

The Human Factor (THF)

Week 2: Usability and User Experience Methods

Dr Tara Capel



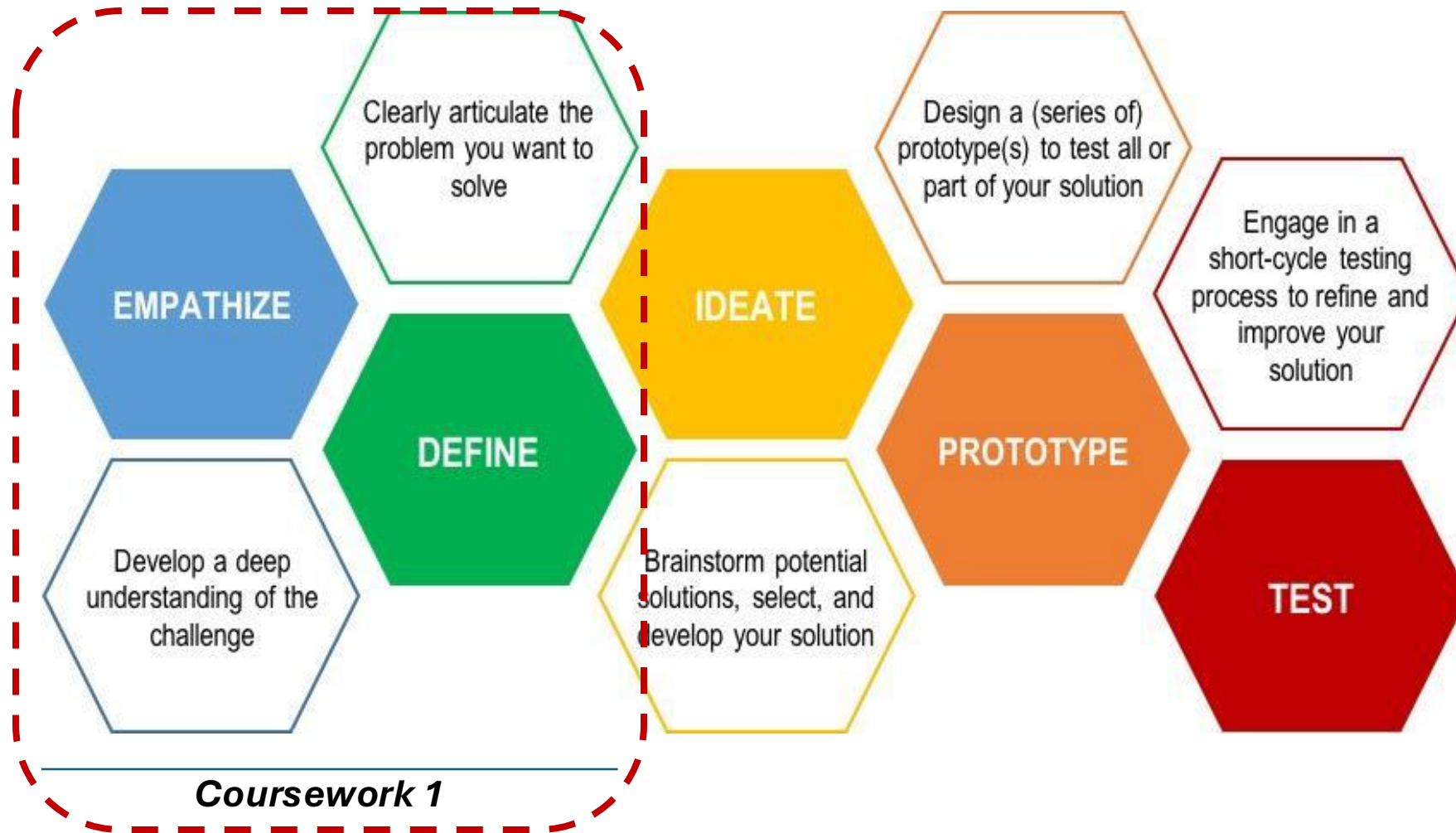
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Week 2 Outline

- UX Research Introduction
- Activities:
 - Activity 1: Define the aim of your research
 - Activity 2: Combining say, do and make methods
 - Activity 3: Start preparing an interview guide

