

A Feature Survey of Mobile-Assisted Language Learning Apps for Kichwa Language Revitalization

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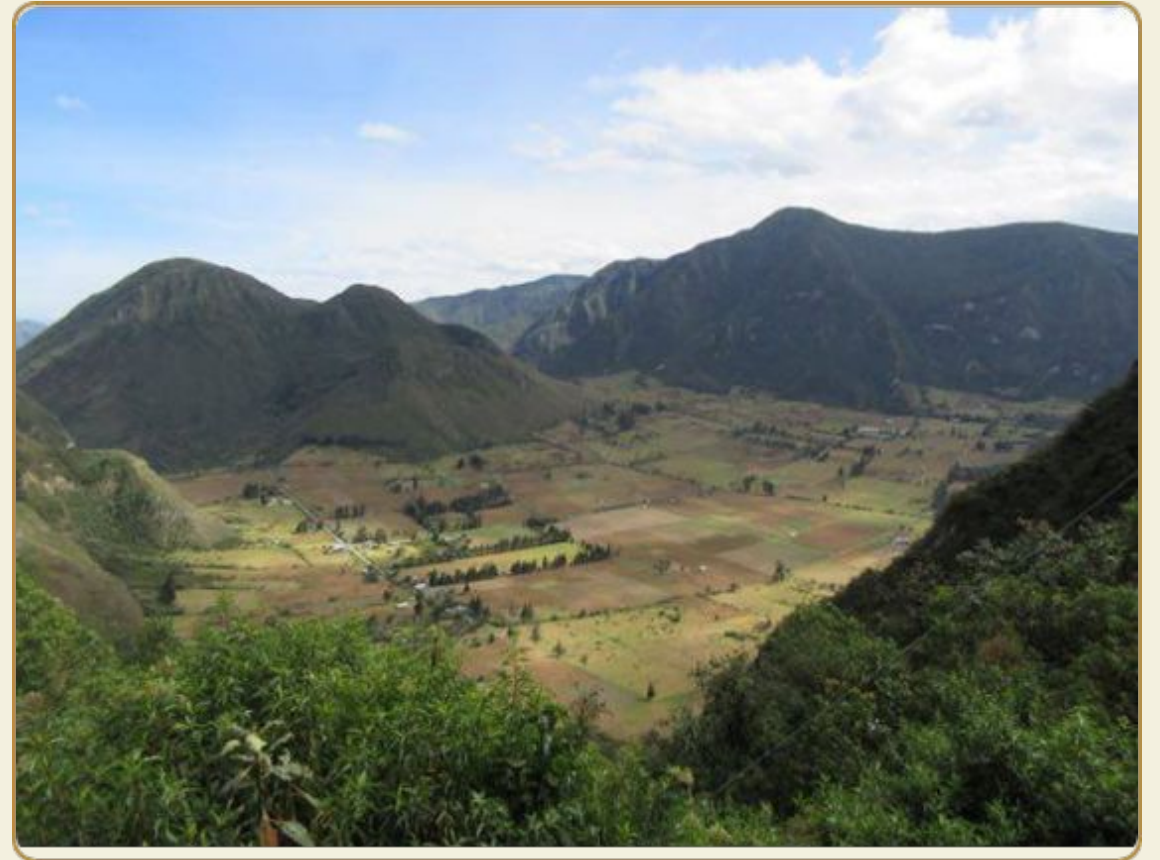
The Kichwa Language: Vital & Vanishing

What is Kichwa?

- The largest Indigenous nationality in Ecuador, representing ~800,000 people.
- An official language of Ecuador (2008 Constitution).
- Descends from Quechua, spread during the Incan empire.

The Threat: Minoritization

- Facing endangerment due to Spanish dominance in education, professional life, and relational spaces.
- **Key Stat:** Indigenous language speakers in Ecuador declined from **4.8%** (2010) to **3.9%** (2022). [1]



The Core Challenge: Language & Culture



Language = Culture

We cannot separate language from culture. Kichwa cosmovision is built on:

- Daily interactions with nature
- Oral storytelling & mythical narrative
- Experiential learning & community rituals
- Generational knowledge (agriculture, medicine)

The Risk of Tech

Digital tools, often built with Western logic, risk "sterilizing" the language into a linguistic artifact, removing it from its cultural context. [7, 8]

Why Tech? The Digital Gap

64.3%
of Kichwa speakers in Imbabura use social
networks. [12]

The Need for Digital Presence

A lack of Kichwa online creates a "digital neocolonialism." [11]

Technology is not optional; it is a necessary space for revitalization and resisting acculturation.

