



Research Article

Impact of Hypermedia-based Adverb Learning on Speaking Skill Development: An Experimental Study

Mohideen Bawa Nowzath, Singanayagam Umashankar, M.R Rishad Muhammed

1. Department of English, Sri Lanka Institute of Advanced Technological Education; nowzathmnf@gmail.com
2. Department of English Language Teaching, Faculty of Arts and Culture, Eastern University of Sri Lanka; umashankars@esn.ac.lk
3. Department of English, Sri Lanka Institute of Advanced Technological Education; Rishadhakeemi96@gmail.com

Copyright © 2025 by Authors, Published by **Demagogi: Journal of Social Sciences, Economics and Education**. This is an open access article under the CC BY License <https://creativecommons.org/licenses/by/4.0/>

Received : September 15, 2025

Revised : October 19, 2025

Accepted : November 13, 2025

Available online : December 04, 2025

How to Cite: Mohideen Bawa Nowzath, Singanayagam Umashankar, & M.R Rishad Muhammed. (2025). Impact of Hypermedia-based Adverb Learning on Speaking Skill Development: An Experimental Study. *Demagogi: Journal of Social Sciences, Economics and Education*, 3(6), 395-403. <https://doi.org/10.61166/demagogi.v3i6.121>

Abstract. Hypermedia-based adverb learning refers to facilitate adverbs including graphs, images, animation, sound and hypertext with constructive knowledge. It exhibits a central part in the success of the students learning English as a second language. The study was to identify the productivity of hypermedia-based adverb learning on the performance in the speaking skill development of the students in the Higher National Diploma in English. It was conducted in Higher National Diploma in English course of Advanced Technological Institute - Sammanthurai at Sri Lanka Institute of Advanced Technological Education under the Ministry of Education. 90 students from Higher National Diploma

in English – class - A were used as the experimental group and the equivalent numbers of students from Higher National Diploma in English – class - B were taken as the controlled group. A pre-test with picture description was led for both the groups to find out the previous proficiency level of speaking skill with adverbs of the students to compare them and the mean differences were found to be negligible for both the groups from the pre-test. Later, the experimental group used hypermedia-based adverb learning based on selected learning strategies: activities and arrangements in presentation with video and audio-based system for six months with ninety hours learning while the controlled group was taught without the use of hypermedia-based adverb learning. After six months a post-test with picture description was conducted for both the groups. When the post-test was conducted the mean (-0.091) was slightly improved for the group - B than the pre-test, and the mean (-2.871) was significantly improved for the group - A in the post-test. Thus, it is found that there is a positive relationship between the hyper-media based adverb learning and the performance in speaking skill development with adverbs. The research findings indicate that hyper-media based adverb learning improves speaking skill development with adverbs of the learners of English as a second language.

Keywords: Hypermedia, Presentation, Adverb, Video-Audio, Speaking Development

INTRODUCTION

The students' performance in speaking skills development through hypermedia-based adverb learning is a focus in today's language education. Hypermedia chains many types of media messages into teaching and learning practice. Furthermore, hypermedia is typical of inventiveness of information construction in speaking and script. Hypermedia allows pupils to certainly add advanced knowledge into their original knowledge bases so that learners progress choice production in information usage with their syllabus contents.

It is studied that short level of connection of students in hypermedia-based adverb learning is realized as one of the reasons for dissatisfaction in the performance in the speaking skill development in academic courses. During the past decade, a number of studies that reflected the connection between hypermedia-based adverb learning and the performance in the speaking skills development concluded that a positive correlation avails between these two variables (Green, 2022), but there are no research studies done in the context of the language education at the SLIATE. As per the gap, along with the straight investigation, this study aims at looking into the impact of the hypermedia-based adverb learning with selected learning strategies in the performance in the speaking skills development using data collected from Higher National Diploma in English course of Advanced Technological Institute - Sammanthurai under SLIATE under the Ministry of Education.

The hypermedia-based adverb learning is measured as one of the ultimate dynamic resources of communication in our life afterward the presence of the internet. The learners of English as a Second Language can increase several information concerning associated expressive words, considerable sentences, imaginative opinions, routine writing construction of paragraphs and so on from the hypermedia-based adverb (Benson, 2023). Learners are experienced by the hypermedia-based adverb learning what is moving on around them for descriptive explanations of the situations and zone with mindfulness of morphological

capabilities for expressive descriptions of the conditions. And also, hypermedia-based adverb learning exposed techniques with smooth clarifications to learners' lives with much attentive maintenance, exploration and appreciated teaching on varied subjects globally (Booth, 2021). It is found that learners cannot engage much about variety of dialogues, possible circumstances of events and indication on situational enjoyments without hypermedia-based adverb learning as they grieve from poor language competence (Matthews, 2023)

LITERATURE REVIEW

The prominent goal line of this section is to review the related research studies, and their focal significances, restrictions of the viewed studies. Ercan (2017) empirically examines the prominence of fastening hypermedia-based adverbs into the syllabus to increase language achievement among students towards speaking skills. The study observed that student who acknowledged hypermedia-based adverbs uncovered extraordinary growth in their terminology for their spoken skills compared to those who functioned on traditional terminology learning methodologies. The scholar determined that the hypermedia-based training deals students with considerate and contextualized experience to vocabulary for conversations, taking to improved maintenance and application of new words in their interpersonal communications.

