Int. j. adv. multidisc. res. stud. 2024; 4(4):557-562

Received: 10-06-2024
Accepted: 20-07-2024

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Using AI for Students' Attitudes to Improve their Speaking Skills at a University

Trần Hùng Cường
Industrial University of Ho Chi Minh City, Ho Chi Minh City, Vietnam

DOI: https://doi.org/10.62225/2583049X.2024.4.4.3070
Corresponding Author: **Trần Hùng Cường**

Abstract
Linguistic proficiency is one of the prerequisites for metacognition in the linguistic background of students majoring in English at the university level. However, most of them do not meet these curricular requirements because they lack an "environment that supports practice," and high technology is considered a "life jacket" for this problem. The aim of this study is to investigate the attitudes of university students towards the effectiveness of artificial intelligence (AI)-based websites and applications to promote the improvement of speaking skills. There are both positive aspects, such as increasing engagement, and potential drawbacks to the technology itself. In this paper, we argue that this kind of case study contributes to elucidating the situation of speaking training in higher education through the provision of qualitative information through a semi-structured questionnaire. One hundred and eighty-eight second-year English students participated in a six-week experiment with carefully crafted guidelines for the use of two AI-based websites (apps): Smalltalk2.me and VoiceTube.com. Afterward, a survey was administered to explore learners' perceptions and engagement during the period. Data analysis showed that students showed some preference for incorporating AI technology into their English-speaking exercises, but the current generation of AI apps also has some limitations. The results contribute to a deeper understanding of how students view English education through the integration of AI technology and its potential impact on their overall speaking skills. This knowledge can help educators integrate effective technological tools into speaking instruction to create a positive learning environment and promote speaking development.

Keywords: AI, Speaking Skills, Students' Attitudes, Speaking Fluency

1. Introduction

The progress in innovation has brought about valuable openings for joining innovative instruments in instructive settings. Inquiries centering on data and communication innovations (ICT) investigate the noteworthy effects of innovative instruments on boosting learner inspiration (Schoepp & Erogul, 2001) [37] and learners' (Ghasemi & Hashemi, 2011) [10]. Considerations in Thailand (Binsaleh & Binsaleh, 2013) [2], Taiwan, and Singapore (Looi *et al*., 2010) [17] illustrate the effective usage of computer programs in course settings. Apps like ELSA Talk have appeared to have positive impacts on elections among learners from Indonesia (Samad & Ismail, 2020; Kholis, 2021; & Anggraini, 2022) [36, 15, 1]. Duolingo's approach to giving level-appropriate assignments and test surveys (Garcia, 2013 [9]; Munday, 2016) has been recognized for its adequacy in building the lexicon. Quizlet's use of flashcards may be a prevalent strategy for memorizing modern words, supported by different instructive organizations utilizing flashcards (Setiawan & Wiedarti, 2020; Bueno-Alastuey & Nemeth, 2022; Nguyen, 2020a [19], 2020b [20], 2020c [21], 2020d).

Observational examinations have distinguished the capacity of AI apparatuses to cultivate the intelligent learning environment of talking aptitudes (Yingsoon, 2021) [40], give openings for considering honed and useful criticism in English, and improve English-speaking capability when coordinating data and communication innovation (ICT) (Madhavi *et al*., 2023). In expansion, an AI-driven educating and learning dialect approach has been proposed as a practical cure for dialect learners, giving precise investigation, quick input, and personalized preparation (Rusmiyanto *et al*., 2023) [35]. These investigated discoveries propose that AI devices have the potential to create talking aptitudes within the dialect-learning handle. The progress in manufactured insights (AI) innovation enables educational websites or applications to supply a more lock-in and important virtual learning environment. They are conspicuous in advancing self-study engagement among learners when it

permits them to hone talking on their own and have their work redressed by AI rather than holding up for teachers' criticism and adjustments. AI innovation has illustrated significant potential for encouraging the development of verbal capability in the context of English dialect procurement.

In a few cases shown within the Vietnam setting, it has appeared that the utilization of mechanical instruments within the dialect education and learning handles has had a positive effect on students' engagement and inspiration and improved EFL learners' talking capacities, as well as the potential downsides of the utilization. The researchers recommend that the utilization of innovative apparatuses can upgrade the learning and instructing of English-speaking abilities, giving positive results on the effective application of ICT at all instructive levels and the premises for reproducing these models within the instruction framework in Vietnam.

