LEARNING OBJECTIVES

• Product design – problems, solutions, new markets and technology
• Applications in design thinking in planning and architecture
• Appetite for change
• Overview of research and design tools
• Questions
TYPES OF PROBLEMS

Well-defined problems have clearly defined solutions.

Ill-defined problems are those that do not have clear goals, solution paths, or expected solution.

A wicked problem is a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize.

More info:
Richard Buchannan, Wicked Problems in Design Thinking (The MIT Press)
Problem solving: applying new technology or ideas to a problem.
WHAT IS DESIGN THINKING?

Problem finding: identifying needs based on reality.
PRODUCT DESIGN - THEN AND NOW

Data-driven design - surveys, market analysis

Contextual inquiry - talking with people in a place that is theirs
WILLIAM WHYTE
JEFF SPECK

WALKABLE CITY
HOW DOWNTOWN CAN SAVE AMERICA, ONE STEP AT A TIME

JEFF SPECK
COAUTHOR OF SUBURBAN NATION
What is your autonomy?
What is your influence?
What is your support?
THEORY OF CHANGE

This process identifies outcomes through the dissection of actions and inputs.

More info: https://wickedproblems.com/5_theory_of_change.php
RESEARCH AND DESIGN- OVERVIEW

1. Planning
2. Contextual interviews and observation
3. Reflections and synthesis
4. Patterns and endless conversation…
5. Insights
6. Design implications and selection criteria
7. "Ideation"
8. Prototype-test-refine (etc.)
RESEARCH AND DESIGN- PLANNING

1. Focus
2. Methods of engagement
3. Participant types and context
4. Recruiting participants or information sources
5. Interview script
6. Photography, recording and note taking (interview roles)
7. Use of info agreements
8. Supplies and physical considerations (sun screen, etc.)
1. In a relevant context
2. Active listening and conversation skill
3. (understanding that you get better at it as you go)
4. Stay broad; let them do the diving
5. They are teaching you- let them show you how to do things
1. Post interview reflection
2. Transcriptions
3. Externalizing the data
4. Begin abductive reasoning…
This is the process of filtering and manipulating gathered data into a cohesive structure to act as a basis for appropriate ideas.

1. You are making sure that progress is externalized because you are working as a team.
2. It is a visual representation of your thinking.
3. It is easily to understand so that team members can cycle in and out.
Provocative statements of truth, that aren’t necessarily true.
RESEARCH AND DESIGN- DESIGN IMPLICATIONS AND SELECTION CRITERIA

These statements form the background for ideation, and help guide the process of moving an idea forward.

They are generally tied to an insight.

The design will provide…

Our design promises to deliver…

The design will work toward…
1. No bad ideas
2. Draw/photo/collage/sketch/model/anything goes
3. Be patient and make time for everyone to generate and complete
4. Really push yourselves- try creating 100 ideas per person
5. Use the selection criteria to down-select (scoring)
6. Be fast; avoid sacred cows
1. Test the basic goals first
2. Find a way to test individual motivations...build your user story and validate demand
3. Be honest with yourself
4. Don’t try and test a finished product
5. Don’t test with people you know
1. Planning
2. Contextual interviews and observation
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How can human-centered design lead to better planning work?

What are the typical goals we are trying to achieve with planning processes and how can human-centered research make them work better?

How can planners push for a more meaningful appetite for change?