

# DIS C VERY



Toolkit

# Contextual Inquiry

These methods of research use a semi-structured approach to understand people's context by having conversations and making observations at relevant locations.

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# Activity Based Research

These methods invite the research participant to play a more active, participatory role in the research process through visual activities.

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# In-Depth Interviews

Get out there and speak directly to those you wish to learn from. This versatile tool is a staple for discover research.



A team of human-centered designers doing research for financial education interventions visited people's homes to speak with households about their financial challenges.

## What is it?

A in-depth, one-on-one conversation, guided by pre-written questions, to better understand your participant and challenge question. These interviews typically last about 1 hour.

There are many different kinds of interviews that may be beneficial to your research. Consider small group interviews (2-3 people), speaking to relevant experts, or interviewing those at the 'extremes' of your target group. These in-depth interviews are meant to be conversations, rather than structured interviews with formal questionnaires and surveys.

## Why is it useful?

In-depth interviews are a great way to get a more holistic sense of the experiences and attitudes that drive your interviewee.

# In-Depth Interviews

## Get Started

### 01 Pick well.

Who you interview is just as important as how you interview. Think of some criteria for the people you'll talk to that's relevant to your problem area. For example, you could talk only to teachers in rural areas, or discuss technology access with high school students applying to college.

### 02 Location matters.

Sitting down for an interview can be an uncomfortable experience for interviewers and interviewees alike. Choose a place that you're both comfortable with (libraries and coffee shops can be great) and make sure you confirm with them the day before.

### 03 Set the stage.

Don't launch right into a prepared set of questions once your interviewee arrives. Instead introduce yourself, tell them a little about your project, how long you'll be talking for and that they can decline to answer anything they aren't comfortable talking about.

Think about the seating arrangement - always be sitting close to your interviewee and be at their same height or below them. It helps manage the power-dynamic!

### 04 Use your emotional intelligence.

Try to read and match your interviewee's energy. If they seem nervous, speak in a reassuring, softer tone. Keep your body language open, but not domineering. Make appropriate eye contact. If it's appropriate, try to lighten the mood with a joke or personal story that helps connect you to the topic.

### 05 Ask the right questions.

When you ask general questions, you get vague answers. When you ask 'yes or no' questions, you get one-word answers. Try to focus interviewees by asking them to tell you the story of a specific time they took a certain action. You can always dig deeper into their story by asking probing questions ("who else was involved", "what did you hope would happen" etc).

Rely on "how" and "why" questions as much as possible to dig deeper and uncover underlying motivations and rationales. If you're feeling bold, try asking "why" five times in a row on one topic and see how deep you can go!

## Tips

### ● Don't be a research robot

This is an interview, not a survey! Your question guide should be a starting point, but not a script. Cut and dry responses may answer a given question, but they won't give you much insight into how or why an individual did what they did. Take the time to ask why and understand the emotions of your interviewee.

### ● Silence can be golden

Interviewers often want to keep the conversation flowing and jump quickly to the next question once they get a response, but letting interviewees pause can give them a chance to think about what they've just said or recall a related experience.

### ● Capturing insights

It's almost impossible to connect with another person, ask them thoughtful follow-up questions, and take good notes. Consider recording your interview using your phone's voice memo function or having a teammate act as a note-taker.

# Intercept Interviews

Interview people while they are on-the-move with this less in-depth but more spontaneous method of research.



In this project about small business owners, the researchers conducted spontaneous intercept interviews at a market where women own their own fruit and vegetable stands.

## What is it?

Intercepts (or “street intercepts”) are unplanned interviews where the researcher approaches someone and asks if they can have a few minutes of their time to answer some questions.

The questions that the researcher asks are often more impromptu than an in-depth interview because the research is having to respond to what is happening in the given moment. However it's still possible to prepare in advance for intercepts by identifying locations, people or topics that you think this method will be more suitable for.

## Why is it useful?

Intercepts are great for getting responses where it's important to be in the moment. This allows the researcher to find insights or build empathy that would be harder to achieve if the interview was happening after the fact.

Intercepts are also useful when it's not possible to schedule an interview in advance, or ask a participant to volunteer a larger portion of their time.

Conducting intercepts is also about cultivating your curiosity and becoming comfortable with asking questions to strangers when you observe something that is of interest.

# Intercept Interviews

## Get Started

01

### Choose the appropriate topics.

Decide which topics related to your education challenge are most appropriate for this method.

02

### Identify a location.

Decide which locations will be the best. Try to think of places that have a lot of foot traffic, or places where people are waiting for something and will be willing to spend a few minutes answering your questions.

