

ARFI: An English and Hakha-Chin Language Learning App

Role: Research Lead & Head of Product

Partner: Thantlang Council International (research phase)

Timeline:

- Phase 1: Initial Research — December 2023
- Phase 2: Follow-up Research — June – September 2024
- Phase 3: App Development — October 2025 – Present

Methods: Ethnographic research, interviews, focus groups, surveys, site visits

Tools: Figma, Lovable, Cursor, Claude, Gemini, Supabase, GitHub, ElevenLabs

Overview

ARFI — meaning "star" in Hakha-Chin — is an AI-powered language learning app built for Chin refugee students displaced by Myanmar's military coup. The app bridges Hakha-Chin and English through a dictionary, flashcards, and a translator, designed to meet students where they are: on their phones, eager to learn, and largely underserved by existing platforms.

This project began as open-ended research into the needs of a displaced community and evolved into a shipped product now preparing for formal partnership with Chin State's education governance team.

Context

On February 1, 2021, Myanmar's military seized power in a coup, arresting civilian leaders and triggering mass protests through the Civil Disobedience Movement (CDM). The junta responded with lethal force — live ammunition, airstrikes, and a scorched-earth campaign that has since displaced over 3.2 million people.

Chin State, in Myanmar's northwest, was among the hardest hit. In September 2021, the military shelled and burned Thantlang, forcing all 10,000 residents to flee. More than 160,000 Chin people — over a third of the state's population — have been displaced, with over 70,000 seeking refuge across the border in India's Mizoram State.

Schools shut down. Homes burned. Life halted for an entire generation of students.

Empathize

Initial Questions

I partnered with Thantlang Council International to conduct field research during my Christmas break in 2023. At the time, no formal research reports existed on this community's needs post-displacement. We entered with broad "How Might We" questions:

- How might we support the resilience of Chin refugees?
- How might we design infrastructure to meet their unmet needs?
- How might we address the mental health challenges facing displaced families?

On-the-Ground Research

Across two research trips — an initial visit in December 2023 and a follow-up from June to September 2024 — I led interviews, focus groups, site visits, and ethnographic observation with over 150 community members: students, teachers, parents, and local leaders.

Unexpected Insights

Research itself was unfamiliar territory.

The concept of academic research doesn't translate easily in Hakha-Chin culture. Asking questions about things we ostensibly already know — our own community, our own traditions — came across as rude or arrogant. We had to reframe every session: positioning ourselves as strangers, emphasizing that honesty wouldn't offend us. What we expected to take minutes took hours.

Students showed up with hope, not despair.

We anticipated conversations dominated by trauma, health concerns, and survival. Instead, young people arrived at town halls with energy and ambition. One student told us he wanted to become a billionaire. These weren't broken kids waiting to be saved — they were dreamers waiting for tools.

Define

Prioritization Framework

After the first trip, we had a long list of potential intervention areas: healthcare, food security, mental health, infrastructure. During the second trip, we used a prioritization matrix — plotting urgency against long-term return on investment — to narrow our focus.

Education surfaced as the clear priority.

Key Insight

100% of the students we interviewed wanted to learn English.

These kids are already polyglots by necessity. By the time they've fled, most have learned Hakha-Chin (native), Burmese (schooling in Myanmar), Mizo (to navigate Mizoram), and Hindi (state mandate in India). They're digital natives with easy access to phones — but almost no platforms serve them in their own language.

Existing apps like Duolingo fail this community for a simple reason: they aren't culturally relevant. The content doesn't reflect their lives, their context, or their identity.

Refined "How Might We"

How might we empower Chin refugee students to excel in their studies — starting with English?

User Persona

Age: 7+

Situation: Displaced students living in refugee camps, rented homes in Mizoram, or informal settlements along the India-Myanmar border. Many attend local schools but face language barriers.

Goal: Access to the wider world. English represents opportunity, mobility, and proof that the world sees them too.

Frustration: No learning tools speak their language — literally or culturally.

Ideate

We explored several directions:

- Teacher training programs
- Financial stipends for students
- Curriculum design support
- Virtual tutoring networks

Each was ruled out for the same reason: they were temporary fixes that treated students as end users rather than empowered participants. They lacked a sustainable development path.

An English learning platform — built in Hakha-Chin, accessible on phones, designed for self-directed learning — emerged as the most scalable and student-centered solution.

Prototype & Implement

Following the research phase, internal reorganization within TCI put the project on hold. The insights we'd gathered risked sitting in a report, unrealized.

I asked for permission to continue building — and got it. From October 2025 onward, I took the lead on product development independently, translating our research into a working app.

Building the Language Dataset

We digitized vocabulary using an existing Hakha-Chin dictionary written by David VanBik, a linguist and — as it happens — my grandfather (my uncle's father). This gave us a credible foundation to build from.

Technical Stack

This was my first deep integration of AI-assisted development tools:

Tool	Purpose
Claude, Gemini	Brainstorming, problem-solving
Lovable	Rapid prototyping
Cursor, Claude	Coding the app
Supabase	Database and backend
GitHub	Version control and hosting
ElevenLabs	Voice generation for audio features

Core Features (v1)

- **Dictionary:** Hakha-Chin ↔ English lookup
- **Flashcards:** Categorized vocabulary (animals, numbers, everyday objects)
- **Translator:** Real-time translation between languages

The Learning Curve

This was my first time building a product end-to-end using vibe coding tools. The learning curve was steep — but it collapsed what would have been months of traditional development into weeks.

The app is set to launch in February 2026.

Test

Ahead of the February 2026 launch, I've been hosting Zoom sessions with students and teachers to gather feedback. Five beta testers have used the app and shared their reactions:

"So cute!"

"This is fun."

"I want to play games on this though."

The feedback confirmed our direction — and pointed toward the next iteration: gamification and interactive lessons.

Reflect

On Assumptions

Our mentors warned us: "Why build another English learning app when Duolingo exists?"

It was a fair challenge. But the empathize and define phases gave us conviction. This community doesn't need another generic app. They need one that speaks their language — literally — and reflects their identity. ARFI isn't competing with Duolingo. It's filling a gap Duolingo will never fill.

On Process

If I were starting over, I'd create research training materials — videos or guides in Hakha-Chin explaining what research is and why we ask questions we seemingly already know the answers to. That friction cost us hours and could have been eased with preparation.

On Identity

Interviewing my own community was strange and clarifying. I sat in the tension between insider and outsider — close enough to understand, distant enough to see patterns. It taught me that proximity is an asset, not a bias, when paired with rigor.

What's Next

ARFI is now entering a formal partnership with Chin State's education governance team.

6-month goal: Launch a full lesson curriculum with fundraising support.

12-month goal: Build the reverse — a Hakha-Chin learning track for Chin American kids in the diaspora. One app, two directions, reconnecting a community split by geography.

Summary

Phase	Timeline	Key Activity
Initial Research	Dec 2023	First field visit; broad discovery; 50+ interviews

Phase	Timeline	Key Activity
Follow-up Research	Jun – Sep 2024	Deep-dive research; prioritization; refined problem definition
App Development	Oct 2025 – Present	Independent build; dictionary, flashcards, translator launching Feb 2026

Designer by training. Researcher by instinct. Strategist by obsession.