1. Empathy

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Definition and Background

The first principle of design thinking is empathy. Social work scholar Brené Brown defines empathy as "the emotional skill set that allows us to understand what someone is experiencing" as well as "to recognize and understand another person's emotions" (2021, pp. 120-121). Empathizing with users requires designers to be conscious of their own preconceived notions and biases in order to listen and observe "with a truly open mind" how users live and make sense of their day-to-day lives (Kelley with Littman, 2005, p. 17). In other words, empathy doesn't mean just thinking, "Here's how I would feel in that person's situation," but rather requires acknowledging and respecting those different experiences and perspectives.

Empathy research is critical for effective design thinking practice. By immersing themselves in the context of users' lives, designers gain insights that enable them to define problems or opportunities from their potential users' perspective and, in turn, to develop solutions that reflect users' values, fit the contexts of their lives, and will be more likely to be adopted by and ultimately benefit users.

Design thinkers are not only concerned with what they observe people do but also ask questions that prompt users to uncover the thoughts and emotions motivating their actions (Dam & Siang, 2020). For example, when the U.S. Department of Veteran Affairs (VA) Center for Innovation wanted to better understand "the experiences Veterans and their families have when attempting to access mental healthcare" (2016, p. 12), they talked at length with over five dozen Veterans—a diverse group across military branches and ranks as well as across gender, race, class, age, and geographic differences—their family members, and both frontline VA and private-sector service providers. By listening to their stories, the VA came "to better understand the processes and pathways people undergo to gain mentally healthy lives" and "gained a rich picture of their frustrations and aspirations" concerning mental health care (2016, p. 12).

Design Application

Empathic design is grounded in *contextual inquiry*, which involves observing and listening to how people live and make meaning within the material and social spaces of their lives (Leonard & Rayport, 1997). For example, when the New York City Mayor's Office of Digital Strategy wanted to better understand how New Yorkers engage with municipal services through their digital devices, they did not distribute general surveys or convene focus groups in a meeting room. Instead, working with design specialists at the nonprofit Public Policy Lab, they got out of their offices in City Hall and met with a diverse range of residents, particularly disadvantaged populations such as those who have mental health issues or physical disabilities, are socially isolated, have low literacy skills, do not read or speak English, or are very low income. To gain empathy for these users, the designers observed how they attempt to access city services, whether digitally or in person, and they prompted them to talk about what they were thinking and how they were feeling before, during, and after these experiences (Public Policy Lab, 2016).

Uses NYCHA website to pay rent. Takes kids to library; uses library computer when there.	Wants more control over when rent is due each month.
DO	THINK
*Private companies do a better job securing my financial data."	FEEL Doesn't fully trust government with security of her data.
"I have to enter all of my personal information every single month."	Frustrated that the NYCHA website doesn't recognize her month to month.

Figure 1.1. An empathy map for a low-income mother's experience with New York City's digital services. Image created by Wible, adapted from empathy research data in Public Policy Lab (2016).

Empathy mapping is one tool designers use to analyze and synthesize the data they collect through empathy interviews and observations (Dam & Siang, 2021). First, design teams use a technique called Story Share & Capture, in which they read through their notes and isolate key words or phrases from the interviews, usually by transcribing them with markers and sticky notes (Interaction Design Foundation). Next, designers arrange these notes on their "map," which is a 2x2 grid with the following four quadrants (such as Figure 1.1):

- What the person *says* (that is, memorable quotes)
- What the person *does* (or says that they do)
- What the person *thinks*
- What the person *feels*

Designers can either create a separate empathy map for each person they interview, or they can layer their notes onto the same map, ideally using different colors of sticky notes to distinguish the different people they've interviewed. Then, designers group similar keywords and phrases within the different quadrants of their empathy map, looking to identify clusters of concerns or problems that different users encounter in a similar way, particularly in terms of how they think or feel about their experiences.

Designers can also create a user journey map as a means to analyze their empathy research (Komninos & Briggs, 2021). Here, designers map major phases of the user experience and then layer their user empathy map notes about what users do, say, think, and feel into those different parts of the user journey. This analytical tool can help designers to identify specific moments where users experience problems that serve as opportunities for designers.

Empathy and journey mapping, then, help designers to keep their users' experience at the center of their problem definition and solution development work.

Pedagogical Integration

In technical communication classes, students can practice empathy mapping as a way of understanding users. For example, my students engaged in design work aimed at helping the university create solutions to better support first-year faculty. To gain empathy with new faculty, students observed them in a wide range of contexts, including familiar settings such as classrooms and office hours, as well as labs, weekly research team meetings, and walks to and from campus. Students also asked new faculty to tell stories about their experiences during their first days, weeks, and semester on campus, using prompts such as "Tell me about a day when you left campus feeling energized and excited to work here" or "Describe a time when you left campus feeling frustrated and like you never wanted to come back."

A student group that interviewed several first-year science faculty noticed that many of them described feelings of "loneliness," "isolation," and "lacking community" as they struggled to set up their new research teams. Clustering these repeated and related keywords on their empathy map helped the student-designers to focus their problem definition on these deeper, conflicted emotional experiences of first-year science faculty. Creating an empathy map helped these student-designers to understand how faculty's stories about their experiences revealed their deeper thoughts and feelings, and the students then used these insights to focus their *problem definition* in a way that reflected faculty's experiences and needs.

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