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Use of Authentic-Speech Technique for Teaching Sound Recognition to EFL Students

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The main objective of this research was to test an authentic-speech technique for improving the sound-recognition skills of EFL (English as a foreign language) students at Roi-Et Rajabhat University. The secondary objective was to determine the correlation, if any, between students' self-evaluation of sound-recognition progress and the actual (quantified) results of their progress in the course of the research period. Sixty-four participants took part in this study. The duration of the research period was two semesters. Two research instruments were utilized: 30 versions of a test-worksheet containing authentic English text for aural-test purposes, and one questionnaire which was administered at the end of each semester. The collected data were statistically analyzed by using average, percentage, frequency and standard deviation. Graphics facilitate explanation of analyses, including depiction of linear regression (trend) when appropriate. Conclusions would suggest that use of the authentic-speech technique, together with additional though minimal class exercises, resulted in a robust improvement in sound-recognition skills by all research participants. Analysis of the questionnaire results, moreover, confirmed that the students participating in this study were largely convinced they had made progress toward resolving earlier sound-recognition problem-areas.

Keywords: sound recognition skills, listening comprehension, authentic English speech, EFL (English as a foreign language)

Introduction

The development of listening skills for EFL (English as a foreign language) students usually receives little emphasis in language instruction (Thanajaro, 2000). Part of the reason for this is that many instructors believe that language-listening skills can be acquired almost through an "osmosis" process which results from constant listening. However, many EFL students find it difficult to develop good listening skills because of sound-recognition problems. Such problems result when the language they are listening to contains sounds that are not in their own native language. The case in point here concerns Thai EFL students who are listening to spoken English.

Spoken English contains several sounds which are totally absent in spoken Thai. Those sounds are listed with examples in Table 1.

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Table 1

English Sounds Totally Absent in Spoken Thai

English sound	Examples
v	vine, van
sh	show, shark
z	zebra, zoo
zh	pleasure, could you
ss	dessert, disservice
th	that, thin

Examples of major sound-recognition problem areas for Thai EFL students of spoken English are summarized shown in Table 2. These examples are drawn from the writer's nine years' experience of teaching listening/speaking classes to EFL students at Roi-Et Rajabhat University.

Table 2

12 Categories of Sound-Recognition Problem Areas

1	2	3	4	5	6	7	8	9	10	11	12
Final "s" (Verbs)	Final "s" (Noun plurals)	Final "ed" (All)	Final "se" (All)	Final "'t" or "n't" (All)	Final "ty" vs. "teen"	Final "r", "'re", "re" or "er"	Initial and medial "th" (All)	Initial "v" vs. Initial "f" and "w"	Initial "ch" vs. Initial "sh"	Personal pronouns with similar sounds	Contrac-tions (All)

It can be seen in Table 2 that, 7 of the 12 problem-areas listed pertain to final sounds, each of which affects meaning in various ways. There is a reason for this. The Thai language has a limited number of possible word endings, eight to be exact, and none of those endings are ever enunciated in spoken Thai. This is the reason why Thai students, especially those at basic- and intermediate- learning levels, find it so difficult to "hear" and subsequently pronounce final sounds in English. Differentiating between "can" and "can't", which have opposite meanings, may therefore be a challenge.

English sounds which are totally absent in spoken Thai, such as "v" and "th", are "heard" and subsequently pronounced as their closest Thai sound-equivalents, namely "w" and "de". Therefore, "the van" becomes "de wan".

So, why can't one's brain automatically hear and reproduce sounds which are not an established component of one's native, spoken language? In fact, infants can do just so (McMahon, 2002). They are capable of producing any sound from any languages. As they grow a little older, their brains "tune out" sounds which are not commonly heard in the immediate family environment. Recent advances in neuroscience research, however, would indicate that the brain can grow new (neuron) tissue to detect ("tune in") sounds lost in early childhood, if given the proper environmental sound-stimuli (della Chiesa, 2007; PhysOrg, 2009; as cited in Irvine, 2009).

Purpose

The purpose of this research is to test an authentic-speech technique for improving the sound-recognition skills of Thai EFL students. "Authentic-speech" is herein defined as snippets of English conversation of the type which a native English speaker would use with another native English speaker.

