

A Study on the Use of Interactive Web Pages in Enhancing Speaking Skill among English Majored Students



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ABSTRACT: This research paper investigates the effectiveness of interactive web pages as a supplementary tool for enhancing speaking skills among non-English majored students. By using survey research design with 122 students of English at The Banking Academy of Vietnam, the findings reveal some interesting results. Fluency aspect was believed the most beneficial aspect that interactive web pages can bring for students ($M=4.01$). Meanwhile, pronunciation obtained the least contribution to the improvement of speaking ability ($M=2.69$). However, further analysis indicated that the contributions of speaking aspects varied according to years of study. The mean of pronunciation aspect for Year1 ($M = 3.57, SD = 0.58$) was significantly larger than for Year 2 ($M = 2.80, SD = 0.62$), $p < .001$ and was significantly larger than for Year 3 ($M = 2.21, SD = 0.38$), $p < .001$. The result shows that students of year 1 believed that pronunciation was most enhanced through the use of interactive web pages ($M=3.57$) compared to $M= 2.80$; $M=2.21$ for year 2 and year 3 students respectively. The finding also reveals that the habits of using interactive web pages varied according to duration of study, i.e. first year students used pages to enhance speaking ability the least ($M= 1.91$) while the second year students use the most, $M=4.33$. The findings indicate that interactive web pages can significantly contribute to improving speaking skills among English majored students, providing valuable insights for educators and curriculum developers.

KEYWORDS: Interactive web pages, Speaking ability, Aspects of pronunciation, Fluency, Vocabulary

I. INTRODUCTION

1.1. Background and context of the study

In today's globalized world, proficiency in the English language is an invaluable asset. Among four macros language skills, speaking skill play a pivotal role in the language learning process. It enables learners to convey thoughts, ideas, and emotions effectively, facilitating meaningful communication. Nunan (1991) asserts that oral proficiency allows students to engage in conversations, negotiations, and discussions in real time, contributing to their participation in academic, social, and professional settings. Proficiency in spoken language enhances the clarity and comprehensibility of learners' communication, leading to better comprehension and engagement in conversations (Derwing & Munro, 2013). In terms of social integration, proficient speaking skills help non-English speakers integrate into new cultural and social environments by enabling effective communication with native speakers. Otherwise, speaking proficiency fosters cultural understanding by allowing learners to grasp nuances, idiomatic expressions, and social cues embedded in the language (Liddicoat, 2007). Strong speaking skills support academic achievement by aiding in presentations, discussions, and debates, contributing to better comprehension and engagement in classroom activities (Thornbury, 2005). Looking at the issue from career opportunity perspective, proficiency in spoken English enhances employability, especially in jobs that require communication, negotiation, and interaction with an English-speaking clientele or colleagues. Furthermore, improvement in speaking abilities boosts learners' confidence, encouraging them to engage more actively in language learning activities (Dörnyei, 2009). In Vietnam, university students have to study at least a foreign language (B1-CEFR) to meet the prerequisites for graduation. Most of the university students find this as a challenge that they must conquer; especially speaking skill. Non-English major students often encounter challenges in developing effective speaking skills. Traditional classroom instruction may not always provide adequate opportunities for students to practice and enhance their oral communication abilities. To address this issue, this study explores the use of interactive web pages as a supplementary tool for improving speaking skills among non-English major students.

1.2. Research objectives

The objectives of the study are twofold; in the first place, the researcher would like to explore which specific speaking aspects such as pronunciation, fluency or vocabulary the English majored students believe they can enhance through the use of interactive web pages. The second objective of the study is to figure out the habits of using interactive web pages to enhance speaking ability among students of English in different years of university study (first year, second year and third year).

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1.3. Research questions

In order to answer the proposed objectives, the study attempts to answer the following research questions;

1.3.1. *What specific speaking aspects (e.g., pronunciation, fluency, vocabulary) are believed to enhance through the use of interactive web pages?*

1.3.2. *In what ways do the interactive web page usages change duration of study?*

1.4. Significance of the study

The study investigates specific speaking aspects that non-English majored students believe can be improved via interactive web pages helps align teaching methods with learner expectations and perceived needs. The recognition and integration of learners' perspectives can guide the design and implementation of more effective language learning tools and strategies. The comparison of the effectiveness of interactive web pages against traditional classroom-based instruction provides empirical evidence to inform language teaching methodologies. The insights into the comparative effectiveness of these approaches can guide curriculum development in language education. Furthermore, the validating the efficacy of interactive web pages in improving speaking skills adds credibility to technology-integrated language learning tools. With the increasing reliance on digital tools in education, understanding the comparative advantages of these tools becomes crucial for educational adaptation.

