



Master of Educational Technology

Unit: Address Real-World Issues Through Making

Lesson 3: Empathy for Users

Lesson Designed by: Michelle Desgroseilliers

<p>Grade(s): 9-12 Date(s): N/A Duration: 6+ 80-minute classes</p>	<p>Lesson Topic/Title: Empathy for Users Subjects: Social Studies / ADST Number of Students: 20-30 students</p>
<p>BIG IDEAS:</p> <ul style="list-style-type: none"> ● In order to come up with realistic and relevant solutions for problems, you have to understand who has the problem and what they need. ● Social justice (EDIDA) frameworks along with design learning can be used to address real-world social, ethical, and sustainability issues. 	
<p>CURRICULAR COMPETENCIES:</p> <ul style="list-style-type: none"> ● Engage in a period of research and empathetic observation in order to understand design opportunities (BC ADST 9 curriculum, 2018). ● Identify potential users and relevant contextual factors & identify criteria for success, intended impact, and any constraints (BC ADST 9 curriculum, 2018). ● Explain different perspectives on past and present people, places, issues, and events, and distinguish between worldviews of the past or present (perspective)(BC Social Justice 12 curriculum, 2016). 	



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CONTENT OBJECTIVES

Examining cognitive biases that limit our abilities to empathize with large groups, and how we can use design tools to overcome these in order to produce effective solutions for big problems.

GENERAL OBJECTIVES

Students will:

- Identify the groups affected by the challenge selected in previous lessons
- Learn about cognitive biases and the role they play in limiting our understanding of the perspectives of others
- Engage in practice with tools to help build empathy and understanding for other people in order to generate solutions

SPECIFIC OBJECTIVES

Students will:

- Identify which groups are affected by their challenge and produce a list of user types
- Produce empathy maps for each user type based on secondary research about the problem
- Conduct primary research such as interviews, focus groups or surveys to develop deeper insights
- Produce user personas and use graphic/narrative technique to detail the experiences of each user

21st CENTURY COMPETENCIES

Which competencies will be addressed and how?

Critical thinking and Problem Solving

- Learners will be asked to generate hypotheses based on secondary sources of information about the challenge and then develop a plan to prove or disprove their assumptions about the user
- Learners will use critical thinking skills to assess the needs of people affected by their selected challenge

Creativity and Innovation

- Learners will use creative thinking to develop characters and stories describing the users' experiences with the challenge



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Collaboration

- Learners will work together in groups to conduct research, propose hypotheses and generate user personas, empathy maps and experience maps/storyboards

Communication

- Learners will have to communicate within their groups to effectively complete the tasks; the end goal of each provocation and challenges are deliverables that communicate the results of their research, user details and user experience

Global Citizenship

- Learners will need to see both themselves and the groups they are designing solutions for in context in order to successfully design a solution

Metacognition & Reflection

- Learners will identify & apply knowledge of cognitive biases in the design process through deliberate exploration of users with needs that fall outside their own experiences

LEARNING GOALS

- I can understand the challenges of empathizing with groups of people whose experience is different than my own
- I will learn who is impacted by the challenge, and develop ideas about their distinct wants, needs and motivations
- I will conduct tests and refine my assumptions about users based on primary sources of information
- I will develop models representing the different user types and their experiences with the challenge in detail for the purpose of collaborative solution design
- I will use graphic/narrative techniques to both explore and communicate the problem to others for the purpose of designing solutions



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PRIOR KNOWLEDGE

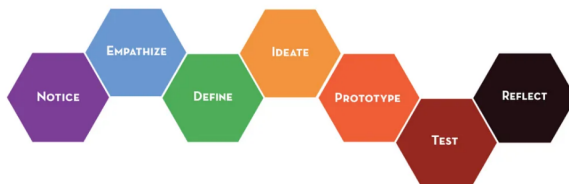
Prior to this lesson, students will be able to...

1. Select a design challenge (Lesson 1)
2. Assess the context of that challenge and situate themselves relative to it (Lesson 2)

EDIDA

Equity, Diversity, Inclusion, Decolonization, Anti-Racism Frameworks

The [Liberatory Design Thinking Process](#) is a framework that supports learners in developing a better understanding of the different equity, diversity and inclusion challenges faced by others. When used in parallel with other Equity, Diversity, Inclusion, De-Colonization & Anti-Racism ([EDIDA frameworks](#)) such as the [First People's Principles of Learning](#) and/or [BCIT's Anti-Racism Framework](#), this understanding can be used to accomplish broader EDIDA goals.



Educator Considerations:

- *Consider what materials you will use; which mix of no/low/high-tech options will be the most inclusive & respectful of your learners' unique experiences and cultures?*
- *How will you ensure all voices are included and heard? How are you going to ensure that this lesson utilizes the EDIDA framework provided to create an inclusive space for your students?*
- *How might you present and implement the content in a way that is culturally responsive and relevant?*

Resources:

- [Liberatory Design Thinking Process](#)
- [EDIDA frameworks](#)
- [First People's Principles of Learning](#)
- [BCIT's Anti-Racism Framework](#)



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DIFFERENTIATED INSTRUCTION & ACCOMMODATIONS

What will I do to assist and/or differentiate instruction for individual learners? (Materials, Delivery, Outcome)

- Delivery
 - Lesson, provocations & challenges should be shared with the learners visually (via presentation, whiteboard, or video), as a written assignment (document) & through verbal explanation (with captions either via auto-generated closed captioning, or through student assistive devices) during class time
 - A recording of the presentation & verbal explanations is made available to the students with subtitles enabled
- Materials
 - All materials should be made available for download via LMS in advance, and an easy to follow key to all lesson resources & materials should be provided
 - Materials & resources selected for each provocation & challenge should include a variety of options for learners to select from
- Outcomes
 - Outcomes from students should have flexibility, giving students options in choosing the modality of their final deliverable(s) for each assessment
 - Individual assessment should be based on student growth
- Learner-Specific Accommodations
 - Consult learner IEP's for other learner-specific accommodations and further adjust lesson delivery, materials & outcome if necessary based on their specific accommodation requirements



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LESSON MATERIALS

Flexible based on available resources & student skills.

