

# Inclusive Co-design Toolkit

Best practices for making co-design inclusive of people with language barriers



How might we make co-design processes more inclusive of people with language barriers so that we can design with diverse populations in mind?



## Best practices for including people with language barriers in co-design engagements

This booklet is designed to help service, interaction, and experience designers and researchers who want to learn how to include people with language barriers in their user engagements effectively.

The information and best practices presented in this booklet are distilled from the larger research paper "Inclusive Co-design: Making Co-design Processes Inclusive to People with Language Barriers." The research that led to this paper included a literature review, a series of interviews, and a group session. It involved collaborating with 30 stakeholders relevant to the question of inclusive co-design—immigrants, ESL students, refugees, ESL teachers and coaches, researchers, and designers.

#### Acknowledgement

The research on which the information presented here is based was conducted by Hitomi Yokota, a designer and researcher, as a thesis submitted to the Institute of Art, Design and Technology, Dublin, for the degree of Master of Interdisciplinary Design Strategies in 2019.

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# Introduction



# Why include LEP (limited English proficient) populations?

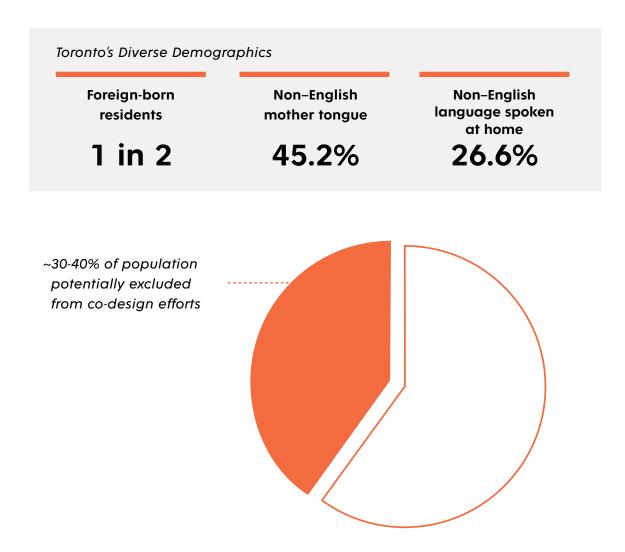
The purpose of running co-design engagements is to create outcomes that are truly meaningful and useful to users and stakeholders by including their input and designing concepts and ideas around them. Too often, we try to design with and for the majority of the community first, and then adapt our solutions to fit the needs of minority groups. By including more minority groups and underrepresented populations in the process, researchers and designers can:

- Create designs that are more resilient and useful for broader audiences
- Avoid unconscious bias in their work

### The importance of language-minority inclusion in Toronto

Inclusivity is especially important in Toronto, where: **1 in 2 residents are foreignborn, 45.2% of residents' mother tongue is not English, and 26.6% speak languages other than English at home** (Statistics Canada, 2016 Census).

Often, researchers and designers collaborate with those who share their primary language and have a similar cultural upbringing. To co-design only with native or advanced English speakers is to design with only about 60-70% of the population in mind and to unconsciously treat the other 30-40%<sup>\*</sup> as secondary recipients of products and services developed for mainstream populations.



\*There are no clear statistics on the LEP populations in Toronto at this time, and therefore this number is an estimate. Speaking English as a second language (ESL) does not necessarily mean someone is an LEP speaker. Many who learned English as a second language have advanced proficiency, including people from French-speaking parts of Canada, for example.

# Engaging LEP populations requires an extra layer of preparation

Additional considerations are necessary when planning co-design sessions with groups that include LEP speakers. The following sections explain key barriers that researchers can face, along with guidance for overcoming these barriers, driven by research conducted with 30 stakeholders.



### The four barriers to engagement

Living in a foreign country or speaking a second language can result in barriers to communication. Through engagement with LEP and ESL (English as a Second Language) populations, as well as experts in ESL education, design, and research, we identified **four major barriers** for LEP engagement:



**1. Linguistic barriers** (e.g., vocabulary, grammar, listening)

LEP speakers find communicating about complex topics, such as academic issues or the details of their professions, particularly difficult compared to everyday topics.



#### 2. Emotional barriers

(e.g., fear of being judged, fear of losing social identity, lack of confidence)

The ESL teachers we spoke to frequently mentioned how even some of their more proficient students feared talking to native English speakers because they lack confidence. Students with lower proficiency who care less about making mistakes end up improving their proficiency level more quickly.

