

Application of Hot Potatoes 6 Software in Teaching English Listening Comprehension Skills for Primary Education Students at Tan Trao University

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Abstract

Review Article

The article is based on the theory of English reading comprehension skills, Hot Potatoes 6 software, and a survey conducted to assess the current state of English listening skills among students majoring in elementary education at Tan Trao University. Through an exploration of the teaching and learning practices of English, it can be said that students encounter specific difficulties in learning listening skills. They often lack interest in this subject and do not allocate much time for it. Based on these findings, the application of Hot Potatoes 6 software is introduced through four steps. The experimental results of implementing Hot Potatoes 6 software in teaching English listening skills for students majoring in elementary education demonstrate that students exhibit better listening skills, improved effectiveness, and a more proactive approach to learning.

Keywords: Hot potatoes 6 software, reading comprehension skills, English, student, primary education.

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1. INTRODUCTION

In the era of globalization, English has been chosen as the language for people worldwide to understand each other. It serves as the shortest path to access and update the vast knowledge of humanity. In today's age of information technology, the transmission of information and data across the world through media such as the Internet, press, and satellite broadcasts all utilize English as the official language. Thus, knowing and using English fluently is a means for people to occupy an inexhaustible source of knowledge.

English has become a compulsory subject in schools in Vietnam, especially in colleges and universities. During the process of learning English, learners always face difficulties related to all four language skills: listening, speaking, reading, and writing. Among these skills, listening is considered the most challenging because it requires regular practice to achieve comprehension. Both general students at Tan Trao University and students majoring in Elementary Education specifically encounter many difficulties in learning listening skills. Most of them are unable to fully understand the content of listening exercises due to a lack of vocabulary, unfamiliarity with the

intonation of native speakers, incomplete understanding of cultural differences in foreign language communication, limited opportunities and time for listening practice, and a lack of effective listening learning methods. As a result, they have a fear of learning listening skills.

The article explores the application of Hot Potatoes 6 software in teaching English listening skills for students majoring in Elementary Education at Tan Trao University. The aim is to improve students' English listening comprehension skills and enhance the quality of teaching in the English subject.

2. CONTENT

2.1. Some theoretical issues on listening comprehension skills and Hot Potatoes software

2.1.1. Some theoretical issues on listening comprehension skills

a. Definition

There are various perspectives on listening comprehension provided by different authors. Field states: "Listening is an unseen intellectual process, making it difficult to describe. The listener must distinguish sounds, understand vocabulary and grammatical structures, grasp intonation and the

speaker's intention, be able to recall and comprehend it within the cultural and social context of the speech" [2, p.38]. Anderson & Lynch believe: "Listening comprehension means understanding what the speaker has said. The listener plays a crucial role in the listening process by applying their diverse knowledge to analyze what they hear in order to understand the speaker's utterance"[1, p.21]...

Van Tan and Nguyen Van Đam (1997) in "Vietnamese Dictionary" hold the view that: "Listening is a process in which the auditory system receives external sounds and transmits them to the central nervous system. Here, these sounds are analyzed, converted into signals, and transmitted to the sensory organs to form human reflexes in response to those sounds" [9].

b. Main stages in teaching listening comprehension skills

Pre-listening stage: This is the stage before listening, aiming to generate interest, provide listening exercises, and create motivation for learners. One of the methods applied in this stage is to present questions and prompts related to the listening topic to help learners generate thoughts and predictions about the content of the listening. Additionally, supplementary materials such as illustrative pictures, charts, and vocabulary can be provided to enhance learners' language knowledge related to the topic [8].

While-listening stage: This is the most important stage because learners can actively listen and pause at necessary segments. For example, they can identify keywords within a passage and grasp the overall topic of the listening. From there, they can infer the meaning of entire sentences through context, guess meaning from the content of the discourse, or from intonation and stress patterns. They can also review challenging or crucial parts [8].

Post-listening stage: The purpose of this stage is to summarize and reinforce the knowledge learned in the lesson, including grammar structures, new vocabulary, pronunciation, and to assess the students' comprehension of the lesson [8].

c. Common difficulties encountered in the process of learning listening comprehension skills.