Recommended:

- Computers or tablets & internet access and/OR
- Paper, pens, whiteboards
- Templates (print & digital templates included)

INTRODUCTION/MINDS-ON

Before (10 minutes)

- *Welcome the class | Land Acknowledgement*
- *Introduce the challenge by explaining how this lesson fits into the overall Liberatory Design Challenge begun in Lesson 1*
 - Remind students that this lesson builds on the previous lessons in the Liberatory Design Challenge. This module will ask them to try to see things from the perspective of other people, and they should try to be open minded and respectful of their peers and their imagined users.
- *Organize learners into groups of 4-6*

Critical Guiding Questions:

- What is a “User” when working on a design challenge?
- Why is empathizing with users so important in the design process?
- What kind of unconscious biases do we have that require these techniques to overcome?



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Why we need to work to empathize with users (5 minutes)

People are not naturally good at seeing things from another person's perspective. In fact, this can be one of the most challenging aspects of the design process. When tackling a design challenge, one of the most important factors is to understand who is most affected by the challenge and what they need in a solution. Without techniques like user personas, empathy maps and user journeys, we tend to design solutions that we want – and we are not always the ones struggling with the challenge! These user empathy provocations and challenges are based on techniques used by professional designers to produce both digital & physical product designs.

Thought starter (10 minutes)

1. Have learners watch these videos:
 - a. [The arithmetic of compassion \(1:39\)](#)
 - b. [Empathize: Do you know what your users really need? \(1:22\)](#)
2. Discussion
 - a. Ask students to discuss these video within their groups
 - i. Have you ever felt misjudged for being part of a group?
 - ii. Have you ever made assumptions about someone because of this?

- What kind of Primary Research can be used to understand Users?
- How can techniques like narrative, characterization and mapping help us better understand users?
- Where do these tools fit within the Liberatory Design Thinking model?



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ACTION-LEARNING EXPERIENCES

See provocation & challenge details for detailed instructions, guiding questions & resources

- A) [EXPERIENCE 1 \(20%\) - PROVOCATION: WHO IS THE USER?](#)** (1x 80 minute class including intro, thought starter)
Based on the problem selected in Lesson 1, and building on the inquiry conducted in lesson 2, learners will explore the problem from a human-centric perspective, identifying what type(s) of people are affected and how those people are different from themselves and from each other.

- B) [EXPERIENCE 2 \(30%\) - CHALLENGE: CREATE USER PERSONA\(S\)](#)** (minimum of 3x 80 minute classes)
Based on your empathy maps, do primary research (interviews, focus groups or surveys) to collect more information and use it to create a User Persona representing each of your types. These personas will be the “main characters” impacted by your design challenge. Personas are used by professional design teams to help overcome the natural tendency to make assumptions and generalizations about groups of users – and to stay creatively aligned!

- C) [EXPERIENCE 3 \(40%\) - CHALLENGE: MAPPING USERS’ EXPERIENCES](#)** (2x 80 minute classes)
Based on your previous lessons and challenge, choose a format for exploring your user’s experiences with the challenge using narrative techniques like experience mapping or storyboarding. The goal is to better understand the experience and assess how the user is feeling at each step. This is an important part of the design process as it allows you to break down the challenge into more manageable events that you can design solutions for.

- D) REFLECTION EXERCISE (10%) - DOCUMENTATION & ASSESSMENT** (15-30 minutes, to be updated after each Provocation & Challenge)



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LIBERATORY DESIGN PROVOCATION

Liberatory Design Provocations are intended to spark curiosity, reflection, and analysis based on prompts such as media or other content. The emphasis of a provocation is on learning through analysis, examination & exploration.

PROVOCATION: WHO IS THE USER?

Overview of the Provocation

Based on the problem selected in Lesson 1, and building on the inquiry conducted in lesson 2, learners will explore the problem from a human-centric perspective, identifying what type(s) of people are affected and how those people are different from themselves and from each other.

Materials & Resources

Refer to no/low/high-tech options to select the best mix of materials for your group of learners

- Computers or tablets for research &/or
- Paper, pens for note-taking
- Example descriptions of users
- User Empathy Map Template (print & digital templates available)



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Instructions

1. **(5 minutes)** Consider the challenge you have selected – who is impacted by your challenge? *Think about what these people might need, care about and want. Remember, it's easy to make assumptions about your users based on your own experience! But, while you may have something in common with your users, there will be many differences as well.*
2. **(5-10 minutes)** Discuss this with your group and make a list of all the different types of people impacted.
3. **(10-15 minutes)** Do some additional research to better understand who may be affected: news articles and videos are great sources for this. Did you miss any types of people? Add them to your list.
4. **(20-30 minutes)** Finally, for each type of person on your list, create a “Empathy Map” using the template provided that includes:
 - a. demographics (basic info like their age, where they live, what their job is, etc)
 - b. What someone from this group might SAY
 - c. What someone from this group might DO
 - d. What someone from this group might THINK
 - e. What someone from this group might FEEL
5. **(5 minutes)** Document your thoughts about this provocation in your Design Journal for this unit.

Critical Questions

Are you personally impacted by the challenge? If not, who is?

How are they different from you?

Are there more than one type of person affected?

What do they want or need to do that this challenge impacts?

What other kinds of limitations or considerations will you need to keep in mind? ie, physical, social, financial.

What do they care about? What do they not care about?



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Background & Additional Information

What are User Types & Empathy Maps?

It's tempting to be very generic about who the user is when you are trying to solve a problem. But the people affected often face different aspects of the problem, or have different needs. For example, if you choose a challenge to design an affordable prosthetic for people who are missing arms, there will be many different types of people with this condition. They will share some of the same needs, but their differences are also important. Consider the War Amps case study linked in the resources:

- Child amputees:
 - need to move around more, and use their arm for schoolwork, sports as well as basic activities
 - are growing, and may need adjustable or new sizes frequently
 - will be less careful with delicate devices or equipment
- War veterans:
 - may have other health issues or impairments that affect their abilities
 - may have more financial issues
- Adults:
 - need to use their prosthetic for everyday tasks like cooking, driving or self-care
 - be motivated to have a durable prosthetic that lasts a long time

Resources

- [The arithmetic of compassion](#) (Video, 1:39)
- [Empathize: Do you know what your users really need?](#) (Video, 1:22)
- [Empathy mapping: The first step in design thinking](#) (Article)
- **Case Study: War Amps**
These different types of people have the same problem but have different needs:
 - [Child Amputees](#)
 - [War Veterans](#)
 - [Adults](#)

