

Setting up an Effective Pronunciation Lab

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Abstract

Kanda University of International Studies (KUIS) has been fortunate enough to be able to offer a stand-alone language lab (LL) focusing on pronunciation. However, in the past it has been the case that teachers who are not necessarily trained in pronunciation have been assigned to teach these classes without much support. Through the course of the current study we have compiled a body of existing pronunciation teaching research that has helped us build a course with a sound foundation and a body of materials for future LL teachers if so required.

In addition, we were inspired by a study by Shizuka (2008) to set up a systematic procedure of cyclical practice, testing and feedback, in order to: (1) link the lessons together; (2) provide more opportunities for practice outside of the LL; (3) maintain motivation; and (4) have students receive individual feedback. Voice recorders were purchased to be used in conjunction with the new state-of-the-art LL in order to allow for this cyclical system. This method was repeated throughout the semester and students were regularly surveyed on their perceived pronunciation abilities. Pre- and post-listening and speaking tests were also carried out to help gauge actual pronunciation abilities. We have implemented the course over a semester and the results of this study will be presented, followed by an overview of the steps to come.

Introduction

Kanda University of International Studies (KUIS) has been fortunate enough to

be able to offer a stand-alone language lab (LL) focusing on pronunciation. This lab was upgraded in Spring 2009 to include desktop computers that enable students to record audio files from sources ranging from CD's to movies to even their own voices. This is an incredible improvement from the old lab that only had cassette tape capabilities, and should be ideal for pronunciation instructors. However, in the past it has been the case that KUIS teachers who are not necessarily trained in pronunciation have been assigned to teach these classes without much support. Literally thrown in the deep end, it would often take these teachers up to a full semester to get a sense of how they should conduct the LL.

On the other hand, from the students' perspective, although pronunciation is a popular topic among language learners, it is also one of the most difficult skills to acquire. Part of this difficulty arises from the elusive nature of pronunciation. Unlike in writing classes where writing assignments can be tracked easily and compared to each other, students cannot easily compare their utterances and check how much their pronunciation has improved in the course of their studies. In other words, students may not be able to realize changes in their pronunciation that are too subtle and fluid.

Therefore, the current study wishes to explore the following questions: (1) What activities can be developed that do not require teachers to be experts of phonetics and phonology? and (2) What activities will help students be aware of their improvement in pronunciation? Through the course of the current study we have compiled a body of existing pronunciation teaching research that includes Shizuka (2008), which inspired us to set up a systematic procedure of cyclical practice, testing, and feedback. This method was repeated throughout the semester and students were regularly surveyed on their perceived pronunciation

abilities. This study, along with other current research, has helped us build a course with a sound foundation and a body of materials for future LL teachers if so required.

Literature Review

At the beginning of any pronunciation course (or any language course for that matter), one must contemplate the question of what to teach. Too often we dive in with our preconceptions of what the students need, but it is recommended to administer some kind of diagnosis (Celce-Murcia, Brinton, & Goodwin, 1996; Wong, 1987). This can be taken from any number of textbooks such as *Clear Speech* by Gilbert (2005) and *Accurate Pronunciation* by Dauer (1993). As an alternative, students can also be asked to reflect on their pronunciation, such as any problems they perceive themselves to have or how important it is for them to have good pronunciation (Hewings, 2004, p. 26).

Once a diagnosis or self-reflection has been administered, it may be of value to examine the pronunciation features that have been identified as problematic. According to Jenkins (2000), some features deserve more attention in the classroom than others because they play a larger role in smooth global communication. Termed the Lingua Franca Core (LFC), the phonology of international English need not bother itself with perfecting, for example, the pronunciation of English /θ/ (as in the 'th' of 'through') because most substitutions for this phoneme do not lead to a communication breakdown (p. 159). It may benefit the students if attention is brought to this concept that not all features of pronunciation need to be perfected.

How one conducts the class beyond this point of course depends on the

teacher. Kelly (2000) states that pronunciation instructors need “a good grounding in theoretical knowledge, practical classroom skills, and access to good ideas for classroom activities” (p. 13). In the context of the KUIS English Language Institute (ELI), most lecturers are of the TESOL and Applied Linguistics background. Therefore, it can be safely assumed that most ELI lecturers have some degree of familiarity with phonetics and phonology, and as most members have some teaching experience, it is hoped that they also have an abundance of practical classroom skills. As for good classroom activities, there is a plethora of resources one could refer to for ideas (Brown, 2008; Grate, 1974; Hancock, 1995; Hewings, 2007; Kozyrev, 2005; Laroy, 1995; Pennington, 1996). Swan and Smith (2001) give advice specific to speakers of various first languages, Japanese being among them (pp. 297-299).

