

AI Speech-Recognition Assessment of Oral Reading Fluency in isiXhosa

AI in Education · Good practice · South Africa

Quality score: 53/100

Evidence strength: Moderate

Summary

A University of Cape Town-led team fine-tuned open-source speech-recognition models to automatically score early-grade oral reading fluency in isiXhosa, using 14,971 recordings from South African grades 1–4, reaching about 91% diagnostic efficiency against human-labelled data.

Key dimensions

Dimension	Score
Evidence of learning impact	0/3
Equity & inclusion	3/3
Transparency, ethics & data protection	3/3
Teacher capability & pedagogy	1/3
Scalability & sustainability	1/3

Evaluated by C-NAPSE

Data sources

[C-NAPSE web research](#) — accessed 2026-07-31

[University of Cape Town, with Western Sydney University, University of Pretoria, Universidade Federal de Pernambuco and Macquarie University](#) — accessed 2026-07-31

[Springer — An End-to-End Approach for Child Reading Assessment in the Xhosa Language](#) — accessed 2026-07-31

[Gates Foundation Grand Challenges — Automating EGRA in African Languages Using Voice-Recognition AI](#) — accessed 2026-07-31

[arXiv — An End-to-End Approach for Child Reading Assessment in the Xhosa Language](#) — accessed 2026-07-31

Cite this — Evidoria. *AI Speech-Recognition Assessment of Oral Reading Fluency in isiXhosa*. Persistent ID: 88a7111f-f1fa-479c-a560-04589aa3717a.