II. LITERATURE REVIEW

2.1. Importance of Speaking Skills

Speaking skills are crucial in various aspects of life, spanning personal, professional, and academic realms. Effective communication through speech facilitates the exchange of ideas, information, and emotions. In the professional world, the ability to articulate ideas clearly can greatly influence career growth. Effective speakers are often better at persuading clients, leading teams, and presenting proposals. A study by the National Association of Colleges and Employers (NACE) identified communication skills as one of the top attributes sought by employers. Good speaking skills foster better interpersonal relationships. Whether it's in friendships, romantic relationships, or within families, the ability to communicate thoughts and feelings effectively help in understanding others and being understood. Good speaking skills foster better interpersonal relationships. Whether it is in friendships, romantic relationships, or within families, the ability to communicate thoughts and feelings effectively help in understanding others and being understood. Leaders must be able to communicate their vision, goals, and plans clearly. Leaders who excel in speaking inspire and motivate their teams effectively. The higher level of speaking is public speaking which is particularly crucial because being able to confidently address a crowd can open doors for career opportunities, social influence, and advocacy. According to the Book of Lists, fear of public speaking ranks among the top fears for many individuals, highlighting its perceived importance. As university students, speaking skills are a fundamental component of language proficiency. Effective verbal communication is essential for academic, professional, and social success, especially in multicultural and international contexts.

2.2. Concepts related to language learning and speaking skills

Language learning and speaking skills intertwine in various ways. When learning a new language, developing speaking proficiency is often a primary goal. Language acquisition involves both understanding (input) and actively using the language (output). The Input Hypothesis by Stephen Krashen suggests that comprehensible input, like listening and reading, contributes to language acquisition. This input then leads to language production or speaking. Actively practicing speaking is crucial for language development. Immerse yourself in the language as much as possible. Surround yourself with native speakers, watch movies, listen to music, and read books in that language. Language acquisition occurs when learners are exposed to comprehensible input in the target language (Krashen, 1985). The language input refers to the information received and understood in a language. It can include listening to others speak, reading written text, or even observing visual cues like gestures and facial expressions. Language input is crucial in the early stages of language acquisition, as it provides the foundation for learning vocabulary, grammar, and sentence structures. Krashen's Input Hypothesis emphasizes the significance of comprehensible input for language acquisition, suggesting that learners improve when they understand language that is slightly more advanced than their current level. The language output involves using the language to express thoughts, ideas, or information. It includes speaking and writing in the target language. Language output allows learners to practice and apply what they've learned from input. It helps solidify understanding, reinforces vocabulary, and refines linguistic skills. Language output encourages active engagement with the language, reinforcing connections in the brain and aiding in memory retention. Krashen (1985) emphasizes the significance of language output or speaking in the language learning process. In addition, Swain's Output Hypothesis emphasizes the role of language output in language acquisition. It suggests that producing language (speaking or writing) leads to language development by pushing learners to notice gaps in their knowledge, prompting them to seek more input to improve their output (Swain, 1985). This is added by Michael Long's Interaction Hypothesis builds on the Input and Output Hypotheses, suggesting that interaction, where learners negotiate meaning through conversation, is particularly beneficial. This interaction provides both input and output opportunities, fostering language development (Long, 1996). Research on input enhancement, such as studies by Sharwood Smith (1993) explores how modifying input (e.g., highlighting specific linguistic features) can affect language acquisition by drawing learners' attention to particular language forms, subsequently influencing their language output. These references and studies highlight the interconnectedness of

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language input and output in the process of language acquisition, highlighting how exposure to input influences output production and how actively producing language output, in turn, enhances language acquisition.

2.3. Aspects of speaking skills

Speaking skills encompass various aspects that contribute to effective communication. Speaking clearly and enunciating words properly ensures that your message is easily understood. Expanding one's vocabulary enhances the ability to express ideas precisely and appropriately. Conveying thoughts and ideas more seamlessly and being able to string together sentences without pauses or stumbling, which is referred to as fluency makes it easier for listeners to follow and comprehend their message.