03

### Have a plan.

Although you have to be prepared to improvise, it's still a good idea to have a brief interview guide. How will you introduce yourself? What are the most important questions that you want to hit?

04

### Don't be shy!

When it comes time to start your interviews, don't be afraid to approach people even if they are strangers. You will be surprised how willing people are to help share their opinions, especially if they know it's for a good cause.

05

### It's not a one-time thing.

Intercepts can happen at planned times and locations (for example, maybe you want to interview people by the coffee maker on Monday morning to ask questions about how they plan their work-week). But they can also be spontaneous, one-off conversations (for example, maybe you observe someone waiting in line at the bank who appears to be taking notes in their weekly planner).

## Tips

- Be prepared to get rejected! Not everyone will want to chat- have a standard line you can use when they decline an interview.

- If you're shy, take the edge off interviews by setting up a folding table and making a sign. Sit next to or stand in front of the table and invite participants to join you for a moment.

## Notes

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## (Un)focus Groups

Use semi-structured group discussions to explore broader themes, understand how groups of people interact with one another and be surprised by what the conversation offers you!



A team of researchers gathered a group of smallholder farmers in rural Tanzania with the intention of getting to know them and their experiences as farmers. This casual afternoon provided a more in-depth understanding into their farming experiences, family structures, village dynamics, and dreams for the future.

### What is it?

An (un)focus group is a research method that embraces a group conversation in order to better understand community interests and motivations amongst a larger set of people.

While focus groups typically ask people for feedback and preferences, (un)focus groups are meant to be more similar in style to an in-depth interview. It won't go as in-depth as an individual interview, but will result in a rich dialogue among the participants that can reveal unique insights.

Although it's important to have some topics and conversation starters, gather a group of people involved in your design challenge and see what discussion sparks naturally. Focus on getting to know the group members as *people*.

### Why is it useful?

Group interviews allow you to hear more perspectives in a shorter amount of time and reveal insights about group dynamics.

# (Un)focus Groups

## Get Started

### 01 The Guest List

The people you invite to be part of your (un)focus group should be relevant to your research question. Since you're trying to understand more about a particular group of individuals, resist the urge to invite multiple types of people to one (un)focus group (eg. don't invite administrators *and* students to the same event... unless your challenge is focused on how those groups work together!).

### 02 The Set-Up

Find a place to conduct your (un)focus group that's informal, comfortable, and has low noise levels. If you have to use a formal space like a conference room – make it more inviting with some snacks or beverages. Be sure to have participants introduce themselves to the whole group if they don't already know each other.

### 03 Letting Go

*This* is the hard part. Don't come into your (un)focus group with a rigid agenda. Try to embrace unexpected directions that the conversation takes. You want to use this as an opportunity to learn about a group of participants with shared traits with as much texture as possible.

### 04 Reflecting

What paths did the conversation take? Who bonded with whom? What did they bond over? Did people complain about anything in their daily lives? Were there any moments of agreement or disagreement? What got the biggest laugh? What would you say the group's priorities are? If you had to describe each participant in one adjective which would you use? If you had to describe the group in three adjectives what would you pick?

## Tips

- As the moderator, it will be your job to make sure every participant's voice is heard. Don't let people dominate the conversation.

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# Card Sorting

A hands-on activity that helps quickly rank participants' preferences, and can elucidate decision-making processes.



While researching how people make decisions around online shopping, the researchers conducted a card sorting activity to help participants describe what websites, social networks, and other channels they use to learn about new products.

## What is it?

A set of index cards with words or images that participants order according to given criteria.

Card sorting is an activity that allows participants to 'think aloud' in front of researchers. Each card has an image or phrase relevant to the research problem and participants are tasked with arranging them in a way that makes sense to them.

Card sorting can help participants explain how they form preferences, understand relationships and processes. Card sorting is also a great way to visually identify the problem areas in a system.

## Why is it useful?

During a card sort, participants' values and preferences rise to the surface as they explain their decisions.

# Card-Sorting

## Get Started

01

### Decide on what you want your participants to explore.

Are you trying to understand a relationship (or set of relationships)? A process? A set of preferences? How your participant values something? How they think others value something?

02

### Make the cards.

Once you've settled on a focus, write out key words or images on index cards.

You can use The Noun Project to find images of various things to help make your cards visual. Try a "headline" on the card with a corresponding image.

03

### Do the activity.

Ask your research participant to do one of the following with a stack of shuffled cards:

- Rank from most to least and decide on the adjective or value important to your topic.
- Sort into agree and disagree piles.
- Map out the relationship between individuals/organizations.
- Demonstrate a process from start to finish.