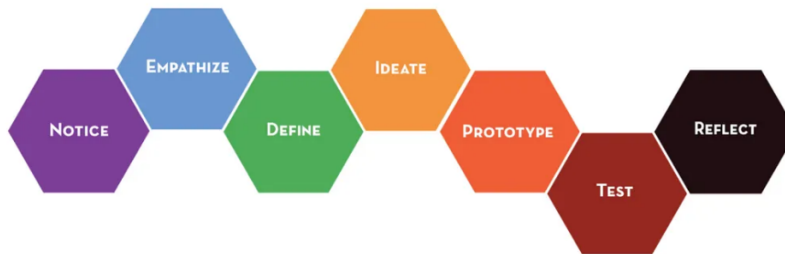


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Inclusivity Focus

The goal of this provocation is to communicate why it is so important to understand the people who are affected by a challenge in order to solve it, and to provide them with tools for beginning to empathize with different types of people.

The [Liberatory Design Thinking Process](#) is a framework that supports learners in developing a better understanding of the different equity, diversity and inclusion challenges faced by others. When used in parallel with other Equity, Diversity, Inclusion, De-Colonization & Anti-Racism ([EDIDA frameworks](#)) such as the [First People's Principles of Learning](#) and/or [BCIT's Anti-Racism Framework](#), this understanding can be used to accomplish broader EDIDA goals.



Resources

- [Liberatory Design Thinking Process](#)
- [EDIDA frameworks](#)
- [First People's Principles of Learning](#)
- [BCIT's Anti-Racism Framework](#)



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No-Tech, Low-Tech, High Tech Options

Select the technology level that is the most applicable based on available resources and learner skill level. Any combination of high/low/no technology is equally effective at supporting this learning activity.

No/Low Tech

- learners conduct research using print media such as newspapers, books or magazine articles on their selected topics
- learners prepare their empathy maps using printed templates, or by copying the format onto a whiteboard or flipchart

High Tech

- learners conduct research using computers or tablets, access online news, videos or articles
- learners complete their user hypotheses using a digital version of the template in a digital whiteboard tool such as Miro or Figjam

Resources

- [Miro Lesson Template](#)
- [Figjam Empathy Map Templates](#)
- [Miroverse Empathy Map Templates](#)
- Empathy Map Example (below)
- Printable Empathy Map Template (below)



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RUBRIC

Assessment of this challenge should be shared with learners before proceeding to the next challenge along with detailed feedback on how to improve.

Provocation Assessment			
	Emerging (educator notes)	Meets Expectations	Exceeds Expectations (educator notes)
Understanding and self-awareness of the biases that limit understanding of other people		Understands the concept of cognitive bias and the concept of “arithmetic of compassion” and the challenges of understanding groups’ needs effectively. Acknowledges and works to overcome a tendency to make assumptions and overgeneralizations about others.	



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Identifying the types of users associated with their challenge		Uses secondary research sources and previous knowledge of the challenge to create a plausible list of the type of people impacted by the selected design challenge.	
Empathy mapping to begin understanding users		Using the empathy map framework, identifies a thorough set of user characteristics for each user type. Understands the meaning of the different categories and includes appropriate examples.	
Integration of secondary research		Locates additional sources of information for adding details and new types of users. Uses ingenuity to find in-depth, reputable information from both traditional media and user-generated sources.	



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Communication & representation		Effectively communicates the contents of each empathy map and user type with clear language, well-organized content and awareness of how their own biases and/or stereotypes might be influencing their outputs.	
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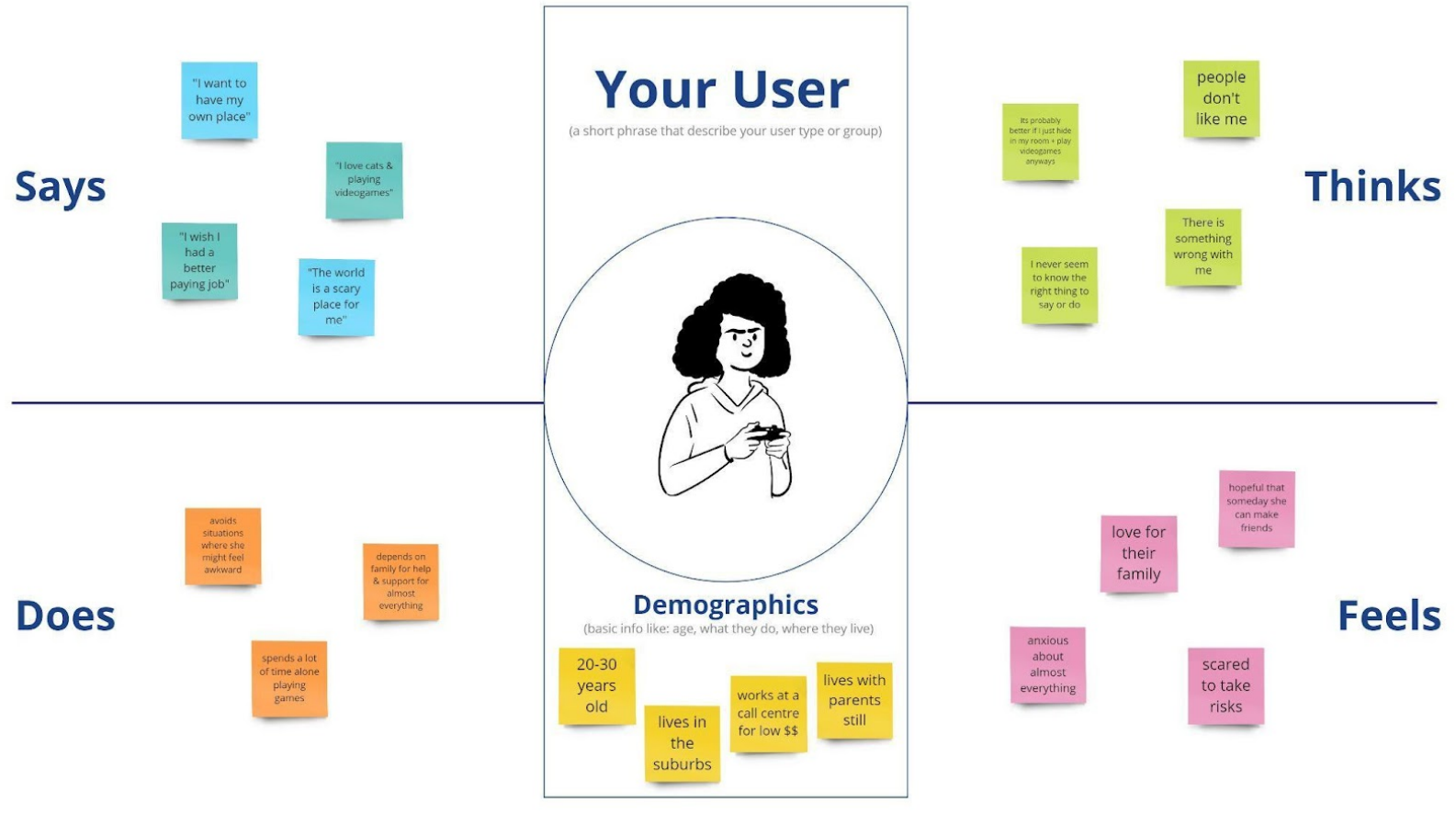