2.2.1. *The aspect of pronunciation*

In the first place, *pronunciation*, the ability to articulate sounds accurately and clearly is crucial for effective communication. It involves understanding and reproducing the sounds, stress patterns, and intonation of a language. Pronunciation holds significant importance in spoken language skills, contributing to effective communication and comprehension. While the degree of importance might vary depending on the context and the speaker's goals, it remains a key element in language learning. Clear pronunciation enhances the intelligibility of speech, making it easier for listeners to understand the speaker. Research indicates that good pronunciation positively influences comprehension (Derwing & Munro, 2009). Accurate pronunciation contributes to effective communication by reducing misunderstandings and ensuring that the intended message is conveyed accurately (Celce-Murcia, et al., 1996). Good pronunciation can aid in social integration, helping individuals to feel more confident and comfortable in social settings where the language is spoken (Munro & Derwing, 2015). Clear pronunciation reduces the listener's cognitive load, preventing listener fatigue, and allowing for more engaging and effective communication. In certain contexts, such as academia or professional settings, clear pronunciation is often associated with credibility and can positively affect career opportunities and academic performance (Jenkins, 2000). While pronunciation is crucial, it's also essential to acknowledge that native-like pronunciation might not always be the goal for every learner. Intelligible pronunciation, which ensures effective communication without necessarily mimicking native speakers, can be a more realistic and practical objective for many language learners.

2.2.2. *The aspect of fluency*

Fluency which refers to the smoothness, pace and coherence of speech involves the ability to speak without undue pauses, hesitations, or interruptions while maintaining a natural flow. Fluency isn't just about speaking quickly but also involves speaking smoothly, accurately, and with ease. Fluency development often includes practicing speaking in different contexts and improving conversational skills (Nation & Newton, 2009). Fluency significantly influences the overall effectiveness and comprehension of communication. It refers to the ability to express oneself smoothly, coherently, and without hesitation. It enables speakers to convey their thoughts and ideas more efficiently. It allows for a smoother flow of conversation, reducing disruptions and enhancing the overall clarity of the message (Larsen-Freeman & Anderson, 2013). Fluent speakers are better able to engage in conversations, participate actively, and sustain interactions, leading to more productive and meaningful communication. Fluency contributes to comprehensibility. When speakers are fluent, listeners can more easily follow the conversation, leading to better understanding of the intended message (Derwing & Munro, 2009). Fluent speakers are often perceived as more confident and competent communicators, positively affecting their interactions in various social and professional contexts (Thornbury, 2005). In academic and professional settings, fluency is essential for presentations, discussions, and negotiations, influencing success and effectiveness (Burns & Richards, 2012). Fluency is a multifaceted aspect of speaking that involves not only the pace of speech but also coherence, smoothness, and naturalness in expressing ideas. Research and references in language teaching, psycholinguistics, and communication studies highlight the significance of fluency in spoken language skills, guiding educators and learners in understanding its importance for effective communication.

2.2.3. *The aspect of vocabulary*

Finally, yet importantly, *vocabulary* which contributes significantly to effective speaking involves selecting and using words accurately and appropriately in various contexts. Vocabulary plays a fundamental role in speaking proficiency, significantly affecting one's ability to communicate effectively. A rich and varied vocabulary enables speakers to articulate their thoughts, emotions, and ideas accurately, allowing for more precise and nuanced communication (Schmitt, 2000). A broad vocabulary allows speakers to choose words that precisely convey their intended meaning, reducing ambiguity and enhancing clarity in communication (Nation & Newton, 2009). Vocabulary richness enables speakers to convey subtle nuances, emotions, and cultural connotations effectively, leading to more engaging and expressive communication (Lewis, 1997). The knowledge of vocabulary contributes to both fluency and accuracy in speech. When speakers have access to a broad lexical repertoire, they can speak more fluently and with greater accuracy. In academic and professional settings, a strong vocabulary is essential for presentations, discussions, and written communication, influencing success and credibility (Laufer & Nation, 1999). References in linguistics, language acquisition, and language teaching literature highlight the critical role of vocabulary in spoken language skills. They provide insights into the significance of a rich vocabulary in facilitating effective communication and guiding educators and learners in vocabulary acquisition strategies.