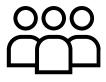


#### 3. Ideation barriers

(e.g., participants not being able to come up with ideas beyond the examples given)

This is not unique to LEP speakers and is seen with native English speakers as well. However, it is presumably more likely to be seen with LEP participants, since:

- Having to articulate new ideas adds another layer of linguistic difficulty.
- LEP speakers are likely to have more diverse educational backgrounds or educations received outside Canada with different standards and curricula.

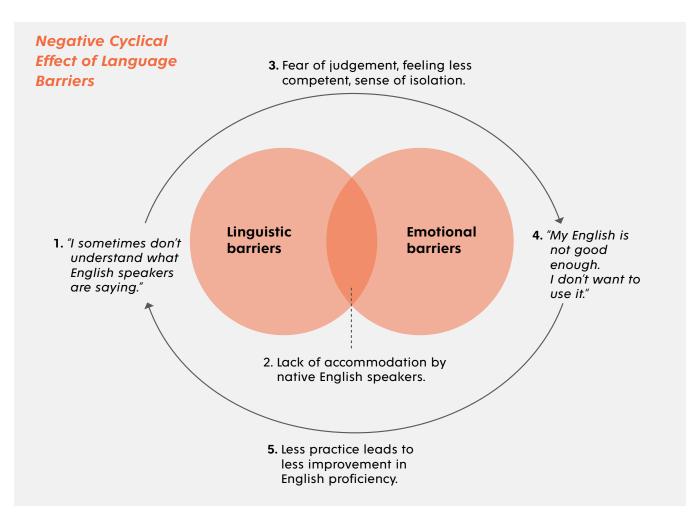


#### 4. Researchers' assumptions

(e.g., cultural tendencies regarding behaviours, rules, and customs)

Researchers tend to connect people's place of birth or length of stay in a given place to their behaviours, although individual behaviour can be affected by many other factors. Some researchers we spoke to mentioned that they try to understand the behaviours often associated with participants' cultural backgrounds to better prepare for engagement. This can lead to bias and prevent researchers from learning from participants' real experience.

# Linguistic and emotional barriers reinforce each other, creating a negative cyclical effect



While preparing for linguistic communication support in co-design engagements is necessary, assisting only with linguistic barriers may prevent less confident participants from speaking up and sharing their ideas and experiences. It is important to accommodate linguistic and emotional barriers equally.

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Talking about weather or introducing myself is easy, but talking about my expertise is very hard. I don't know if I can get a job here.

-LEP student

#### 66

A lot of students who have good English skills think they are not good enough. They fear native English speakers don't take them seriously.

-English teacher

# **Best practices**

# Equipping yourself with best practices

Through interviews and workshop engagements with stakeholders, we developed best practices to overcome these barriers. These best practices provide guidance to researchers and designers on how best to engage LEP populations in co-design efforts.

### The best practices are broken down into four stages:

- 1. Adopting an inclusive mindset
- 2. Starting to plan your engagement
- 3. Planning for facilitation
- 4. Planning for activities and materials

Each best practice is also accompanied by specific examples and anecdotes from the research workshop.

# 1. Adopting an inclusive mindset

The following best practices should be followed before starting to plan your engagement. They will help you reflect and emphathize.

# Reflect on your own sociocultural context, knowledge, and biases

Look for potential differences and commonalities between you and your participants. To interact with participants effectively and interpret data accurately, you need to be aware of how you might be perceived by participants as well as how you might perceive them.

Canada hosts diverse immigrants and foreign nationals. Some examples include:

- Skilled immigrants—with higher education, career experience and skills, and language fluency
- · Spouses and family members of Canadian citizens and permanent residents
- Refugees and asylum seekers
- International students
- Temporary workers
- Other types of workers (e.g., working holiday/youth mobility program workers, sponsored workers)

While skilled immigrants may struggle with cultural differences and lack of sense of belonging, refugees and asylum seekers may struggle with many more factors, such as language comprehension, family separation, financial instability, and trauma.

The LEP population in Canada also includes Francophones (native French speakers) who were born and raised in Canada with less exposure to English.

#### **QUESTIONS TO REFLECT ON**

Language: Have I learned languages other than my mother tongue(s)?