Perhaps one of the most often-mentioned tasks of value in the pronunciation classroom is self observation and self monitoring (Celce-Murcia, Brinton, & Goodwin, 1996; Kelly, 2000; MacCarthy, 1978; Miller, 2006). This can be done through recording oneself and listening to the audio files, followed up by additional recordings for comparison. We highly value such tasks, and the new state-of-the-art LL encourages such self observation. Voice recorders can also be handy, as they can be taken home for additional practice, and as such we have purchased enough recorders for pairs of students to share in a 30-person classroom.

Shizuka (2008), who set up a cyclical design for his LL for Japanese junior high school students, became the inspiration for our current research study. As replications were encouraged by the ELI management at the time, we decided to forge ahead with a partial replication of the study according to guidelines in the 2008 Language Teaching Review Panel. In Shizuka’s study, each class was

composed as follows: “[T]he first 15 to 20 minutes were spent on teacher-fronted explanations and after-the-model collective repetitions...” (p. 70). Movie clips or songs were also presented to aid the explanation. “The remaining 70 to 75 minutes were spent on cyclical one-on-one performance testing/coaching...” (p. 70). There were 24 such sessions repeated throughout the year over three terms. To gauge the students’ self-perceptions, Shizuka administered a Japanese questionnaire every other class, of which the English translation can be seen in Appendix 1. He also asked a control group of all the other students who were not enrolled in the LL to take the survey once at the beginning and once at the end of the school year for comparison. What Shizuka found was that in the LL, students’ self-perceptions of their pronunciation increased over the year. However, perceived abilities of “the control group virtually did not change” (p. 78). It can be said therefore that the LL was successful in terms of raising the students’ awareness of their improvement in pronunciation. And without any complicated graphs explaining phonetics and phonology concepts that would confuse junior high school students, we believe this course is teacher-friendly as well.

Methods

There is an elective LL available to students in each ELI department at KUIS, the English, International Languages and Culture (ILC), and International Communication (IC) departments. The LL in this study is the elective course open to students of all years in the IC department. It is a one-semester course, offered twice during each academic year. The class size is traditionally quite small, approximately fifteen students. However, the semester that coincided with this study saw twenty-nine students enrolled in the course. The make-up of these students was

twenty-five female sophomores, one female junior and three male juniors.

As mentioned above, the study is a partial replication of Shizuka (2008). One aim of the study therefore, is to see if the results will reflect those in his junior high school study, despite the differences in age and setting. In addition, a further difference in the study is the specific items that were investigated. These differences can be seen in Table 1 below:

TABLE 1: Comparison of target pronunciation features

Shizuka (2008)	Current Study
/r/	/r/
/v/ /f/	/v/
/θ/ - as in think, thank	
/ð/ - as in the, other	/ʌ/ - as in uncle, truck

The items for this study were chosen after analysis of a diagnostic pre-test. There are certain pronunciation issues that are associated with Japanese students and have been well-documented (Best & Strange, 1992; Strange & Dittmann, 1984). Nevertheless, the diagnostics test was administered in order to establish the weak points of the participating students. The items selected from this analysis are all pertinent features in Jenkins' LFC (2000), and therefore are seen as important sounds for preventing communication breakdown. The pre-test involved the clear listening test and clear speaking test from Gilbert's *Clear Speech* (2005).

In addition to the items seen in Table 1, a number of other segmental and supra-segmental pronunciation features were incorporated into the course. These features included work on syllable stress and number, word stress, sentence stress, linking and assimilation amongst others. The differences in the pronuncia-

tion features under consideration in the current study and Shizuka's study are also reflected in the respective questionnaires. The two questionnaires can be seen in Appendix 1 and 2. As in Shizuka's study, we had the students complete the questionnaire in the first and last class, and periodically throughout the semester. This was in order to gauge any changes in the students' self perception of their pronunciation abilities. The questionnaire was also completed twice by a control group, once at the start of the semester and once at the end of the semester. The control group was also made up of IC students, with a breakdown of forty-five sophomores, sixteen juniors and seven seniors. Nineteen of these students were male, forty-nine female. The target group and control group both answered some background questions as part of the first questionnaire only. These background questions can be seen in Appendix 3. The questionnaires were carried out online during the lessons using SurveyMonkey.com.

