

Real-Time Palestinian Sign Language Recognition Reaches 97.6% Accuracy for Deaf Students' Math Lessons

AI in Education · Good practice · Palestine, State of

Quality score: 40/100

Evidence strength: Descriptive / self-reported

Summary

Researchers at Palestine's Arab American University, backed by Warwick's Education Fund, built a Vision Transformer recognising Palestinian Sign Language gestures for 41 math concepts at 97.59% accuracy, giving deaf pupils real-time math lessons in their own sign language.

Key dimensions

Dimension	Score
Evidence of learning impact	0/3
Equity & inclusion	3/3
Transparency, ethics & data protection	2/3
Teacher capability & pedagogy	0/3
Scalability & sustainability	1/3

Evaluated by C-NAPSE

Data sources

[C-NAPSE web research](#) — accessed 2026-09-13

[Arab American University \(AAUP\), Palestine, with University of Warwick Education Fund support](#) — accessed 2026-09-13

[Enhancing Mathematics Learning for Hard-of-Hearing Students \(arXiv preprint\)](#) — accessed 2026-09-13

[University of Warwick Education Fund project page](#) — accessed 2026-09-13

[Sign Pulse: a hybrid AI-based learning framework \(PubMed\)](#) — accessed 2026-09-13

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