**Experience being in a foreign country:** Have I felt lost or stuck in other countries where I did not speak the local language? How did I feel?

#### Experience and skills in engaging with LEP speakers:

- · How much experience do I have communicating with LEP speakers?
- Did I grow up with people from diverse cultural backgrounds and language levels? What did I learn?
- · How comfortable do I feel in supporting people with limited proficiency?

**Other considerations:** education, financial situation, racial or ethnic experiences, conscious and subconscious thoughts and emotions, social location (gender, race, social class, age, ability, religion, sexual orientation, and geographic location), personality

- How do my educational background and cultural upbringing look different from those of participants'?
- What might I have had growing up that participants did not?
- How might growing up in my country or cultural group be affecting my biases toward people from other backgrounds?

# Acknowledge difficulty and put yourself in participants' shoes

Many LEP speakers fear being judged for not being fluent. Explicitly acknowledge that speaking a second language and living in another country with a different culture *is* hard. If you've never had to experience the same barriers as LEP speakers, acknowledge the fact that you do not have the same lived experience and be open to learning about theirs. If you share some common experiences, think about where you may be able to relate and where you may be perceived differently. Be ready to share where you stand and build rapport.

## Look beyond stereotypes for deeper insights

Cultural tendencies do exist, and recognizing sociocultural behaviour is important. However, one's personality and behaviours are also formed by many other factors, such as age, interests, beliefs, community and friend groups, partners' cultures, education, and life experiences. As well, an individual's ethnic culture is determined by their own identity. How strongly they identify themselves with their ethnic roots is solely up to them. Jumping onto people's place of birth or length of stay in your country prevents you from learning from the participants' real experience.

Avoid looking at your participants through a preset lens and allow them to speak up for themselves. Ask them if they need special accommodations rather than making assumptions about what they need. (Refer to *Take a survey before the session*, p. 23.)

#### **EXAMPLE**

In a region that has people with diverse cultural backgrounds and generations of immigrants, some people may have multiple cultural identities. For them, no single culture can define who they are. For example, length of stay, which researchers often look at, does not always correlate to people's cultural identities and behaviours. A landed immigrant of 20 years who lives in a community with people from the same country may behave more like people from their home country, whereas an international worker who came to Canada recently and has been following North American pop culture may behave more like mainstream North American people.

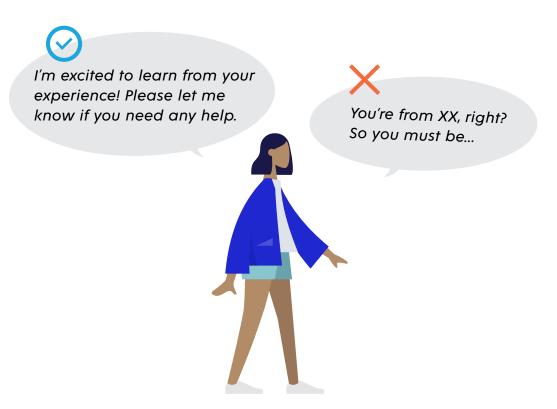
# Participant A

- Immigrated 20 years ago
- Lives in a neighbourhood with people from the same country
- May behave more like people from their home country

# Participant B

- Been in Canada for a year
- Familiar with North American pop culture and trends
- May behave more like mainstream North American people





# ⊘ Do:

- Reflect on your background and beware of biases you may be bringing in.
- Acknowledge the difficulty your participants may experience.
- Be curious about their experience and let participants speak for themselves.

# × Don't:

 View participants through a pre-set lens.

# 2. Starting to plan your engagement

The following best practices should be followed before starting to plan your engagement. They will help your team get ready for LEP engagements.

# Bring in ESL or international researchers to the session whenever possible

Building rapport plays a big role in any co-design sessions. As you would want to include female researchers when working with female employees on gender issues, bring in researchers to whom participants can relate or who they feel have similar lived experiences.

## Plan for one facilitator for every two participants

LEP participants tend to need more one-on-one or small group support. They tend to find it intimidating to ask questions in a big group setting and require more proactive nudges by facilitators.