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2.3.1 Interactive web pages in language learning

Technological innovations, including interactive web pages, have revolutionized language learning. These tools offer interactive and engaging platforms for practicing language skills. Interactive web pages could be defined as dynamic digital platforms designed to engage users actively through various multimedia elements and features, enabling real-time user interaction and participation. They incorporate tools, functionalities, and content that invite users to engage, respond, and manipulate the information presented, fostering an immersive and engaging experience. Interaction Design Foundation defines interactive web pages as digital interfaces that "allow users to actively engage with them, and users can interact with the content provided." These interactions can include clicking, dragging, typing, or any other form of engagement. Benyon emphasizes that interactive web pages involve user engagement, feedback, and responsiveness, stating that "interaction is fundamental to the user experience" and is achieved through various input mechanisms. Garrett (2011) describes interactive web pages as platforms that enable users to manipulate and interact with content, facilitating a two-way communication process between the user and the interface. Several studies have demonstrated the effectiveness of interactive web pages in improving various language skills, including speaking. These platforms provide opportunities for interactive, self-paced learning, and immediate feedback. Interactive platforms provide opportunities for learners to practice speaking in a simulated environment. They often offer voice recording features or virtual conversation partners, allowing learners to practice pronunciation and speaking skills (Saylan, Kokoç & Tatli, 2023). Some platforms simulate real-life conversations, providing learners with scenarios and dialogues to engage in. This immersion in authentic language contexts helps in improving conversational skills (Chun, 2016). These platforms adapt to learners' proficiency levels, providing tailored exercises and challenges. This personalized approach helps in addressing specific speaking weaknesses or areas that need improvement (Patterson & Mattern, 2012). Interactive features such as gamification, quizzes, or interactive exercises make language learning enjoyable and engaging. This increased engagement can positively impact speaking practice. Some platforms offer access to authentic materials like videos, podcasts, or interviews with native speakers. This exposure aids in improving listening skills, intonation, and natural speaking patterns. Interactive web pages often facilitate communication between learners, enabling them to engage in language exchanges or group activities, fostering speaking practice in a collaborative setting (Omar et al. 2020). By providing immersive, interactive, and personalized experiences, these platforms enhance speaking skills by offering real-time practice, feedback, and engagement, leading to more effective language acquisition.

III. METHODOLOGY

3.1. Research design

The study's first aim is to investigate the students' perceptions about the use of interactive web pages to improve their speaking ability and the aspects of speaking skills such as pronunciation, fluency and vocabulary that they believed to be enhanced through the use of interactive web pages. The second aim of the study is to figure out the changes in the habits of using the pages in enhancing speaking skill varied by years of study. With the proposed aims, the appropriate research design would be survey research. It is a methodical approach used in various disciplines to gather data and insights from a target population or sample. Surveys employ structured questionnaires or interviews with standardized questions to collect data from respondents. They maintain uniformity in question format, wording, and sequence to ensure consistent data collection across respondents (Groves, et al., 2009). Surveys aim to use random or stratified sampling methods to ensure the sample represents the broader population, enabling generalization of findings. Surveys generate quantitative data that can be analyzed statistically, allowing for numerical summaries, correlations, and comparisons. Data collected undergo statistical analysis to draw inferences and generalize findings to the larger population (Babbie, 2016). Survey research yields valuable insights into attitudes, behaviors, and opinions within populations, facilitating informed decision-making in academic, market research, social sciences, and other fields.

3.2. Participants

The participants of the current study include 122 English majored students from The Banking Academy of Vietnam. The students involve in the study belong to Year 1, Year 2 and Year 3. Table 1 shows the frequencies and percentage of the participants.

Table 1: Frequency and percentages of the participants

Year		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 1	44	36.1	36.1	36.1
	Year 2	40	32.8	32.8	68.9
	Year 3	38	31.1	31.1	100.0
	Total	122	100.0	100.0	

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3.3. Data Collection

In order to collect the data for the study, the researcher employed two set of survey questionnaires. The first survey consists of 15 items. The five point Likert Scale with interpretations from 1 (strongly disagree) to 5 (strongly agree) to measure the effectiveness of using interactive web pages in enhancing aspects of speaking skill. Another 5 point Likert Scale was employ to investigate the habits of using of pages that changes through duration of study, the choices range from 1 (never) to 5 (very frequently).