According to Ur, P. (1984), the author of numerous books on language teaching, learners often face the following six difficulties while learning listening skills: 1/ Failing to recognize the sounds produced by native English speakers. 2/ Having the habit of needing to understand every word in a sentence in order to comprehend the content. 3/ Struggling to understand when native English speakers speak naturally and at a fast pace. 4/ Needing to listen multiple times before being able to understand. 5/ Finding it challenging to grasp all the information and

predict what the speaker is about to say. 6/ Feeling fatigued and lacking concentration when listening for an extended period of time [3].

The difficulties in the process of learning listening skills, from the perspective of learners, are also outlined by authors Hoàng Văn Vân, Nguyễn Thị Chi, and Hoàng Thị Xuân Hoa (2006) in their book "Renewal of English Teaching Methods in Secondary Education in Vietnam" as follows: 1/ Difficulties in perceiving English sounds. 2/ Needing to understand all new words to grasp the speaker's intention. 3/ Inability to understand native speakers when they speak naturally and quickly. 4/ Needing to listen repeatedly. 5/ Difficulty in capturing all the information and unable to predict the next piece of information. 6/ Lack of concentration during listening [10].

2.1.2. The Hot Potatoes 6 software

a. Definition

The Hot Potatoes is a software suite used for creating exercises for e-learning applications on the World Wide Web (WWW). With this software, users can generate exercises and export them in the Hot Potatoes format. Subsequently, these exercises can be utilized to create quizzes on Moodle by importing questions from files or Hot Pot modules [4, 6].

b. The main functions of the Modules in Hot Potatoes 6 are as follows:

- ✓ JQuiz: This module allows the author to create exercises with four types of questions: Multiple-choice, Short Answer, Hybrid, and Multiple Select.
- ✓ Jcloze: This module provides tools for creating gapped text exercises where learners have to fill in the missing words.
- ✓ Jcross: This module enables the creation of crossword puzzle exercises.
- ✓ Jmix: JMIX offers a popular exercise format where learners arrange words or phrases to form a coherent sentence or sentences.
- ✓ Jmatch: JMatch is a module used to create matching exercises where learners have to match corresponding parts of a question.
- ✓ Masher: Masher is a tool designed to assist in managing a large number of Hot Potatoes exercises. It compiles all the exercises created by the Hot Potatoes modules into a cohesive unit, creating a table of contents and links for easy navigation and operation.

c. The advantages of Hot Potatoes 6 software in teaching English listening skills are as follows:

Applying Hot Potatoes 6 software will bring high efficiency to the process of teaching English, especially listening skills. During its usage, Hot Potatoes 6 software offers the following benefits:

- ✓ The ability to create fill-in-the-blank exercises.
- ✓ The ability to create matching exercises.
- ✓ The option to randomize the order of questions

and answers.

- ✓ The capability to provide feedback for answers.
- ✓ Completely free and can be embedded in PowerPoint, Moodle, or run independently on any web browser.
- ✓ After creating the exercises, they can be used on personal computers and uploaded to the Internet for students to review their knowledge.
- ✓ No limit to the number of questions on a single page.
- ✓ Intuitive, simple, and user-friendly interface.
- ✓ It runs on any computer without the need for additional software installation.
- ✓ Time control feature for exercises, where students cannot select any answers after the allotted time has expired [4].

2.2. The current situation of teaching English listening comprehension skills to students majoring in Elementary Education at Tan Trao University

2.2.1. Survey Participants

The survey was conducted among students from the A and B classes of the Primary Education, consisting of 123 students from different provinces, including 114 female students and 9 male students. The students' cognitive levels vary. The majority of them have been studying English since the 6th grade, while some have never studied English before. However, they can only perform well in grammar-focused exercises, as they are hesitant in learning listening skills, considering it as one of the more challenging skills. Most students lack effective listening learning methods and struggle to allocate sufficient time for this skill. During listening classes, their concentration is often low, and they fail to

meet the teacher's requirements.