## Debrief other participants and clients

Let all participating stakeholders know that there will be people with less linguistic fluency ahead of the session. Share ground rules and ask for understanding and support, including:

- Speaking slowly where needed
- Using simpler terms (also read: *Prepare a vocabulary list for project-specific terms*, p. 24)
- Helping with LEP participants
- Encouraging LEP speakers to share their ideas

# Build in more time, especially for individual heads-down time before group work

Aim for 50% more time than usual in the session compared to sessions with native or advanced English speakers because:

- LEP participants often struggle with explaining situations or coming up with vocabulary.
- People with less confidence feel more comfortable jotting down ideas and thoughts before sharing.
- Reading and writing take extra time.

# Prepare for agility in your interview or workshop structure—have a plan B

As LEP participants tend to take longer to read, write, process, and translate thoughts, you may run into a situation where the time you have prepared is not enough. Have a plan B, prioritize main goals, and be ready to drop certain activities or cut them short.

# Prepare a variety of communication support tools and devices for translation

Have a variety of tools and devices in your back pocket, even if you might not need them.

#### **EXAMPLES**



**Google Translate** This helps translate basic sentences and technical terms.



#### Internet search

This is especially helpful for showing images of culturally specific items or when there are misunderstandings while translating words.



#### **Conversation cards**

You can use pre-populated cards with useful phrases for cross-linguistic conversations:

- "Please speak more slowly."
- "This translation does not make sense."
- "Please say that again."



#### Emotion vocabulary sheet

Use a list of emotions with emojis or an emotion wheel. Some LEP speakers find it difficult to express emotions in English beyond basic vocabulary for emotions such as angry, sad, and happy; it gets harder when it comes to more complex feelings like "frustrated" and "feeling rushed."





# **⊘ Do**:

- Create a social environment that is relatable and safe for LEP participants (debriefing the native English speaker group, bringing in non-Canadian facilitators).
- Prepare a variety of support tools and devices for cross-linguistic communication, even if you may not use them.

# $\times$ Don't:

- Allocate facilitator resources and activity timing based on your experience with native English speakers.
- Rely on written templates and discussions.

# 3. Planning for activities and materials

The following best practices should be followed before starting to plan your activity and material designs. They will help you create activities and materials that support the needs of LEP speakers.

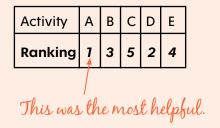
### Avoid complexity in instructions and activity format

Complicated activity instructions can confuse LEP participants. Keep your activities simple and straightforward, with easy steps.

#### **EXAMPLE ROADBLOCK**

During a research workshop with LEP participants, we asked the group to evaluate the co-design activities they completed in a forced ranking format. Participants were to rank the activities from 1 to 5, the most helpful to the least helpful. Two out of five participants thought they were supposed to give points from 1 to 5 instead, so they assigned the same number to various activities. To avoid this, you can include a visual instruction.

#### Forced ranking format



vs.

#### Point format

Activity	А	В	С	D	Е
Points	5	5	2	5	3
These we	/ re a	) Il i	/ gre	/ at!	

Inese were all great 5 points!

# Include a variety of non-verbal communication formats in activities

In regular workshops, facilitators mostly use discussions and written templates. Each LEP person may struggle in different areas of linguistic communication and have different preferences. Prepare various modalities to allow participants to use what they feel the most comfortable with.

#### **EXAMPLES**



Gestures and role play E.g., to demonstrate a concept, have one person play a bank employee and the other person play a customer.



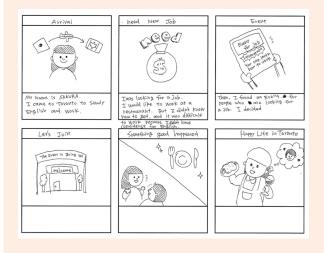
Visuals E.g., make collages from a pile of pictures; show analogues using scene-byscene storyboard illustrations; show a video.



**Drawing** Have a facilitator and/or a participant draw their ideas.

#### **EXAMPLE OPPORTUNITY**

Where native English speakers gravitate toward verbal and written communication and tend to have anxiety around drawing, LEP participants in the research workshop found it helpful to communicate their ideas pictorially. During our workshop, one participant did not have much writing ability but could voice his opinions well; another participant struggled with vocabulary but loved drawing as a means to communicate her ideas.



