ACTIVITY ONE | INTERVIEW, OBSERVE, EMPATHIZE

USER-CENTERED DESIGN (UCD) ACTIVITY

INTRO TO USER-SENSITIVE INCLUSIVE DESIGN: INTERVIEW, OBSERVE, EMPATHIZE

GENERAL IDEA

Prior to this class, students should watch a pre-recorded lecture (available at inclusive.design) to learn the basics of User-Sensitive Inclusive Design. This short video will introduce students to User-Centered Design Methods and their roles as co-designers, as well as users.

After watching the video, students will be ready to participate in this introductory UCD Activity. During this classroom activity, students will interview their peers to learn about their respective morning routines (or bedtime routines, depending on which is more problematic). An instruction sheet will guide the interviewers, helping them to identify moments of frustration or “pain points.” After identifying pain points, interviewers will work in pairs to come up with app concepts that alleviate a specific pain point. This first introductory exercise models the process of working with users to identify their needs, developing design concepts to address those needs, and then bringing the concepts back to the users for feedback and future iterations.

iDATA UCD OVERVIEW

PHASE ONE:

User-Sensitive Inclusive Design promotes the concept of involving users with specific needs in the design process. The activities in this series will engage high school students (both sighted and BVI) in the process of redesigning the Afterglow interface to better meet their needs. Activity One, the introductory exercise, models User-Centered Design Methods through hands-on engagement with a design problem.

During Activity Two, students draw upon their own experiences to create personas and scenarios representing typical BVI Afterglow users. These initial exercises employ investigative methods, asking students to critically reflect upon and document the needs and preferences of BVI users and then share that information with the iData team.

Activity Three through Six move into generative methods, i.e. the making phase, asking students to envision new solutions to current Afterglow Interface inaccessibility. Activity Three utilizes improv techniques to structure a fast-paced ideation session for reimagining the Afterglow interface. During Activity Four students use a Task Flow as a springboard for envisioning innovative means of completing a specific task—an accessibility wish list. Activity Five asks students to record moments of delight as they interact with everyday technology and then transfer characteristics of that moment to the Afterglow interface. Activity Six engages students in Card Sorting, an exercise that asks them to reorganize the content of the Afterglow homepage into a more intuitive structure.

These initial six activities in iDATA UCD Phase One embrace the students as co-designers, empowering them not only to critically examine existing non-accessible digital platforms, but also to use their experiences to develop innovative concepts of their own for making these platforms accessible and enjoyable to BVI users. All of the material generated by these activities will feed the larger Afterglow redesign process.

PHASE TWO:
In the second phase of the project, students will test prototypes of Afterglow created by the iData team. These prototypes will respond directly to the material generated by Activities 1-6. Students will provide feedback and ideas for further iteration of these prototypes which will, in turn, lead to Phase 3.

PHASE THREE:
During Phase 3, the prototypes will be developed further—coded rather than mocked up. These prototypes will also be tested and revised based upon student feedback, although only minor changes will be possible at this stage. The final redesign of Afterglow will, ideally, not only be accessible to BVI students, but also enjoyable to use.

LENGTH OF ACTIVITY
30 minutes

MATERIALS NEEDED:
- Interview instructions
- Elevator Pitch Template (Google Docs)

TEACHER PREPARATION
- Instructors should familiarize themselves with the key terms discussed in the video lecture (UCD, USID, UX, Users, Co-Design, Pain Points, etc.).□

LEARNING OBJECTIVES
- Students understand key terms in UCD.
- Students acquire a basic understanding of how observation and interview methods can be used to gather user data, identify pain points, and address those pain points through innovative concepts.

ACTIVITY INSTRUCTIONS:
1. Instructors separate students into groups of three. Two students (interviewers) will follow the provided instructions to interview a third student (Interviewee) about his/her morning routine (or evening routine, depending on which is more problematic.) (5-10 minutes)
2. Over the course of this interview process, interviewers identify moments of frustration (pain points) that emerge during the interviewees morning routine. Emphasize to students that they should not try to solve problem during the interview, simply work to better understand it. (See interview instructions for more details on this process.)