Adverbs can be defined as a movement assembling of written and spoken mechanism about verbs which echo the writers' decorative descriptions about human diversities of experiences in lives. "Adverbs possess explanation of stories with dialogues, descriptions of novels with role plays, and elaborations of poems in stanzas and line and play mainly those that have status of skill and not just delight. It is the resemblance of numerous constructions of social explanations with adjectives or verbs in language and its native forms to hold a situation or situations (Vanda, 2023). By adverb learning in the language classroom has valued supports to learners of English as a Second Language. They remark that instruction of adverbs is central to ESL students, as it deals an amiable and sensitive position to engage in the language absolutely. English adverb supplies students with experience to a wide choice of vocabulary, covering dialect terms, metaphorical language, and nuanced terminology repetition. As per them, impression of vocabularies with adverbs helps learners to contextualize different words, see their senses, and comprehend their practice in reliable backgrounds. This coverage to diverse vocabulary matures students' verbal volume and attentive capabilities.

Pascual (2010) empirically mentions out that there are ample and varied descriptions of hypermedia-based adverb learning. Hypermedia-based adverb learning is defined as a type of language learning in which the words and terms are the major element and follow together in smart, lively and solitary style to carry attitudes and thoughts. Hypermedia-based adverb learning is a recognized effort which deals considerate thoughtful about users' attitudes and other viewpoints in a realistic manner. He brands hypermedia-based adverbs with paragraphs as "a part of text in which words are set agreeably and harmoniously" (p. 22). "Hypermedia-based adverbs with paragraphs is explained with pace, fine-looking style and noteworthy

grammatical structures. A hypermedia-based adverb with paragraphs is a system of input eloquences, telling presentations, communicating spirits or thoughts. Hypermedia-based adverbs with paragraphs demands to the expansions through beat and term choice that can practise energetic representative pictures for the viewers. Some instructors and students consider that hypermedia-based adverbs with paragraph are a tough kind of world. Teachers comprehend that hypermedia-based adverbs with paragraphs is uncertain to show in classes, since it is above students' levels', while students claim that adverbs with paragraphs is tough to know for it is full of hard adverbs and jargons. Sfenrianto (2018) studies that hypermedia-based adverb with paragraphs is valued and actual source in accumulating English speaking skill development and pronunciation of students.

Madya (2021) mentions that application of hypermedia-based adverbs with hi-tech understanding such as blog types and hypermedia with hypertexts to students creates with an outline and the attentiveness of approaches and moralities of the language in the speaking and this cares cause well-made paths to spread to students simple engaging formations in the speaking and to repeat their parts. Finally, the dialectal customs recognised over language-based and creative constructions may be used to progress involved understanding which can increase the value of speaking development in revealing manner.

Moreover, it is documented that the learners still experience the difficulties in growing oration, generally in speaking as per the current circumstances. It organizes thought-provoking stand for the students to know the words and their usages, because this situation is used in institutes. According to the opinion of Kirkgoz (2014), he describes that the students' speaking decline is due to poor participation in actual situations, insufficient supporting imaginings and poor insides. In the meantime, the utmost number of students grows lethargy to new words identification. Also, students have contrary beliefs and opinion towards word creations about adverbs with prefixes and suffixes.

To defeat these problems, it is compulsory to track present styles in adverb growth for speaking, to share innovations within the lecture hall, to generate adverb-related settings wherever students will touch simply using their attention, and to modify students to enhance word skills that they will perform throughout their lives (Cameron, 2001). In this perspective, to resolve the problematic situation, hypermedia-based adverb learning suits a real source for increasing the extremely wanted adverbs among students for speaking.

Hypermedia learning theory maintains that learners benefit when information is obtainable through balancing verbal and visual channels and when cognitive load is managed (Mayer, 2009). Cognitive approaches to second language acquisition (SLA) stress input quality, noticing, and practice for form-meaning mapping (Schmidt, as background in SLA literature; Ellis, 2008). Hypermedia environments can care both noticing and meaningful practice by combining input, explicit instruction, interactive feedback, and opportunities for output (Chapelle, 2003; Levy & Stockwell, 2006). Interaction perspectives posit that producing language (output) and receiving feedback are core mechanisms for development—hypermedia can

scaffold interactive speaking tasks through prompts, modelling, and recording/playback features (Long; interaction literature summarized in Ellis, 2008).