2.2.2. Survey Content and Method

The main textbook used in the curriculum is "Life Lines" (Intermediate) by Tom Hutchinson [7]. This textbook consists of 14 lesson units covering various topics and advanced language levels. In this semester, students are required to attend 45 theory classes, with approximately 12 classes dedicated to listening skills. The following are the 6 topics that students must study in class.

Table 1: Listening Topics in the curriculum

Ordinal number	Topics	Number of classes
1	Modern life	02
2	Lucky thing	02
3	Your future	02
4	Relationships	02
5	Law	02
6	Tourism	02

With only 12 lessons dedicated to listening, students have limited classroom time to practice their listening skills. The combination of limited time and extensive content leads to students being unable to meet all the requirements of the lessons.

2.2.3. Survey Results

a. For students

A questionnaire was designed to gather students' opinions and assess the current situation of their listening skills. The results are as follows:

Table 2: General Information and Difficulties of students in learning English listening comprehension skills

Question	Choose option			
	A	B	C	D
1. Do you like learning English listening skills? A. Yes B. Somewhat C. No	4,1 %	20,3 %	75,6 %	-
2. What do you think about English listening skills? A. Easy B. Somewhat difficult C. Difficult D. Very difficult	0 %	9,7 %	42,3 %	48 %
3. What difficulties do you encounter in learning English listening skills? (You can choose more than one option). A. You are not accustomed to the intonation of native speakers. B. You don't know the vocabulary and grammar structure C. You lack the ability to infer context D. You cannot distinguish between different sounds in English. E. Other difficulties (Please write here).....	61,7 %	70,7 %	52,8 %	68,3 %
4. How long do you practice listening skills per week? A. Never B. 30-45 minutes C. 1- 2 hours D. 3 – 4 hours	65 %	18,7 %	13 %	3,3 %
5. What do you usually do during listening classes? A. Sit quietly B. Focus on listening and answer the teacher's questions C. Focus on listening but have difficulty answering the teacher's questions D. Not pay attention to listening and unable to provide answers E. Other activities (Please specify here).....				

Question	Choose option			
	A	B	C	D
6. Have you heard of or are you familiar with the Hot Potatoes 6 software? A. Yes B. No If yes, in what situation? Please specify here.				
7. What do your teachers usually do to help you improve your listening skills? (You can choose more than one option) A. Redesign the listening materials to match the students' proficiency level while ensuring the content of the lesson B. Provide additional vocabulary and grammar structures related to the lesson content C. Apply ICT (Information and Communication Technology) into the teaching process D. Other activities (Please specify here)				

b. For teachers

A survey was conducted among 5 teachers from the Faculty of Foreign Language who are directly involved in teaching the English 2 module at university-level classes with the same curriculum as the Primary Education program. The survey questionnaire consisted of 7 questions aiming to explore the current situation of teaching listening comprehension skills among the teachers, as well as to gain a deeper understanding of the overall English learning situation, particularly the listening skills of the students.

Most of the teachers (4/5) feel uninterested in teaching listening skills, and only 1 teacher enjoys it. 100% of the teachers believe that teaching listening skills is difficult because of the students' limited language proficiency and the challenging listening materials. Students lack effective listening learning methods and have limited opportunities to interact with native speakers, resulting in their lack of understanding, frustration, and disinterest in learning this skill.

Many teachers share similar views on the difficulties students face when learning this skill. 100% of the teachers believe that students are not familiar with the intonation of native speakers and struggle to distinguish English sounds. 3/5 of the teachers also think that students lack the ability to infer meaning from context during listening. Most teachers believe that students often lack concentration during listening activities. Based on these difficulties, most teachers observe that students tend to remain silent and struggle to provide answers when prompted by the teacher.

To help students improve their listening skills, most teachers redesign listening materials to suit their proficiency level and provide additional vocabulary and grammar structures relevant to the lesson content. 60% of the teachers agree with integrating information and

communication technology (ICT) into teaching practices, hoping that students will benefit from these activities.