Methodology: Sampling and Survey Instruments

Sixty-four participants took part in this study. All were 2nd and 3rd year students majoring in English, business English or computer education. The sampling was purposive. The duration of the research period was two semesters. Two research instruments were utilized: (1) 30 versions of a test-worksheet containing authentic English text for aural-test purposes; and (2) one self-assessment questionnaire which was administered at the end of each semester.

The 30 test/worksheets constitute the primary research instrument and each test/worksheet contains 10 sets of authentic English speech. Text was read aloud at normal speed by the researcher, who is a native English speaker from the San Francisco Bay Area.

After reading text, once and at normal speed, the researcher told students to check what they heard. For example:

	A	B
Set 1	√ Who's he?	Who's she?
Set 2	I can go there.	√ I can't go there.
↓	Etc., to Set 10	

In this example, the researcher reads aloud "Who's he?". Students who hear this accurately will check the left-side (= A) entry. After a short pause (four to five seconds), the researcher then reads aloud "I can't go there". Students who hear this accurately will then check the right-side (= B) entry. This process is repeated for each of the 10 sets per-test/worksheet.

The 30 test/worksheets were designed to contain a representative selection of commonly-used words in their various forms (pronouns, contractions, grammatical inflections of number and tense, etc.) together with phonological consideration that addresses important sound recognition problems of Thai students.

All students were aurally tested four times each semester, using the test/worksheets, for a total of eight tests. Each test consisted of 15 separate test/worksheets and lasted approximately 30 minutes. During Semester 1, students were tested four times on test/worksheets No. 1-15. During Semester 2, the same students were tested four times on test/worksheets No. 16-30. The same types of sound-recognition problem-areas are represented throughout both batches of the test/worksheets. The first two tests of Semester 1 were identical, meaning that the same text was read aloud. The last two tests of Semester 1 were also identical, but using a different text. This same procedure was used during Semester 2. Hence, there are eight tests in all. When aurally testing the research participants, the researcher read aloud from one of four distinct master key versions of the primary instrument.

This test procedure is illustrated in Table 3. The text reproduced on that table consists of the first three sets of authentic English speech taken from test/worksheets No. 1 and No. 16, as applied to Semester 1 and Semester 2, respectively.

The positioning of check-marks is intended to indicate the particular text read aloud by the researcher for each of the eight tests. Note that the "tests" on this table constitute abridged examples and not the complete, actual tests.

Test/worksheets were collected immediately after each test. Each test/worksheet was checked against the appropriate master key. There are 10 sets of authentic English speech per test/worksheet in order to facilitate scoring. Each set is worth 10 points, so the maximum score possible per test/worksheet is 100%.

Table 3

Example of Test-Procedure Using the Test/Worksheets

Test No.	Semester 1	Test No.	Semester 2
1	√ He said he could go. He said he couldn't go. √ What's her name? What's his name? I've barely eaten. √ I've nearly eaten.	5	√ Has their nanny come? Has her nanny come? She's up to monkey business. √ He's up to monkey business. √ How are you, sir? How are you sure?
2	√ He said he could go. He said he couldn't go. √ What's her name? What's his name? I've barely eaten. √ I've nearly eaten.	6	√ Has their nanny come? Has her nanny come? She's up to monkey business. √ He's up to monkey business. √ How are you, sir? How are you sure?
3	He said he could go. √ He said he couldn't go. What's her name? √ What's his name? √ I've barely eaten. I've nearly eaten.	7	Has their nanny come? √ Has her nanny come? √ She's up to monkey business. He's up to monkey business. How are you, sir? √ How are you sure?
4	He said he could go. √ He said he couldn't go. What's her name? √ What's his name? √ I've barely eaten. I've nearly eaten.	8	Has their nanny come? √ Has her nanny come? √ She's up to monkey business. He's up to monkey business. How are you, sir? √ How are you sure?