The structure of the lessons was relatively uniform. Each lesson involved presenting and practicing new items, and giving the students feedback on their homework, which involved production of previous items. The new weekly items were introduced by means of gap fill activities from authentic material such as music videos or CD's, and movie or TV clips. Also, warm up conversational activities were designed in order for the language including the target sounds to be elicited naturally. An example concerning the target structure /Λ/ can be seen in Appendix 4.

Once the new features were introduced, the students received a handout containing further explanations on the items, and a number of activities to practice them. The handout incorporated activities from several textbooks, with the most frequently used including Baker's *Ship or Sheep (2006)*, Gilbert's *Clear Speech*

(2005), and Grate's *English Pronunciation Exercises for Japanese Students* (1974).

With the facilities available in the new LL at KUIS, the students were able to practice these activities individually at their computer, and also with a partner linked up through a webcam and headset. In addition, the students could also record themselves. They had the option of listening to the material and simultaneously shadowing, or listening and then repeating the text. Furthermore, all the texts (music, DVD's, textbook exercises, and student recordings) can easily be saved to a USB memory stick. This has greatly improved the capacity for students to practice outside the classroom what they have studied during the lesson.

For practical purposes, the cyclical method of practice, testing and feedback implemented in this study also differed from Shizuka's original study. Due to the large class size in this particular LL group, and the fact that the total number of classes was almost half that of the Shizuka study, the testing stage was carried out for homework. The students received a handout with example sentences and a short dialogue containing the pronunciation features to be tested. In the following class, the students received one-to-one feedback on their homework performance. This process was continued periodically throughout the semester. The process was made possible due to the purchase of a number of Olympus V-41 voice recorders which enabled the students to receive one recorder per pair. The voice recorders have an in-built USB function, allowing the students to practice their recordings and then e-mail their final production to the teacher between classes.

Results

In the LL, self-perception scores increased at a significant level. A paired sam-

ples T-Test of the first and last questionnaire administered revealed a significant increase, as can be seen in Table 2. However, the same increase was found for the control group, as given in Table 3. In addition, to examine actual perception and production abilities, listening and speaking pre-post tests were given to the LL students, in which a significant increase in performance was found in each case, as can be seen in Tables 4 and 5. Unfortunately, no listening or speaking scores are available for the control group due to lack of access to the students in that group.

Discussion and Limitations

As mentioned in the Results section, self-perception scores significantly increased for both the LL and control groups; these results differ from Shizuka (2008) and are counterintuitive, since “in the Japanese EFL setting pronunciation accuracy generally does not improve over time, even when students are continually exposed to target-like pronunciation by the teacher and/or audio-materials recorded by native speakers” (Shizuka, 2008, p. 78). We had presumed this would hold true in our context as well, given the same EFL setting. Perhaps this can be explained by the fact that Shizuka’s study was conducted in the Japanese junior high school environment, as opposed to the present context, which is a university of international studies. At KUIS, an English-only policy is encouraged, and so not only are students exposed to target-like pronunciation from the teachers and other materials, they are also involved in constant output in and out of the classroom. This may be why even the students who were not taking the LL perceived themselves to improve in pronunciation, which complicates our view on the role of the LL, but on the other hand is a positive finding for the KUIS initiative in general.

TABLE 2: Paired Samples Test of LL Questionnaire 1 and 6

	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Upper				Lower
Pair 1 LL#1 - LL#6	-.29467	.20252	.05229	-.40682	-.18252	-5.635	14	.000

TABLE 3: Paired Samples Test of Control Questionnaire 1 and 6

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Upper	Lower			
Pair 1 Control#1 Control#6	-.19400	.13979	.03609	-.27141	-.11659	-5.375	14	.000

TABLE 4: Paired Samples Test of LL Listening Pre- and Post-test

Pair 1 LL#1 -	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Upper				Lower
-3.40000	4.42531	.88506	-5.22668	-1.51332	-3.842	24	.001	

TABLE 5: Paired Samples Test of LL Speaking Pre- and Post-test

Pair 1 LL#1 -	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Upper				Lower
-1.44444	.64051	.12327	-1.69782	-1.19107	-1.1718	26	.0001	

One way of resolving this complication is to examine whether or not this increase in self-perception in the control group is actually carried over to their production abilities. However, due to logistical limitations, we were not able to obtain such data. Therefore, if a follow-up experiment were to be conducted, it should definitely include a listening and speaking pre-post test for the control group as well. As for now, we are confident that the LL has enabled students to increase both their perceived and actual pronunciation abilities.