3. After the interview, Interviewees come together in a separate section of the room, gather together and chat with one another about their experience.
4. Meanwhile, each pair of Interviewers consults their notes and then together generate potential app concepts that address one of the pain points that emerged from the interview process. At the end of 10-15 minutes, each pair selects their strongest idea and quickly fills out the Elevator Pitch handout on Google Docs. (10-minutes. More time could be devoted to this phase if available.)
5. During the final 10 minutes, some pairs of interviewers volunteer to read their ideas aloud, communicating these concepts to the interviewee for the first time. The interviewee responds before any of the other students, explaining why the idea would/would not help him/her with the morning routine. The instructor leads this discussion, using the Engagement Questions. If there is time, vote on the most effective idea. (10 minutes)

ENGAGEMENT QUESTIONS

1. [Directed to the interviewee] Do you think this concept could improve your morning? Does it address a point of frustration that you struggle with each day? Would it work? Why or why not?
2. How could the idea be improved to better meet your (interviewee's) needs?
3. How did the initial interview help the interviewers come up with a useful app concept?
4. Would it be problematic for the designers (interviewers) to go ahead and build the app without returning to the user? Why or why not?

DATA COLLECTION

Once the classroom portion of the activity is completed, instructors or team leaders submit the results—Elevator Pitches— to Yerkes for use by the iData team.

FOR FURTHER EXPLORATION

General Resources for understanding User-Centered Inclusive Design and User-Centered Design Methods:

Hannington, Bruce and Bella Martin, *Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, And Design Effective Solutions*, Rockport Publishers, 2012.

Newell, Alan F. and Peter Gregor. "User Sensitive Inclusive Design – In Search of a New Paradigm," In ACM Conference on Universal Usability, 2000.

Norman, Don. *The Design of Everyday Things: Revised and Expanded Edition*, Basic Books, 2013. (Original Edition Pub. 1988)

Sanders, Liz and Pieter Jan Stappers, *Convivial Toolbox: Generative Research For the Front End of Design*, BIS Publishers, 2013.

STUDENT INTERVIEW INSTRUCTIONS (Google docs)
Before coming up with a concept, you need to understand your user and identify their pain points.

Step One: Gather in groups of 3. Two students should be designated as interviewers and 1 should be an interviewee.

Step Two: Interviewers should ask their interviewee to go through his/her typical morning routine aloud. (Note: the interviewee can switch to their evening routine if going to bed is more problematic.)

The goal of this interview is to improve the interviewees' morning routine in some way. Listen for any moments of frustration or inefficiency. Maybe they have trouble getting out of bed initially, maybe they have trouble fitting in a healthy breakfast, maybe they just feel crabby. Maybe their kid brother runs into their room and annoys them while they try to prepare for school.

Interviewers: Be sure to take notes. When your partner is finished going through his/her morning routine, ask follow-up questions to clarify details. For example, if he/she wakes up feeling generally crabby, try to determine any factors influencing this mood: Diet? Sleep patterns? School stress? Smartphone overuse? Back problems?

Do not try to solve the interviewee's problems during the interview. Instead, focus on better understanding his/her morning routine.

Step Three: Interviewers separate from the interviewee and begin to develop ideas together for an app that could alleviate one morning pain point. *Crazy ideas are perfectly acceptable as long as they address user need.*

Be sure to focus on one source of frustration in each concept. Your app only needs to solve one very specific morning issue for the identified user (your interviewee). Come up with as many ideas as you can. Select your top idea and fill out an elevator pitch template to clearly communicate the idea. **Do not yet share your idea with the interviewee.**

Step Four: Reconvene as a class and await further directions from your instructor.

ELEVATOR PITCH FORM (Google docs)

Instructions: An Elevator Pitch is a concise statement of your concept. The idea is that the statement is brief enough to clearly communicate a concept during one elevator trip. Once you select your strongest idea, fill in the supplied template to generate your pitch. Do not yet share your idea with your interviewee.

For [user name] **who needs** [pain point], [app name] [benefit/solution].

Unlike [alternative]**, it** [differentiators].

EXAMPLES OF FORM FILLED OUT

Example One:
For [Phil Miller] **who needs** [to get to school earlier each day], [The Snooze Destroyer app] [syncs his morning phone alarm with a friend's phone alarm to discourage snoozing]. **Unlike** [annoying loud alarm clocks]**, it** [uses friendship and peer pressure].

Example Two:
For [Susannah] **who needs** [to take a hot shower each morning to wake up, despite her shower-hog siblings], [The Shower Genie app] [connects wirelessly to the hot water heater, switching off the hot water temporarily after 8 minutes to ensure all three siblings get a hot shower]. **Unlike** [an alarm or a yelling dad]**, it** [uses the refreshing sting of cold water].