Research Article

Leveraging technology for oratory skills assessment of plurilingual learners

Jiten Udhas[1], Mohit Goswami[2], Deepak Mashru[3]

Abstract

The present study focuses on how the leveraging technology for oratory skills assessment of plurilingual learners who studied first-year engineering at Marwadi University, India, between 2020-2021. The targeted group of learners used a mobile application, *I-Speak.* The learners were required to record their responses in audio recordings for the application randomly suggests to them. They were asked to record their responses initially, in the English Language, a Foreign Language and then in the Gujarati Language, a First Language. The assessment of the recordings while played together exhibited the findings related to the learners' articulation, comprehension, and oratory skills. The research was carried out keeping the IELTS band descriptors for Speaking skills as a base. The mobile application proved very useful as the learners could listen to their recordings more than once and find out their mistakes. They were also mentored on how they can leverage technology for enhancing their oratory skills as plurilingual learners. This research paper aims to present that the learners who are fluent in the First Language are also fluent in the Foreign Language and vice-versa. Pronunciation and the Lexical Resources were moderately associated with both languages. There is a highly significant correlation between respondents' First Language and Foreign language-oratory skill bands.

Keywords: Oratory Skills, Technology, Mobile Application, Assessment, IELTS, Speaking Skills

Introduction

Cell phones are not an exemption in this rapidly developing universe of innovative gadgets and the rise of remote correspondence innovation, with incredible highlights and abilities covering all human existence fields. Before long, all metropolitan and country regions will approach remote figuring gadgets and mobiles.

The English Language has emerged as the language of communication and research in this 21st century. With the advent of technology, Mobile Applications have played a vital role in helping learners acquire English language proficiency. Moreover, enhanced communication skills will also help the learners in their professional careers. (Alzatma, 2020)

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The speech features in the mobile applications have been the catalyst in improving the listening and speaking skills in the English Language as the mobile applications record the responses and allow the learners to listen to and review their responses. The learners can identify their errors and improve the same with the help of such hand handled devices. (Yannick. J., 2007) A user of English, whose home language is another language, maybe internally, cognitively, using another language to help them communicate in English: that is to say, they are drawing on their plurilingual competence, or repertoire, to process the communicative task at hand. (Cenoz, J and Gorter, D, 2013) Oral communication in the objective language is essential in teaching English as a Foreign Language. The teachers in higher education foster the learners in developing their articulation and thinking in the Foreign Language. (García-Carbonell, 2019) It was observed and registered that the presentation techniques like Pecha Kulcha can help the learners in enhancing their oratory skills, and with the integration of technology, the learners can improve their skills positively. (Mabuan, 2017) As well as giving raters broad preparation and freedoms to work on scoring, accumulating the measurements into the three segments recognized by Schreiber et al. (2012) might work on the nature of scoring. (Schreiber, 2012) There are ample possibilities of integrating Mobile Assisted Language Learning (MALL) in the teaching-learning process, especially if Artificial Intelligence is integrated into the techno-pedagogy in acquiring proficiency in the English language. (Mashru, 2016)

Most plurilingual people use their dialects for explicit and separated correspondence needs. It is rare for the monolingual to foster comparable abilities for every language in their collection. Plurilingual people can subsequently learn other languages more effectively than monolingual learners. (Daniel COSTE, 2009) Learners of the Foreign Language and the First Language, who had difficulty thinking of a randomly given the word, were allowed to alter their choices, which resulted in low interrater reliability. (Joe, 2015) Plurilinguals can switch to bilingual strategically in ordinary conversation; bilingual speech occurs in interactions among the same community members and uses multiple languages to transport their ideas. The ability to switch from one language to another implies mastery of all the systems in contact: every language has its specific rules to follow within an alternate sequence. Nevertheless, code switching fits into a social functionality, which regulates how and when it appears and the strategic and symbolic values. The use of code switches and/or bilingual speech in peers' conversations adds a dual focus to messages by reminding the participants that they subscribe to a system of cultural and linguistic norms specific to their group. (Solmaz, 2019) Jan Scheider mentioned in his research work about educational interventions in the form of feedback and their importance for public speaking skills. He further identified that human tutors are neither feasible nor affordable. That's why technological interventions are designed and devised to provide feedback. (Jan Schneider, 2016) The study presented here exhibits several observations and proposals about integrating technology in helping the learners enhance their speaking skills and provide apt assessments for the same. Academia regularly assesses student ability in public speaking, but there are problems in what is assessed and how ability is certified. Even with its experience in assessment, which for technical subjects is very mature, the assessment of public speaking skills is still relatively weak but improving. As it articulates needs through job adverts, the industry is currently in a very different place to academia, with definitions of ability firmly set in subjective adjectives. (A E Ward, 2016)

Objectives of the study

1. The core objective of the study was to check if there is any relation between oratory skills of the First Language and Foreign Language.
2. The sub-objectives of the research were to check if there is any relationship among the components of oratory skills of First Language and Foreign Language.
3. The sub-objective of the study was to check if there is any relation between respondents' oratory skills and comprehension abilities.