UX Research Introduction

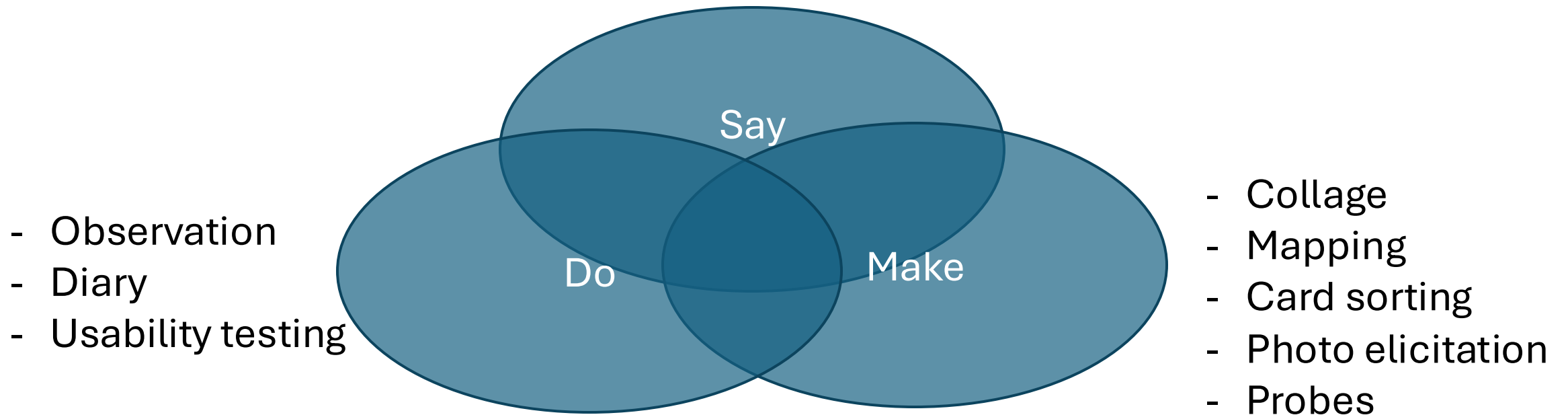
A first step in UX research and design is to understand the needs and challenges of target users in a real-world setting



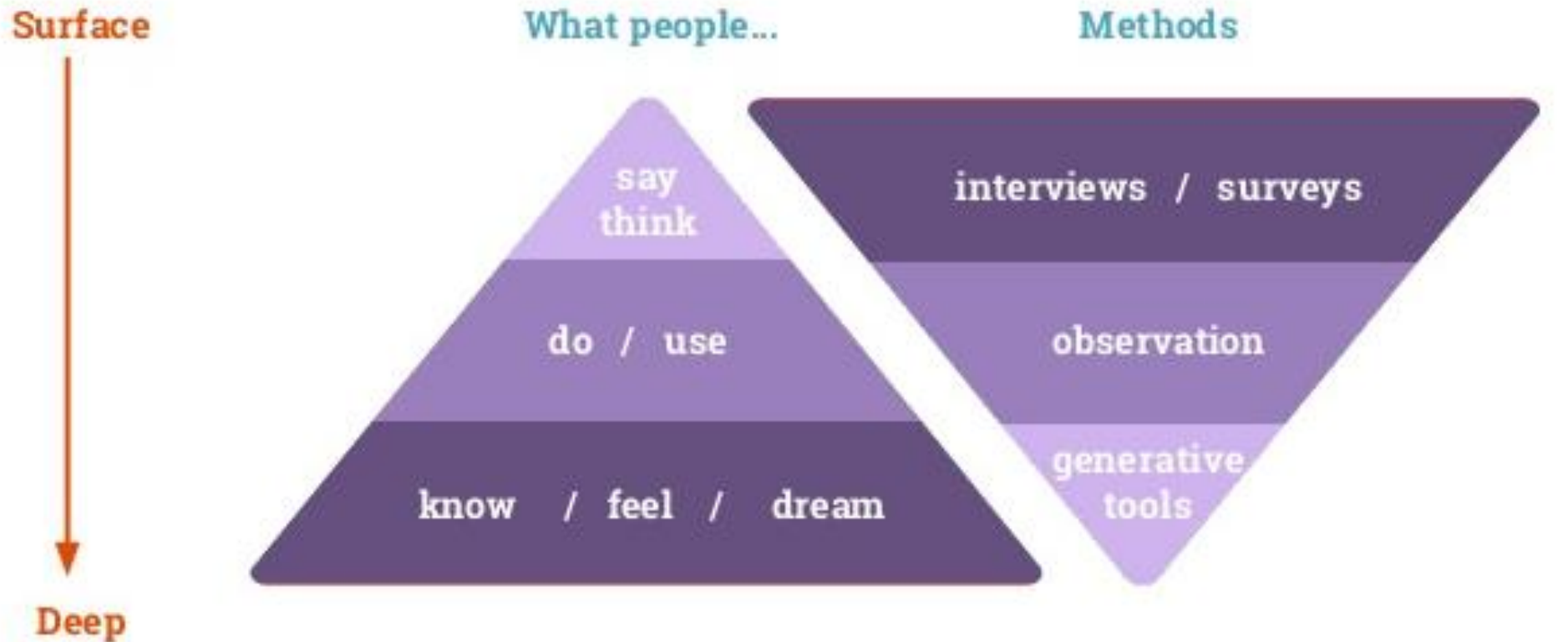
Why do we need to engage with target users to understand their experience? Can't we just use our personal experience?