04

### Ask questions.

As your participant is sorting out their cards and making decisions ask them to explain their choices and reasoning. Ask them what, if anything, would change how they've arranged the cards (money, time, etc.). Allow the activity to spark a conversation.

## Tips

- Card sorting can be a simple way to start conversations by asking why a person values one thing over another, or how their sorting might change in a different scenario.

- Have some blank cards and a Sharpie available in case you need to create new cards during the activity. Maybe the participant had a great idea of something to add!

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# Diaries

Empower your participants to conduct their own research by giving them tools such as journals or disposable cameras and get a glimpse into aspects of their life that might otherwise be difficult to observe.



Students at the Copenhagen Institute of Interaction Design affixed envelopes to the back of people's mobile phones. Each envelope contained a set of cards that began with the statement "I wish my phone would..." and they instructed the research participants to complete the statement each time they felt frustrated with their phone.

## What is it?

With this method, the researcher creates a set of instructions and tools and equips the research participant with everything they need to document certain aspects of their life. At the most basic level, the researcher is asking the participant to keep a diary.

After a predetermined amount of time, the researcher and the participant meet to debrief. The researcher asks the participant to show them what he or she has documented and uses this as a way to facilitate a rich conversation.

## Why is it useful?

Diaries (visual, written or otherwise) are useful for understanding an experience that someone has over a period of time.

This tool also empowers the participant to play a more active role in the research and help them be more engaged in the feedback that they give the researcher because they feel like a partner.

Lastly, it can be a way to understand the first-hand perspective your participant has of an experience that might be difficult for the research to gain access to.

# Diaries

## Get Started

01

**Determine how you want your participant to help.**

What challenge are you trying to better understand? What unique perspective will your participant have?

02

**Identify the most appropriate tool to help them accomplish the research.**

What tool is most appropriate for this participant and most effective for your research? It could be a journal, a camera, or something more creative.

03

**Set them up for success.**

Give the participant clear parameters and make it easy for them. Parameters could be a prompt or a schedule. See if you can design the parameters together with your participant.

04

**Check-in along the way.**

Offer support and make sure the participant is not struggling, confused or overwhelmed.

05

**Debrief.**

Schedule a time to debrief in person and come prepared with questions that you want to ask. Have the participant explain the outcome of their diary to you, what the biggest challenges to keeping a diary were etc.

## Tips

- Make the objective and time line clear to the participant (i.e. "Interview each member of your family between now and next Friday").
- Let the participant know that there are no right or wrong answers.

- Try to be creative in the prompts (i.e. "Take a photo of the 5 places that you spend the most amount of time in").

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# Co-Creation

Encourage your participants to visualize their thoughts by creating easy, fun activities with simple materials like pen and paper.



A team of designers ran workshops with social housing residents and first time home owners to co-create various design possibilities for housing additions.

## What is it?

Co-creation is about including the people you are designing for in the creative process by having them envision their own solutions, but it can also be a great discovery tool. In the Discovery phase, the researcher should not be as concerned with what ideas the participant has, but *why* the participant thinks these are good ideas. This helps the researcher find new insights and perspectives about the underlying problems.

## Why is it useful?

Drawing (or other hands-on activities) can spark new thoughts that might not come up in a normal conversation.

Some people might feel uncomfortable in a formal interview setting or having difficulty answering questions. An activity can shift the focus and make people more comfortable.

## A few examples...

- Have a teacher (or student) design their ideal classroom. For each idea they have, try to understand what problem that idea is solving and why that problem is important.
- Have your participant draw a map of the school. Give them prompts to help you understand their relationship to the different places on the map.
- Ask the participant to create a timeline of their typical day and have them use simple drawings to describe how they are feeling during each part of the day.



# Co-Creation

## Get Started

### 01 Plan the activity.

Have a clear idea about what you want the activity to accomplish and which materials you will need. Some activities might benefit from bringing custom worksheets. For example, if you are doing an activity with students and ask them to “Design the perfect teacher” then the worksheet can have prompts for how the teacher might talk, assign homework, use technology, give advice etc.

### 02 Give instructions.

Be prepared to give instructions to the participants so they understand what is expected of them and what the goal is. Some people might be self-conscious about their artistic abilities, but let them know that understanding more about the subject is the goal, not perfectly drawn lines.

### 04 Have a conversation.

Remember, the final output is not as important as the underlying thinking. Be sure to use the activity as a conversation starter and ask thoughtful questions along the way.

## Tips

- Make sure to bring a diverse set of creative supplies for your co-creation session. For example, markers, pens, pencils, post-its, paper, scissors, tape, etc.