IV. FINDINGS OF THE STUDY

4.1. Reliability coefficient

A Cronbach alpha coefficient was calculated for the Aspect of pronunciation scale, consisting of PA1, PA2, PA3, PA4, and PA5. The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2018) where $> .9$ excellent, $> .8$ good, $> .7$ acceptable, $> .6$ questionable, $> .5$ poor, and $\leq .5$ unacceptable. The items for Aspect of pronunciation had a Cronbach's alpha coefficient of .82, indicating good reliability. Table 2 presents the results of the reliability analysis.

Table 2: Reliability Table for Aspect of pronunciation

Scale	No. of Items	α	Lower Bound	Upper Bound
Aspect of pronunciation	5	.82	.78	.86

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

A Cronbach alpha coefficient was calculated for the Aspect of fluency scale, consisting of FA1, FA2, FA3, FA4, and FA5. The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2018) where $> .9$ excellent, $> .8$ good, $> .7$ acceptable, $> .6$ questionable, $> .5$ poor, and $\leq .5$ unacceptable. The items for Aspect of fluency had a Cronbach's alpha coefficient of .89, indicating good reliability. Table 3 presents the results of the reliability analysis.

Table 3: Reliability Table for Aspect of fluency

Scale	No. of Items	α	Lower Bound	Upper Bound
Aspect of fluency	5	.89	.50	.69

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

A Cronbach alpha coefficient was calculated for the Aspect of vocabulary scale, consisting of VA1, VA2, VA3, VA4, and VA5. The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2018) where $> .9$ excellent, $> .8$ good, $> .7$ acceptable, $> .6$ questionable, $> .5$ poor, and $\leq .5$ unacceptable. The items for Aspect of vocabulary had a Cronbach's alpha coefficient of .86, indicating good reliability. Table 4 presents the results of the reliability analysis.

Table 4: Reliability Table for Aspect of vocabulary

Scale	No. of Items	α	Lower Bound	Upper Bound
Aspect of vocabulary	5	.86	.58	.75

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

4.2. The aspects of speaking that can be enhanced through interactive pages

The observations for pronunciation aspect (PA) had an average of 2.89 ($SD = 0.78$, $SE_M = 0.07$, Min = 1.60, Max = 4.80, Skewness = 0.36, Kurtosis = -0.71). The observations for fluency aspect (FA) had an average of 4.01 ($SD = 0.46$, $SE_M = 0.04$, Min = 2.40, Max = 5.00, Skewness = -1.12, Kurtosis = 2.99). The observations for vocabulary aspect (VA) had an average of 3.51 ($SD = 0.60$, $SE_M = 0.05$, Min = 1.60, Max = 4.60, Skewness = -0.53, Kurtosis = 0.10). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 5.

Table 5: Summary Statistics Table for Interval and Ratio Variables

Variable	M	SD	n	SE_M	Min	Max	Skewness	Kurtosis
PA	2.89	0.78	122	0.07	1.60	4.80	0.36	-0.71
FA	4.01	0.46	121	0.04	2.40	5.00	-1.12	2.99
VA	3.51	0.60	122	0.05	1.60	4.60	-0.53	0.10

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

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Fluency aspect was believed that the most beneficial aspect that interactive web pages can bring for students ($M=4.01$). Meanwhile, pronunciation obtained the least participation to the improvement of speaking ability ($M=2.69$). However, further analysis indicated that the contributions of speaking aspects varied according to years of study. An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in pronunciation aspect (PA) by Year. The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were significant, $F(2, 119) = 65.47, p < .001$, indicating there were significant differences in PA among the levels of year. The eta squared was 0.52 indicating Year explains approximately 52% of the variance in PA. The means and standard deviations are presented in Figure 1 and Table 6.

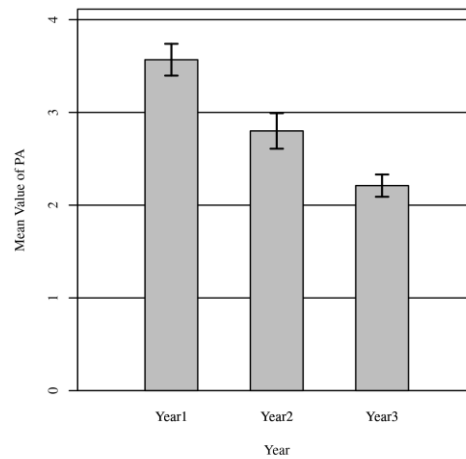


Figure 1: Means of PA by Year with 95.00% CI Error Bars

Table 6: Mean, Standard Deviation, and Sample Size for PA by Year

Combination	<i>M</i>	<i>SD</i>	<i>n</i>
Year1	3.57	0.58	44
Year2	2.80	0.62	40
Year3	2.21	0.38	38

Note. A '-' indicates the sample size was too small for the statistic to be calculated.