Innovation apparatuses empower personalized instruction custom-made to each student's needs and interface. This focused approach permitted understudies to center on their particular shortcomings in talking, leading to more productive and viable advancement. Innovation infuses fervor and engagement into dialect learning through intelligent exercises. These exercises, not, as it were, spur understudies to hone their talking aptitudes but to make the learning process more agreeable and, eventually, more compelling.

Innovation offers understudies awesome opportunities to improve their talking aptitudes. With a wide range of bona fide English materials accessible, understudies can immerse themselves in real-world English through news articles, podcasts, and recordings, growing their lexicon and presentation to normal discourse patterns (Nguyen, 2021; Nguyen, 2022; Nguyen, 2023a, 2023b, 2023c, 2023d) [22, 23, 24, 25, 26, 27].

Innovation infuses energy and engagement into dialect learning through intelligent exercises. These exercises not only propel understudies to hone their talking aptitudes but also make the learning process more pleasant and, eventually, more compelling.

Innovation offers understudies incredible access to assets to upgrade their talking aptitudes. With a wide run of bona fide English materials accessible, understudies can submerge themselves in real-world English through news articles, podcasts, and recordings, growing their lexicon and presentation to characteristic discourse designs (Nguyen, 2024a, 2024b and 2024c) [29, 30, 31].

Stemming from this, the college may consider executing methodologies to optimize opportune input for students' talking exhibitions. Utilizing innovation for more effective communication could be a potential arrangement that creates a strong and intelligent environment for EFL learners. Exploratory inquiry about what integrates web-based learning devices into talking exercises has been conducted to induce more understudies locked in on additional talking errands to upgrade their inspiration as well as their certainty in talking execution.

The essential goal of the investigation is to examine students' recognitions with respect to the application of web-based learning instruments to their talking capacity. Two essential inquiries about questions will be tended to within to ponder:

1. Do mechanical stages connect to students' talking capacity?
2. What is the students' engagement level with the effect of mechanical stages on the talking assignments conducted?

To ponder endeavors to explore students' comprehensive viewpoints on AI-based learning websites and talking learning exercises. The findings could contribute to the long-term application of AI-based advances in large-sized talking classes to maximize students' engagement and make strides in their speaking abilities.

2. Literature review

Introducing App Smalltalk2.me

Created in 2020, the app smalltalk2.me serves as a website that uses artificial intelligence to improve users' speaking skills and vocabulary. It uses a unique approach based on daily bite-sized tasks that promote self-directed learning habits (Cheon *et al*., 2012) [6]. The app suggests several speaking practice activities related to a person's level and interests, focusing on both fluency and range (Khameis, 2006). In addition, the site uses the shadowing technique, a proven learning method (Brown, 2001; Chung, 2010) [3, 7], to create more personalized exercises suited to different needs. A unique feature of SmallTalk2.me is its comprehensive progress tracking system, which analyzes progress and identifies positive developments and areas for improvement. This data-driven approach suggests the most appropriate tasks for learners for continuous improvement.

A presentation to Voicetube.com

Starting in Taiwan, Voice Tube provides clients with video sources to prepare English articulation and talking attitudes. This site and app (accessible on IOS, Android, and the internet) boasts a gigantic library of over 40,000 recordings, classified into different points and trouble levels (A1-C1) to suit students' learning objectives. Additionally, clients can unreservedly select to hone in on American, British, or Australian highlights according to their inclination (Jin, 2017) [13]. This strategy decreases learners' uneasiness and stretch compared to hone, driving more successful dialect procurement (Hamazah & Minko, 2010; Hamada, 2014 [11]). With personalized assignments and advancement, users' access to different reasonable learning materials energizes learning independence and certainty (Chapelle, 2001) [4]. Whereas Voice Tube offers a wealth of true learning materials, one potential zone for change is the following advanced framework, which advances learners in their learning style (Chen, 2016) [5]. Generally, Voice Tube provides a comprehensive and locked-in stage to create certainty and familiarity in spoken English through the control of video and personalized personality. We trust to advance a more advanced understanding of the conditions beneath which AI-based advanced platform students' endeavors to meet the prerequisites of their curriculum from their point of view so that their voice may move out to a bigger setting and, in so doing, contribute to more compelling educational forms within the scope of talking familiarity.