Say, Do, Make Model

- Interviews
- Focus Groups



Why Use (Different) Methods?



By Liz Sanders [link](http://www.maketools.com/articles-papers/FromUsercenteredtoParticipatory_Sanders_%2002.pdf)

- Aim for a deep understanding of experiences by combining different methods (triangulation)

http://www.maketools.com/articles-papers/FromUsercenteredtoParticipatory_Sanders_%2002.pdf

CW1 Steps

Week 1:

- **Team formation:** form a group of 3 and register your group on Learn by next Tuesday. This will be the group you will work with in CW2 so ensures you are all working on the same topic.
- **Pick a topic:** pick from the examples provided or propose your own
- **Pick a technology:** each individual student will then pick a technology that fits that topic – these technologies need to be different for each member
- Email Srravya with your topic, technologies and group number. Your topic and technologies will need to be approved before you start.

CW1 Steps

Week 2/3: Individually create usability and UX methods

- **Say methods:** prepare an interview guide to learn about what people have to say.
- **Do methods:** prepare a plan and materials to observe what people do, either through an in-person observation or through a usability test.
- **Make methods:** select an appropriate make method and prepare materials and instructions, integrate method with your interview guide.

Activities

Activity 1: Define and refine the aim of your research

Define the aim of your research

- A research aim is the guiding purpose of your study
- It is a clear, concise statement that explains what you want to achieve by the end of your research
- This keeps your project focused and helps guide your research methods and insights
- Consider:
 - **What is the problem or opportunity?** Describe the issue or area you want to explore. What challenges or gaps are you addressing? What other research are you building on?
 - **Who are you focusing on?** Identify the users or communities your research will centre around.
 - **What do you want to achieve?** Define what you hope to learn, discover or create as a result of your research.

Defining and Refining Your Aim

- To understand the challenges/experience/practices of <topic> for <target group> in <context> and to explore opportunities for digital technology design.
- Example: To **understand the self-care practices of university students** in an **educational context** and to **explore opportunities for digital technology design**.
- Step 1: Identify key elements
 - Target audience: university students
 - Topic: self-care
 - Context: educational settings
 - Goal: understand practices and explore design opportunities

Defining and Refining Your Aim

- Step 2: Narrow the focus
 - Target audience: university students > first-year university students adjusting to life on campus
 - Topic: self-care > barriers to maintaining consistent self-care practices
 - Context: education settings > during high-stress periods, such as coursework deadlines and exams
 - Goal: explore opportunities > identify technology design opportunities to support self-care practices

Defining and Refining Your Aim

- Step 3: Refine your aim

Broad Aim: To understand the self-care practices of university students in an educational context and to explore opportunities for digital technology design.

Refined Aim: To explore the barriers first-year university students face in maintaining consistent self-care practices during stressful periods and to explore opportunities for digital technology design to support these practices.

Defining and Refining Your Aim

- Step 4: Reflect on the feasibility
 - Reflect on whether the refined aim is realistic given the constraints of your assignment

Search for relevant websites and peer-reviewed literature to refine your project aim

- Search within SIGCHI on the ACM's Digital Library to find literature from the field of Human-Computer Interaction
<https://dl.acm.org/sig/sigchi>
- Try a broad search on Google Scholar
<https://scholar.google.com.au/>

Activity 1: Define and refine the aim of your research

- Work in your teams
- Start by discussing your target audience, topic, context, technologies and goals for your initial research aim
- Then discuss how you can refine your research aim
- Write 1-2 sentences for each of the following:
 - 1) Aim of this research?** Describe the aim in your own words.
 - To understand the challenges/experience/practices of <topic> for <target group> in <context> and to explore opportunities for digital technology design.
 - 2) Why is this important?**