Post-hoc

A *t*-test was calculated between each group combination to further examine the differences among the variables based on an alpha of .05. The Tukey HSD *p*-value adjustment was used to correct for the effect of multiple comparisons on the family-wise error rate. For the main effect of Year, the mean of PA for Year1 ($M = 3.57, SD = 0.58$) was significantly larger than for Year2 ($M = 2.80, SD = 0.62$), $p < .001$. For the main effect of Year, the mean of PA for Year1 ($M = 3.57, SD = 0.58$) was significantly larger than for Year3 ($M = 2.21, SD = 0.38$), $p < .001$. For the main effect of Year, the mean of PA for Year2 ($M = 2.80, SD = 0.62$) was significantly larger than for Year3 ($M = 2.21, SD = 0.38$), $p < .001$. The result of the ANOVA test shows that students of year 1 believed that pronunciation was most enhanced through the use of interactive web pages ($M=3.57$) compared to $M=2.21$ for year 3 students.

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in fluency aspect (FA) by Year. The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, $F(2, 118) = 1.21, p = .302$, indicating the differences in FA among the levels of Year were all similar. The main effect, Year was not significant, $F(2, 118) = 1.21, p = .302$, indicating there were no significant differences of FA by Year levels. The means and standard deviations are presented in Table 7.

Table 7: Mean, Standard Deviation, and Sample Size for FA by Year

Combination	<i>M</i>	<i>SD</i>	<i>n</i>
Year1	3.98	0.46	44
Year2	3.95	0.50	39
Year3	4.11	0.42	38

Note. A '-' indicates the sample size was too small for the statistic to be calculated.

While aspects of fluency were similar for Year 1 and Year 2 students, the Year 4 students believed that fluency participated much in the speaking ability ($M=4.11$).

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4.3. The habits of using interactive pages by years of study

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in the use of interactive web pages (IWP) by years of study. The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were significant, $F(2, 119) = 83.97, p < .001$, indicating there were significant differences in the use of IWP among the levels of Year (Table 11). The eta squared was 0.59 indicating Year explains approximately 59% of the variance in the use of IWP. The means and standard deviations are presented in Table 9.

Table 8: Analysis of Variance Table for the use of IWP by Year

Term	SS	df	F	p	η_p^2
Year	122.43	2	83.97	< .001	0.59
Residuals	86.75	119			

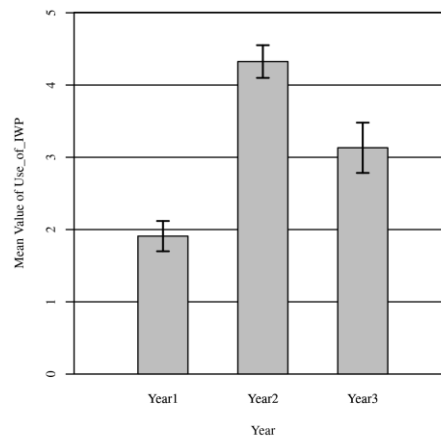


Figure 2: Means of the use of IWP by Year with 95.00% CI Error Bars

Table 9: Mean, Standard Deviation, and Sample Size for the use of IWP by Year

Combination	M	SD	n
Year 1	1.91	0.71	44
Year 2	4.33	0.73	40
Year 3	3.13	1.09	38

Note. A '-' indicates the sample size was too small for the statistic to be calculated.

Post-hoc

A *t*-test was calculated between each group combination to further examine the differences among the variables based on an alpha of .05. The Tukey HSD *p*-value adjustment was used to correct for the effect of multiple comparisons on the family-wise error rate. For the main effect of Year, the mean of the use of IWP for Year1 ($M = 1.91, SD = 0.71$) was significantly smaller than for Year 2 ($M = 4.33, SD = 0.73$), $p < .001$. For the main effect of Year, the mean of the use of IWP for Year 1 ($M = 1.91, SD = 0.71$) was significantly smaller than for Year3 ($M = 3.13, SD = 1.09$), $p < .001$. For the main effect of Year, the mean of the use of IWP for Year 2 ($M = 4.33, SD = 0.73$) was significantly larger than for Year 3 ($M = 3.13, SD = 1.09$), $p < .001$.