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Empathy Map Template

The Challenge

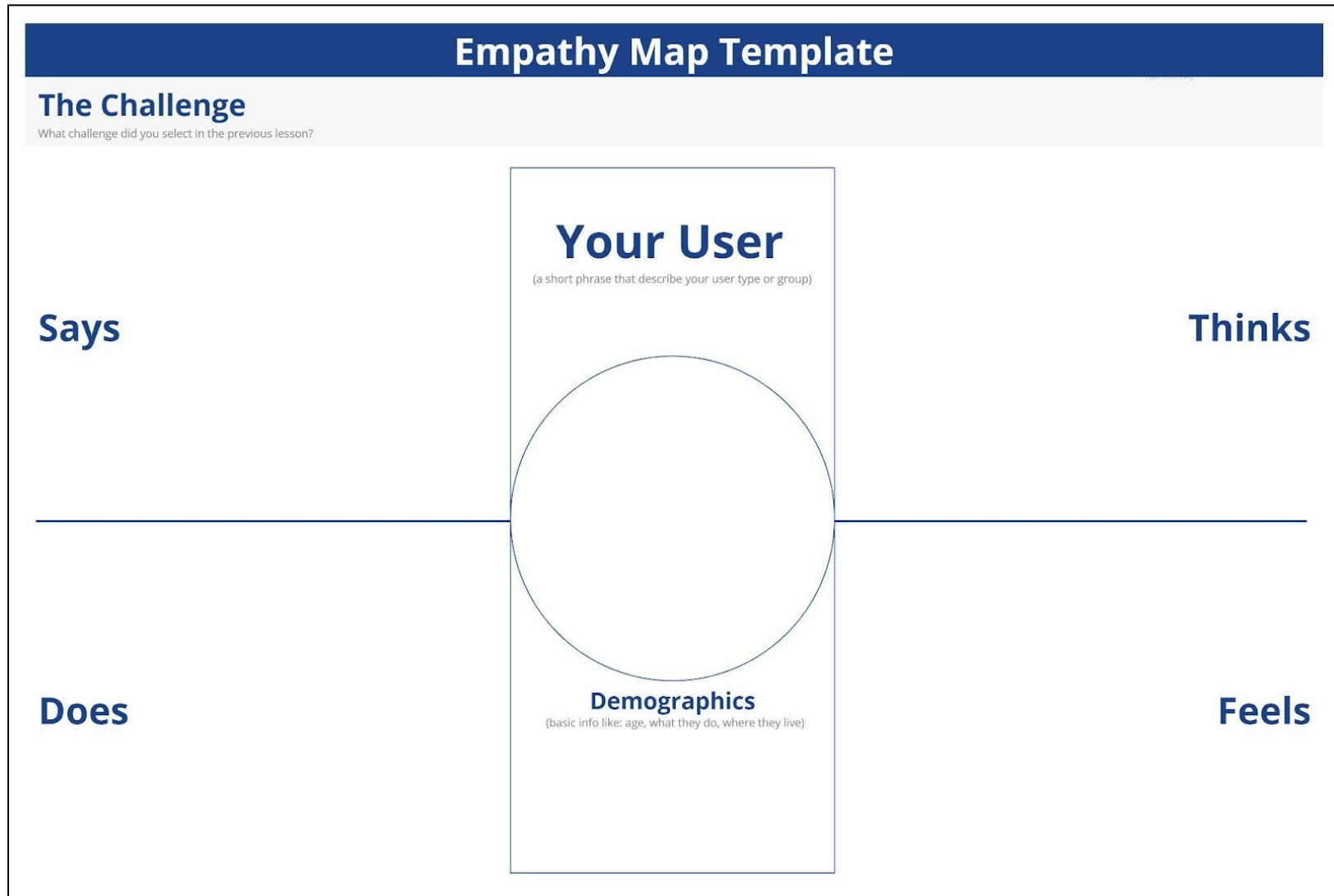
What challenge did you select in the previous lesson?



Example Empathy Map (from [Miro Template](#))



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LIBERATORY DESIGN CHALLENGE

Liberatory Design Challenges use inclusive practices to foster a maker mentality through hands-on, immersive experiences. The emphasis of a challenge is on learning by doing.

CHALLENGE: CREATE A USER PERSONA

Overview of the Challenge

Based on your empathy maps, do primary research (interviews, focus groups or surveys) to collect more information and use it to create a User Persona representing each of your types. These personas will be the “main characters” impacted by your design challenge. Personas are used by professional design teams to help overcome the natural tendency to make assumptions and generalizations about groups of users – and to stay creatively aligned!