Throughout the duration of each semester, the researcher set aside five to ten minutes of class time per-class-day for reinforcement and practice of sound recognition skills. Most of the problem areas addressed focused on the 12 categories listed in Table 2. However, when addressing these problem areas, the researcher did not use the exact examples of authentic English speech appearing in the test/worksheets. Instead, other examples were created so that students would be exposed to many of the same sound recognition problem areas, but in different contexts. This was done intentionally in order to dissuade research participants from attempting to memorizing any of the test/worksheet entries and concentrate their attention on specific sound-recognition problem areas.

Similarly, student's verbal mispronunciations when reading aloud or engaging in conversation practice would be corrected in class by the researcher, especially, but not limited to, sound problems of the aforementioned 12 categories.

The purpose of all this review and correction was to practice and reinforce recognition skills of sounds considered by the researcher to be problematic for the research participants. It was hoped that this adjunct practice would be reflected, positively, via increasingly higher test-score results for the 30 test/worksheets.

The secondary research instrument is a multi-scaled questionnaire with two questions concerning degree of personal interest in learning English and the participants' opinion as to whether the test/worksheets were of value in helping them to improve sound-recognition problems.

All collected data was statistically analyzed by using average, percentage, frequency and standard deviation.

Results

Table 4 summarizes test results over both semesters in terms of relative frequency for all test/worksheet scores $\leq 70\%$.

So for example, in the case of Business English II, 18% of total test scores were $\leq 70\%$ during the first semester. That figure dropped to 3% during the second semester. Similarly, for Business English III, English II and Computer Education II, the commensurate reductions are from 14% to 2%, 18% to 4% and 22% to 6%, respectively.

Table 4

Freq of Scores ≤ 70% Expressed as Relative Freq by Group and Semester

A	B	C	D	E
	Business English II (12 students)	Business English III (9 students)	English II (20 students)	Computer education II (23 students)
Semester 1	18%	14%	18%	22%
Semester 2	3%	2%	4%	6%

Prior to the relative stabilization of scores that starts with Test 4, all groups showed rapid progress in frequency-percentage increase for the 100%, 90%-100% and 80%-100% score ranges during the period Test 1 to Test 3.

Referring again to Table 4, the low percentages (2% to 6%) for scores ≤ 70% during the second semester conversely mean a commensurate increase in scores ≥ 80%.

An examination of class-score percentage averages for Test 1 versus Test 8 yields similar positive progress-results, as is evident in Table 5 and Figure 1.

Table 5

Class-Score and Low-Score Averages for Test 1 and Test 8

	E	F	G	H
	Business English II (12 students)	Business English III (9 students)	English II (20 students)	Computer education II (23 students)
Test 1 class score averages	74.89%	80.37%	73.76%	75.73%
Low-score average for sample			68.16%	
Test 8 class score averages	94.83%	95.33%	94.80%	92.20%
Low-score average for sample			88.33%	

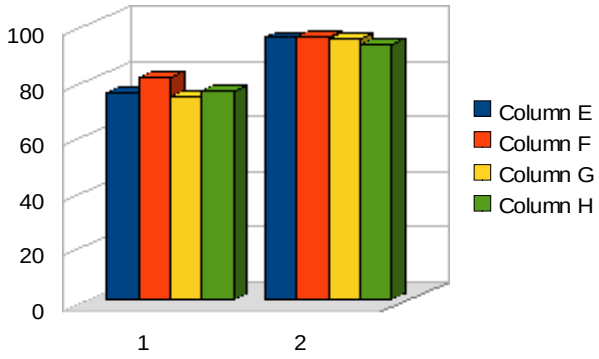

Figure 1. Comparison of group score average Test 1 versus Test 8 (1 = Test 1 and 2 = Test 8).

SD averages for all participants in all groups were examined. Generally, rapid improvement in SD was observed, meaning progressively smaller SD numbers. The improvement is especially apparent during the Semester 1 period (Test 1-Test 4). There is a relative stabilization of SD averages during Semester 2 (Test 5-Test 8). The smaller SDs translate into less guesswork and more precision with regard to sound-recognition. Figures 2, 3, 4 and 5 show SD averages and means for the 20 English II majors; similar progress was observed in all four groups.