V. CONCLUSION AND DISCUSSION

The results of this study indicate that interactive web pages can significantly enhance speaking skills among English majored students. The flexibility, engagement, and interactive nature of web-based platforms contribute to their effectiveness. However, it is important to strike a balance between technology-assisted learning and traditional classroom interaction. Educators should consider integrating interactive web pages into language curricula to better prepare students for the demands of the modern world.

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Appendices

Appendix 1: Survey on enhancing aspects of speaking skills through Interactive Web Pages

Instructions: Please rate your agreement with the following statements on a scale from 1 to 5, where: 1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree

#	Statements	Ratings				
Pronunciation aspect						
1.	Interactive web pages can assist me in improving my pronunciation of words and sounds in the target language.	①	②	③	④	⑤
2.	I believe that interactive web pages provide effective practice for mastering phonetic sounds and their correct articulation.	①	②	③	④	⑤
3.	Interactive web pages with feedback features help me identify and correct pronunciation errors effectively.	①	②	③	④	⑤
4.	Engaging with interactive web pages enhances my confidence in pronouncing challenging sounds or words accurately.	①	②	③	④	⑤
5.	I find that interactive web pages facilitate repetition and reinforcement of correct pronunciation patterns.	①	②	③	④	⑤
Fluency aspect						
6.	Interactive web pages can assist me in speaking more fluently and with fewer pauses in the target language.	①	②	③	④	⑤
7.	I believe that interactive web pages provide effective practice for engaging in natural conversations in the target language.	①	②	③	④	⑤
8.	Engaging with interactive web pages helps me improve the speed and flow of my speech.	①	②	③	④	⑤
9.	I find that interactive web pages with dialogue simulations enhance my ability to respond promptly and naturally in conversations.	①	②	③	④	⑤
10.	Interactive web pages help me practice speaking in different scenarios, contributing to improved fluency.	①	②	③	④	⑤
Vocabulary aspect						
11.	Interactive web pages effectively aid me in expanding and improving my vocabulary in the target language.	①	②	③	④	⑤
12.	I believe that interactive web pages help me learn new words and phrases in relevant and practical contexts.	①	②	③	④	⑤
13.	Engaging with interactive web pages assists me in retaining new vocabulary and applying it effectively in speech.	①	②	③	④	⑤
14.	I find that interactive web pages help me learn word associations and synonyms, enriching my vocabulary.	①	②	③	④	⑤
15.	Engaging with interactive web pages offers various activities that enhance my understanding and usage of diverse vocabulary.	①	②	③	④	⑤

Appendix 2: Frequency of Using Interactive Web Pages to Improve Speaking Skills

Instructions: Please indicate how often you use interactive web pages to improve your speaking skills by selecting the appropriate response for each statement.

Respondents can choose from options ranging from 1 "Never" to 5 "Very Frequently" to indicate how often they use interactive web pages for their learning needs.

Statements	Ratings				
1. I use interactive web pages to practice speaking	①	②	③	④	⑤
2. I engage in speaking exercises on interactive web pages	①	②	③	④	⑤
3. Interactive web pages are a regular part of my speaking practice	①	②	③	④	⑤
4. I rely on interactive web pages to improve my speaking fluency.	①	②	③	④	⑤
5. Interactive web pages help me work on my pronunciation	①	②	③	④	⑤

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|-----|---|---|---|---|---|---|
| 6. | I use web-based speaking tools for language practice | ① | ② | ③ | ④ | ⑤ |
| 7. | I incorporate interactive web pages into my speaking exercises | ① | ② | ③ | ④ | ⑤ |
| 8. | Web-based speaking activities are an essential part of my language learning routine | ① | ② | ③ | ④ | ⑤ |
| 9. | Interactive web pages are my primary resource for enhancing my speaking abilities. | ① | ② | ③ | ④ | ⑤ |
| 10. | I find interactive web pages helpful in improving my speaking skills | ① | ② | ③ | ④ | ⑤ |



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