Materials & Resources

Refer to no/low/high-tech options to select the best mix of materials for your group of learners

- Computers or tablets & internet access for virtual interviews and/or access to in-person interviews
- Google Forms or MS Surveys for developing and collecting survey results OR
- Paper, pens for note-taking
- User Persona example and template (print & digital templates available) for capturing research results



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Instructions

Primary Research Planning Class

1. **(20-30 minutes)** Review your empathy maps with your group. Make a list of questions you would ask these users if you could.
2. **(10-20 minutes)** Discuss your questions with your teacher.
3. **(30-50 minutes)** Work on creating a survey or interview script

Interviews or surveys to be conducted during subsequent class times as planned between teacher & learners. Depending on challenge scope and available resources, this may include field trip(s) and/or activities outside of class time at the teacher's discretion.

Persona Production Class

4. **(10-20 minutes)** As a group, discuss your research. What did you learn about your users? Compare to your empathy maps & make changes.
5. **(50-60 minutes)** Divide up the users and assign 1-2 people to create a "User Persona" for each type. Use the template provided by your teacher to build a kind of main character that represents the typical user – this Persona will have a name, a photo, a backstory to go along with their goals & pain points.
6. **(10 minutes)** Document your thoughts about this challenge in your Design Journal for this unit.

Critical Questions

Research Planning

What kinds of questions can you ask to confirm what you put in your empathy maps?

Persona Production

What did you learn about each user type from the research?

Were your empathy maps correct?

Does your User Persona feel authentic based on your research and knowledge of these users?

Did any new types of user types emerge during your research? Be prepared to create new ones!



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Background & Additional Information

Using Primary Research to learn about your users

By talking directly to users either through interviews or survey questions, we can learn valuable information about who we are designing for. This allows us to get to know our potential users more authentically and learn how they truly experience the challenge. The detail of their experience are what allow us to create solutions that actually address the barriers and pain points they may be facing and ensure we are solving real problems instead of just guessing what might work best. Users can also offer ideas; as the people who have the most direct experience with their challenge, users often have innovative ideas for how to solve it (even when they can't implement it themselves).

What are User Personas, & why are they used in the design process?

"A persona is a fictional, yet realistic, description of a typical or target user of the product." ([Harley, 2015](#))

These character sheets capture the essence of a "group" or type of user and represent some of the common characteristics shared by that group. Personas have names, backgrounds and other details that allow the design team to easily remember who they are – essentially, the main character of the design process for this challenge.

Resources

- [How to conduct user interviews](#) (article)
- [What are personas?](#) (Video, 18:07)
- [Personas make users memorable for product team members](#) (article)

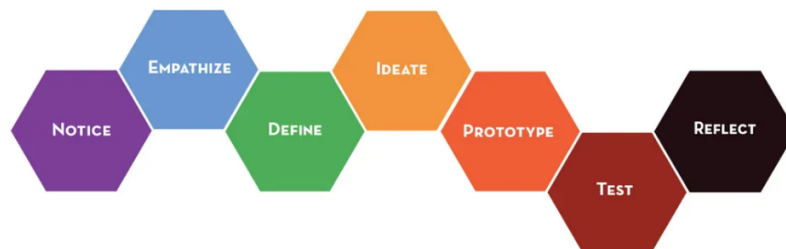


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Inclusivity Focus

The goal of this challenge is to introduce new techniques for understanding the people impacted by a problem; including talking to real users and using this research to create a character (called a Persona) who represents the average user. This is an important technique for enabling designers (and learners) to empathize effectively with the different types of people they are designing solutions for.

The [Liberatory Design Thinking Process](#) is a framework that supports learners in developing a better understanding of the different equity, diversity and inclusion challenges faced by others. When used in parallel with other Equity, Diversity, Inclusion, De-Colonization & Anti-Racism ([EDIDA frameworks](#)) such as the [First People's Principles of Learning](#) and/or [BCIT's Anti-Racism Framework](#), this understanding can be used to accomplish broader EDIDA goals.



Resources

- [Liberatory Design Thinking Process](#)
- [EDIDA frameworks](#)
- [First People's Principles of Learning](#)
- [BCIT's Anti-Racism Framework](#)



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No-Tech, Low-Tech, High Tech Options

Select the technology level that is the most applicable based on available resources and learner skill level. Any combination of high/low/no technology is equally effective at supporting this learning activity.

No Tech/Low-Tech

- learners conduct research interviews in person or over the phone
- distribute paper surveys
- create User Personas and/or Empathy Maps using printed templates + pens/markers

High-Tech

- conduct interviews virtually using tools like Zoom, MS Teams or Google Hangouts
- go on virtual field trips to visit users who may live in remote or distant locations to gain a better understanding of the challenges they face
- use Canva, Miro or Xtensio Templates to create & share User Personas

Resources

- [Miro Lesson Template](#)
- [Canva Persona Templates](#)
- [Xtensio Persona Templates](#)
- User Persona Example (below)
- Printable User Persona Template (below)



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RUBRIC

Assessment of this challenge should be shared with learners before proceeding to the next challenge along with detailed feedback on how to improve.

Challenge Assessment			
	Emerging (educator notes)	Meets Expectations	Exceeds Expectations (educator notes)
Research Planning		Critically assesses empathy maps completed previously. Proposes logical primary research methods (ie interviews, surveys) for confirming and extending what they learned through secondary research. Generates thoughtful questions that may lead to further insights. Demonstrates self-awareness of bias.	



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Conducting primary research		Conducts primary research effectively. Demonstrates respect for users in all aspects of research, documents and organizes research collected.	
Analysis of primary research		Insightful analysis of user interviews or other primary research gathered to inform the development of updated empathy maps. Makes direct connections between what users have to say about their needs, experiences and the resulting user personas.	
Development of user personas		Produces believable, well-rounded user personas that capture the essence of each user type without resorting to stereotypes.	



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Use of medium		Shows attention to details and a creative approach to developing each persona's character details. Uses images and concepts effectively to build a representative persona that is also compelling and "real-feeling" for the team to design for.	
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User Persona



Morgan Law

Age: 26
Pronouns: She/her
Location: Mississauga
Education: Bachelor's Degree
Relationship: Single

Occupation: IT Call Centre Rep
Income: \$48K

"Why is life so confusing sometimes? Everyone else just gets it -- I feel like I missed the tutorial level."