Hypotheses

H_01 There won't be a significant correlation between respondents' scores on the oratory skills assessment tests of the First Language and Foreign Language.

H_02 There won't be a significant correlation between respondents' scores on the oratory skills assessment test of the First Language and Foreign Language as far as their fluency is concerned.

H_03 There won't be a significant correlation between respondents' scores on the oratory skills assessment test of First Language and Foreign Language as far as their pronunciation is concerned.

H_04 There won't be a significant correlation between respondents' scores on the oratory skills assessment test of First Language and Foreign Language as far as their vocabulary is concerned.

H_05 There won't be a significant correlation between respondents' scores on the oratory skills assessment tests of First Language and Foreign Language as far as their accuracy is concerned.

H_06 There won't be a significant correlation between respondents' comprehension ability scores of First Language and Foreign Language.

H_07 There won't be a significant correlation between respondents' scores on the oratory skills assessment test and the comprehension ability score of First Language.

H_08 There won't be a significant correlation between respondents' scores on the oratory skills assessment test and comprehension ability score of Foreign Language.

Variables

There were two dependent variables in the present study, namely oratory skills and listening skills. For both the dependent variables, language was treated as an independent variable for which there were two categories – First Language and Foreign Language. Below is the graphical presentation of the variables:

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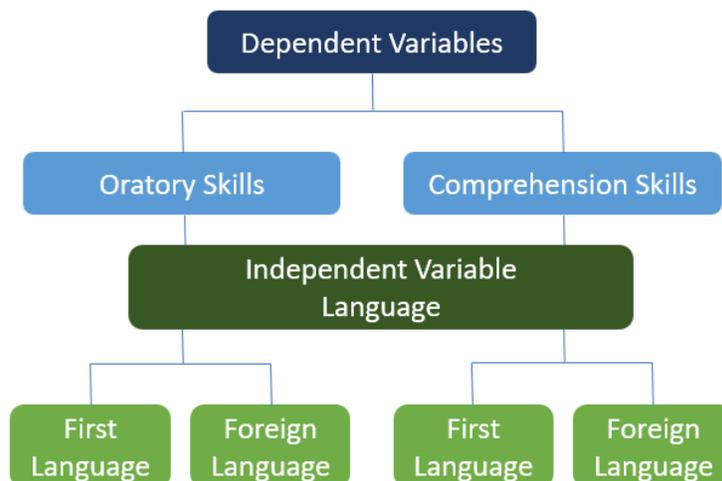
Significance

- The software was found effective enough to motivate the learners to improve the oratory skills by using it.
- Learning through the 'i-Speak' application was found novel, and the learners enjoyed improving oratory skills through the application.
- The learners can have practice languages by themselves at their own time and pace; therefore, it can be beneficial for both slow and fast learners.

Sample

As the present research was experimental in nature, a particular environment was needed for the experiment to be executed. Therefore, a purposive sampling technique was used, and 30 first-year engineering students from Marwadi University were selected as a sample for the present research.

Delimitation

In the present experimental research, the speaking skills of the plurilingual learners were measures about their listening skills, and the focus was on the First Language and Foreign Language, that is, Gujarati Language and English Language. The researchers may experiment with more than languages to evaluate the learners speaking skills through technology.

## Research Method and Tools

The present research was executed with an experimental method, and a 'two random groups only post-test design was used to experiment. The oratory skill assessment test was conducted based

on the IELTS speaking band descriptors (Council), with four main criteria, 1. Fluency and coherence, 2. Lexical Resouces, 3. Grammatical Range and Accuracy, and 4. Pronunciation. The speaking band descriptor has been defined in 0 to 9 bands to predict the learners' performance in speaking skills. Hence, each criterion was given the weightage of 9 marks which was converted into 9 bands. On the other hand, to test the correlation of the learners' oratory skills with their listening comprehension ability, a Listening Comprehension Ability Test was administered, which was 36 marks. Later, the same was converted into the 9 bands.