### Take a survey before the session

Unlike in a classroom setting where teachers can gradually get to know students, researchers and designers often don't have time to evaluate and prepare for participants' needs. It's therefore helpful to ask participants what their English proficiency and comfort levels are and what types of support they may need before the session. This will help your team determine how to form groups and plan activities. Also ask about any special accommodations they may need, whether dietary restrictions, restrictions based on cultures and beliefs, or physical accommodations.

#### **EXAMPLE QUESTIONS**

#### What is your first language/mother tongue?

#### How would you describe your English fluency and comfort levels? (1-5)

- 1. Beginner (difficult to communicate in English, need a lot of help)
- 5. Advanced (can talk about work, academic and political topics without much help)

#### In which English skill areas do you think you might need help?

- Reading
- Writing
- Listening
- Speaking
- Vocabulary
- Other (please specify)

#### What types of help do you think you might need in a group conversation?

- Speak slowly to me
- Help me with vocabulary (e.g., using a dictionary or translator app)
- I want to draw
- Show me pictures and drawings
- Give me time to think
- Other (please specify)

#### Please let us know if there are special accommodations you would like to

**request** (e.g., dietary restrictions, culture or belief-based accommodations, or physical environment).

## Prepare a vocabulary list for project-specific terms

Vocabulary was mentioned the most often as an area of difficulty by LEP participants in the research. A quick internet search can show you specific vocabulary terms used for certain situations that match your project context (e.g., going to a bank, taking a flight). If you are working with participants from a specific cultural group that shares a common language, have it translated as well.

Another way to effectively communicate meanings is to accompany vocabulary with images of each situation. Share this list with LEP participants, other participants, and facilitators ahead of the session so they have a common understanding of the vocabulary to be used.

#### **RESOURCES**

1. the	26. O F	s. will	76. number
2. of	27. one	52. U.D.	77. no
3. and	28. had	sa. other	78. way
4. a	29. by	sa about	78. could
s. to	30. word	55. out	so. people
6. in	31. but	ss. many	81. my
2. is	32. not	sz. then	82. than
s. you	33. what	sa them	as first
9. that	34 all	so. these	84. water
10. it	35. were	60. 50	as. been
11. he	36. we	61. Some	86. call
12. was	37. when	62. her	87. who
13. for	38. your	63. would	88. QII
14. On	30. can	64. make	as. its
15. are	40. said	65. like	90. now
16. <b>as</b>	41 there	66. him.	92. find
17. with	42. U.S.C.	67. into	92. long
18. his	43. an	68. time	93. down
19. they	44. each	ea. has	94. day
20.	45. which	70. look	95. did
21. at	46. she	71. two	96. get
22. be	42. do	72. more	97. come
23. this	48. how	73. write	98. made
24. have	40. their	74. go	29. may
25. from	so. if	75. see	100. p a r t

#### The Thousand Words by CALLE

A vocabulary tool for ESL classes that lists the most common 1,000 words used in the English language. Researchers can also scan and familiarize themselves with the basic vocabulary to use.



#### **Oxford Picture Dictionary**

A vocabulary series accompanied by pictures of realistic scenarios that are easy to relate to.

# Pull out personal stories to build connections among participants

Having common experiences and hearing personal stories creates connections between participants (as well as facilitators). This builds rapport and makes participants more comfortable engaging with each other.

#### **ANECDOTAL TIP**

In our research workshop, we asked each participant to bring an item that represents their first month's experience in Canada. Although participants came to Canada for different reasons and from different cultures, this activity warmed up the room and added a human touch. This was also voted one of the favourite activities by participants in terms of overall enjoyment and for giving them a chance to communicate their thoughts.

### Build in indirect collaboration as a starter

Some LEP participants are shy and intimidated in a group setting due to lack of confidence in speaking English. At the same time, they find it helpful to hear others' ideas, as it sparks more ideas and thoughts for them. Bring in some indirect collaboration exercises before jumping into direct pair work or group work.

#### **EXAMPLES**



"Pass-around" activities Each participant develops a base idea, passes it on to the next participant, and keeps adding onto others' ideas.



Small rounds of individual heads-down work time and share-back Participants can keep getting inspired and build stronger ideas.





# **⊘ Do**:

- Allow participants to choose communication tools and formats.
- Understand the support needs of each participant beforehand and accommodate them.
- Create easy activities and steps to connect and collaborate with other participants.