When asked about Hot Potatoes 6 software, all teachers are familiar with it. However, their utilization of the software remains limited. 100% of the teachers have never used this software to teach listening skills to university students.

Based on the data collected from the survey of teachers in the Faculty of Foreign Languages, it can be concluded that first-year university students encounter certain difficulties in the process of learning listening comprehension.

In summary, through the investigation of the teaching and learning situation of English, especially listening comprehension, it can be said that students of K1 Primary Education at Tan Trao University, face specific challenges in learning listening skills. From these findings, the application of Hot Potatoes 6 software to support students in improving their listening skills becomes essential and highly effective.

2.3. Experiment on the application of Hot Potatoes 6 software in teaching listening comprehension

2.3.1. Overview of the experimental process

Purpose of the experiment: To test the feasibility and effectiveness of this software in improving listening comprehension skills for students of K1 Primary Education at Tan Trao University. The experiment aims to validate the scientific hypothesis of the research topic.

Content of the experiment: Conducting a practical teaching experiment on three listening lessons in the English 2 module, utilizing the Hot Potatoes 6 software.

Table 3: Titles of the experimental teaching lessons

Ordinal numbers	Name of the lesson	Number of classes
1	Making polite requests	1
2	Agreeing and disagreeing	1
3	At the doctor's	1

Research subjects: 123 students of the K1 Primary Education were selected for the study. Among them, 60 students from A Primary Education Class were assigned to the experimental group, and 63 students from A Primary Education Class were assigned to the control group. The students from both classes are first-year students of the 2014-2018 training course and are studying the English 2 module.

2.3.2. Experimental process

- Pre-experiment assessment: The proficiency level of the experimental and control groups was evaluated through a listening comprehension test. The test results are as follows:

- + K1 A Primary Education Class (Experimental class)
- + K1 B Primary Education Class (Control class) \bar{X}

Table 4: Pre-experiment test results

Test	Class	$\frac{\sum x_i}{n}$	1	2	3	4	5	6	7	8	9	10	\bar{X}	S^2	Standard deviation
1	Experimental (TN)	60	0	5	13	19	16	4	3	0	0	0	4.0	1.15	1.07
	Control (ĐC)	63	0	7	17	20	13	3	3	0	0	0	3.9	1.12	1.24

Table 4 shows the mean value: \bar{X} ; the variance S^2 of the experimental and control classes is nearly equivalent. This indicates that the proficiency level of the experimental class and the control class is similar in terms of learning ability.

- Experimental Procedure

- + For the control class: regular teaching was conducted according to the daily lesson plans without applying the Hot Potatoes 6 software in the listening skill instruction.
- + For the experimental class: listening skill instruction was conducted with the application of Hot Potatoes 6 software. To obtain accurate and persuasive results, I used the software as follows:

Step 1:

- + Prepare the teaching conditions with the application of Hot Potatoes 6 software.
- + Select the teaching content from the training program.
- + Choose the experimental group and the control group.
- + Instruct students on the method of learning listening skills with the application of Hot Potatoes 6 software.

Step 2:

- + Design the lesson plan outline with the use of Hot Potatoes 6 software.
- + Check the necessary conditions for the lesson (projector, speakers, computer, CD).

Step 3: Teach listening comprehension skills with the use of Hot Potatoes 6 software.

Step 4: Evaluation.

- Experimental Activities: Conducted three experimental activities using the Hot Potatoes 6 software in teaching listening skills.
- Post-experimental assessment: Designed a test for both the experimental and control groups. The test was graded on a scale of 10. The test scores from both groups were analyzed using mathematical statistics methods such as mean value, variance, and standard deviation. The learning outcomes between the experimental and control groups were compared using the z-test.

Post-experimental Test: K1 A Primary Education class (Experimental class); K1 B Primary Education class (Control class).