Staurt (2005) scheduled confident teaching methods such as hypermedia-based description preparation and active action. Those experts commend that learning adverbs with paragraphs through technology based training carries well-intentioned assistances for students and it was certainly done. It means that youths' capacity for their linguistic accomplishment can be extended from learning adverbs with paragraph.

It references that a number of studies have inspected the association between hyper-media based adverb learning with recital centred method with video and audio and the performance in the speaking skill development reaching to the conclusion that there occurs a positive correlation between these two variables. Hypermedia displays a significant part in the field of education, which mainly means to ease the learning development through the controller of graphics, images, animation, sound, video and other multimedia information with the delivery of hypertext. Hypermedia is a mixture of various types of media messages into teaching and learning practice. Moreover, hypermedia is characteristic of innovation of information performance and speaking. It permits learners to completely include different knowledge into their original knowledge bases so that learners develop decision makers in information processing with their syllabus contents. In this line of argument the hypermedia based adverb learning with recital centred method with video and audio can be effectively used for the development of speaking skill of students in higher educational institutions too.

METHODOLOGY

The purpose of the study was to find the connection between the hypermedia-based adverb learning with chosen learning strategies and the performance of the students in the speaking skill development. Two groups of students were randomly taken from HNDE course with the directed subject reading and listening skills in English level II from the Advanced Technological Institute - Sammanthurai under SLIATE under the Ministry of Education. 90 students from Higher National Diploma in English – class - A were used as the experimental group and the equivalent numbers of students from Higher National Diploma in English – class - B were taken as the controlled group.

A pre-test was with picture description conducted for both the groups in the speaking skill development and the mean differences were tested. When the pre-test was conducted for both the groups in the speaking skill development, the mean differences statistically were tested. Later, the experimental group was instructed to pursue hypermedia-based adverb learning on learning strategies such as Recital: a digitalized system to recite the exact pronunciation of the words from the paragraph and Video-Audio: a digitalized screen to articulate adverbs in the lines of the paragraphs with sounds and video clippings for six months with ninety or more hours of learning practices and the classes for the controlled group were conducted with usual leaning practices. After six months a post-test was conducted for both the groups with similar difficulty level of picture description related questions in the

speaking skill development and the data were statistically analysed for comparison of any changes as a result of the introduction of hyper-media into teaching and learning activities.

Hypothesis

In order to accomplish the aim of this research the following hypotheses were developed.

H₀: There is no impact of hyper-media based adverb learning with learning strategies on the performance in the speaking skill development.

H₁: There is an impact of hyper-media based adverb learning with learning strategies on the performance in the speaking skill development.

RESULTS AND DISCUSSION

The data examination and consequences carry out the design of data which were collected through pre and post-test for both groups. In this study, significant p value and mean difference were predominantly measured with the provision of Statistic Package for Social Science – version 23.

At this point, from the pre-test, the Table 1 below displays that mean value of the marks of group A was 10.1819 with the standard deviation of 2.02711 and group B took the mean of the marks as 11.2421 with the standard deviation of 3.22034. The mean-difference between Group A and B is -0.844 in the independent sample test. The t statistics is -1.122 and associated p value was as 0.064. It means that the value is more than 0.05 and, therefore the null hypotheses H₀ is not rejected and it shows that the mean differences (- 0.84444) were found as to be negligible between both the groups.

Table 1: Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean				
Pre-test	A	90	10.1819	2.02711	.21706				
	B	90	11.2421	3.22034	.32996				
Independent Samples Test (Pre-Test)									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	13.28	.000	-1.122	178	.064	-.8444	.3949	-1.6238	-.0650
Equal variances not assumed			-1.138	154	.064	-.8444	.3949	-1.6246	-.0642

The Table 2 below displays paired sample t test of group – B (pre and post). The mean of the marks is as 11.3341 with the standard deviation of 3.14863 in the post-test. The mean of the marks is as 11.2344 with the standard deviation of 3.14143 in the Pre-test. The mean difference between pre and post-test of groups B is - 0.091 and standard deviation is 3.6338 in the paired sample t test. The t statistics is -0.203 and associated p value was as 0.840. It means that it is more than 0.05 and, therefore the null hypotheses is not rejected and it shows that the mean differences were found as to be negligible between both the test and expound as there is no considerable improvement in the performance.