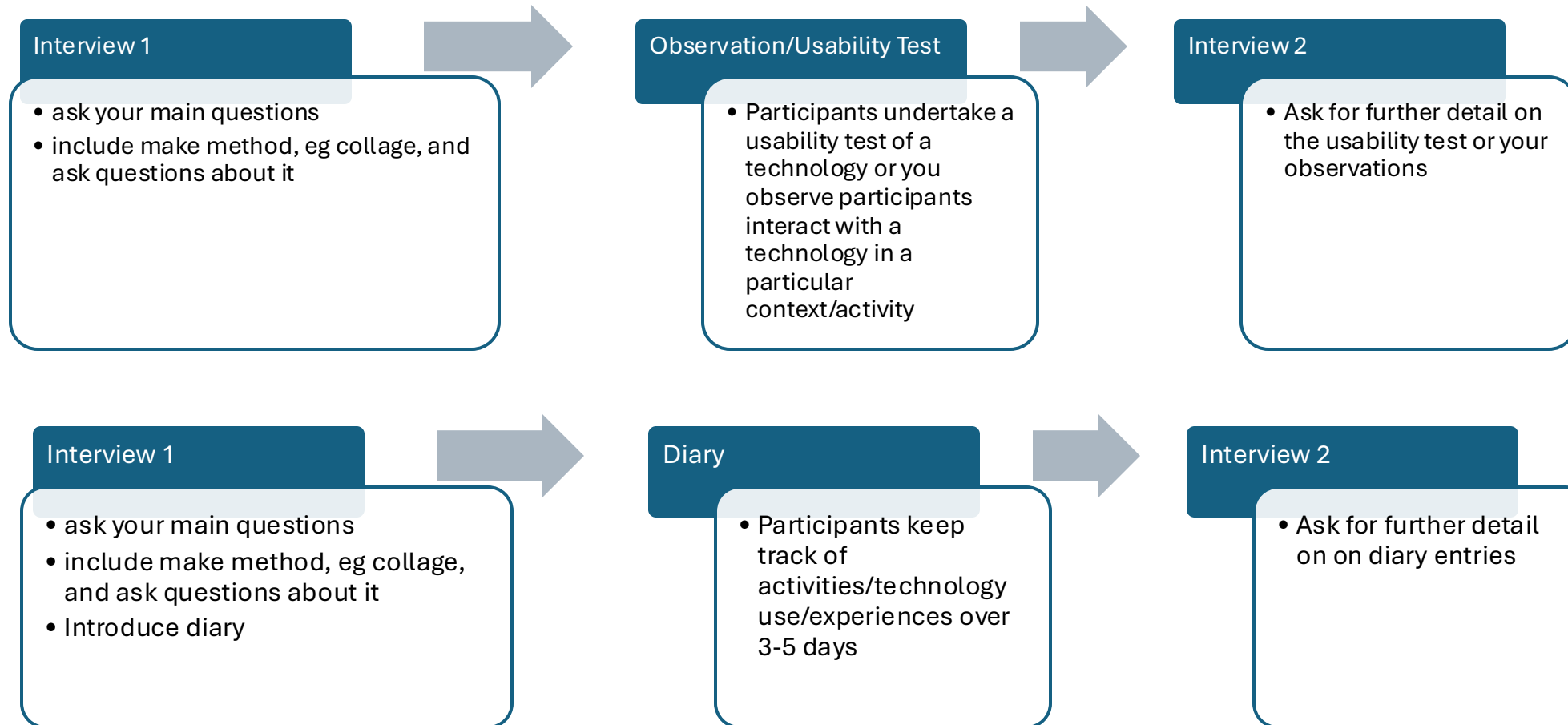
What is the specific opportunity or problem that you aim to explore?
Use the literature to describe the problem-opportunity space and its importance.

