# signstory

**Fostering early literacy through the joy of storytime** 

## **EDUSIGN**

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## signstory, where stories come to life!

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Password Select Language

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Lengua de Signos Espanola (LSE)

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# Our Team







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# Problem Statement How might educators and families make story time accessible so they can support early literacy skills in deaf/hard of hearing (HoH) children?

## **Problem Context**

## Current State of Deaf Education

## Accessibility Concerns

Challenges Faced

## Existing Solutions

Necessary to Understand What is currently Done and what parts are underserved.

What are some nuances of accessibility that we need to keep in mind when designing our end product?

Challenges that our target audience faces on a daily basis as a result of the education system failure.

Finding markets that are already being sufficiently served and identifying potential niches that may allow us to bring our product to help out target population



# Key Research Insights



## ~15% of Children in America are Deaf/ HOH; 90% of them are born to hearing parents

Approximately 3 in 1,000 children born in the U.S are born deaf, many of them to hearing parents. This problem is large scale, but has been largely under addressed by mainstream education.

## Delayed Reading Skills Development

Research has shown that deaf/HoH children typically fall behind their hearing peers in schools. A 16 year old deaf/HoH child will typically perform reading abilities of a 9 year old hearing child.

## Language Deprevation and Critical Periods

First 6 months are critical periods for language development. Without learning a language, individuals will never be able to fully utilize language even with years of rigorous education in the future.

## Market Focus of ASL Products

Large Product segment is focused on ASL teaching, not necessarily early development of reading skills. Our hope is to combine reading skills acquisitions alongside exposure to ASL.

## **Meet Catalina**

### Motivators -

- Family bond and connection: desire to build a strong bond and connection with her son despite the challenges they face
- Advocacy and inclusivity: motivation to advocate for her son's inclusion and equal opportunities in education and society
- Support her child and prevent developmental delays by starting early intervention

#### Needs

- Educational resources and tools: access to educational materials and tools supporting deaf children in early literacy, language acquisition, and communication to aid her son development effectively
- Efficient Solutions: Catalina needs to balance her career and family life and needs a strategies or resources that are easily accesible

"I know my son needs exposure to ASL but i feel discouraged since I don't know it myself. I also worry about connecting with him and communicating with him as a hearing person."



**Catalina | Hearing Parent to a Deaf Child** 

# Key Concepts

#### Accesibility

- Enhances user experience for everyone, not just those with disabilities.
- Expands audience reach and inclusivity, promoting equality.

#### Making learning fun

- Transforming education by incorporating fun and interactive elements to enhance engagement, motivation, and retention
- Facilitating parent/child connection

#### **Positive reinforement**

- Behavioral strategy that involves rewarding desired behaviors to increase the likelihood of their recurrence.
- Enhances motivation and engagement.
- Builds self-esteem and confidence.
- Encourages continuous improvement and effort.
- Fosters a positive and supportive learning environment.



# **Concept Validation**Insights

- Accessibility
  - Expressed that funding was a big barrier to resources; users liked that the platform was easy to access on a website

### Parent-Child Connection

- liked to idea of parents learning with their children in the learning dojo
- ASL vocabulary library
  - Making sure the library is easy to use for both children and their caregivers
- Overall website
  - The design should be engaging for children 0 to 5. Consider implement elements like bright colors and striking shapes to attract childrens' attention.



