PHASE 2: OBSERVING

What is this phase about?
The observation phase is all about learning more about the people and the context of the challenge. It creates the fundament of your ideas and the further process.
Why is this phase important?
Design Thinking is a human-centred design process. Humans are at the centre of our process. The research in the observation phase allows the team to understand the problems the people are facing and their context. It's the phase of opening the problem space.
What is required for this phase?
It is necessary to have a crisp and clear challenge and a common alignment what the project will deliver. The extent of the research depends on the project scope. A common understanding of the challenge and the project helps the team to know, what they need to address and do in the research.

At the end of this phase, these questions should be considered in the team:

- Have all research questions been answered? If not, do you know why?
- Have any new research questions emerged?
- Have we developed a broad and deep enough understanding of the challenge?
- Have we documented all interviews in a way that we can find the information again?

What to observe
We try to understand the field of our challenge. That means we are interested in the people, contexts and processes. We can learn a lot from behavioural patterns, workarounds, misuses, adjustments, unintended use cases, general different experiences and analogue situations.
The observation phase opens the problem space. To go out and observe and ask people can be uncomfortable but has its own magic. The magic flourishes when we allow us to learn other perspectives and explanations instead of trying to fit the stories of people into our own understanding of the world. The fundamental attitude is that we do not know how other people perceive and understand the world. Many perspectives do co-exist, and there is not only one true perspective.
Don’t miss to observe the context: Try to collect artefacts from the context (cultural probes), observe and interview people in their context (shadowing, contextual interviews) or let them take pictures of the context (diary study).
Who to observe
Figure out who are the people affected by the challenge. Not only users but also experts and stakeholders. Users are not all alike. There might be extreme users who use the product in a very specific way. There might be beginners who do not have a clue what they are doing. There might be expert users who have used the product or service for ages and already know all other solutions for everything.

Research questions

Example challenge: Redesign the learning incentives of adult learners to avoid dropouts.
Derived question: How do learning incentives of adult learners avoid dropouts?

As you can see above, using the challenge as a research question will not lead us to the most valuable results: It is too big and addresses different aspects in one question. Good research questions though only address one topic and focus on individual key aspects of the challenge, for example: What keeps adult learners motivated?
However, this main research question alone will not deliver all the information we need to know. That's why we formulate research questions that address important related topics. They will deliver insights for answering the main question, e.g.:

- What are underlying needs of learning?
- Which goals do learners have?
- Which contexts do exist and how does the context influence the learning experience?
- What are reasons people drop out?

The next step is to understand with which method you can answer your research questions.

Research methods

There are many suitable methods to gain empathy with the people we design for. Here are some examples:

- Desk/secondary research (Existing studies, facts, discourses, political and structural aspects)
- Immersion (Gain empathy: Step in somebody's shoes.)
- Cultural probes (Exploration of context)
- Diary study (Observe a topic over a longer period of time)
- Field observation/Shadowing (Explore context and behaviour in the situation)
- Survey (Explore attitudes, facts, etc.)
- Contextual interview (Explore context and the perspective of people)
- Expert interview (Explore current discourses, good if field access is difficult)
- 1-to-1 interview (Explore understandings, worldviews, relevance systems of people)
- Focus group (Explore understandings, worldviews, relevance systems of people)

When choosing a method, think about the following questions:

- What are possible information sources? (e.g. existing studies, interviews with learners, expert interviews with scientists/trainers, diary study with training participants, …)
- Is our focus on behaviour or people's attitude, perceptions and world views?
- How much time, resources and skills do we have?
- What are our research topics?

- How can we gain access to the field and people??
- What is our research plan?

Useful tools
Method collection - easy to filter: http://ucdtoolbox.com/browse-methods/
Interactive tool that helps to choose a method: http://www.usabilityplanner.org/#home
Limitations
People who do the research are subjective people. We grew up in a specific way, we have our perception of the world, we have preferences and stereotypes. So be aware of the high chance of your own biases.