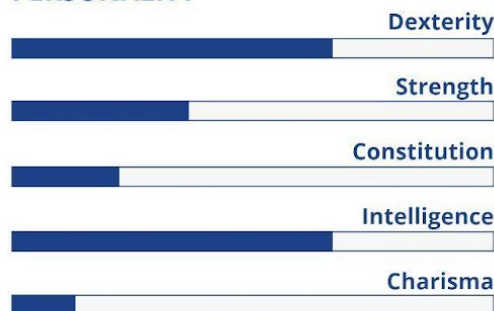
The Challenge

Morgan wants to be independent but also needs support. Because of her struggles with mental illness, she needs help figuring out basic life activities so she can be happier & more independent.

BIO

Morgan finished university last year. She loved school but doesn't love the student loans! Now she is working in an IT Call Centre and living with her parents again to save money and pay off her student loans. She loves animals, and her favourite hobbies are playing videogames, cooking and reading. She dreams of having her own place & being independent, but she also struggles with a chronic illness and mental health challenges.

PERSONALITY



GOALS

- Live independently & not have to rely on parents for financial support
- Make friends & find a better job
- Get a cat

PAIN POINTS

- Needs guidance for basic life stuff
- Struggles with ups and downs in her motivation levels, ability to pay attention & remember stuff
- Has trouble making or keeping friends
- Low-paying, stressful job where people yell at her for stuff that isn't her fault

NEEDS

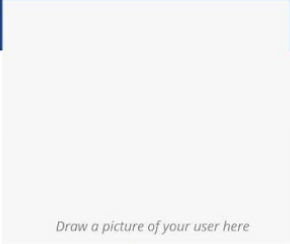
- Better support for her mental health
- Help managing her finances & day-to-day activities when dealing with fluctuating energy levels & job stress

MOTIVATIONS

- Family
- Having more free time to enjoy life
- Being around animals
- Independence



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User Persona Template		
 <p><i>Draw a picture of your user here</i></p> <p>Age: Pronouns: Location: Education: Relationship:</p> <p>Occupation: Income:</p> <p>Quote</p> <p>The Challenge</p>	<p>BIO</p> <p>PERSONALITY</p> <p>Dexterity <input type="text"/></p> <p>Strength <input type="text"/></p> <p>Constitution <input type="text"/></p> <p>Intelligence <input type="text"/></p> <p>Charisma <input type="text"/></p>	<p>GOALS</p> <p>PAIN POINTS</p> <p>NEEDS</p> <p>MOTIVATIONS</p>



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LIBERATORY DESIGN CHALLENGE

Liberatory Design Challenges use inclusive practices to foster a maker mentality through hands-on, immersive experiences. The emphasis of a challenge is on learning by doing.

CHALLENGE: MAPPING USERS' EXPERIENCES

Overview of the Challenge

Based on your previous lessons and challenge, choose a format for exploring your user's experiences with the challenge using narrative techniques like experience mapping or storyboarding. The goal is to better understand the experience and assess how the user is feeling at each step. This is an important part of the design process as it allows you to break down the challenge into more manageable events that you can design solutions for.

Materials & Resources

Refer to no/low/high-tech options to select the best mix of materials for your group of learners

- Computers or tablets & internet access for using digital creation tools & templates OR
- Paper, pens, whiteboards for story or experience mapping
- Experience Map example, template options (print & digital templates available)



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Instructions

1. **(20-30 minutes)** Review your User Personas as a group. Discuss, and identify different scenarios where they are experiencing your challenge.
2. **(5-10 minutes)** Choose a format for describing these experiences: Experience Mapping or Storyboarding (comic-strip).
3. **(45-110 minutes)** Using digital or printed templates to create either a storyboard or experience map, describe each User Persona's experiences with the problems. Describe different hypothetical scenarios that might happen with your challenge in mind. Include:
 - a. events or external triggers that take place
 - b. the user's actions or dialogue in response to events
 - c. what they are thinking & feeling
 - d. ideas, insights or alternative storylines based on these details
4. **(20 minutes)** Document your thoughts about this lesson in your Design Journal for this unit. Use these questions to guide your reflection:
 - a. Do you feel like you "know" your user(s) a little better now?
 - b. Can you imagine ways that the problem might be solved, based on the details of each of these scenarios?
 - c. Do you feel like all the steps of this lesson (from empathy maps to user personas to mapping / storyboarding) were necessary? Why or why not?
 - d. Can you identify other circumstances where you might use some of these techniques to understand people better?

Critical Questions

What do you think it might be like dealing with your challenge for each of your User Personas?

How can you use what you learned from your research to inform these scenarios?

What are some of the differences between your different users' experiences of the same issue?

Can you imagine ways that the problem might be solved, based on the details of each of these scenarios?

What else do you need to know in order to solve these challenges?



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Background & Additional Information

In the previous provocation and challenge you focused on deepening your understanding of the users – but the focus is on the problem or challenge they are having, right? Here are some techniques used by designers to put their personas in context:

Storyboarding to understand a problem from a user's perspective

This graphic approach to telling the story of a user's journey with the challenge is more commonly associated with comic strips or film production; but storyboards are also a great tool for understanding experiences and all the different inter-related aspects that contribute to someone's challenges.

Experience mapping a challenge

Another commonly used technique in design is the experience map or journey map. These are simple graphic expression of a user's experiences with a challenge that shows the touchpoints, events, thoughts and feelings of a user as they experience a challenge. This technique is most commonly associated with the design of digital products, but can be applied to almost any kind of design challenge

BONUS

Storyboarding and experience or journey mapping are frequently also used to communicate and work out the details of the solution as well as to understand the problem!

Resources

- [The what, why & when of storyboarding in UX design](#) (article)
- [Journey mapping 101](#) (article)

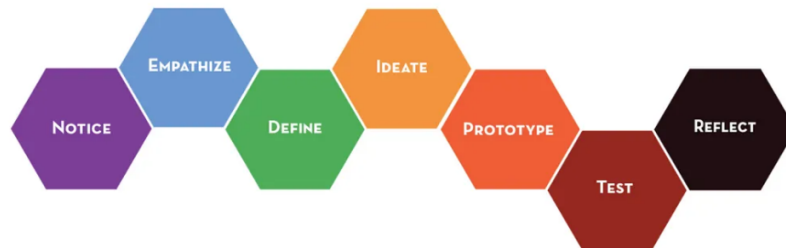


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Inclusivity Focus

The goal of this challenge is to introduce new techniques for understanding how people are impacted by a challenge. These practices include narrative techniques that allow learners to explore the specific events and context as well as how users' behave. It highlights barriers in a humanistic way that further deepens our ability to empathize with those in need of a solution.

