Example Research Plan

Study 1: Semi-Structured Interview

Foreign language learners and what they need

Background

Digital learning has become a trend. Our market research shows that there are 10 million digital learners in the US and 1/10 of them are learning foreign languages. Our team is interested in creating a digital product (desktop or mobile app) for adult learners who study languages in their leisure time for fun. Since adult learners usually have a busy schedule, our platform aims at optimizing study plans for busy adult learners.

Research Goal

Our team wants to learn about how adult learners use digital tools to learn languages, including what goals they try to achieve when using these tools. We want to determine what opportunities and needs might exist for new language-learning products, so that we can use these findings to help us shape the direction we take in developing our product.

Research Questions

- [Needs] What is essential for language learning?
  - What are users' current pain points?
- [Behaviors] How do language learners currently study languages?
  - How do they interact with existing digital products?
- Do users really need another language learning product?
  - How do users feel about existing products?

Method

- 30-minute in-person or video semi-structured interview to gather in-depth qualitative data
- The researcher will use the interview script as a guide and ask follow-up questions based on answers from the users

Recruiting

- 5 participants

- Adults with a full-time job who:
  - Use digital language-learning products at least once a week
  - Have been using digital language-learning products for at least 3 months
- To recruit participants, we will send emails to full-time employees at Company X's foreign languages study group

Screening Questions

1. What is the primary reason for you to study foreign languages?
   a. For my current job (screened out)
   b. For leisure
   c. For a career change (screened out)
   d. Other (screened out)

2. What is your primary way to learn languages?
   a. Take in-person, instructor-led courses (screened out)
   b. Use digital products
   c. Other (screened out)
   d. Currently, I am not learning languages (screened out)

3. How long have you been using digital products to study foreign languages?
   a. Less than 3 months (screened out)
   b. 3 months to a year
   c. Over a year

4. When was the most recent time you have used these digital products?
   a. Within a week
   b. Within a month
   c. Over a month ago (screened out)

5. How often do you use these language-learning digital products?
   a. A few times a week
   b. About once a week
   c. 2-3 times a month (screened out)
   d. About once a month (screened out)
   e. Fewer than once a month (screened out)

Timeline
- Design proposal: August 1—3, 2019
- Recruiting: August 6—8, 2019
- Sessions: August 12—15, 2019

- Readout: August 18, 2019

Script

Notes: *[italicized brackets]* are used to document what we wish to learn from each question

Introduction

My name is [name]. Thank you very much for participating in this study. I am currently working on a project related to learning foreign languages. I would love to learn more about your experience with language-learning digital products. This interview will take about 30 minutes. If you want to leave the session or take a break at any point, please let me know. Do you have any questions before we start?

Do you mind if I record this session for note-taking purposes? The recording won't be shared with anyone outside of our team.

Warm-up Questions *[Build rapport. Start with easy questions to get to know the participant]*
1. Could you tell us more about yourself.
2. Which languages are you currently learning?
3. Which apps or websites are you currently using for learning languages? Have you tried other apps before?

Probe into needs and behaviors
4. How did you get started using digital language-learning products? *[Motivation: what did participants hope to achieve?]*
   Follow-up questions:
   - When did this happen?
   - What was the trigger?
   - How was the learning experience?
   - What was the learning outcome? Did you reach your learning goal?

5. How long have you been learning languages?
   - Where did you take your very first lesson?
   - (If not digital) Why did you decide to switch to using digital products? *[Which needs did digital products meet that other types of learning failed to meet?]*

6. How often do you study? What motivates you to continue to study on a daily/weekly/etc. basis? *[There might be internal motivation "I want to be able to speak French fluently" and external motivation "I want to keep my streak on Duolingo's top leaderboard".]*
   - What are your major achievements? *[What makes users feel proud and excited?]*

- How do you track your progress? *[Do users care about progress? Do existing apps do a good job at celebrating progress?]*

7. How do you decide what to study? Why? *[Do participant build their own learning plan or follow the app?]*
    - Do you set up learning goals? *[Do participants set up learning goals in the app?]*

8. What do you use to learn languages now?
    - Have you used other products/tools?
    - What was the very first product you were using? Why did you switch to other products? *[Pain points]*
    - (If participant is using more than 1 product concurrently) What do you use each product for? *[Needs]*

9. You mentioned you are currently using Duolingo, what time of day and where do you usually use Duolingo? *[Does participant have a daily routine? Is it spontaneous?]*
   Follow-up questions:
    - Ask participants about the context *[when and where]*: At noon every day? Are they on a short lunch break? When they are waiting for a bus?
    - Ask participants why they choose to use the app in certain locations or during certain times

10. When was the last time you opened up Duolingo? Could you walk me through how you were using this app? *[How do language learners interact with existing tools. Better to ask participants to show than tell]*
    Observation & follow-up questions:
    - Observe what features the participant is using and how the participant uses them.
    - Ask what participants like or dislike about each feature, why they like/dislike each feature.
    - Which features do participants not use and why?
    - What's on participants' wishlist for the app?
    - If participants talk about frustrations, ask why and their current workarounds *[Unmet needs]*

Wrap-up
Thank you so much for sharing your experience and insights. Your answers will help our team build a better product. If you have any additional thoughts and comments, I would love to hear about them at any time. I can be reached at [name@email.com]. Hope you have a wonderful day.

