# The Effect of Software Instruction on EFL Students Pronunciation Skills

**Ju-Chun Ou**

Applied English Department, Overseas Chinese University

Taiwan

## Abstract

*The main purpose of the research aims to explore the effectiveness of students using software to learn English pronunciation skills in particular. Nowadays, English has become a bridge of communication around the world. Whether in work or society, good language skills can further expand social and communicative abilities. In recent years, the ability to communicate in English has been regarded as an important part of life, and many channels and methods have been used in learning to improve English ability, using software to learn independently, and learning easily without pressure. The researcher in this study adopted MyET, a professional listening and speaking training software, to explore the impact on students' English pronunciation. MyET can score oral ability, analyze and provide diagnosis toward pronunciation, intonation, fluency, etc. MyET allows students to learn English on the one hand, and on the other hand, students can continue to learn independently when they are out of the classroom. In order to better understand the effect of MyET on students' English pronunciation, SPSS was conducted through pre- and post-test results to achieve statistical analysis. The result reflects that our assumption is established that software instructions employed in authentic classroom improves students' willingness and effectiveness in English learning.*

**Keywords:** MyET, Pronunciation, SPSS, Effectiveness

## 1. Introduction

Learning one language requires more practice, including listening, speaking, reading, and writing, no matter Japanese, English, Spanish, French and so on. The goal of learning a language is to communicate; consequently, oral ability is extremely important. Nowadays, most people need a second language to survive in this rigorous society. In Taiwan, English is considered as an official foreign language because it is a bridge to the world. The reasons why learning English is critical are discussed as follows. First, English can be communicated in most countries, which in turn more and more people are learning English, whether they are children or the elderly. Secondly, there are many occupations related to English such as medical profession, business, engineer and so on. Lots of jobs require people to have basic English ability. Finally, English grade will affect total score because English is a basic subject in the exam. (Adil, 2019)

Inevitably, some people have accent while speaking English, which makes it difficult to understand. This situation abovementioned might cause misunderstandings while communicating with others. (Tsai, 2006) In addition, pronunciation is an essential focus of speaking. Nevertheless, for people who is learning English as a foreign language, it is hard to speak fluent English as Americans. People must pay more time and put more

efforts on learning English. Namely, it is vital of knowing how to amend pronunciation as well as improve the ability of oral speaking.

There are many ways of learning English via virtual classrooms or platforms. The ultimate goal of learning English is to enhance inner self and increase the speaking ability. If the language is learned well, people will be able to appreciate how much it helps one's life. As long as people can speak different languages, they will have more merits in social skills, works, careers, and society. For example, in order to give children a broader future, many parents ask them to go to private tutors or cram schools to improve their language ability. However, these cost money and may not necessarily achieve the desired results. Children are learning new languages under tremendous stress. On the other hand, having more conversations with foreigners is an efficient way to learn a target language. Taking English as an example, if people always chat with foreigners, when times go by their speaking will improve a lot because practice makes perfect. However, not everyone has an opportunity to talk with foreigners on a daily basis. Except for face to face learning, people can learn English online nowadays. The most importantly, technology is becoming more and more developed, more and more platforms have been invented to aim at learning English. There are lots of platforms free to use for the public. For those who are busy or having no resources to learn or even having financial difficulties, online software is a good pathway for them to learn.

In recent years, self-directed learning theory and continuous study have been discussed, especially in online learning. When it comes to online learning, the researchers cannot help but mentioning Computer-Assisted Language Learning (CALL) and Computer-Assisted Pronunciation Training (CAPT). These two theories embrace a wide range of information and communications technology applications and approaches to teaching and learning foreign languages, from the "traditional" drill-and-practice programs to student-centered practices such as teacher as a facilitator, project-based learning, and independent inquiry. .

This paper aimed to investigate whether the introduction of pronunciation-promoted software in the pronunciation class at the university level would result in developments in EFL learners' pronunciation. MyET adopted in the class can be easily downloaded to learn no matter on desktop or portable devices. The materials established in the software are designed by well-known chain cram schools or publishers. The main purpose is to strengthen English speaking ability as well as encourage the appropriate ways to achieve the willingness and effectiveness in English learning. The criteria of MyET scoring are categorized into four sections: pronunciation, fluency, intonation, and volume. MyET will analyze the extent to which learners need to strengthen. It is like a one-on-one tutor to correct leaners' pronunciation. MyET is suitable for people who have basic English ability but dare not speak or have no confidence in English. No matter what age groups, people can learn easily without stress. MyET will provide some practical words or sentences taken place in our daily life to increase conversation skills. Meanwhile, the materials can be repeated all the time to listen to the dialogues and easily grasp the learning progress. Additionally, MyET provides a wide range of courses, so that people can learn simple words in a short time and pick up our daily life dialogues. In order to correct pronunciation, learners can do exercises repeatedly on MyET to effectively amend verbal pronunciation anytime and anywhere, which is used to cultivate ability to overcome learning deficiencies.