Execution of the Experiment

In the present study, 30 students were selected randomly for the execution of the experiment. The students were guided to download the 'I-Speak' application. In the application, each student was given the word randomly. Students have to speak on that particular word for one minute in Foreign Language. Then they will be provided with one more word, and they need to speak on it for one more minute in First Language. The role of the teacher will be as a facilitator. All the responses of the students were recorded in the drive based on which they were given respective bands.
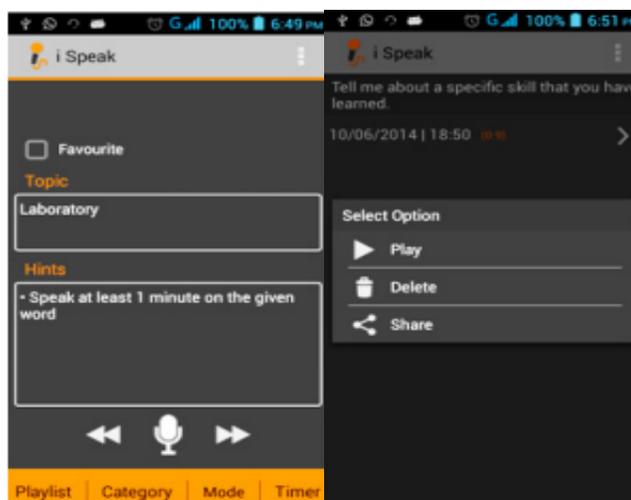
(Screenshots of the I-Speak Mobile Application)

Data Analysis and Interpretation

The core purpose of the present study was to (Joshi, Renuka, et al., 2018) check if there is any relation between oratory skills of First Language and Foreign Language. The linear correlation of the data was calculated using SPSS to overcome the said objective.

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Table 1.1 Correlation between respondents' scores on oratory skills assessment test of First Language and Foreign Language

		First Language	Foreign Language
First Language	Pearson Correlation	1	.853**
	Sig. (2-tailed)		<.001
	N	30	30
Foreign language	Pearson Correlation	.853**	1
	Sig. (2-tailed)	<.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

It can be observed from the above table that the linear correlation between First Language and Foreign Language -oratory skill bands is 0.853, which is significant at 0.01 level. Therefore, the null hypothesis of the study 'There won't be a significant correlation between respondents' scores on oratory skills assessment test of mother tongue and Foreign language.' was not accepted. It states a highly significant correlation between respondents' First Language and Foreign language-oratory skill bands.

In the present study, four components were observed to determine the oratory skills of respondents' as described in the IELTS Band descriptors for Speaking. (Council, 2021) The linear correlation between the First Language and Foreign Language was tested to check the oratory skills of the learners.

Table 1.2 Correlation between respondents' fluency on First Language and Foreign Language

		First Language	Foreign Language
First Language	Pearson Correlation	1	.959**
	Sig. (2-tailed)		<.001
	N	30	30
Foreign language	Pearson Correlation	.959**	1
	Sig. (2-tailed)	<.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

It can be observed from the above table that the linear correlation between fluency in First Language and Foreign language-oratory skill bands is 0.959, which is significant at 0.01 level.

Therefore, the null hypothesis of the study 'There won't be a significant correlation between respondents' scores on oratory skills assessment test of mother tongue and Foreign language as far as their fluency is concerned.' was not accepted. It states a highly significant correlation between respondents' fluency in First Language and Foreign language-oratory skill bands.

Table 1.3 Correlation between respondents' pronunciation in First Language and Foreign Language		First Language	Foreign Language
First Language	Pearson Correlation	1	.679**
	Sig. (2-tailed)		<.001
	N	30	30
Foreign language	Pearson Correlation	.679**	1
	Sig. (2-tailed)	<.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

It can be observed from the above table that the linear correlation between pronunciation in First Language and Foreign language-oratory skill bands is 0.679, which is significant at 0.01 level. Therefore, the null hypothesis of the study 'There won't be a significant correlation between respondents' scores on oratory skills assessment test of mother tongue and Foreign language as far as their pronunciation is concerned.' was not accepted. It states a moderately significant correlation between respondents' pronunciation in First Language and Foreign language-oratory skill bands.

