

# An Empirical Study on Obstacles and Countermeasures of English Audio-Typing Based on Monitor Theory

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**Abstract:** English audio-typing is a college skill-training course that integrates professional knowledge such as English listening, typing and business and secretarial English. Its main purpose is to use a large number of English simultaneous listening and typing training to master the audio-typing skills, so that they can independently or assist in English audio-typing tasks on various occasions. Based on the Monitor theory proposed by Krashen, this study attempts to use the “i+1” approach to design the teaching of the course, analyzes the obstacles from the angles of listening comprehension ability, typing skill and listening and typing skills and explores the countermeasures. The study conducted experimental teaching and discussed the pre-test and post-test data of the typing and audio-typing speed from the results of T test. In conclusion, English audio-typing teaching based on the Monitor theory can effectively and significantly improve the students' typing and audio-typing speed.

**Keywords:** monitor theory; English audio-typing; obstacle; countermeasure

## 1. Introduction

As a university course for innovation and skill training, audio-typing could comprehensively strengthen students' specialized knowledge in the field of English listening and typewriting, business English, tourism English and secretarial English, etc. Based on a certain degree of English proficiency and a great deal of audio-typing training, the main purpose of this practice is to make trainees master the basic skill of simultaneous English listening and typing and to enable themselves to accomplish the task of simultaneous English listening and typing in various occasions by an independent or a cooperative way.

## 2. Theoretical foundation

Krashen, a distinguished American linguist, proposed the monitor model of second language in 1970s, in which he linked linguistic theories to practical language teaching. After that, he also put forward five corresponding hypotheses to consolidate his theory that includes Comprehension Input Hypothesis, Acquisition-Learning Hypothesis, Monitor Hypothesis, Natural Order Hypothesis and Affective Filter Hypothesis.

English audio-typing would provide a scenario where the ability of English listening comprehension and the ability of computer operation could be integrated. By participating in such training as English listening comprehension, typewriting skills and audio-typing, students could enhance the level of English listening and typing gradually. This training pattern has a good agreement with the monitor model theory.

## 3. Analysis of the obstacles in English audio-typing

### 3.1 Listening comprehension ability

Listening plays an important role in the process of English audio-typing, which directly affects the result of listening and typing. At the same time, English audio-typing requires a higher response speed for listening. It not only requires learners to decode long sentences quickly and decompose them into

short sentences, phrases and words, but also requires learners to input the computer at the same time, and pay attention to what follows. But the listening level is influenced by the learners' basic language knowledge, such as phonetics, vocabulary, grammar and so on. In the training of audio-typing, most learners cannot fully understand the material. Specific performance for the lack of vocabulary, phonetic defects and grammatical knowledge of the system of the degree of inadequate and so on. Krashen's "Acquisition and learning hypothesis" requires the learner to achieve unconscious acquisition and conscious learning, so the learner can start from word to sentence and gradually increase difficulty to passage when practicing audio-typing, the process is gradual. Learners need to combine the listening skills and vocabulary accumulation, effective use in the listening process, at the same time use typing skills will hear the content of editing, so that the complete output. The higher the level of listening comprehension, the more successful the listening task will be.

### ***3.2 Typing skills***

On the premise of mastering listening skills, typing skills are also a major problem affecting learners' information input. The computer operating ability and the keyboard input ability will affect the speed of typing. Influenced by the environment and individual ability, different learners have different problems when typing, such as the unfamiliarity of the keyboard, the switch of capital letters, and the use of punctuation. In order to improve the speed of typing, first of all, learners should strengthen the familiarity of the keyboard, and then repeatedly practice touch-typing from sentences to articles, and constantly improve the ability of touch-typing. The process of touch-typing is not only to lay a solid foundation for English audio-typing, but also an irreversible process. When the fingering proficiency to a certain extent, the amount of information input is naturally enlarged. Krashen's "Input hypothesis" holds that the input materials of language acquisition should follow the "i+1" principle. Learners should first reasonably recognize their existing typing level, that is, "i", and then formulate the next stage of "+1" content, from easy to difficult, step by step. Quantitative change is the basis of qualitative change. Repeated practice will make learners' typing skills achieve a leap from quantitative change to qualitative change

