# **Research Plan**

# **Study 1: Semi-Structured Interview**

# Needs of Full-time Students belonging to Science stream who want to learn more about their curriculum subjects.

## **Background**

Digital Learning is the new trend in India as Research shows 10 times growth in the education market of India since 2017. Our team is interested in created a digital product (desktop or mobile app) for Full time students who want to learn their curriculum's Science and Technology with ease and better visualization. Since, students usually have a very busy schedule in India, our platform aims at providing the educational content in an entertaining and optimized way.

## **Research Goals**

Our team wants to know about how Students belonging to science stream use digital platforms for better understanding of their curriculum's Science and Technology related subjects and what goals the students try to achieve while using these tools. We want to determine what are the opportunities that might exist for a new curriculum learning Product, so that with the help of all this information we can shape the direction of our own products. Some of the other goals are:

- 1. Learn more about digital-learning platform which teaches curriculum related subjects to Students belonging to Science stream.
- 2. Learn what are the likes and dislikes in the current product scenario?

## **Research Questions**

[Needs] What is essential for learning Science and Technology of the curriculum? What are the current pain points while doing so?

[Behaviors] How do high-school Students currently study Science and Technology of their curriculum for better understanding?

How do they interact with the current product?

How often do they interact?

[Usefulness]Do students need any other app to teach them about their curriculum?

## **Method**

- Email Screening.
- 30-minute 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.
- Full time Students who:
  - Use digital learning products for science and technology of their curriculum at least once a week
  - Use digital learning products for science and technology of their curriculum at least once a week.
- To recruit participants, we will send emails to Full time School Students belonging to Science stream.

# **Screening Question**

- 1. What is your primary way to learn about Science and Technology of your curriculum, apart from School?
- a. Private Tutor (screened out)
- b. Use digital products
- c. Other (screened out)
- d. I study on my Own (screened out).
- 2. How long have you been using digital products to study more about Science and Technology of your curriculum?
- a. Less than 3 months (screened out)
- b. 3 months to a year
- c. Over a year
- 3. 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)

- 4. How often do you use these products to learn more about your curriculum's Science and Technology?
- 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)
- 5. Are you currently a Full-time Student?
- a. Yes
- b. No (Screened Out)
- 6. Are you available on or willing to download any video conferencing apps?
- a. Yes
- b. No (Screened out)

## **Timeline**

Design Proposal: May 1-2, 2020

Recruiting: May 3, 2020Sessions: May 4, 2020Readout: May 7, 2020

# **Script**

#### Introduction

Hello, my name is Saurav. Thank you very much for participating in this study. I am currently working on a project which will help us to learn more about our curriculum related to Science and Technology. I would love to learn more about your experience. 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 will not be shared with anyone outside of our team.

## Warm up questions[Build rapport. Start with easy questions to know the participant]

- 1. Could you tell us more about yourself?
- 2. What are the subjects that you are currently studying?

3. Which apps or websites are you currently using for learning more about your subjects? Have you tried other apps before?

#### **Needs and Behaviors**

- 4 How did you start using these platforms? What was the motivation behind using them? [Motivation: What did the user hope to achieve] Follow-up questions:
- When did this happen?
- What motivated you to make the switch?
- O How was the learning experience?
- What was the learning outcome? Did you reach your learning goal?
- 5. For your curriculum, Is there any dedicated platform which helps you to learn more about it?[Do students interact with the current available tools?]
  - On what device do you use it on?
  - Are you able to find the content you're looking for?
  - Are the apps budget-friendly?
- 6. How long have you been looking to learn more about your curriculum?
  - Where did you take your very first lesson?
  - (If not digital) Why did you decide to switch to using digital products?
- 7. What are the top three resources you use to learn about your curriculum?
  - Websites? Applications? Books?
  - Which do you prefer? Why?
  - How did you find out about it?
- 8.Do these platforms just provide with the content or something more?[Do students care about the type of subscription?]
  - Paid or unpaid?
  - Membership needed?
- 9. What time of day do you study?[Do participants build their own learning plan or follow the app?]
  - And where do you study?
  - Why?
- 10. What do you use to learn about your subjects now?
  - Have you used other products/tools?
  - What was the very first product you were using? Why did you switch to other products? [Pain Point]

- [If using more than one product] What do you use each product for?[Needs]
- 11. What features on these resources do you use to study?
  - Video? Text with screenshots? Face-cam video? Screen recording?
  - What has been the most effective way of learning?
- 12. Could you talk to me about which resource you use the most?["How do students interact with the current tools. Better to ask participants to show than tell"]
  - What do you like and dislike about it? Why?["Why do participants like a certain feature"]
  - Which features do you not use? Why?
  - How would you improve it? List 3 5 most important features.

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 [Saurav.lama@yahoo.com]. Hope you have a wonderful day.

# **Study 2: Survey**

# How to learn more about the subject with ease?

## **Background**

In the previous study, we learned that Students love to study during the night and always want to know more about their subject to score good in the exams. 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 with the larger population of language learners.

## **Research Goals**

This study focuses on better understanding users needs who want to know more about their subject with ease and want to get good marks during their exam, also it will be used to measure if this generalization is valid or not.

## **Research Questions**

- How can digital products best support learners in learning more about their subject and pass the exams with ease.
  - o Which features are useful?

# Method and Recruiting

- Use surveys to collect data from at least 30 language learners
- Send surveys to Lovely Professional 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. What is the domain that you are currently studying? \*
- a. Computer Science
- b. Mathematical Science
- c. Life science (Biology)

d. Physical Science (Physics or Chemistry)
2. In the past month or early, how did you study about your subject?
a. Used Desktop b. Used Mobile c. Other Electronic Devices such as Kindle d. Physical Products (Books, Research Papers, Printouts)
3. In the past week how often did you use your phone to learn about your subject?
a. A few times a day b. Once per day c. 4-6 times a week d. 2-3 times a week e. Once per week
4. At what time do you study during your regular classes? *Select all that Apply*
<ul><li>a. I study early in the morning</li><li>b. I study during night</li><li>c. I study whenever i get time</li><li>d. I sometimes bunk Classes to study.</li></ul>
5.In the past week, How many new concepts did you learn about your subject?
a. 0 b. 1-3 c. 3-7 d. 7+
6. Do you find the video content that you are looking for about your subjects?
a. Yes b. No c. Sometimes
7. Do you prefer to know more about your subject that you're studying?
a. Yes b. No
8. Do you require questions related to the video that you just watched?
a. Yes b. No

10.Do you want to review what you have studied?							
<ul><li>a. Yes, and i always do.</li><li>b. Yes, But i never manage to do it.</li><li>c. No, i dont want to review.</li></ul>							
11. Do you want to decide your routine or follow the app?							
<ul><li>a. Follow the app.</li><li>b. Follow your choice.</li></ul>							
12. On the scale of 1-5 please select the importance of the feature. 5 being the most important.							
	Not necessary	Nice to have	Must have	Does not apply			
Do you want a statistical							
review on your							
week points							
and strong points?							
Show your							
learning track							
against the							
official Exams you are							
preparing for?							
Do you want							
the app to							
motivate you if							
you score less in one of the							
Self							
Assessment							
test of the ann?		1	1				

9. Do you need notes about the subject that you're learning online?

a. Yes b. No

13.	What	is	you	age?
Ans	s:			