# $\times$ Don't:

- Go in with assumptions about the tools they need.
- Assume they understand industryspecific terms and vocabulary.
- Design activities for limited communication formats (e.g., verbal and writing).

# 4. Planning for facilitation

The following best practices should be followed before starting to plan facilitation. They will help you prepare for smooth and accommodating facilitation with LEP participants.

# Begin the engagement by letting participants know that you acknowledge communication challenges

English language coaches suggest that acknowledging the communication difficulties LEP speakers face helps to build rapport and to encourage participants to engage more. Let them know during comfort calls<sup>\*</sup> and at the beginning of your session that you recognize the difficulties they may be going through, and reassure them that mistakes are fine and that you welcome any requests for extra support.

\*A comfort call is a communication made prior to the actual engagement to walk participants through the engagement overview and build initial rapport.

#### **EXAMPLES**

If you have learned another language or speak English as a second language, share that background

E.g., "I studied English as a second language as well, and I know how hard it is. It took me years to be able to communicate with native English speakers comfortably, so if you need help, please let me know. I'm happy to assist you."

#### Share your experience visiting or living in non-English-speaking countries

E.g., "Though I am from Canada and speak English as a first language, I stayed in China for three months last year, and it was a very hard experience for me as I only knew a few words in Mandarin. I understand what it's like to talk with people in another language. Please tell me when you need help."

# If none of the above applies, share that up front and tell them that you are willing to learn from their experiences

E.g., "I don't know what it's like to speak another language. If I'm speaking too fast or using difficult words, please let me know."

# Adjust how you communicate based on participants' comprehension and comfort levels

When working with a diverse group of LEP speakers, you may find that they have varying levels of English proficiency. Even people at the same level may have different areas of strengths and weaknesses, such as writing, speaking, listening, and reading. Learn about their needs in the pre-session survey as well as during the session, and don't treat everyone the same way just because they are LEP participants.

#### EXAMPLE

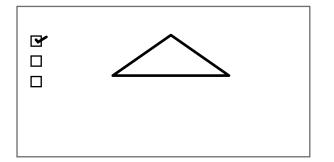
Speaking very slowly to someone with good listening and comprehension skills may feel condescending or offensive.

### Model and show step-by-step instructions for activities

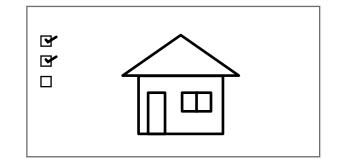
Activity instructions can be complicated and confusing. In regular workshops, you might simply explain what to do. However, during sessions with LEP speakers, you should model activities between facilitators before beginning so that participants can better understand what they are supposed to do.

#### EXAMPLE

When explaining the instructions for Collective Drawing\*:



Facilitator A draws one item (e.g., the roof of a house), checks off the box, and passes it to facilitator B.



Facilitator B then draws a wall, a window, and a door, and checks off the box.

\*Collective Drawing is a warm-up activity where participants pass around a template and draw one object or scene as a group. For example, if the assignment is to draw a house, participants complete a drawing of a house by separately drawing elements, such as a roof, a window, a door, a chimney, and a garden (see p. 34).

### Give a lot of examples

Sometimes it's hard for LEP participants to understand exactly what they are supposed to do in each activity at the first attempt. The more examples you can give, the more certain and confident they can get before they begin.

#### EXAMPLE

When facilitators model instructions for the Inspiration Card activity (Kim Halskov and Peter Dalsgård, 2006) they go over five examples using the actual, prepared cards.

E.g., "Okay, I might combine the 'art class' card and 'cooking event' card, then make...an event where people paint with food!"

#### Be ready to act as a scribe when you are facilitating

Normally, we try to focus on workshop facilitation, letting participants jot down their own ideas. Because LEP participants have different English abilities and levels of proficiency, it is important that facilitators step in, take notes, and draw with or for them when needed.

#### **ANECDOTAL TIP**

In our research workshop, we had two participants who did not have writing ability. As the facilitators went around the table, they supported those participants by jotting down ideas so they could share back to others.

#### Probe and clarify more than usual

Communications with LEP speakers can sometimes get lost in translation, whether the LEP speakers use their own words or translation apps. A word in one language may have different meanings in another language. Words with broader meanings can also easily get translated incorrectly. Ask for clarifications and specific examples or anecdotes.