The [Liberatory Design Thinking Process](#) is a framework that supports learners in developing a better understanding of the different equity, diversity and inclusion challenges faced by others. When used in parallel with other Equity, Diversity, Inclusion, De-Colonization & Anti-Racism ([EDIDA frameworks](#)) such as the [First People's Principles of Learning](#) and/or [BCIT's Anti-Racism Framework](#), this understanding can be used to accomplish broader EDIDA goals.



Resources

- [Liberatory Design Thinking Process](#)
- [EDIDA frameworks](#)
- [First People's Principles of Learning](#)
- [BCIT's Anti-Racism Framework](#)



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No-Tech, Low-Tech, High Tech Options

Select the technology level that is the most applicable based on available resources and learner skill level. Any combination of high/low/no technology is equally effective at supporting this learning activity.

No Tech/Low-Tech

- learners use printed templates or whiteboards to create storyboards or experience maps describing users' experiences with their challenge

High-Tech

- learners use digital templates such as the lesson materials in Miro to complete experience maps or storyboards
- learners use alternative story tools such as Canva, Make Beliefs or Storyboard Creator to develop user stories in a "comic strip" format
- learners create interactive user stories through virtual tools such as cospaces for storytelling

Resources

- [Miro Lesson Template](#)
- Storyboard Template Example & Printable Template (below)
- User Experience Map Example & Printable Template (below)
- [Canva Comic Strip Templates](#)
- [Make Beliefs Comix Maker](#)
- [Storyboard Creator](#)
- [Cospaces Storytelling](#)



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RUBRIC

Assessment of this challenge should be shared with learners before proceeding to the next challenge along with detailed feedback on how to improve.

Challenge Assessment			
	Emerging (educator notes)	Meets Expectations	Exceeds Expectations (educator notes)
Different scenarios for users' experiences with the design challenge		Develops multiple scenarios exploring the topic of the challenge. Limited overlap in issues between different scenarios and user stories. Identifies multiple aspects of the design challenge that might be avenues for solutions.	
Communication of users' experiences		Uses narrative to describe the experiences of the users in a compelling and intuitive manner.	



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Demonstration of understanding and empathy for users		Shows empathy for the users through sensitivity in the way their experiences are handled in story. Story points and actions avoid blaming the victim and attempt to show a well-rounded perspective on the rationale behind their behaviours and actions.	
Effective use of format		Creative use of story techniques to draw in the reader/viewer, and explore the reality of users' experiences with challenges in a way that exposes opportunities for design interventions to help alleviate pain points and reduce barriers.	



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Storyboarding: Morgan Law

THE CHALLENGE

Morgan wants to be independent but also needs support. Because of her struggles with mental illness, she needs help figuring out basic life activities so she can be happier & more independent.

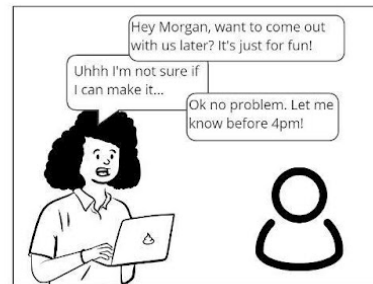


THE SCENARIO

One of Morgan's biggest pain points is her struggle to make friends. In this scenario, she is invited to hang out with some work colleagues but doesn't go due to her social anxiety.



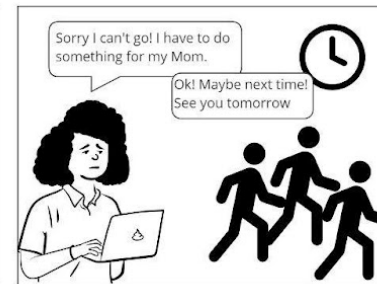
The Scene	
Panels 1-2 should introduce the context where the action occurs	
Context	Morgan is at work at the call centre. Its friday afternoon.
Events	She overhears some co-workers talking about going out together later.
Reactions	She looks anxious.
Thoughts	Ohhh maybe they will ask me and I can make some friends!
Feelings	Nervous but also hopeful



Journey Stages	
Capture the events, experiences & context of that scenario	
Context	Morgan's co-worker invites her to come out
Events	Invitation to participate
Reactions	Mind starts racing... she hedges
Thoughts	I'd probably mess it up .. I am so awkward
Feelings	Super anxiety



Journey Stages	
Capture the events, experiences & context of that scenario	
Context	Morgan is back at her desk thinking
Events	Morgan reflects on the invite
Reactions	She's thinking about it
Thoughts	If I say no they'll think I'm a jerk. But if I go I'll definitely do something to ruin it.
Feelings	Sad/scare/anxious



Journey Stages	
Capture the events, experiences & context of that scenario	
Context	Who, what & where?
Events	What external events or triggers?
Reactions	How does the user respond or act?
Thoughts	I'm never going to have any friends
Feelings	How are they feeling?



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Storyboarding Template

THE CHALLENGE

THE SCENARIO

Add user photo here

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The Scene
Panels 1-2 should introduce the context where the action occurs

Context	<i>Who, what & where?</i>
Events	<i>What external events or triggers?</i>
Reactions	<i>How does the user respond or act?</i>
Thoughts	<i>What are their thoughts?</i>
Feelings	<i>How are they feeling?</i>

The Journey
Step-by-Step details of the experience

Context	
Events	
Reactions	
Thoughts	
Feelings	

The Journey
Step-by-Step details of the experience

Context	
Events	
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The Journey
Step-by-Step details of the experience

