

Effectiveness of the ELSA Speak Application as a Medium for Improving Pronunciation Skill in Speaking English in Vocational High Schools

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June, 2026



Introduction

English is an international language that plays a vital role in the worlds of education and work. One of the key skills in English is speaking, which requires good pronunciation to ensure that communication is clearly understood. However, many vocational school students still struggle to pronounce English words correctly, particularly in terms of sound accuracy, stress and intonation.

With the development of technology, various digital learning platforms have emerged to aid the process of learning English, one of which is the ELSA Speak app. ELSA Speak is an Artificial Intelligence (AI)-based app that uses speech recognition to detect pronunciation errors and provide real-time feedback. This app allows students to learn independently anytime and anywhere.

Research Question

- Is the use of the ELSA Speak app effective in improving the English pronunciation skills of students at SMK Muhammadiyah 1 Taman

Pre-test and Post-test Result

Pre-test

No.	Initials Name	Value	Categories
1	AHK	79	Good
2	ACS	71	Enough
3	ADA	57	Enough
4	CHAPTER	66	Good
5	APM	90	Excellent
6	AP	82	Excellent
7	BEA	88	Excellent
8	CZR	60	Enough
9	CWV	77	Good
10	CFY	62	Good
11	CSZCW	81	Excellent
12	CA	70	Good
13	DAF	52	Enough
14	DTN	83	Excellent
15	DA	77	Good
16	DPP	94	Excellent
17	FS	75	Good
18	FKN	55	Enough
19	FMCA	87	Excellent
20	HZ	92	Excellent
21	IBY	55	Enough
22	JCN	70	Good
23	KNC	77	Good
24	KEF	63	Good
25	NJP	63	Enough
26	NAS	72	Enough
27	NNR	76	Good
28	NV	77	Good
29	NK	84	Excellent
30	US	88	Excellent
31	PAF	85	Excellent
32	RHN	93	Excellent
33	RPA	64	Good
34	SYNS	80	Good
35	SPR	85	Excellent
36	SAM	68	Good
37	SAR	58	Enough
38	SR	71	Good
39	SPA	61	Enough

Post-test

No.	Initials Name	Value	Categories
1	AHK	84	Excellent
2	ACS	74	Good
3	ADA	75	Good
4	CHAPTER	82	Excellent
5	APM	80	Good
6	AP	76	Good
7	BEA	82	Excellent
8	CZR	80	Good
9	CWV	82	Excellent
10	CFY	85	Excellent
11	CSZCW	83	Excellent
12	CA	80	Good
13	DAF	66	Good
14	DTN	76	Good
15	DA	89	Excellent
16	DPP	84	Excellent
17	FS	80	Excellent
18	FKN	77	Good
19	FMCA	81	Good
20	HZ	86	Excellent
21	IBY	90	Excellent
22	JCN	92	Excellent
23	KNC	70	Good
24	KEF	75	Good
25	NJP	84	Excellent
26	NAS	81	Good
27	NNR	84	Excellent
28	NV	83	Excellent
29	NK	83	Excellent
30	US	86	Excellent
31	PAF	90	Excellent
32	RHN	94	Excellent
33	RPA	81	Good
34	SYNS	82	Excellent
35	SPR	63	Good
36	SAM	85	Excellent
37	SAR	73	Good
38	SR	79	Good
39	SPA	83	Excellent

Normality test results data

Table 4 Normality Test Results Using Kolmogorov–Smirnov and Shapiro–Wilk

Data	Kolmogorov–Smirnov Statistic	df	Sig.	Shapiro–Wilk Statistic	df	Sig.
Pre-test	0.092	39	0.200	0.973	39	0.173
Post-test	0.088	39	0.200	0.981	39	0.241

T Test Results

Table 6 Paired Samples Statistics

Pair 1	Red	N	Std. Deviation	Std. Error Mean
Pretest	73.08	39	11.42	1.83
Posttest	81.56	39	8.97	1.44

Table 7 Paired Samples Correlation

Pair 1	N	Correlation	Sig.
Pretest & Posttest	39	0.742	0.000

Table 8 Paired Sample Test

Pair 1	Paired Differences Mean	Std. Deviation	Std. Error Mean	95% CI Lower	95% CI Upper	t	df	Sig. (2-tailed)
Pretest – Posttest	-8.48	5.44	0.87	-10.24	-6.72	-9.72	38	0.000

Correlation Test Result

Table 5 Paired Sample t-Test Results of Pre-test and Post-test Scores

Test	Red	N	Std. Deviation	P Value
Pretest	73.08	39	11.42	0.001
Posttest	81.56	39	8.97	

CONCLUSION

This study aimed to determine the effectiveness of the ELSA Speak application in improving students' pronunciation skills at SMK Muhammadiyah 1 Taman. The findings showed that ELSA Speak had a significant effect on students' pronunciation improvement, as indicated by the increase in the average score from 73.08 to 81.56 and a significance value of 0.000 ($p < 0.05$). The application helped students improve their pronunciation through real-time feedback and increased learning flexibility, allowing students to practice anytime and anywhere. Therefore, ELSA Speak was considered an effective learning medium to support pronunciation and English-speaking skills. Teachers are recommended to integrate the application as a short and structured activity, such as a 15-minute daily pronunciation drill, rather than replacing classroom interaction. However, the study had limitations, including a small sample size of 39 students from a single class and a short treatment duration of four weeks, suggesting that future studies should involve larger samples and control groups to provide more comprehensive findings.