#### **ANECDOTAL TIP**

In an experiment we did between two researchers, one speaking Mandarin and another speaking Japanese, without using English, the words meaning "terrible landlord" in Japanese translated to (or could have been interpreted as) "scary landlord" in Mandarin. In instances like this, facilitators need to clarify why this landlord was terrible or scary, to get to a common understanding.





# ⊘ Do:

- Build rapport by expressing your concern and through actions such as modelling instructions.
- Adjust communications based on participants' areas of strength and difficulty.
- Communicate through nonverbal means (e.g., gestures, showing visual examples, drawing).
- Make sure all parties are on the same page by repeating back what you're hearing and probing further.

# × Don't:

- Treat every participant the same way just because they are LEP speakers; different LEP speakers have different challenges.
- · Communicate only verbally.
- Assume you understand what participants are saying; the participants' intended meaning might be slightly or very different.

# Workshop structure and materials

# Sample workshop structure and materials

Whenever researchers develop an engagement session, they need to consider all factors unique to the project context. This section provides activity and material samples with annotated rationales from the best practices explained in the previous sections. These are not meant to be duplicated for every project but to be used as a starting point.

### Sample structure for a 3-hour workshop

Workshop introduction	5 mins.
1. Warm-up	25 mins.
A. Mini cultural probes	
B. Collective drawing	
2. Current state: Journey mapping	30 mins.
A. Pre-populated journey mapping	
B. Live journey mapping	
Break	10 mins.
3. Ideal state: Idea generation	95 mins.
A. Review examples	
B. Discuss examples	
C. Modify examples	
D Generate ideas	
E. Exchange and build on ideas	
<b>4. Exit survey</b> (5 min. fill-in, 10 min. discussion)	15 mins.
Total time:	3 hours

### Workshop introduction

Facilitators should introduce themselves and review:

- Project context and engagement objectives
- Ground rules
- · Communication tools that can be used during the engagement

#### **TIPS FOR THE ACTIVITY**

Ground rules should include:

- No need to be shy—mistakes are welcome
   To recognize the emotional barriers LEP participants often face, first
   acknowledge the difficulty of speaking another language, then reassure them
   that this is a safe environment for making mistakes. Share that you're willing to
   learn from their experiences.
- Support each other Encourage participants to help others in the group with things like vocabulary and meanings.

Communication tools can include the following:

- Internet-enabled devices (smartphones, laptops)
- Internet search engines (dictionary, image search)
- Translation apps
- Drawing with paper and pen
- Support tools you prepare specifically for the session
   (e.g., vocabulary sheets for a specific topic, conversation cards)

#### 1. Warm-up

#### A. Mini cultural probes

Ask participants to bring an item (e.g., photo, drawing, object, accessory) that represents any experience they may have relating to your project topic. Instead of a regular team introduction, go around the table to introduce each other using these items in a "show and tell."

#### ANECDOTE

This was one of the top-rated activities in our group workshop; participants loved hearing others' experiences and felt that personal stories helped them break the ice and get to know each other.

#### **B. Collective Drawing**

Collective Drawing is a warm-up activity that lets participants casually practice collaboration.

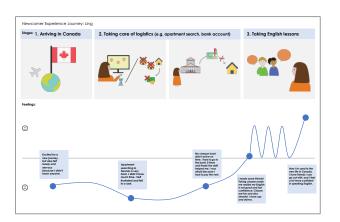
WARM UP	WARM UP
CO-CREATIVE DRAWING	CO-CREATIVE DRAWING
Draw a meal Draw one of the following items on the lat Draw one of the following one done. Then by the constraints and the late Draw one done	Druce a classroom Druce of the following items on this ist concession when you extreme Chars Cha

#### Instructions:

- Each participant gets one sheet with a drawing assignment (e.g., draw a house) and a list of suggested elements appropriate to the topic (e.g., window, door, roof, porch).
- Each participant chooses one element from the list and quickly draws while the facilitator times them for 30 seconds.
- After the time is up, each participant passes the sheet to the next person and adds to the drawing the previous participant started.
- Repeat until the group collectively completes a drawing.
- At the end of the activity, go over the complete drawings and point out:
  - 1. The importance of collaboration—how having multiple perspectives can create a unique outcome.
  - 2. The impact of rough prototyping—there is no need to be great at drawing, and quick and rough sketches can often communicate ideas better than words.