Context	
Events	
Reactions	
Thoughts	
Feelings	



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Experience Map: Morgan Law

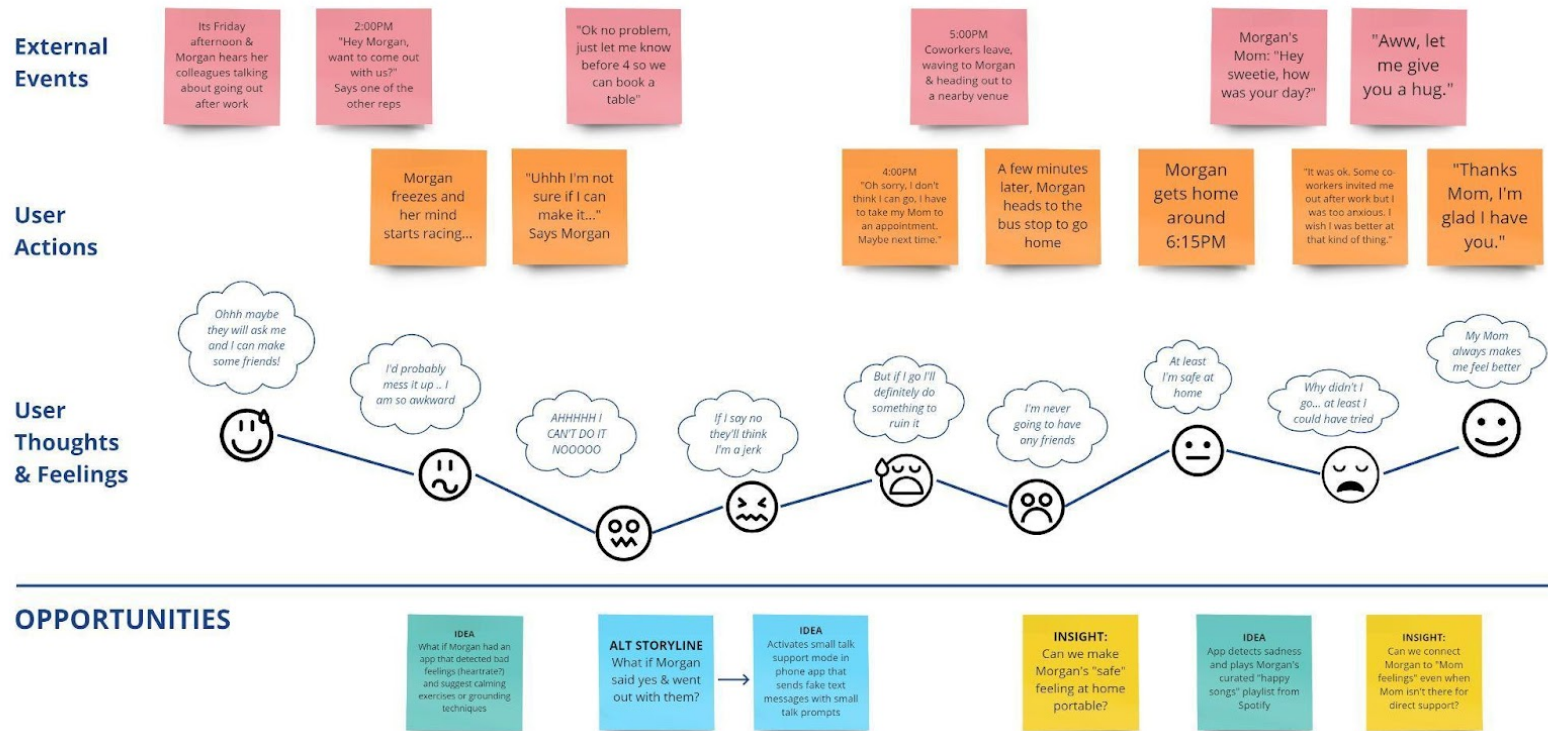
THE CHALLENGE

Morgan wants to be independent but also needs support. Because of her struggles with mental illness, she needs help figuring out basic life activities so she can be happier & more independent.



THE SCENARIO

One of Morgan's biggest pain points is her struggle to make friends. In this scenario, she is invited to hang out with some work colleagues but doesn't go due to her social anxiety.



Example Experience Map (from Miro Template)



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Experience Map: Template		
<p>User's name here</p>		
THE CHALLENGE		THE SCENARIO
<p>Draw a picture of your user here</p>		
External Events		
User Actions		
User Thoughts & Feelings		
OPPORTUNITIES		



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CONSOLIDATION/CONCLUSION

So, why is it so important to describe the user in such detail? These activities both show us how people are different from ourselves and from others, and give us tools for increasing our understanding in pursuit of better problem solving through design.

Cognitive biases: the Arithmetic of Compassion

- As humans, we tend to generalize when it comes to large groups; learning to look for the stories of individuals can help us overcome this

Empathy Maps & User Personas

- Tools like these help us describe fictional “main characters” to focus our design solutions on

Experience Mapping & Storyboarding

- Narrative techniques like these can help us see the little and not so little details that must be addressed for a successful design solution

All these practices are used by professional designers to create the products we interact with; but they are also powerful mechanisms for producing change in the world. How will you use the Liberatory Design Thinking method in your life to make the world a better place?

Critical Guiding Questions:

- Do you feel like you “know” your user(s) a little better now?
- Can you imagine ways that the problem might be solved, based on the details of each of these scenarios?
- Do you feel like all the steps of this lesson (from empathy maps to user personas to mapping / storyboarding) were necessary? Why or why not?
- Can you identify other circumstances where you might use some of these techniques to understand people better?



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ASSESSMENT

Tools & Strategies

DIAGNOSTIC

- Review previous lesson outcomes
- Have students create a [KWFLSD chart](#) in their Design Journal for this step of the Design Process that describes their knowledge & understanding level prior to initiating this lesson

FORMATIVE

- Participation & engagement in discussions, research activities & creation activities in each provocation and/or challenge of this lesson (observed)
- Group collaboration (peer assessed)
- Creation of empathy maps for all user types (see [provocation rubric](#))
- Creation of thoughtful, research-informed user personas (see [challenge rubric](#))
- Creation of detailed user experience mapping (see [challenge rubric](#))
- Completion of self-reflection journal (completion assessment, to be fully assessed as unit summative assessment)

SUMMATIVE

- Completion of self-reflection (design journal) for each action activity as part of unit summative assessment

Evaluation of the lesson

The effectiveness of this lesson will be assessed based on observation, student & community feedback, and learner success in subsequent lessons.

Reflection

1. *Were my students successful in meeting the learning goals? How do I know?*
2. *Did my instructional decisions meet the needs of all students? If not, what are my next steps?*
3. *What worked well? Why?*
4. *What will I do differently: When teaching this lesson again? For the subsequent lesson?*
5. *What are the next steps for my professional learning?*