An Overview of the ABC Model of Attitudes

In exploiting the viable and reliable data on students' perspectives on this fact, the ABC Model of Attitudes by Leon Frestinger (1957) was employed. First proposed by

psychologist Leon Frestinger in 1957, the ABC Model of Attitude develops a psychological framework that suggests attitudes and engagement levels are comprised of three key components.

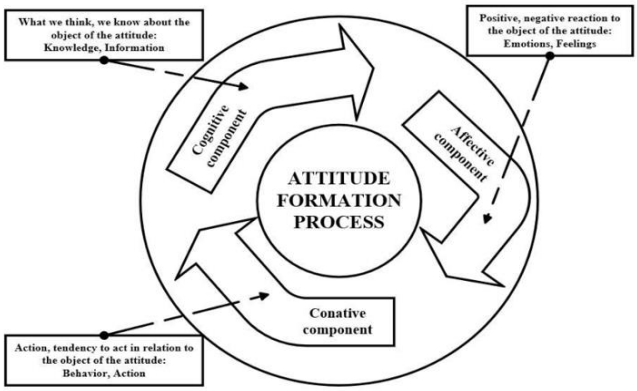

Fig 1: ABC Model of Attitudes

The affective factor shows the emotional feelings a person has toward learning a language, which can be positive (excitement, enjoyment), negative (anxiety, frustration), or neutral.

The behavioral aspect represents the outward actions or behaviors a person exhibits toward language learning, such as attending classes, participating in speaking practice, or utilizing language learning apps.

The cognitive component refers to the beliefs or perceptions of a language learner towards the difficulties of learning a language, the effectiveness of different learning methods, or the usefulness of a learning application.

The ABC model suggests that all three components interact with each other to influence a person's overall attitude toward something.

3. Methods

Case Study

Primary data for this study was collected through a questionnaire, which is a qualitative, ethnographic method for obtaining information about the subjective nature of people's experiences (Atkinson, 2007, p.225). A tool of data collection through semi-structured questionnaires questionnaire were used to investigate web-based learning tools and their engagement in the tasks performed using these applications, and quantitative through the summary of the data.

Table 1: Participants with stages at the speaking level

Levels	Number of students	Percent
A1	70	39%
A2	50	28%
B1	40	22%
B2	15	8%
C1	5	3%
Total	**180**	**100%**

This data collection approach is quick and convenient. Google Forms were made to gather students' opinions using educational websites and participating in speaking activities. The first part of the questionnaire consisted of 12 demographic questions, while the second part contained 23 questions on a Likert scale to investigate students' attitudes and engagement in the use of the two speaking practice websites.

Research process

The study was investigating 180 second-year students at a university in Ho Chi Minh City, Vietnam. 180 second-year students enrolled in a speaking course participated in the seven-week experimental phase.

They had taken a speaking course in the previous semester, ensuring that they were familiar with the university-level learning process and environment. During the first week of the semester, students were introduced to two websites, https://smalltalk2.me/ and https://voicetube.com, and were instructed on how to use these web-based learning tools over the weeks. Each student had to create an account to record their learning progress on the websites and follow the instructions specified by the research group.

Every week, learners complete assigned tasks designed to support in-class learning activities on vocabulary, structure, and conversational expressions. Their speaking performance was recorded to guide their shadowing techniques and further analyzed by the AI capabilities of the web-based technology to obtain comments and feedback, thus improving their speaking skills.

Before the study, participants were fully provided with the study information, detailed guidelines, and right of withdrawal, and were subsequently invited to join the Zalo group for further support during the experiment. After the seven-week project, students completed a survey to explore their attitudes and engagement towards using the two web-based applications.

4. Results and discussions

4.1 Do mechanical stages connect to students' talking capacity?

On the cognitive component

The data suggests that these AI-based websites and applications are perceived positively by students and seen as effective tools with the potential to improve their English-speaking ability, as below:

Table 2: Weekly use of speaking level for two apps

15 minutes to less than 30 minutes	42%
30 minutes to less than one hour	38%
More than one hour	20%

Table 3: Students' attitude in cognitive form

S. No	Content	Levels					Mean	Std. Deviation
		A1	A2	B1	B2	C1		
1.	Widen my vocabulary range.	1.8	0.0	36.0	54.5	7.3	3.6	0.6
2.	Improve students' pronunciation.	3.6	0.0	41.6	43.4	11.0	3.5	0.8
3.	Improve students' fluency.	3.5	3.4	28.9	50.8	13.1	3.6	0.8
4.	Improve students' English-speaking skills.	3.8	3.6	22.2	52.7	17.9	3.78	0.9

A majority of participants agreed that these technological tools are generally good and very good for language learning. Some of them noted that both applications were excellent for speaking development, and a few of them found that the applications were not very effective.