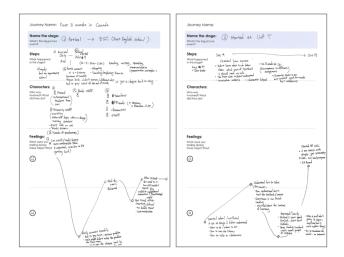
### 2. Current state: Journey mapping

Journey maps—often referred to as user journey maps or customer journey maps—are visual interpretations of the overall flow of experience, from an individual's perspective, of their relationship with a service. Journey maps are a good way to align with stakeholders on the current state experience of a service and to discuss existing pain points and opportunities.



#### A. Pre-populated journey mapping

A basic, generic journey map can be developed prior to a group session by talking to stakeholders who are involved in the process. During the workshop, validate, confirm, and populate more with the workshop participants.



#### B. Live journey mapping

Another way to create a journey map is through live journey map creation. Bring in a basic template and help the group to discuss their experiences while filling in the template.

#### **TIPS FOR THE ACTIVITY**

Having physical and visual materials enables LEP participants to understand and communicate better. You can prepare cards that represent elements such as stakeholders (e.g., customer, frontline staff, call centre staff) and channels (e.g., online, phone call, in-store) that can easily be placed on the map to further assist with language barriers.

### 3. Ideal state: Idea generation

One of the barriers identified in our group workshop was a lack of ideation ability. This is not unique to LEP speakers and is common with native or advanced English speakers as well. It is crucial to overcome for all participants.

The following is general guidance, based on our workshop observations and results, on how researchers can construct co-design sessions to support participants' needs so that participants can ideate more effectively.

### A. Review examples

It can take time for participants without previous knowledge or experience in ideation to begin generating new ideas. Start the ideation session by providing them with examples and getting them familiarized with the concept of ideation.

#### **EXAMPLES**

Examples to show participants can include:



Case studies and out-of-industry analogs



Rough prototypes based on hypotheses

### **B. Discuss examples**

It is easier for participants to give opinions based on examples presented than to generate their own ideas. After giving participants time to read and/or go through examples together, discuss:

- What they like about a specific example and why
- What they don't like about the example and why
- Alternatively: fill in a "Rose, Bud, Thorn" template to identify opportunities and risks: Rose: What will work well?
   Bud: What are the areas of opportunity yet to be explored?
   Thorn: What won't work well or is risky?

## C. Modify examples

Based on the outcomes of the previous step, ask participants to modify the examples.

#### **EXAMPLES**

You can use some or all of the SCAMPER technique, which it provides seven thinking approaches that force the mind to think in a specific flow to find innovative ideas.

- 1. Substitute
- 2. Combine
- 3. Adapt
- 4. Modify
- 5. Put to another use
- 6. Eliminate
- 7. Reverse

```
Olivier Serrat, "The SCAMPER Technique," in Knowledge Solutions (Springer, 2017), Knowledge Solutions, pp. 311–14, DOI: 10.1007/978-981-10-0983-9_33.
```

### D. Generate and build on ideas

Steps 1–3 will make participants familiar with creative thinking and ideation. Now that they have more ideas and opinions about what the service could potentially look like, ask them to come up with their own concepts.

#### **EXAMPLES**

The research questions and project direction should determine questions to ask. A basic template could look like the one on the right.

At this stage, you can also run activities such as storyboarding and role play. These activities can be used both as a method to generate ideas and an exercise between small groups to share back the developed concepts.

Concept descr	iption:
Sketch:	
[	Development
Features:	Benefits:
•	•
•	•

Title:

#### Storyboarding

A method that helps visualize a concept from start to finish, by visually plotting out elements in scene-by-scene boxes

## Role play

A method for stepping into someone else's shoes, taking on a persona, and acting like that person in a particular scene

### E. Exchange and build on ideas

To even further develop ideas, have participants pass around their generated ideas or swap ideas in pairs and add to others' ideas (repeat Step C).

### 4. Exit survey

You can choose to run an exit survey. In the survey, you can ask about the workshop experience and solicit opinions or vote on generated concepts. Go around the table to ensure each participant understands the survey. Answer any questions they may have. Make sure to accompany the survey with a discussion to confirm their answers. Designing with and for vulnerable populations in the community helps not only the vulnerable but also the majority group by making interactions easier for everyone. bridgeable