Our study aims to determine: How do we build good, culturally-grounded technology?

The Research Gap

- 🧩 Dominant language app (MALL) criteria are well-debated [23], but often don't fit the unique needs of Indigenous languages.
- 📍 Most research on Indigenous Language Revitalization (ILR) apps focuses on North America (Canada/US) [24, 25] and Australia.
- 🔍 **THE KEY GAP:** A "striking" lack of systematic analysis and established criteria for Indigenous MALL in **Latin America**.
- 🎯 Our study is a first step to fill this gap, starting with Kichwa in Ecuador.

Our Guiding Questions

1. What are the features of an Indigenous language learning app?

2. What are gaps and areas for improvement for Kichwa language learning apps?

Methodology (1): Building the Rubric

Quantitative Criteria (0-4 pts)

Pedagogical & Content

- Cultural Relevance
- Relevant Content
(Real-life)
- Content Coverage
(Topics &
Difficulty)
- Immediate
Feedback
- Assessment
- Interactive
Activities

Dichotomous Criteria (0-1 pts)

Usability & Features

- User Interface
(Ease of Use)
- Offline Access
- Online Availability
(Platforms)
- Sound Quality
- Image Quality
- Progress Check
- Technical
Assistance
- Additional
Resources (for
Teachers)

Total Possible Score: 31 Points

Methodology (2): The Process



1. SEARCH

"kichwa app" & "quichua app"
on Google/Bing.
(14 apps found)



2. FILTER (Tech)

Omitted outdated,
non-installable, or broken
apps.



3. FILTER (Purpose)

Omitted non-learning apps
(radios, dictionaries, bibles).



4. ANALYZE

3 apps selected for full
rubric analysis.

Finding 1: The "App Graveyard"



Outdated & Incompatible

Many apps (e.g., *Otavalo Rimay*) were outdated and incompatible with modern Android, making them impossible to install.



Thesis Projects

Many apps were created as thesis projects and were never updated, leading to non-existent installers.



Key Finding

This indicates a critical lack of **long-term sustainability models** and ongoing maintenance for ILR technology.

Finding 2: The Finalists

Only three apps met the criteria for a full analysis:

- 1. Alli Kichwa**
- 2. Sumak Kichwa Wawa**
- 3. Guia Quichua**

Finding 3: The Rubric Scores

Criteria	Alli Kichwa	Sumak Kichwa Wawa	Guia Quichua
Cultural Relevance (0-4)	0	4	4
Relevant Content (0-4)	2	3	3
Interactive Activities (0-4)	2	3	2
Immediate Feedback (0-4)	2	0	0
Assessment (0-4)	4	2	2
Progress Check (0-1)	1	1	0
Technical Assistance (0-1)	0	0	0
TOTAL (/ 31)	23	23	22

Discussion: What the Scores Mean



Culture vs. Pedagogy

Apps are either culturally strong (*Sumak*, *Guia*) OR pedagogically strong (*Alli*), but rarely both.

Sumak is an AR app for a book, not a full learning course.



Low Ceiling

Content is stuck at beginner/vocabulary levels. There is no clear path to intermediate levels or **communicative competence**.



The 0% Score

A total lack of Technical Support (all 0s) suggests these are "one-off" projects, not living, maintained tools for a community.

Discussion: The Biggest Gap

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"The integration of Indigenous MALL within
community efforts is the most important yet the most //
difficult goal to achieve."

Based on Reinders & Pegrum's [23] framework, the "teacher's role" is critical.
None of the apps included platforms or resources for teachers, parents, or community leaders to
guide learning.

Conclusion & Recommendations

- ↔ A clear gap exists between current app features and the real needs of Kichwa learners.
- ★ We propose our rubric as a starting point for a standardized framework to assess ILR-MALL in South America.
- 💡 **Future apps must:**
 - ✓ Integrate authentic culture *with* sound pedagogy (not one or the other).
 - ✓ Be built with long-term sustainability and technical support.
 - ✓ Include community, teacher, and/or parental platforms to foster communication.

Questions?

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THANK YOU



Image Sources



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