Table 1.4 Correlation between respondents' vocabulary in First Language and Foreign Language		First Language	Foreign Language
First Language	Pearson Correlation	1	.570**
	Sig. (2-tailed)		.001
	N	30	30
Foreign language	Pearson Correlation	.570**	1
	Sig. (2-tailed)	.001	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

It can be observed from the above table that the linear correlation between vocabulary in First Language and Foreign language-oratory skill bands is 0.570, which is significant at 0.01 level.

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Therefore, the null hypothesis of the study 'There won't be a significant correlation between respondents' scores on oratory skills assessment test of mother tongue and Foreign language as far as their vocabulary is concerned' was not accepted. It states a moderately significant correlation between respondents' vocabulary in First Language and Foreign language-oratory skill bands.

Table 1.5 Correlation between respondents' accuracy in First Language and Foreign Language			First Language	Foreign Language
First Language	Pearson Correlation		1	.969**
	Sig. (2-tailed)			<.001
	N		30	30
Foreign language	Pearson Correlation		.969**	1
	Sig. (2-tailed)		<.001	
	N		30	30
**. Correlation is significant at the 0.01 level (2-tailed).				

It can be observed from the above table that the linear correlation between accuracy in First Language and Foreign language-oratory skill bands is 0.969, which is significant at 0.01 level. Therefore, the null hypothesis of the study 'There won't be a significant correlation between respondents' scores on oratory skills assessment test of mother tongue and Foreign language as far as their accuracy is concerned' was not accepted. It states a highly significant correlation between respondents' accuracy in First Language and Foreign language-oratory skill bands.

Moreover, it was also one of the objectives of the present study to check the correlation between the comprehension ability scores of First Language and Foreign Language.

Table 1.6 Correlation between respondents' comprehension ability scores of First Language and Foreign Language			First Language	Foreign Language
First Language	Pearson Correlation		1	.706**
	Sig. (2-tailed)			<.001
	N		30	30
Foreign language	Pearson Correlation		.706**	1
	Sig. (2-tailed)		<.001	
	N		30	30
**. Correlation is significant at the 0.01 level (2-tailed).				

It can be observed from the above table that the linear correlation between the comprehension ability scores of First Language and Foreign Language is 0.706, which is significant at 0.01 level. Therefore, the null hypothesis of the study 'There won't be a significant correlation between respondents' comprehension ability scores of mother tongue and Foreign language' was not accepted. It states a moderately significant correlation between respondents' comprehension ability scores of First Language and Foreign Language.

Finally, the correlation between scores on oratory skills assessment test and comprehension ability score of First Language as well as scores on oratory skills assessment test and comprehension ability score of Foreign Language were calculated, and the results of the same are given below:

Table 1.7 Correlation between respondents scores on oratory skills assessment test and comprehension ability score of First Language

		Oratory	Comprehension
Oratory	Pearson Correlation	1	.920**
	Sig. (2-tailed)		<.001
	N	30	30
Comprehension	Pearson Correlation	.920**	1
	Sig. (2-tailed)	<.001	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

It can be observed from the above table that the linear correlation between Oratory skill bands and the comprehension ability score of First Language is 0.920, which is significant at 0.01 level. Therefore, the null hypothesis of the study 'There won't be significant between respondents' scores on oratory skills assessment test and comprehension ability score of mother tongue' was not accepted. It states a highly significant correlation between respondents' oratory skill bands and the comprehension ability score of First Language.

Table 1.8 Correlation between scores on oratory skills assessment test and comprehension ability score of Foreign Language

		Oratory	Comprehension
Oratory	Pearson Correlation	1	.909**
	Sig. (2-tailed)		<.001
	N	30	30
Comprehension	Pearson Correlation	.909**	1
	Sig. (2-tailed)	<.001	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

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It can be observed from the above table that the linear correlation between Oratory skill bands and the comprehension ability score of Foreign Language is 0.909, which is significant at 0.01 level. Therefore, the null hypothesis of the study 'There won't be significant between respondents' scores on oratory skills assessment test and comprehension ability score of Foreign language' was not accepted. It states a highly significant correlation between respondents' Oratory skill bands and Foreign Language comprehension ability scores.

Findings

The present study was carried out to check if there is any relation between oratory skills of First Language and Foreign Language. The following conclusions were made after the interpretation of the collected data.