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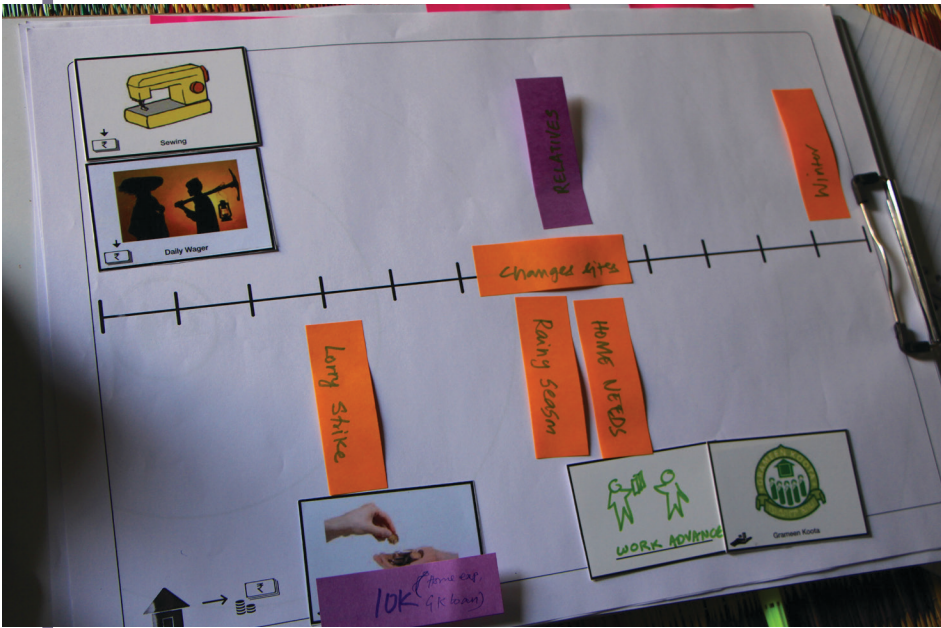
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# Mapping

Creating maps are a great way to understand systems and the relationships that people have with them, and can be an engaging way to facilitate interviews.



In this project, which focused on creating new financial services for farmers, the researchers were interested in how a farmer's cash flow changes throughout the year. To do this, they created a mapping activity to see at which points throughout the year households were earning money vs. spending money.

## What is it?

This method generally refers to any activity where the researcher and participant try to create a map of a system or process. It can be:

*A systems map that tries to show all the stakeholders and how they are connected*

*A literal map that shows the layout of a space*

*A timeline that maps out a person's day or routine*

*A process map that describes a sequence of events*

As with other activity based research tools, the best findings and insights often come out of the conversation that happens during the activity.

## Why is it useful?

Many problems that you are researching may be tied to a complex system, and having someone involved in that system to help you map it out can be helpful.

Other problems might unfold over a period of time and have many touch points. Visualizing a sequence of events can be helpful.

# Mapping

## Get Started

### 01 Plan the activity.

Have a clear idea about what you want the mapping activity to accomplish and which materials you will need.

### 02 Give instructions.

Be prepared to give instructions to the participants so they understand what is expected of them and what the goal is. Some people might be self-conscious about their artistic abilities, so try to put their mind at ease.

### 03 Have a conversation.

Remember, the final output is not as important as the underlying thinking. Be sure to use the activity as a conversation starter and ask thoughtful questions along the way.

## Tips

- At the end of the activity have participants share out their maps and encourage participants to ask questions of each other – this way you can gain even more insights.
- Consider asking participants to draw smiley faces - how each point on the map makes them feel to understand their reactions to specific experiences and spaces.
- It may sound simple, but increase engagement and enjoyment of the activity by providing colored markers and playing some up-tempo background music.

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# Immersion

Immersive research goes beyond interviewing and requires that a researcher tries to *experience* the processes or situations that the people they are researching also experience.



Designers doing research for a care center for disabled children in rural Mongolia spent considerable time in the homes of families of these children in order to learn more about the daily challenges associated with caring for them.

## What is it?

Immersion is a general way of describing research activities in which the researcher is going to places where their research participant is living, working, or having experiences that are relevant to the topic being researched. The researcher tries to gather insights and empathy through experiencing first-hand the situations and contexts that their users' also experience.

At its best, immersion goes beyond observing an experience and the researcher tries to walk in the shoes of the person they are designing for.

## Why is it useful?

It's one thing to listen to someone describe an experience, but it's a whole other thing to actually try to experience it for yourself. This is the best way to build empathy and discover nuanced details.

