIENCE FOR YOUR PITCH?

3 WHAT IS THE PROBLEM?
Why is it a problem worth solving?
Who is involved? What are the consequences if this goes unsolved?

4 WHAT IS YOUR SOLUTION?
How are you going to address this problem in a new and novel way? What's involved in your solution?

5 WHAT IS THE POTENTIAL NEAR-TERM IMPACT?
How is your solution going to create positive learning outcomes for at least 20 students in the near future?

6 WHY DOES THIS MATTER?
Why are you invested in creating this change?
Why should your audience be invested?

7 WHAT IS THE TIMELINE?
Can you implement a pilot of this idea in the next two school terms? If so, how? If not, why?

8 WHAT RESOURCES DO YOU NEED?
What personnel might you need?
What space might you need?
What materials might you need?

9 BASED ON WHAT YOU STATED ABOVE, HOW MUCH FINANCIAL SUPPORT DO YOU NEED?
What might the budget be for this initiative?

10 WHAT IS THE POTENTIAL LONG-TERM IMPACT?
How might your solution be replicable in other classrooms, grade levels and schools?

TELL TRANSITION SUMMARY

STORYTELLING | PITCHING

SUMMARY OF TELL YOUR COMMUNITY PHASE

Use this **Tell Your Community** summary page to gather up the work you completed during this phase. Be thinking about 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.

WORKSHOP #4 TOOLS

#1 Storytelling

Summarize the story you wrote about your stakeholder, their problem and why your solution solves it. 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 solves it. What are the most important ideas that you want to share with the community and potential funders?

TELL TRANSITION ALIGNMENT

STORYTELLING | PITCHING

TEAM ALIGNMENT

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 so that you can move on to the next phase of the design challenge with a shared perspective. Let each person read their summary responses without interruption or comments from the team. If there are differing views and ideas from team members, ask questions to gain understanding. Try questions like: "Can you share more information about how you came to these ideas?" and "Tell me more about that…" Your team does not have to be aligned on all aspects of your design work, but you must be aligned on the items below in order to move on.

What is the best pitch outline your team wants to use to present to the Schools2030 initiative?

How does your team's pitch communicate why you believe your concept will improve the holistic learning outcomes for your students?

CRITERIA FOR MOVING TO THE NEXT PHASE

Use the rubric below to assess if your team has met all the goals of this phase 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 criteria at the bottom of the rubric, consider as a team the progress you're making overall.

	Not ready	Ready with hesitation	Ready with confidence
STORYTELLING ACTIVITY	You are not able to write a stakeholder-centered story to communicate about your design challenge.	You are not confident writing a stakeholder-centered story to communicate about your design challenge, but feel comfortable moving forward.	You feel confident that you have written a stakeholder-centered story to communicate about your design challenge.
PITCHING ACTIVITY	You are not able to write a pitch that communicates about the potential of your solution to solve the stakeholders' needs and improve the holistic learning outcomes.	You are hesitant to write a pitch that communicates about the potential of your solution to solve the stakeholders' needs and improve the holistic learning outcomes, but feel comfortable moving forward.	You feel confident that you have written a pitch that communicates about the potential of your solution to solve the stakeholders' needs and improve the holistic learning outcomes.
PROJECT STATUS: QUALITY OF THE STORYTELLING	You have not written an effective stakeholder-centered story to communicate about your design challenge.	You are hesitant that you have written an effective stakeholder-centered story to communicate about your design challenge and will work to improve it.	You are confident that you have written an effective stakeholder-centered story to communicate about your design challenge.
PROJECT STATUS: QUALITY OF THE PITCH	You have not written an effective pitch that communicates about the potential of your solution to solve the stakeholders' needs and improve the holistic learning outcomes.	You are hesitant that you written an effective pitch that communicates about the potential of your solution to solve the stakeholders' needs and improve the holistic learning outcomes.	You are confident that you have written an effective pitch that communicates about the potential of your solution to solve the stakeholders' needs and improve the holistic learning outcomes.
PROJECT STATUS: CONNECTION TO LEARNING OUTCOMES	Your story and pitch are not connected to the goal of improving the holistic learning outcomes.	You are hesitant that your story and pitch are not connected to the goal of improving the holistic learning outcomes.	Your story and pitch are connected to 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, trying 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 is not confident, work to improve before moving on.*

HOLISTIC LEARNING OUTCOMES

Core Academic Proficiencies
- Literacy
- Numeracy & Mathematics

Applied Academic Proficiencies
- Science
- Health & nutrition
- Humanities
- Arts & culture
- Digital literacy, technology & media

Being Our Best (the individual learner)
- Self-awareness
- Self-efficacy
- Self-regulation
- Resilience
- Taking responsibility
- Ethical decision-making
- Creativity
- Critical thinking

Working With Others (our class/school)
- Communication
- Collaboration
- Open mindedness
- Empathy
- Relationship building
- Reconciling tensions
- Leadership

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

TELL TRANSITION REFLECTION

STORYTELLING | PITCHING

n REFLECTION ON PROCESS

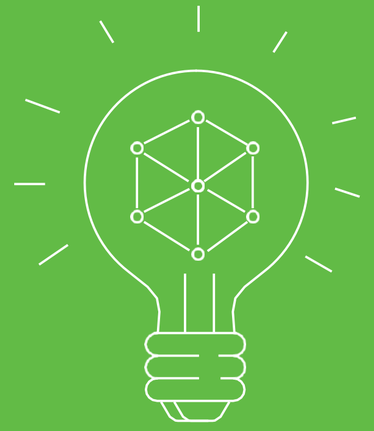
Independently, reflect on how you team is working together by answering the questions below. Then share your reflections as a team.

- 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?

n 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.