1. There is a highly significant correlation between respondents' First Language and Foreign language-oratory skill bands.
2. There is a highly significant correlation between respondents' fluency in First Language and Foreign language-oratory skill bands.
3. There is a moderately significant correlation between respondents' pronunciation in First Language and Foreign language-oratory skill bands.
4. There is a moderately significant correlation between respondents' vocabulary in First Language and Foreign language-oratory skill bands.
5. There is a highly significant correlation between respondents' accuracy in First Language and Foreign language-oratory skill bands.
6. There is a moderately significant correlation between respondents' comprehension ability scores of First Language and Foreign Language.
7. There is a highly significant correlation between respondents' Oratory skill bands and the comprehension ability score of First Language.
8. There is a highly significant correlation between respondents' Oratory skill bands and Foreign Language comprehension ability scores.

Discussion

It was found from the present experimental research that the learners who face difficulties in speaking English as a Foreign Language had difficulties in their First Language, Gujarati. The major challenges faced by the learners were about the articulation. The learners who were fluent in the First Language were also fluent in the Foreign Language and vice-versa. Pronunciation and the Lexical Resources were moderately associated with both languages. However, the learners' overall performance in the Listening Comprehension Skills and their Oratory Assessment Skills were highly associated with their overall performance. The researchers opine and are optimistic of an exemplary use of technology flavoured with Artificial Intelligence in improving the oratory skills of the plurilingual learners.

References
1. A E Ward, N. R. (2016). The Assessment of Engineering Student Public Speaking Ability: What, How and Issues. *The Assessment of Engineering Student Public Speaking*

Ability: What, How and Issues. In: International Conference on Engineering Education and Research (pp. 2-9). York: University of York.

2. Alzatma, A. A. (2020, 9). Using Mobile Apps to Improve English Speaking Skills of EFL Students at the Islamic University of Gaza. *Using Mobile Apps to Improve English Speaking Skills of EFL Students at the Islamic University of Gaza*. Gaza: Islamic University of Gaza. doi:10.13140/RG.2.2.13775.10408

3. Cenoz, J and Gorter, D. (2013). Towards a plurilingual approach in English language teaching: softening the boundaries between languages. *TESOL Quarterly, 47*(3), 591–599.

4. Council, B. (2021, 5 20). *https://www.ielts.org/for-organisations/ielts-scoring-in-detail*. Retrieved from https://www.ielts.org.

5. Council, B. (n.d.). *https://www.ielts.org/-/media/pdfs/speaking-band-descriptors.ashx?la=en.* Retrieved 5 15, 2021, from https://www.ielts.org.

6. Daniel COSTE, D. M. (2009). *PLURILINGUAL AND PLURICULTURAL.* Strasbourg: Language Policy Division.

7. García-Carbonell, M. A. (2019). Developing English Speaking Skills through Simulation-Based Instruction. *Teaching English with Technology*, 3-20.

8. Jan Schneider, D. B. (2016). Enhancing Public Speaking Skills - An Evaluation of the Presentation Trainer in the Wild. In K. V. al., *Adaptive and Adaptable Learning* (pp. 263-276). Springer. doi:https://doi.org/10.1007/978-3-319-45153-4_20

9. Joe, J. K. (2015). *A prototype public speaking skills assessment: An evaluation of human-scoring quality.* Princeton, NJ: Educational Testing Service. doi:http://dx.doi.org/10.1002/ets2.12083

10. Joshi, Renuka, et al. (2018). "A Study of Psychosocial Adjustment Pattern of Hearing Impaired Children in Reference to Speech Therapy. *Indian Journal of Health and Wellbeing, 9*(1), 83.

11. Mabuan, R. A. (2017). Developing ESL/EFL Learners' Public Speaking Skills through Pecha Kucha Presentations. *English Review*, 1-10.

12. Mashru, A. U. (2016, 3). I can speak with I-Speak: A study on acquiring English proficiency through Mobile Application. *Recent Trends: A Referred International Journal of Multidisciplinary Research, 2*(4), 1-6.

13. Saldaña, J. (2015). *The coding manual for qualitative researchers.* London: SAGE.

14. Alessio Faccia, Luigi Pio Leonardo Cavaliere (2021). Online Banking in Italy. "Widiba Bank" Case Study, PESTLE and DEA Analysis. Financial Markets, Institutions and Risks, 5(1), 87- 97. http://doi.org/10.21272/fmir.5(1).87-97.2021

15. Schreiber, L. M. (2012). The development and test of the Public Speaking Competence Rubric. *Communication Education*, 205–233.

16. Solmaz, O. (2019). Developing EFL Learners' Speaking and Oral Presentation Skills through Pecha Kucha Presentation Technique. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 542-565.