Activity 2: Combining Say, Do, and Make Methods

Combining Say, Do, and Make Methods

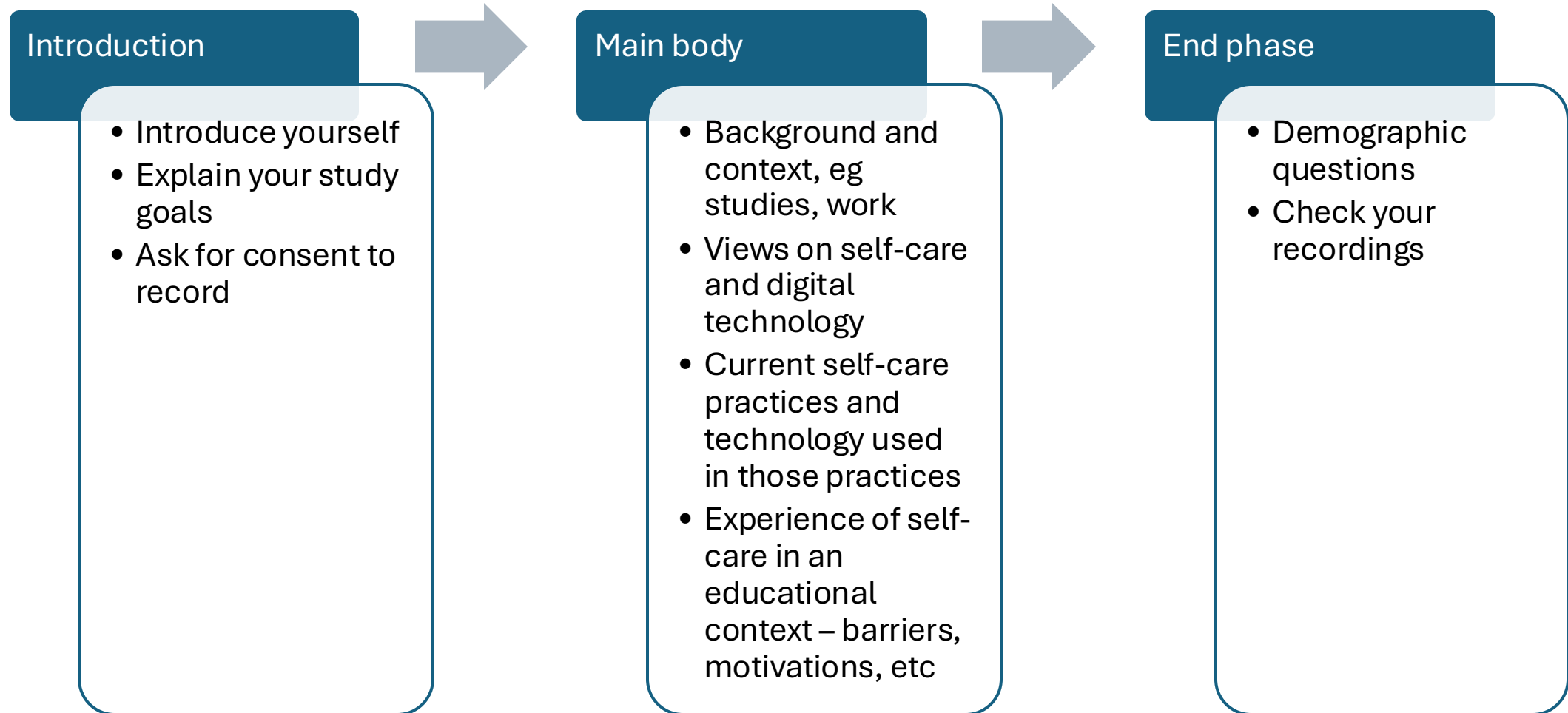
- Combine methods to gain different perspectives on your research aims
- Methods need to be designed to reflect your particular study setting. Not every method is suitable for every project or setting.
- Use interview questions to follow up on do- & make-methods

Activity 2: Combining Say, Do, and Make Methods



Activity 3: Prepare an Interview Guide

Example Interview Guide



Activity 3:

Prepare an Interview Guide

- Prepare a list of questions that covers all your key questions and includes follow-up questions.
- Easy beginning
- Covers all topics
- Uses open-ended questions asking about concrete experiences (examples)
- Brainstorm questions
- Identify and order topics
- Aim for a 30-45min interview (10-20 main questions)

- INTRODUCTION

Welcome

Thank you for your time

Let me briefly tell you about the aim of this interview: ...

Please read the consent form and let me know if you have any questions.

Is it ok if I start recording?

- TOPIC 1: X

- Can you tell me about the last time you did X?

- What started X?
- What were the key steps/challenges?
- How long did it take?
- What was the outcome?
- ...

- TOPIC 2: Y

- ...

- Is there anything else that I have missed in this interview?

- I will now stop recording.

- Thank you for support

Any questions?