With the teaching of language being more and more communication-oriented, the traditional classroom teaching is facing a big challenge and is being replaced by the "learner-centered" one, which means that learners will assume greater responsibility for their own learning. That is to say, learner autonomy has to be enhanced to meet the need of the new classroom teaching mode. Precisely speaking, students can set their own goals according to their own level, so that those who want to learn the standard language can cultivate the importance of autonomy and practical ability.

**Research Questions**
1. Does the invention in the use of MyET bring the effectiveness and make a great progress on students' pronunciation skill?
2. Which category of MyET is more influential: pronunciation, intonation, fluency, or volume?

## 2. Literature Review

MyET is a software which focuses on learners' oral expression. Learners can continuously operate the content to increase their familiarity. In addition, the dialogues learned from rich videos are diverse, which provide multiple languages to make students from other countries get familiar with the software as well.

The software, MyET, brings lots of conveniences for both students and teachers. Students can practice English more easily without pressure while using MyET. First, students can use the software anytime and anywhere, with no limitation to the classroom. As a consequence, students can find a place where they feel comfortable to take practices and tests. Secondly, the software can provide individual help. In the classroom, some students' English level is low, whereas others is high, which results in different learning progress. As a consequence, MyET can be an alternative way to cope with these problems. Students can choose the level which is suitable for them. Namely, teachers do not need to worry about that the whole class's progresses are out of synchronization. Thirdly, MyET provides many subjects and scenarios for students to practice. Students can learn how to speak authentically and being native-like. According to students' intonation, MyET will score and provide feedback with diagnosis report immediately. If students do not satisfy their performance, they can retake the test until they feel satisfied. Students can achieve self-examination and self-review. After continuous self-correction, students can obtain high scores and speak authentically. Continuous practice makes a great progress on the pronunciation skills. Fourthly, the operation of MyET is simple and the interface of App is vivid which can attract students to use the App more frequently.

## 3. Methodology

### 3.1 Subjects

The subjects in the study were 30 university freshmen who took English pronunciation course. The subjects were asked to take pre- and post-tests and told that the purpose of the tests was to investigate the effectiveness of MyET on their pronunciation skill as well as which category of MyET is more influential: pronunciation, intonation, fluency, and volume.

### 3.2 Course Material

The researcher adopted MyET as the course teaching and training materials. In addition, a great deal of subjects and sentences were designed to evaluate and train students' accent, pronunciation, intonation, and fluency.

### 3.3 Instruction and Testing Procedure

All subjects were administered the pretest to obtain initial scores of the students' English proficiency. After one-semester instruction of pronunciation skill, a posttest was administered to explore the effectiveness of MyET. The most importantly, the researcher aimed to investigate which category of MyET is more influential. Students should repeat all sentences recorded in advanced and then they can go to next sentences. All subjects were given the same test used in pre-test as a post-test.

## 4. Results of Data Analysis

The means and standard deviations of t the pre- and post-test scores of the adoption of MyET software were presented in Table 1.

Table 1 Descriptive Statistics of Pretest and Posttest

| N=30 | | |
| --- | --- | --- |
| **MyET** | **M** | **SD** |
| Pretest | 62 | 15.12907 |
| Posttest | 89 | 5.77350 |

A paired-samples T test was conducted to evaluate whether the adoption of MyET instrruction increases students' scores. The results indicated the mean scores for posttest (M= 89, SD= 5.77350) was significantly greater than the mean scores for pretest (M= 62, SD= 15.12907), t(29) =-16.900, p= .000 (Table 2). The results confirmed the effect and appropriateness of the adoption of MyET instruction.

Table 2 Results of Paired Samples T test

| | Mean | Std. Deviation | t | df | Sig. |
| --- | --- | --- | --- | --- | --- |
| Pretest-Posttest | -58.00 | 10.85255 | -16.900 | 9 | .000 |

The second question of the present study was the following "Which category of MyET (pronunciation, intonation, fluency, and volume) was influenced most after exposed to MyET instruction?" A multivariate analysis of variance (MANOVA) was performed on the data with the four scores (scores of pronunciation, intonation, fluency, and vulume) used as dependent variables and Group as the independent variable. The four dependent variable scores were calculated by subtracting test scores of each question type obtained at the beginning of the instruction (pre-test scores) from those obtained at the completion of the instruction (post-test scores).