This indicates a positive overall impression of the applications' efficacy in supporting language development (Samad & Ismail, 2020 [36]; Kholis, 2021 [15]; Yingsoon,

2021 [40]; Anggraini, 2022 [1]; Madhavi *et al*., 2023; Nguyen, 2024d [32]).

4.2 What is the students' engagement level on the effect of mechanical stages on the talking assignments conducted?

On affective component

Regarding the affective element: As detailed, a clear majority of the survey participants found the applications to be user-friendly, provide clear instructions, and are accessible on a variety of devices. These applications are user-friendly, provide clear instructions, and be accessible on a variety of devices. They are easy to use on a variety of devices. Moreover, participants expressed their willingness to use the platforms, such as: Using these apps makes me feel more relaxed during the speaking test; I am interested; and I can't wait to use these applications while studying. They also expressed satisfaction with the apps' ability to provide a personalized learning experience. For example, we enjoy practicing speaking on these apps because the content is personalized. We enjoy learning to speak on these applications because the content of these applications is related to the course content and useful. Also, learning to speak on these applications is fun because it provides unbiased, automatic feedback and instant results.

Table 4: Students' attitude in affective form

S. No	Content	Levels					Mean	Std. Deviation
		A1	A2	B1	B2	C1		
1.	Feel relaxed doing the speaking with two apps.	3.8	0.0	35.0	43.5	17.3	3.7	0.7
2.	Their contents are relevant and useful.	1.6	0.0	35.6	51.4	11.0	3.7	0.6
3.	Improve students' confidence.	3.5	2.4	32.3	48.0	13.8	3.6	0.8

Another point seen in this context is the positive feedback that these apps contribute to confidence in other speaking activities in the following ways: We enjoy learning to speak using these applications because they provide us with a variety of tasks to practice our speaking skills. Using these applications helps us participate confidently in class speaking activities. This means that the survey shows a strong preference for AI-based language learning platforms among students (Schoepp & Erigul, 2001 [37]; Ghasemi & Hashemi, 2011 [10]; Madhavi *et al*., 2023).

On the behavioral aspect

Table 5: Students' attitude in behavioral form

S. No	Content	Levels					Mean	Std. Deviation
		A1	A2	B1	B2	C1		
1.	Complete weekly tasks.	7.8	11.0	38.0	31.5	11.3	3.2	1.0
2.	Continue learning to speak with two apps.	1.8	1.8	36.0	44.4	15.6	3.7	0.8
3.	Introduce these applications.	3.8	5.6	30.3	36.0	27.7	3.7	1.0

Regarding behavioral aspects, as shown here, a significant proportion of participants demonstrated a high level of engagement through the quality of consistency in using the applications for the learners' speaking tasks. In addition to following the instructions given to complete the weekly tasks, we would like to continue using these applications to learn to speak. A more positive outlook also emerged regarding future use, a typical example being that they would like their teachers to incorporate these applications into their classroom speaking activities. Last but not least, survey participants recommended the adoption of the platform to their classmates, stating, I would like to introduce these applications to my friends. Given this, the data reflects a high level of engagement regarding the impact of technological platforms on the speaking tasks performed (Rusmiyanto *et al*., 2023; Hoang *et al*., 2021; Le & Vo, 2014) [35, 12, 16].

5. Conclusion

The aim of this article was to explore students' attitudes in use two technology-based websites in language learning. The results indicate participants' positive attitude toward the effectiveness of the learning platforms in improving their language skills.

Further research could explore the causes of students' inconsistent task completion, such as time constraints, intrinsic and extrinsic motivation, content difficulty, and a lack of personalized learning guidance (if available). Additionally, research could examine the effectiveness of different classroom integration approaches to the same issues discussed here. These could include individual and group activities and the incorporation of elements to increase students' engagement in English speaking.

6. Acknowledgement

The Industrial University of Ho Chi Minh City supported this research. We are thankful to our instructors and friends, who provided expertise that assisted the research.

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