# Solution Approach

## Problem

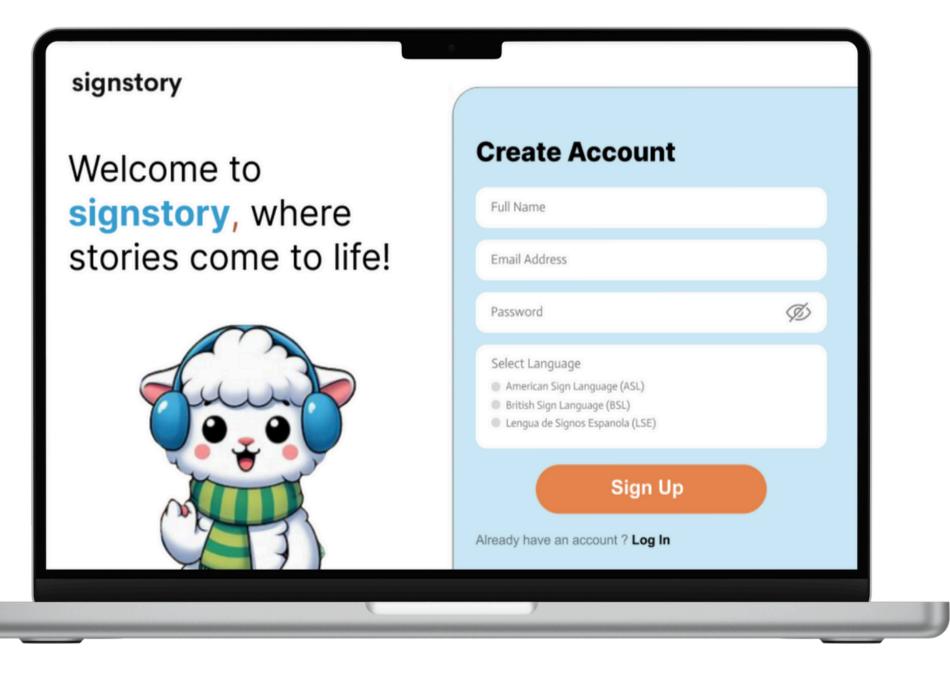
A need to create a platform that contributes to language development, literacy skills, and cognitive growth of deaf children