How to build vocabulary?

Background

In our previous study, we learned that foreign language learners like to preview vocabulary during breaks throughout their work day. This is a promising opportunity we may be able to target with our product, but more data is needed to better understand the needs and whether they generalize to the larger population of language learners.

Research Goal

This study focuses on better understanding users needs related to building vocabulary during work breaks, as well as better measuring the extent to which these needs are held by the majority of language learners.

Research Questions

- How can digital products best support learners in building vocabulary, particularly during work breaks?
    - Which features/functions are useful?

Method & Recruiting

- Use surveys to collect data from at least 30 language learners
- Test survey questions with 5 volunteers recruited from our engineering team
- Send surveys to Company X's foreign languages study group whose answers in our screener meet our recruiting criteria:
    - Use mobile language learning product(s) at least once a week
    - Have been using digital language learning products for at least 3 months

Survey Questions

1. Which foreign language are you currently studying? (If you are studying more than one language, select the one you spend more time on.) *[Assumption: people might use different approaches when learning different languages]*
    a. French
    b. German
    c. Spanish
    d. Chinese
    e. Japanese

  f. Russian

  g. Other (Specify___)

2. In the past month, how did you study vocabulary? (Select all that apply.) *[learning method]*

  a. Use mobile device(s) [if respondents do not select mobile, survey ends]

  b. Use desktop(s)

  c. Other digital devices (e.g., Kindle, tablet)

  d. Physical products (e.g., books, printouts, physical flashcards)

  e. In an instructor-led class

3. In the past month, which types of mobile products did you use? (select all that apply) *[current tools]*

  a. Language-learning app(s) (e.g., Memrise, Duolingo)

  b. Podcasts

  c. Video platforms (e.g., YouTube)

  d. E-books

  e. Websites in my mobile browser

  f. Other (Specify___)

4. In the past week, how often did you use a mobile app to study vocabulary? *[Frequency]*

  a. A few times per day

  b. About once per day

  c. 4-6 times per week

  d. 2-3 times per week

  e. Once per week

  f. I didn't study vocabulary last week [survey ends]

5. Which of the following best describes when you study vocabulary? *[Do participants have a routine?]*

  a. I study vocabulary when I have a block of time to do so *[Spontaneous]*

  b. I set aside time for studying vocabulary *[Has a routine]*

  c. The language app reminds me when to study *[The tool does the planning work]*

  d. Other (Specify__)

6. In the past week, how long was your typical study session? *[How much content should be fit into each session]*

  a. Less than 15 minutes

  b. 15 to 30 minutes

  c. 31 minutes to 1 hour

  d. Longer than 1 hour

7. In the past week, how many new words did you plan to learn? *[Do learners have specific learning goals?]*
   a. 1–5 words
   b. 6–10 words
   c. 11–20 words
   d. 21–50 words
   e. Above 50
   f. I didn't make any plans

8. In the past week, each time when you studied vocabulary, approximately how many new words did you study in each learning session? *[What is the amount of new words learners can digest in each session?]*
   a. 1–5 words
   b. 6–10 words
   c. 11–20 words
   d. 21–50 words
   e. Above 50
   f. I didn't learn any new words last week

9. In the past month, which of the following best describes how you review words you have already learned? *[Review habits]*
   a. Every time I use the mobile language product, I reviewed old vocabulary
   b. I sometimes review old vocabulary
   c. I didn't review

10. Based on your experience with the learning app(s) you are using, how essential were the following features? *[What types of achievements/milestones do learners care about?]*

	Not necessary	Nice to have	Must have	Does not apply
Track the number of new words I have learned in the past week				
Show the total number of words in my vocabulary				
Show my learning progress against requirements of official language tests				
Show my competency				

level (e.g., reading level)				

Demographic Questions

11. What is your first language? *[Assumption: First language affects how people learn a new language. Note: Even when people are bilingual, it is rare that they can read and write equally well in both languages.]*
    a. English
    b. Spanish
    c. Chinese
    d. French
    e. Arabic
    f. Other (please specify: _____)

12. What is your age? *[Assumption: People in different age groups might have different learning styles.]*
    a. Under 18
    b. 18–25
    c. 26–35
    d. 36–65
    e. Above 65

13. What is your education level? *[Assumption: Education level affects learning style.]*
    a. Less than a high school degree
    b. High school degree or equivalent
    c. Associate's degree
    d. Bachelor's degree
    e. Graduate degree