The ANOVA for the Group main effect was found to be significant, $F_{(6,50)}= 25.515$ (Wilks' $\Lambda = .061$), $p < .001$. As a result, the univariate ANOVAs on each dependent variable were conducted as follow-up tests to the MANOVA. Using Bonferroni method, each ANOVA was tested at the .0125 level (.05/4). There was a significance in the accent scores, $F_{(3, 27)} = 53.224$, $p<.001$, eta squared = .824. The difference in the pronunciation scores was significant, $F_{(3, 27)} = 38.113$, $p = <.001$, eta squared = .375. The difference in the intonation scores was significant as well, $F_{(3, 27)} = 46.113$, $p = <.001$, eta squared = .538. The difference in the fluency scores was nonsignificant, $F_{(3, 27)} = 25.317$, $p=.159$, eta squared = .652.

### 4.1 Findings

The first significant finding of this study is that MyET has obvious effects on students' pronunciation skills. The present study demonstrates students' pronunciation skills have improved by using MyET. Furthermore, the research evidence that pronunciation, intonation, and fluency have an improvement except the volume is not improved. When students repeat the dialogues again and again, their pronunciation, intonation, and fluency will far more improve than before. However, their volume may be influenced by different accents or equipment. Hence, volume is hard to have great achievement.

## 5. Discussion

The researchers divided the pre-test and post-test as a comparison. Preliminary results show that students have made significant improvements in pronunciation, intonation, and fluency. The reasons are provided as follows. Firstly, it can be repeated countless times in the software, so the probability of being able to get used to the same pronunciation is very high. In terms of pronunciation, students can learn the authentic way of speaking. Through the playback mode, they can remember words and sentences commonly used in daily life more efficiently. In terms of intonation, students can learn what a person expresses. If different intonations are placed in random sentences, they will give people different kinds of feelings.

Secondly, MyET is more convenient than traditional teaching, allowing students to use it all the time. There is no need to worry about grade problems or facing the pressure of teachers and students. MyET can make learning easy, independent, and autonomous, which enhances students' confidence in speaking as well.

Lastly, there is not much change in volume because students will pause and be confused based on poorly pronounced words or longer sentences. In addition, strong accent is challenging for the software to record volume, which might cause students become less and less courageous to communicate with others.

### 5.1 Pronunciation

The software offers students some situations to test their pronunciation. Students should repeat when the example sentence is finished. The software will give the score on pronunciation afterward. Moreover, each sentence has different background. As the result, through different background changes, students are more active in the learning process.

## 5.2 Intonation

Intonation can let the other person know what kind of emotions you have. In the same sentence, rising tone means happiness, on the contrary, falling tone means sadness. This software emphasizes the intonation in every dialogue in the context. When students learn the correct intonation, they can speak naturally and express themselves in an authentic way so as to avoid misunderstandings in real life.

## 5.3 Fluency

Through MyET, students who do not speak English very often can take this opportunity to practice fluency. In Taiwan's learning environment, oral expression is the most difficult place to be trained. Through continuous practices, students can overcome the feeling of tension in the face of foreigners.

## 5.4 Volume

According to the result, there is little difference in volume category. MyET can help EFL students speak at an intelligible rate of speech, so they can be confidently pronouncing each sound in every word perfectly. In addition, it also facilitates students to speak naturally and confidently like native speakers. However, having an accent may cause some difficulties in speech which results in no oblivious improvement in volume category. Apart from that, strong accents might interfere the recording which leads to the least increase in volume category.

## 5.5 Teacher training

There are many approaches and methods to teach or learn English. Nowadays, more and more teachers take advantages of Flipped classroom and distant teaching. These teaching methods become common, and students prefer these innovative teaching methods to traditional teaching methods. As a result, the entire learning environment has started to focus on autonomous learning. In light of that, teachers should be trained well in how to adopt applications to teach so that students can operate the application flexibly when studying independently. Even if students learn independently, teachers have the responsibility to observe students' learning progress.

## 5.6 Pedagogical Implication

The result of this study could be a good demonstration for teachers to provide more options in English pronunciation learning. Through the software, teachers could promote the ability to devise a flexible variety of activities in order to stimulate students' learning as well as make them better interested in English communication. This study has set up a great value for other similar researches and should be replicated with students at various English proficiency levels. Through MyET, teachers could realize which part is the most challenging for students so as to design corresponding courses to strength students' weaknesses. In addition to applications, Flipped classroom approaches have gotten substantial attention in the last decade because they have a potential to stimulate students' engagement as well as active and collaborative learning. In Flipped classroom, a traditional face-to-face lecture is moved out of class time. The Flipped classroom relies on technology and is therefore suitable for online or blended learning, which were predominant forms of learning during the COVID-19

or in the post-epidemic era.

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