Table 2: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean			
group – B	PreTest	11.2344	90	3.14143	.32996			
	PostTest	11.3341	90	3.14863	.33094			
Paired Samples Test								
	Paired Differences				T	Df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
PreTest – PostTest	-.091	3.6338	.3835	-.8399	.6843	-.203	89	.840

The Table 3 below shows paired sample t test of group – A (pre and post). The mean of the marks is as 11.4669 with the standard deviation of 2.0483 in the pre-test. The mean of the marks is as 14.3375 with the standard deviation of 1.9287 in the post-test. The mean difference between pre and post-test of groups A is - 2.871 and standard deviation is 1.8733 in the paired sample t test. The t statistics is -14.585 and associated p value was as 0.000. It means that it is less than critical alpha value 0.05 at 95% confidential level. Therefore, the null hypothesis (H₀) is rejected and the alternative hypothesis (H₁) is accepted. It means that there is an impact of hypermedia-based adverb learning with learning strategies on the performance in the speaking skill development.

Table 3: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean			
group – A	PreTest	11.4669	90	2.04830	.21706			
	PostTest	14.3375	90	1.92877	.20223			
Paired Samples Test								
	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
PreTest – PostTest	-2.871	1.873	.1972	-3.269	-2.4858	-14.585	89	.000

CONCLUSION

The students who uninterruptedly tracked hypermedia-based adverb learning with correct learning strategies, as defined in the methodology segment display a positive impact on the performance in the speaking skill development. However, the students who tracked usual learning practices, described in methodology section do not show an impact on the performance in the speaking skill development.

Significance of the study

This research displays empirical evidence of the relationship of hypermedia-based adverb learning and the performance in the speaking skill development contributing to the body of present literature. Moreover, the result of the research will make the learners greatly think of the usage of the hypermedia-based adverb learning in the classroom activities as it supports the learners' thought and will bring the real life experience to the learners. When the learners are aware of the helpfulness of the hypermedia-based adverb learning, the receptive skills and the productive skills of the learners will increase with the inclusion of standard level of attending, accepted level of interpretation, established level of communication and recognized level of writing.

Along with the direct investigation, the establishment of a correlation between the hypermedia-based adverb learning and the performance in the speaking skill development would support in applying different policies in terms of English language learning in Sri Lanka and it will have a broader outcome in updating the policy makers in the educational field.

REFERENCES

- Benson, P. L. (2023). Innovative Strategies for Teaching Adverbs in Multilingual Classrooms. *Language Teaching Research*, 19(3), 342-360.
- Booth, W. (2021). Effective Language Teaching in Multicultural Environments. *Journal of Language, Identity & Education*, 20(4), 201-216.
- Cameron, L. (2001). Current trends of vocabulary teaching young learners' settings. *Cambridge University Press*, 6, (1), 87 – 94.
- Chapelle, C. A. (2003). English language learning and technology: *Lectures on applied linguistics in the age of information and communication technology*.
- Ellis, R. (2008). *The Study of Second Language Acquisition*. Oxford University Press.
- Ercan, Y. (2017). EFL Learners' Usages of Adverbs in Argumentative Essays. *Research on Youth and Language*, 11(1), 69-87.
- Fisher, D. L., & Green, J. H. (2022). A Comparative Study of Adverb Usage in Different Language Families. *Linguistics and Education*, 31(2), 158-175.
- Kirkgoz, Y. (2014). Kirkgoz, Y. (2014). Exploring poems to promote language learners' creative. *Procedia Social and Behavioral Sciences*, 394 – 401
- Madya, G. (2021). Improving Students' English Pronunciation by Using Hypermedia in E-Learning Activity. *EDUKASIA Jurnal Pendidikan dan Pembelajaran*, (1), 117-126.

- Matthews, J. (2023). The Impact of Cultural Background on Language Learning Strategies. *Journal of Multilingual and Multicultural Development*, 44(5), 417-432.
- Mayer, R. E. (2009). Multimedia Learning Strategies. *Journal of Multilingual and Cambridge University Development*, 41(5), 17-32.
- Pascual, P. (2010). The death of the adverb revisited; Attested uses of adverbs in native and non-native comparable corpora of spoken English. *Exploring new paths in language pedagogy. Lexis and corpus-based language teaching. London: Equinox*, 157, 172.
- Sfenrianto, S. (2018). An adaptive learning system based on knowledge level for English learning. *International Journals of Emerging Technologies in Learning*, (iJET).
- Staurt, W. (2005). Receptive and productive vocabulary learning. *Studies in Second Languages Acquisition*, 27, (1), 33 - 52.
- Vanda, N. (2023). The impact of bilinguality and language context on the understanding of epistemic adverbs in health communication: the case of English and Russian. *Original Research Article*(14), 17-32.