



ENIN 140: Design Thinking

Assignment #1: Empathise and Define

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Observational Research Methods

1. Shadowing learners online

Attending class with them to put myself in their shoes as an outsider [cc1]

Set up:

- **Observing learner** through Zoom
- While they attended online class on a different device
- Shadowed them through class to observe **pain points** & **experiences** [cc2]
- Follow-up **interview** to clarify any questions/doubts



To avoid '**observer effect**' - my camera was off [cc3]

2. Interviewing participants within a focus group



Focus group - students

Demographic

Interviewed 10 participants: [cc4]

- Undergraduate university students
- Students in different types of majors
- Graduate and research students
- High school students
- Teaching assistants
- Interns working



Methods

- Detailed phone interview: **discussion** with students
- Response-form Google doc

to understand **pain points**, areas for **bettering**
experience from user's point of view



Questions about:



- Studying, understanding, taking notes online
- Breaks and schedules
- Usage of video conferencing technology
- Engagement with peers
- Emotional satisfaction, joy, comforts
- Physical, mental environment
- Pain points

Observations

Sorted into 4 categories:

Physical

- "I can't concentrate online after 2 hours - eyes, neck, wrist, back hurt"
- "The (in-lesson) breaks are so important"
- "Back-to-back online classes are exhausting + leisure on laptop too"
- "I have to take 20 min walks more consciously for health"
- "Need more time/breaks offline"

Behavioural

- "Online classes become a monologue"
- "Meeting friends incentive to attend in-person classes, not so online"
- "Non-verbal cues are important for professors and students"
- "Too much time/effort to schedule meetings so I don't talk to new people in online school-> don't know anyone"
- "Easy to overwork as no divide between school and home time"
- "I take more notes in person as I see people around me doing the same"

Distractions

- "I remembered a due assignment, worked on that instead of listening to lecture"
- "Difficult to sit through 2 hours without losing focus/boredom"
- "Many distractions with a laptop"
- "Online classes get monotonous quickly and I lose concentration & interest"
- "Having family/people not attending class around at home is a distraction"
- "Lack of school environment is demotivating & leads to distractions"

Tech/Logistical

- Students with bad internet dropped then waited 15 mins in lobby
- Meeting join link texted to phones, students attend class on laptops
- "Gets confusing to find the right link with many subjects/classes"
- Notes online: recorded lectures, screenshots, can re-watch, pause, etc.
- "Must make sure I have charger, books, water, door shut before lecture"
- "Faculty can't figure out connecting equipment, sharing content/screen"

Insights

- **Physical markers** like change of place are important to maintain *structure* through the day + take breaks. Online, no markers.
- Students become **overwhelmed** by continuous work - *physically and mentally* (can't concentrate, eye ache, etc.)
- Difficult to overcome **distractions** and **lack of motivation** online
- Students want to remain **healthy** and ensure **working within their physical limits** for mental wellbeing



Priority Problem

Problem statement/Job-To-Be-Done^[cc5]

What and why?

Change of environment, **movement**: markers for people to **stick to a healthy schedule** but online: everything on same 11" screen.

They need to structure their day on their own to be well-balanced so they can be healthy, happy, motivated and not overwhelmed

Actionable problem statement: Students need to hire a solution to help **get organised and structure their day in a way that does not demand too much effort on their part.**

USER PERSONA



NAME: JENNIFER FORTIN
AGE: 21
OCCUPATION: UNIVERSITY STUDENT
LOCATION: TORONTO, ON
LIVING SITUATION: UNMARRIED, LIVES WITH HOUSEMATES

TIMELINE OF JENNIFER'S DAY



Wake up, get ready
Breakfast, morning classes
Check news, social media



Get a quick lunch
Study
Attend afternoon classes



Reviewing, projects
Cooking
Workout



FaceTime with family
Chill with friends (calls, in-person)

ABOUT JENNIFER

- Pharmacy student
- Lives in North York with flatmates.
- Students at University of Toronto, now remotely online.
- Wants to excel in university, get a good job on graduating
- Focused and hard working
- Likes to meet friends when free
- Adept at using technology and social media sites like Instagram.
- Is curious and can sometimes get distracted.
- Meditates to improve concentration

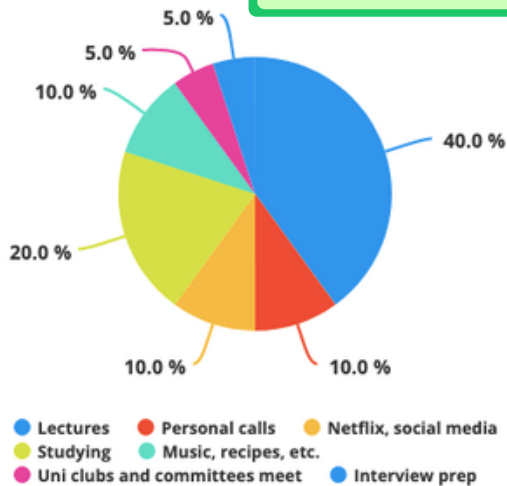
MOTIVATIONS

- Wants to make the most of her day (maximise daytime productivity)
- Make time for social life
- Realises importance of being energised and motivated

GOALS

- Become confident, less overwhelmed
- Do well in university
- Become healthier

LAPTOP USAGE



WHY IS ORGANISATION A PRIORITY PROBLEM FOR JENNIFER?

Jennifer wants to

- do well in university
- maintain a good work-life balance
- meet with friends.

However, she sometimes gets distracted and falls behind schedule. She tries to manage her the anxiety and feeling of being overwhelmed by practicing mindfulness and meditation.

She is looking for a way to stick to her schedule so that she:

- can feel more in control of her situation
- Overcome negative feelings
- Feel accomplished
- Complete work and achieve her goals
- Have time to meet friends, relax, have work-life balance

Citations and course connections

Course Connections [cc]

1. 'User perspective-taking' - *Needfinding, Module 2: Observe*
2. Interviewing and shadowing to deeply understand problems faced by online learners - *Empathetic Design, Module 3: Empathise*
3. Avoiding 'Observer effect' to prevent influencing behaviour - *Shadowing, Module 2: Observe*
4. Designers must observe *and* interview to understand both realised and unspoken needs of users - *Empathetic design, Module 3: Empathise*
5. Jobs to be done: our solutions must 'do a job' for users - *Needfinding, Module 2: Observe*