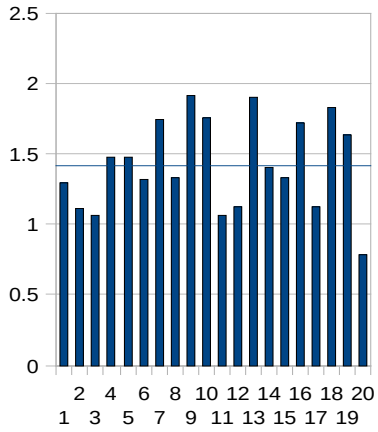

Figure 2. Test 1.

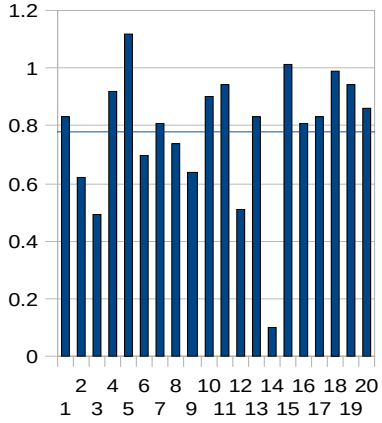

Figure 3. Test 4.

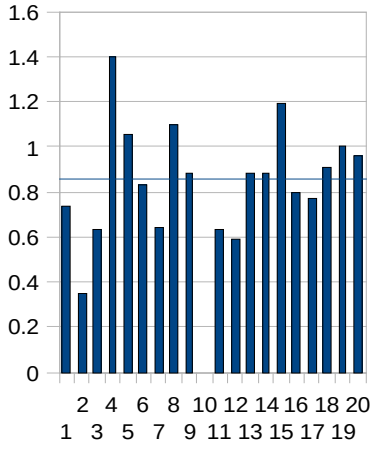

Figure 4. Test 5.

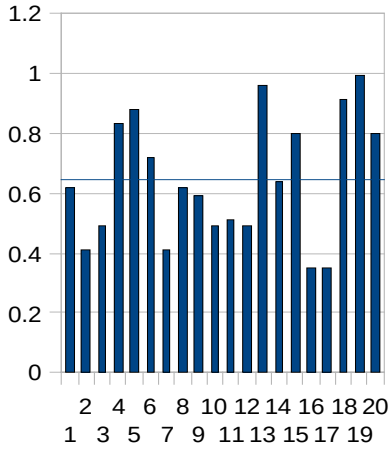

Figure 5. Test 8.

All analyzed data taken together (averages, percentages, SDs and frequencies) indicated a pronounced improvement in test-score progress for all participants in all groups over the two-semester period. Generally, the most improvement occurred between Test 1 and Test 3 in the first semester. Starting with Test 4 and continuing through Tests 5-8, a stabilization in test score averages was observed. The stabilization was the consequence of continuously high scores in the 80%-100% test-score range.

Exposure to the primary instrument in the form of eight tests, coupled with minimal classroom aural exercises which concentrated on sound-recognition problem-areas, collectively provided the “aural stimuli” needed to improve prior difficulties with sound recognition. This improvement is also affirmed by the 64 participants themselves, 97% of whom indicated on the final questionnaire that the test/worksheets helped them without doubt.

Discussion and Conclusions

The fact that the most progress in sound recognition took place during the first semester has an interesting implication. It implies that if this same group of 64 research participants had undergone identical research protocol with a different researcher, then their progress would have been modeled after that particular

researcher. In other words, the pronunciation of the researcher, if correct or incorrect, would have been mimicked and remembered in terms of "correct" sound-recognition experience in the same short period of time. This would hence appear to underscore the importance of exposure to native or near-native accents during early stages of the English-language sound-recognition learning experience.

One other implication of this research study is the possible need for a review of listening/speaking-curricula in order to accommodate the inclusion of a one-semester course in listening skills (sound recognition skills) to be taught prior to teaching existent listening/speaking classes. The incorporation of such a course in the existent curricula might serve to expedite the actual listening comprehension progress of students subsequently enrolled in a regular sequence of listening/speaking courses. In this connection, one must appreciate that sound-recognition is a pre-requisite to sound comprehension and can even affect spelling inasmuch as students will spell in accordance with what they perceive to hear.

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