### ***3.3 Audio-typing strategy***

English audio-typing is a combination of listening comprehension and keyboard input ability. Listening and typing requires learners to have the ability of adaptability and coordination, short-term memory of words and sentences, comprehension of short passages and the ability to adjust their state during listening and typing. Specifically, it is necessary to go through a series of processes: language perception, vocabulary recognition, grammatical relations determination, establishment of multi-dimensional semantic schema, derivation of internal meaning, etc. In the process of listening and typing, the learner's mind is highly concentrated, which inevitably leads to the psychological pressure of tiredness and restlessness, and the feeling of tiredness will greatly reduce the effect of listening and beating presented by the learner at the end. This requires the learner to control his emotions, to ease the tension and anxiety. Learners can take appropriate ways such as listening to light music to relax, take a nap, etc. which can reduce the burden of the mind, and actively adjust their own state, so that the content of listening and typing can be effectively output. At the same time, in the process of listening and typing, learners should grasp the main idea of the passage, pay attention to the extraction of key words and the shorthand of the words. Krashen's "Affective filter hypothesis" teaches learners to reduce or overcome negative affective factors, and to promote language acquisition with a positive attitude and a good state of mind.

## **4. Empirical study**

### ***4.1 Object of Study***

Among English major undergraduates in the grade of 2017 in Wuchang Institute of Technology, 30 students were selected into experimental class and performed experimental teaching. Also, the other 30 students were selected into control class.

### ***4.2 Study methodology***

Quantitative and qualitative studies is adopted in this project. (1) The empirical study. Experimental

class was arranged to implement experimental and carry out empirical study. This paper discusses and analyzes the practical problems affecting English typing and English simultaneous typing in the course of the experiment, adjusts and improves the teaching content and methods, forms an effective teaching model, and improves the students' English simultaneous listening and typing level. (2) The quantitative analysis. The SPSS statistical software is used to conduct statistics and analysis on the data obtained from the test scores before and after the experiment. Through quantitative analysis, the teaching evaluation standard is developed to test the teaching effect.

### 4.3 Results and discussion

In the one-year period of experimental teaching, the data associated with typing speed and audio-typing speed of students in both kinds of classes were recorded before and after the experiment, followed by a factorial analysis using SPSS. In this section, the result of t test was specifically employed to discuss typing speed and audio-typing speed before and after the experiment. Also, this section included analysis and discussion of the information acquired from interviews.

#### 4.3.1 Experimental teaching

For the teaching practice in experimental class, the monitor model was regarded as theoretical basis and the difficulty of this training pattern was increased step by step. There were totally 64 class hours, with 4 class hours distributed in each week. Among these, students were guided by the teacher to participate in such trainings as listening skill, typing skill, audio-typing in the first 2 class hours per week. As for the other 2 class hours, students were arranged to do keyboard input and computer operation autonomously and then to participate in listening and audio-typing trainings, etc.

##### 4.3.1.1 Analysis of descriptive data acquired before and after experiment

In order to investigate the normal situation of the two classes, the typing speed and audio-typing speed of students before and after the experiment were compared. The results are shown as follows.

Table 1. Typing speed and audio-typing speed of both classes before and after the experiment

	group	N	Mean (Characters/min)	Std. Deviation	Std. Error Mean
Typing speed before experiment	EC	30	67	.53790	.09364
	CC	35	72	.54792	.09262
Audio-typing speed before experiment	EC	30	23	7.55598	1.31533
	CC	35	28	8.65326	1.46267
Typing speed after experiment	EC	30	171	.47768	.08315
	CC	35	114	.50480	.08533
Audio-typing speed after experiment	EC	30	140	6.84418	1.19142
	CC	35	96	9.05371	1.53036

According to Table 1, it can be seen that students in both classes had low typing speed before the experiment, with the average typing speed of students in controlled class (72 characters per minute) slightly higher than that of students in experimental class (67 characters per minute). Whereas, after the experiment, the average typing speed of students in experimental class was 171 characters per minute, which was higher than students in controlled class (114 characters per minute). This variation indicates that students could obviously enhance their typing speed after participating in relevant training courses in experimental class. In fact, whether there was significant difference in terms of typing speed between the two class or not had not been revealed.