Interviews
The aim of interviews is to bring the interviewees to a detailed presentation of their own world view/life world/constructions/relevance systems. Therefore, there is a much greater openness and less control than with quantitative methods. Great openness does not mean that the conversation is uncontrolled. However, the control takes place orally adapted to the conversation.
Knowledge, attitudes, opinions form complex structures. But they are often vague, contradictory or a mixture of knowledge and non-knowledge. In an open interview, the interviewees are thus encouraged to express what is relevant to them and in what way.
Important:
Maintain a clear definition of roles and strive for a natural situation for the interviewee if possible. That can happen by an interview in a familiar environment and by the speech you use.
What can be communicated:

- Free associations
- Metaphors, pictorial and symbolic representations
- Explanations and definition of terms
- Reasoning
- Evaluations
- Condition/situation descriptions
- Progress descriptions
- Narrations

The interviewer must know the research question and the research goal well. A constant, flexible transfer of (implicit) research questions into explicit interview questions is needed, as well as an ongoing review of the answers to their relevance to the research question (encouraging detailing or cautiously redirecting). Creating a trusting atmosphere is crucial for the success:

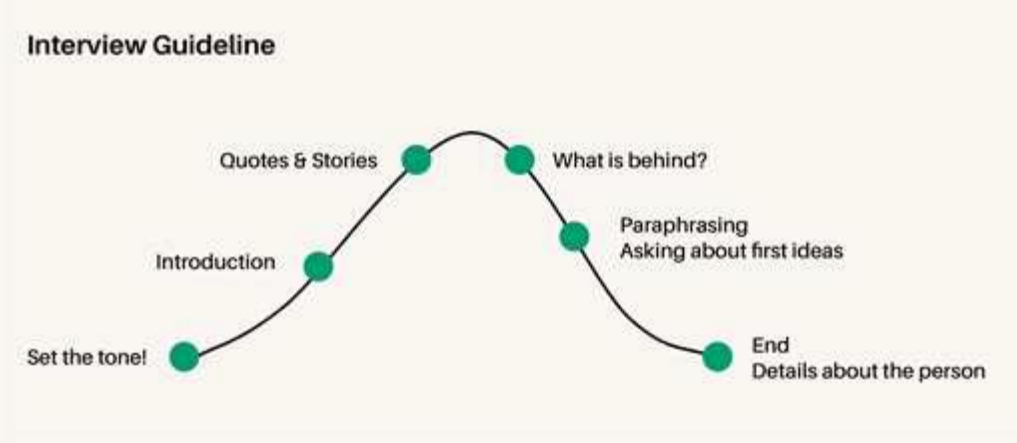
- Ask for permission to record sound beforehand
- Guarantee anonymity through alienation
- Encourage detailed responses

From research questions to interview questions
Research question: What keeps adult learners motivated?
Interview question: Please tell me about the last time you took a course. How did that go?

Dig deeper if not addressed before:

- What were the reasons you took the course?
- What kept you motivated? Why?
- Did you experience any challenges? Why?

Roles
It is recommended to do interviews with two people - one interviewer, one note-taker. The separation of the roles is important, so the interviewer can focus on the interviewee and execution of the interview. The note-taker should write down everything that is said and do observations. The different roles are also helpful for the interviewee, as (s)he knows to whom (s)he should mainly speak.



Interview Checklist

- ✓ 1 person asks, 1 person takes notes
- ✓ Portrait and attributes
- ✓ Observe! Pay attention to details, behaviour, context, environment
- ✓ 80/20 rule (You do max. 20% of the talking!)
- ✓ Ask open questions
- ✓ No suggestive questions
- ✓ Ask for good/bad experiences in specific contexts
- ✓ Ask: why? Why? Why?
- ✓ Wanted: Stories, needs, surprises
- ✓ Helpful for the further process: Quotes, quotes, quotes!

Helpful Videos

Videos about difficult situations in user testings: http://www.modsurvivalguide.org/videos/
Good and bad interviewing: https://www.youtube.com/watch?v=9t-_hYjAKww
Theoretical explanation: https://www.youtube.com/watch?v=LPwO-vOVxD4
Good interview example: https://www.youtube.com/watch?v=eNMTJTnrTQQ
Bad interview example: https://www.youtube.com/watch?v=U4UKwd0KExc

Reference:

https://ecologic.mk/d-thinking-manual/