Table 5: Results of the post-experimental test

Test	Class	$\frac{\sum x_i}{n}$	1	2	3	4	5	6	7	8	9	10	\bar{X}	S^2	Standard deviation
1	Experimental (TN)	60	0	4	12	21	16	4	3	0	0	0	4.2	1.43	1.19
	Control (ĐC)	63	0	9	14	21	14	3	2	0	0	0	3.9	1.51	1.23

The data in Table 5 shows that the average test scores of the experimental class are higher than those of the control class ($\bar{X}_{TN} = 4.2$, $\bar{X}_{ĐC} = 3.9$). The variance of the experimental class is lower than that of the

control class ($S_{TN}^2 = 1.43$; $S_{ĐC}^2 = 1.51$), indicating that the test scores of the experimental class are more concentrated compared to the scores of the control class.

To confirm these findings, I conducted a comparison of the mean values and analyzed the variances of the test scores between the experimental and control classes in the post-experimental phase. The hypothesis H_0 was set as: "There is no difference in the

learning outcomes between the experimental and control classes." Using the U-test to test the hypothesis H_0 , the results of the hypothesis test are presented in Table 6.

Table 6: Hypothesis test \bar{X} for post-experimental test scores

Hypothesis test \bar{X} for two samples (U-Test: Two Sample for Means)	Experimental (TN)	Control (ĐC)
Mean ($\bar{X}_{ĐC}$ and \bar{X}_{TN})	4.2	3.9
Known Variance	1.43	1.51
Observations	60	63
Hypothesized Mean Difference	0	
z (numeric value z = U)	-5.07	
P(Z<=z) one-tail	0	
z Critical one-tail	1.64	
P(Z<=z) two-tail	0	
z Critical two-tail	1.96	

The analysis results in Table 6 show that $\bar{X}_{ĐC}$ ($\bar{X}_{TN} = 4.2, \bar{X}_{ĐC} = 3.9$). The absolute value of U = 5.07 > 1.96 (the critical value of the standard z-score), indicating that the hypothesis H_0 is rejected with a probability (P) of 1.64 > 0.05. Therefore, the difference between \bar{X}_{TN} and $\bar{X}_{ĐC}$ is statistically significant with a 95% confidence level.

To further confirm this conclusion, an analysis of variance was conducted. The alternative hypothesis H_A was set as: "Teaching listening skills using Hot Potatoes 6 software has an equal impact on the academic performance of students in Experimental and Control classes using traditional teaching methods." The results of the analysis of variance are shown in Table 7.

Table 7: Analysis of variance for post-experiment test score

Anova: Single factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Experimental	60	253	4.2	1.43		
Control	63	246	3.9	1.51		
ANOVA						
Source of Variation	Total variance (SS)	Degrees of freedom (df)	Variance (MS)	$F_A = S_a^2 / S_N^2$	FA (P-value)	F crit
Between Groups	29.8	1	29.8	20.3	0	3.9
Within Groups	177.6	121	1.46			
Total	180.6	122				

In Table 7, the summary section provides the number of tests (Count), total scores (Sum), average scores (Average), and variances (Variance) for both Experimental and Control classes. The analysis of variance (ANOVA) table shows that $FA = 20.3 > F_{crit} = 3.9$, so the H_A hypothesis is rejected. This means that different teaching methods have an impact on the stability and knowledge retention of students.

Therefore, based on the experimental results, the stability and knowledge retention of students in the Experimental class after the experiment are higher than those of students in the Control class. This finding aligns well with the scientific hypothesis of the research project.

3. CONCLUSION

The application of Hot Potatoes 6 software in teaching listening skills in certain English language

courses at Tân Trào University has yielded positive results, as evidenced by the progress made by students in the experimental group compared to the control group. The results of using Hot Potatoes 6 software in teaching listening comprehension have validated the scientific hypothesis set forth. Based on the research findings, regular implementation of Hot Potatoes 6 software in teaching listening skills in this English language course will help students improve their listening comprehension abilities and contribute to enhancing the quality of English instruction, particularly in the area of listening skills within the university.

Overall, the application of Hot Potatoes 6 software has demonstrated its effectiveness in enhancing students' listening skills and has the potential to improve the quality of English language instruction,

especially in the realm of listening comprehension at the university.

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