**ASL translated** 

A digital library of story time books with videos and closed captioning

## Solution

# Key Features

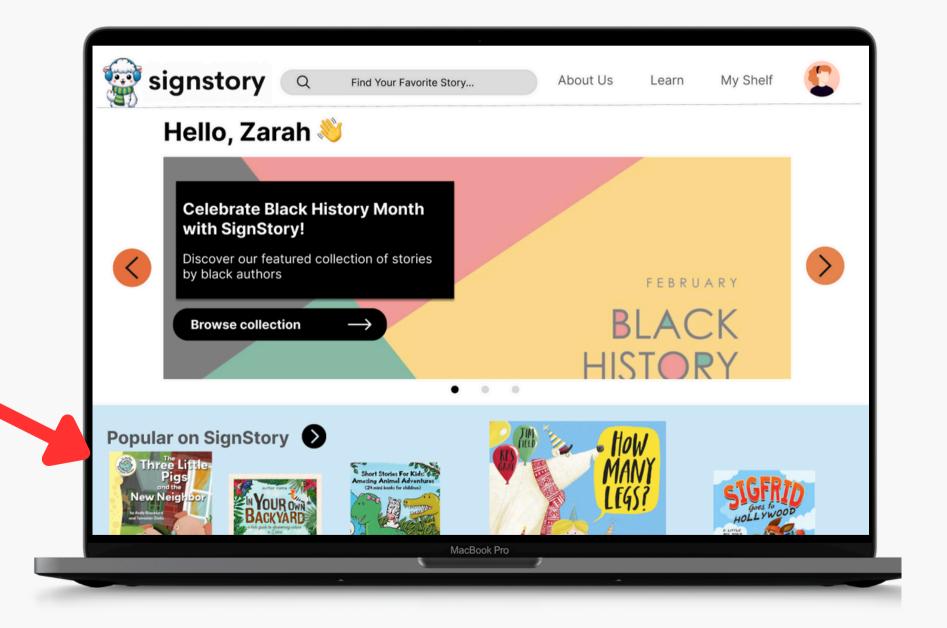


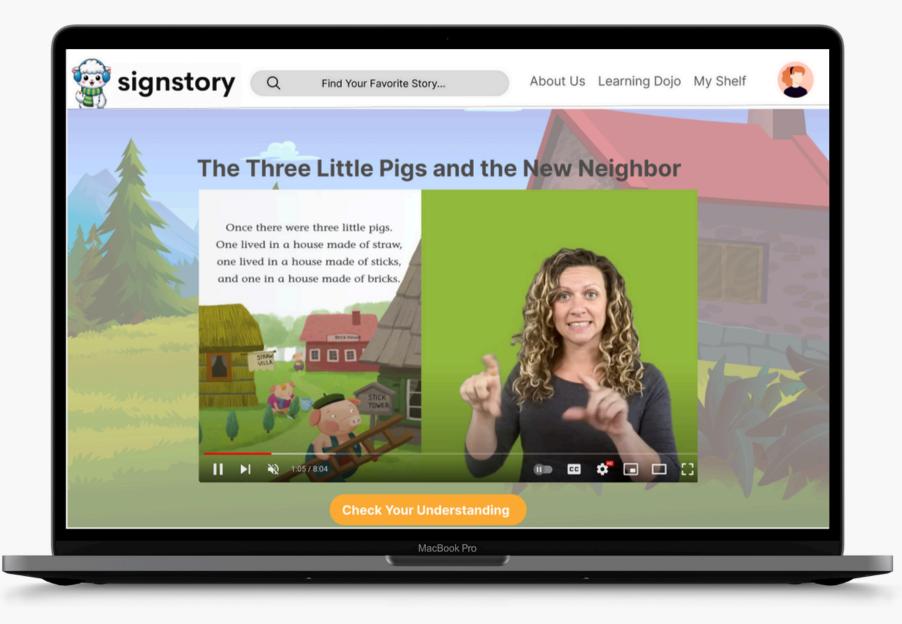
## **Translated Storytime books**

Quiz

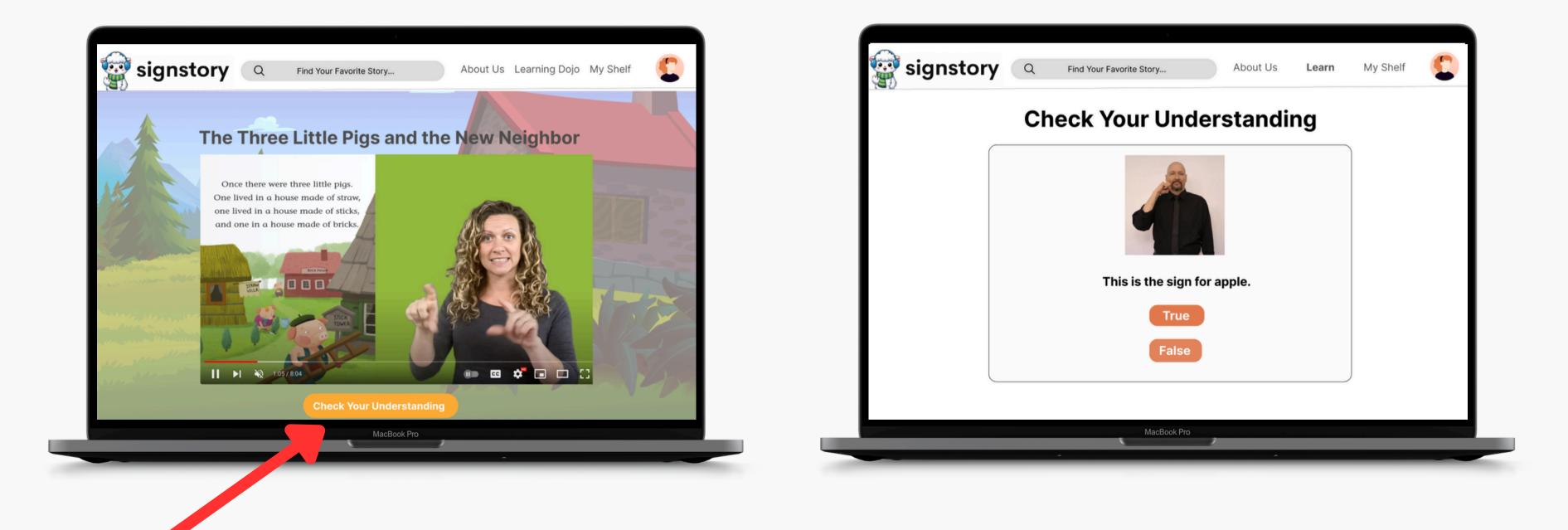
## Learn: Resources

# **Translated Storytime Books**

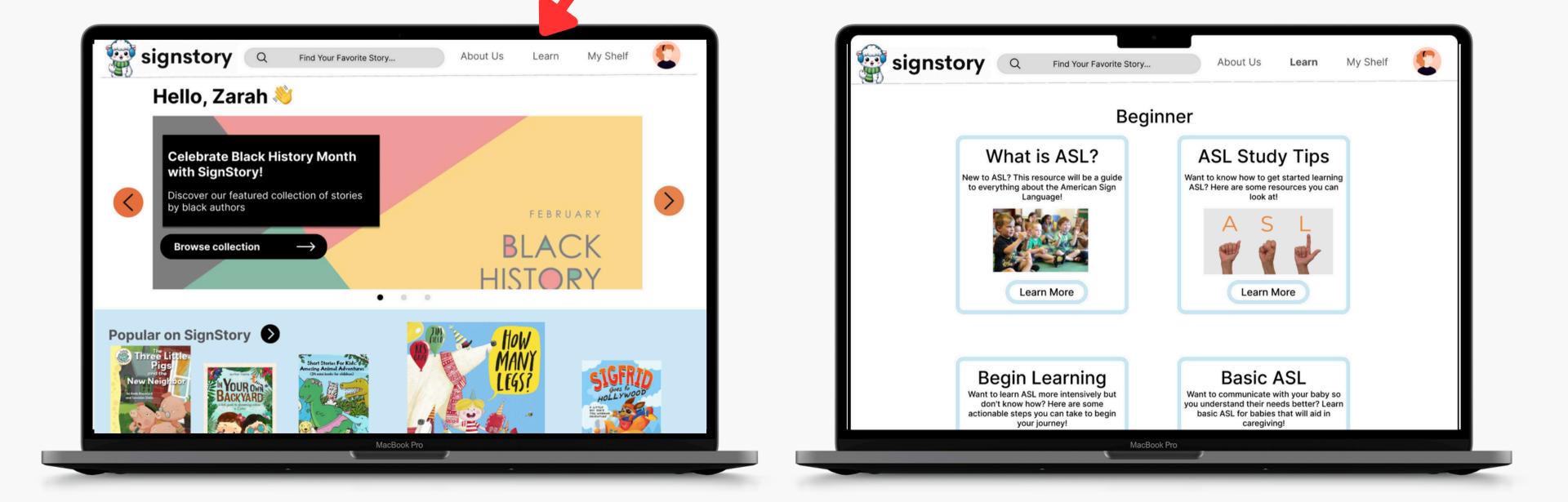








## Learn: Resources



# User Testing



## Existing Features & Strengths

Bright UI along with easy navigability.

"I like how simple the page is. It's something I can imagine a 4-5 year old navigating."

### **Existing Concerns**

Features to further engage younger audiences.

Incorporate different modes of language for inclusivity (bilingual, asl, etc...)

Concerns regarding variety and number of stories.

## Iterative Development: Resources Page

Received suggestion to incorporate different levels of resources for our resources page.

Transitioned from a single generic resources page to one that is suggested depending on quiz result.

## Future Development Direction

Mascot Popping up and Helping User Navigate Page

Including Sign Language on the Main Screen for Increased Accessibility

Incorporate International Stories

## **Ethical Considerations**

## **Signing Styles**

- Range of signing styles, including regional variation
- Involve Deaf community members in content creation
- Learning modules that highlight the differences in signing styles

## Privacy of young users

- Protecting the privacy of young users
- Transparent communication with parents
- Customizable privacy settings

- skills

- and educators

## Dependency

 Over reliance on technology • Impede the development of direct social interaction

• Guidelines for parents and educators that includes face-to-face interaction.

## Continuous user involvement

• Feedback loop with users, including children, parents,

• Community forum or advisory board consisting of Deaf and hard of hearing users,

## **Next Steps**

- Commercialize our platform.
- Post graduation begin forming an LLC.
- Apply for microgrants with iStartup Lab at the University of Washington.

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# Thank You

We're dedicated to providing hard of hearing children with a library of storybooks that entertain, educate, and inspire, because every child deserves to experience the joy of storytime . With Signstory, we aim to enhance children's language development and early literacy

## EduSign