From the perspective of audio-typing speed before and after the experiment, Table 1 shows that the average speed of controlled class was 28 characters per minute, which was higher than that of experimental class with 23 characters per minute. However, the audio-typing speed of students in both classes was not high, which showed that there was room for improvement. According to previous studies, researchers found that monitor theory could produce important effect on enhancing students' audio-typing ability. But after conducted training, the average audio-typing speed of experimental (140 characters per minute) was higher than that of controlled class (96 characters per minute)

**4.3.1.2 Impacts of monitor theory on the ability of English audio-typing***Table 2. Independent-sample t-test on typing speed and audio-typing speed before and after the experiment*

		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
Before typing	Equal variances assumed	506	.479	-.778	66	.439	-.10251	.13177	-.36561	.16059
	Equal variances not assumed			-.778	65.888	.439	-.10251	.13170	-.36547	.16045
Before audio-typing	Equal variances assumed	.394	.532	-.824	66	.413	-1.62684	1.97503	-5.57012	2.31644
	Equal variances not assumed			-.827	65.626	.411	-1.62684	1.96710	-5.55470	2.30102
After typing	Equal variances assumed	.000	.997	2.560	66	.013	.30545	.11934	.06718	.54373
	Equal variances not assumed			2.564	65.999	.013	.30545	.11914	.06758	.54333
After audio-typing	Equal variances assumed	.357	.129	3.068	66	.003	5.99827	1.95531	2.09438	9.90216
	Equal variances not assumed			3.093	63.083	.003	5.99827	1.93945	2.12268	9.87385

It can be seen from Table 2 that there was not significant difference of the typing speed between experimental class and controlled class before the experiment, whose value was .0439. It meant that students in both classes had almost the same level in terms of the typing speed. Similarly, there was not significant difference of simultaneous audio-typing ability between experimental group and controlled group (0.413 higher than 0.05). These were indispensable prerequisites for this study. In general, the typing speed and audio-typing speed of students in controlled class were higher than those in experimental class, which represented that students in controlled class possessed stronger ability of audio-typing and also behaved better in fast typing, shown in Table 2. After training, significant difference in simultaneous audio-typing ability of students in experimental and controlled classes appeared (significant different was 0.003 and less than 0.05).

In terms of typing speed and audio-typing speed, Table 3 shows that there was not significant difference between the controlled class before and after the experiment, whose value were 0.102 and 0.285 respectively and higher than 0.05. But there was significant difference in the experimental class, whose value were approximately 0 and less than 0.05. The results mean that after participating in training, students significantly enhance their typing speed and audio-typing speed more frequently than before. As a consequence, what can be concluded is that a kind of simultaneous English audio-typing teaching based on monitor theory could significantly increase both typing speed and audio-typing speed of students.

Table 3. Paired-sample *t*-test on typing speed and audio-typing speed

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
EC	Before typing & after typing	-.43939	.29255	.05093	-.54313	-.33566	-8.628	32	.000
CC	Before typing & after typing	-.03143	.11054	.01868	-.06940	.00654	-1.682	34	.102
EC	Before listening and typing & after listening and typing	-7.93939	4.14532	.72161	-9.40926	-6.46953	-11.002	32	.000
CC	Before listening and typing & after listening and typing	-.31429	1.71106	.28922	-.90206	.27348	-1.087	34	.285

#### 4.3.2 Analysis of interviews

Students were interviewed in different stages and by this practice, researchers found that there were several questions proposed by interviewees. For example, they did not know how to strengthen their audio-typing ability, they found it difficult to understand those materials with longer length and although getting a rough idea, it was also difficult for them to guarantee the accuracy of listening and typing. A student said: “when listening to English. I usually try to search words one by one in my brain, and then put them together by using grammatical rules and type them out gradually”. The other student said: “when implementing audio-typing, the first came into my mind was Chinese generally and I would like to translate them into English”. The author believes that it is of great significance to an effective approach to strengthen students’ audio-typing ability. For this purpose, the monitor theory should be introduced into classroom-based English audio-typing.

In the interview conducted in experimental class, a student expressed: “I have mastered some stenographic strategies in listening and typing, and I could consciously use them in English audio-typing”. Many students believed that the monitor theory was beneficial to enhance their levels in terms of English audio-typing, found by the author. To be more specific, students believed that the English content they listened to and typed out was longer and correspondingly, this process became more fluent.

## 5. Conclusion

By reduplicative experiments and practices, it was found that such problems as anxiety, the lack of listening capacity and deficiency in stenographic aptitude were restraining factors for students to enhance their English audio-typing level. For this phenomenon, “i+1” method, in which the difficulty was increased step by step, was employed to strengthen the level of English input and the ability of English listening and typing gradually. It can be concluded that simultaneous English audio-typing teaching based on the monitor theory could effectively and significantly enhance students’ typing speed and audio-typing speed.

## Acknowledgements

This work was supported by the 2019 Educational Scientific Project of Hubei Provincial Department of Education (No. 2019GB081).

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