CONCLUSION

SCHOOLS 2030 HUMAN-CENTERED DESIGN **TOOLKIT**

CONCLUSION

CONGRATULATIONS!

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.

n 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
- Show don't tell
- Many cycles of prototyping are necessary to develop an idea
- Feedback is a gift to improve your ideas

n MINDSETS REFLECTION

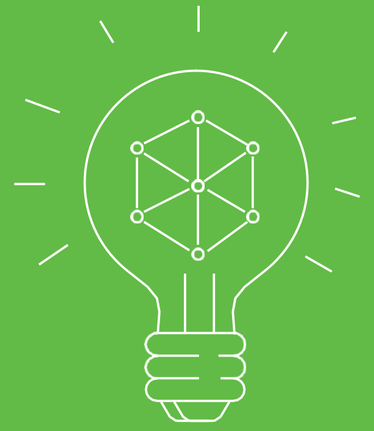
What mindsets are you most comfortable with?

What mindsets are you least comfortable with?

What mindsets do you want to work on?

n PROCESS REFLECTION

- What is the most important insight you gained during the design challenge?
- 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?
- What do you hope to do next using human-centered design?



APPENDIX

SCHOOLS 2030 HUMAN-CENTERED DESIGN **TOOLKIT**

APPENDIX I

n HOLISTIC LEARNING OUTCOMES DEFINTIONS

Core Academic Proficiencies

The level of competence 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 engage with written language to understand and make meaning. Learners have the ability to engage in the production of written language in order to communicate meaning.

• **Numeracy & Mathematics:** Learners have the ability to use numbers to communicate ideas, analyze information and solve problems. Learners have the ability to understand, appreciate and apply concepts related to shapes and space, patterns and data.

Applied Academic Proficiencies

The level of competence in bringing together multiple complex academic areas that a student needs to achieve in order to lead a successful, productive and fulfilling life.

• **Science:** 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 systems that work together to create health and well-being for humans. Learners have the ability to act on that information to create a healthy lifestyle.

• **Humanities:** Learners have the ability to pursue knowledge and understanding of how human beings express their values and their cultures following a systematic methodology based on critical analysis. Learners have the ability to apply their knowledge and understanding of the humanities, in order to produce new knowledge.

• **Arts and culture:** Learners have the ability to pursue knowledge, understanding and competency in utilizing tools related to communication and expression. Learners have the ability to analyze and appreciate pieces of art and forms of cultural expression. Learners have the ability to apply their knowledge and understanding of arts and culture, in order to produce new knowledge and self-expression.

• **Digital literacy, technology and media:** Learners have the ability to pursue knowledge, understanding and competency in utilizing the most appropriate tools 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 gaining an understanding of their behaviours. Learners practice self-regulation alongside self-awareness, bringing about mindful awareness to thoughts and actions. Learners reflect upon their various identities, build greater self-esteem, motivation, and confidence to bring about positive personal changes in behaviour.

• **Self-efficacy:** Learners have an accurate assessment and belief in their ability to accomplish a goal. Learners have the ability to take action to accomplish that goal and to ask for 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 are in.

• **Resilience:** Learners demonstrate the ability to cope with failure and mistakes, persevere, and take creative risks.

• **Taking responsibility:** Learners take ownership of their actions and the repercussions of actions, choices, and decisions. Learners reflect on and critically evaluate their choices and actions from an ethical perspective, with the ability to evaluate their ethical stance and make decisions based on respect for others.

• **Ethical 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, critical 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 limitations.

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 to understand the intention and meaning of the idea.

• **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 shared responsibility for collaborative work and value the individual contributions made by each team member.

• **Open mindedness:** Learners demonstrate respect and appreciation for the ideas, perspectives and values of others. Learners acknowledge their own prejudice with a willingness to continually learn from others.

• **Empathy:** Learners listen to others and try to experience what others may feel. Learners relate to others with deep 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 trust and demonstrate trustworthiness in interactions. Learners build trust by sharing themselves and seeking to understand others as individuals. Learners develop and sustain meaningful relationships with people different from themselves.

• **Reconciling Tensions:** Learners think in an integrated way that avoids premature conclusions and recognises interconnections between diverse views. Learners develop skills in handling tensions, dilemmas and trade-offs with others from a different background. Learners work towards balancing competing interests and perspectives of others to manage conflict in a respectful manner. Learners are aware of the tensions within themselves and seek to understand and resolve tensions.

• **Leadership:** Learners have the ability to understand one's role and act on the opportunity to influence and guide a group of people to act ethically and work collaboratively toward achieving a common goal.

Improving Our World (our community/our 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 identities.

• **Problem-solving:** Learners analyse and solve problems with consideration of diverse viewpoints and ethical implications to make sound decisions. Learners connect their ethics and values to their thinking and decision-making processes.

• **Civic engagement:** Learners have the understanding of decision-making structures in a society. Learners have the ability to understand one's role and act on the opportunity to participate in one's community in order to improve life for everyone.

• **Entrepreneurship:** Learners have the ability to understand the challenges facing different communities and the opportunities to improve their circumstances. Learners have the ability to understand one's role and act on the opportunity to create market-driven value for others. Learners have the ability to design and implement value-added initiatives and overcome and learn from challenges and setbacks.

• **Respect for Diversity:** Learners' commitment and everyday actions demonstrate respect for and positive engagement with diversity and difference, including working constructively with people different from themselves. Learners understand that pluralism is an ethic of respect for diversity and that it is a process not a product, and one that is challenging. As such, it requires continuous effort at multiple scales and levels across society.

• **Respect for the Environment:** Learners understand their impact on the natural world, show concern for environmental issues and take action to protect natural resources for a sustainable future. Learners have a sense of responsibility and actively participate in protecting and resolving environmental problems.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