German children reading English
Low CL with prosodic features, but useful extension to pronunciation features, cf. Fig. 1 [B]

Teachers have high agreement on correct words (low hit rate on mispronunciation)
Greater weights for all wrongly classified

Automatic, cf. Fig. 1 [A] (63 features)

Here:

Module: Select (113 features)

Pronunciation scoring with /h/: 4.4% – 5.2%; N: 7.6% marked as errors
Trained on exactly 1 feature

Feature selection with AdaBoost for each feature over 28 loo-iterations

Lowest error

Energy statistics

Mean/Max/Min

Feature selection with AdaBoost

Results

Class-wise-averaged recognition rate:

CL = 0.9(REC0 + REC1) (= av. Recall)
c: correctly pronounced; w: wrongly pronounced

Reference:
Marked if at least 3 experts agree (5.6%, cf. strictness)

Class-wise-averaged recognition rate:

89% of human expert agreement

Low CL with prosodic features, but useful extension to pronunciation features

Best feature: phone confusion

AdaBoost: No overfitting to training data

Similar feature sets are selected
in all loo-iterations
using different references/experts
15 features: 66.7% CL
35 features: 68.6% CL

→ 89% of human expert agreement

Teachers have high agreement on correct words (low hit rate on mispronunciation)