# Immersion

## Get Started

### 01 Identify a context or situation that you want to better understand.

Then decide the best level of immersion for this (i.e. Will you go through the process yourself? Or will you just observe someone going through the process?).

### 02 Immerse yourself.

Participate as fully as possible in the lives of those you are designing for. This might mean careful observation or shadowing of an individual as they go about their day, or actually walking in their shoes and actively partaking in their activities.

### 03 Document the experience.

Immerse yourself as fully as possible, but don't forget to take notes, photos or other forms of documentation to make sure you are capturing the details of the experience.

## Tips

- A researcher won't be able to immerse themselves in all experiences. Other methods in this toolkit describe how to find insights from analogous experiences and how to equip your research participant with tools to document their own experience.

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# Analogous Contexts

Find fresh perspectives and inspiration by immersing yourself in situations that have similar experiences, but different contexts.



When designing a new mobile banking service for smartphone users in Pakistan, the researchers wanted to find insights by looking at other technology people interact with on a daily basis. One of the analogous experiences that the researchers explored were the ticketing kiosks for the metro system.

## What is it?

Some contexts can be difficult to immerse yourself in, or sometimes you need fresh inspiration. Exploring analogous contexts can help you achieve this. For example, researching an international educational experience for high schoolers is probably prohibitive given time and cost, but observing a specially planned field trip to a museum is more feasible and could help you identify what works when introducing students to new points of view and experiences.

## Why is it useful?

Certain contexts are difficult to immerse yourself in. Identifying and exploring analogous contexts can be a practical and useful workaround. Other times, experts and designers need to see a problem with a fresh perspective. Analogous contexts allow you to explore how similar challenges have been approached.

For example, if the objective is making learning a particular new skill less daunting for students, you could research or interview a computer coding instructor to see what techniques they use to make coding less daunting for new learners. Or you could even take an Intro to Coding class to understand how it feels to be an absolute beginner.

# Analogous Contexts

## Get Started

### 01 Brainstorm contexts that are analogous to the context or problem you are trying to explore.

Think about contexts that share similar organizational structures, behaviors, emotions, challenges or processes.

### 02 Document the experience.

Immerse yourself as fully as possible, but don't forget to take notes, photos or other forms of documentation to make sure you are capturing the details of the experience.

### 03 Distill crossover insights.

What have you learned from your experience? What are the key analogies or insights that have crossover into your research area? How can you apply what you've learned to your own context?

## Tips

- Make sense of what you observe in your chosen analogous context by sketching out a compare-contrast tool (like a Venn diagram) or identifying key analogies.

- When looking for analogous inspiration, don't be afraid to seek out contexts that may be very different from your target one. The important thing is to find a context that shares a key quality or attribute that you are researching.

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# Guided Tours

Ask for a guided tour of a location or context that is important to the people you are researching to understand what goes on there from the perspective of the individual.



A team of designers doing research on solar power visit the home of this family living off the grid. By having a guided tour of the man's home, the team was able to see different tools that he used to light his house at night.

## What is it?

In guided tours, researchers are shown around a relevant environment by research participants. The individuals lead the tours while researchers observe and ask questions.

Tours can be of a space such as an individual's home or office, or tours can be more metaphorical. For example you can take a "tour" of the belongings in a person's purse.

## Why is it useful?

Tours allow participants to show researchers objects and activities that make up a large part of their daily lives. Being in a familiar, yet stimulating environment can spark deeper conversations between researchers and research participants.

# Guided Tours

## Get Started

### 01 Prepare the participant.

Asking to be shown around someone's personal space – be it their office, classroom, or locker – can be a delicate matter. Make sure you explain to the research participant why you're interested in a tour and let them know that there's no need to tidy up or prepare – you want to get a sense of how the environment looks on a normal day. Ask them if you can take photos along the way.

### 02 Let them lead.

Guided tours upend the usual research relationship by putting the research participant in the driver's seat. Allow them to tell you their thoughts on the space before asking probing questions.

### 03 Probe with questions.

Guided tours aren't only about the physical surroundings, they also provide an opportunity to learn about what goes on within that environment. To get a better sense of the activities that happen there, ask your participant what the first thing they do when they enter that space is, how they decided on an organizational system, who else uses the space and how, etc. If you're trying to understand your participants' attitudes and desires ask them what they wish was different about the space.

### 04 Record!

If your participant is comfortable with it, take pictures or short videos of the space to refer back to. Try to focus your lens on parts of the space that are most relevant to your challenge problem. Details matter so try to capture images of both the full space and zoomed in aspects.

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