As for other logistical limitations, Spring Semester 2009 was when the new LL had been revealed to the faculty. In fact, the LL was so new that it had not been completed to be ready for the first week of classes. Therefore, it took a few weeks for the course to establish flow and for the teachers and students to become comfortable with the new environment. As a result, it was difficult to implement the syllabus as smoothly as we would have liked during that period. Moreover, the number of students was problematic in that there were 40 students who were initially interested, which had to be decreased to 29 due to the lab only containing facilities for 30 students. Ideally, if there were even fewer students, more in-class testing and feedback in addition to the out-of-class testing system described in the Methods section would have been possible, as in Shizuka's study. Perhaps the maximum limit could be set to 20 students, as the lab is offered twice a year and there should be ample opportunity for all students to register for the course over four years.

Conclusion

Throughout this study, we feel we have been able to achieve the end result of setting up an effective pronunciation lab, and the compiled resources and equip-

ment will be extremely beneficial for future LL instructors. Moreover, the questionnaires revealed that students were in fact able to perceive their improvements in pronunciation (though this was not limited to students in the lab), which was realized in actual perception and production abilities as well. We recommend future teachers to use this study as a reference and possibly further explore the current issues and even replicate the study taking into consideration the limiting factors mentioned in the Discussion and Limitations section.

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Appendix 1: Questionnaire from Shizuka (2008)

1. [Imptnt]: Acquiring good pronunciation is important when learning English.
2. [Attntn]: When reading English aloud, I pay attention to my pronunciation.
3. [Cnfdnt]: I am fairly good at English pronunciation.
4. [R_wA]: When I am paying attention, I can pronounce the “r” sound (as in right, America) correctly.
5. [R_w/oA]: Even when I am not paying attention, I can pronounce the “r” sound (as in right, America) correctly.
6. [TH_wA]: When I am paying attention, I can pronounce the voiceless “th” sound (as in think, thank) correctly.
7. [TH_w/oA]: Even when I am not paying attention, I can pronounce the voiceless “th” sound (as in think, thank) correctly.
8. [DH_wA]: When I am paying attention, I can pronounce the voiced “th” sound (as in the, other) correctly.
9. [DH_w/oA]: Even when I am not paying attention, I can pronounce the voiced “th” sound (as in the, other) correctly.
10. [F_wA]: When I am paying attention, I can pronounce the “f” sound (as in fine, office) correctly.
11. [F_w/oA]: Even when I am not paying attention, I can pronounce the “f” sound (as in fine, office) correctly.
12. [V_wA]: When I am paying attention, I can pronounce the “v” sound (as in village, have) correctly.
13. [V_w/oA]: Even when I am not paying attention, I can pronounce the “v” sound (as in village, have) correctly.
14. [RTM_wA]: When I am paying attention, I can read aloud English with proper rhythm.
15. [RTM_w/oA]: Even when I am not paying attention, I can read aloud English with proper rhythm.

Appendix 2: Questionnaire of current study

Grade level: (Circle one)	Freshman	Sophomore	3 rd -year	4 th -year
Sex: (Circle one)	Male	Female		
Age: _____				

Pronunciation Questions

1=Not at all true; 4=Absolutely true

1. Acquiring good pronunciation is important when learning English.
2. When reading English aloud, I pay attention to my pronunciation.
3. I am fairly good at English pronunciation.
4. When I am paying attention, I can pronounce the “r” sound (as in right, America) correctly.
5. Even when I am not paying attention, I can pronounce the “r” sound (as in right, America) correctly.
6. When I am paying attention, I can pronounce the “v” sound (as in violin, novel) correctly.
7. Even when I am not paying attention, I can pronounce the “v” sound (as in violin, novel) correctly.
8. When I am paying attention, I can pronounce the “u” sound (as in up, cut) correctly.
9. Even when I am not paying attention, I can pronounce the “u” sound (as in up, cut) correctly.
10. When I am paying attention, I can read aloud English with proper rhythm.
11. Even when I am not paying attention, I can read aloud English with proper rhythm.
12. When I am paying attention, I can read aloud English with proper intonation.
13. Even when I am not paying attention, I can read aloud English with proper intonation.
14. When I am paying attention, I can deemphasize unstressed syllables correctly.
15. Even when I am not paying attention, I can deemphasize unstressed syllables correctly.

Appendix 3: Background Questions

Have you studied pronunciation before? (Circle one) Yes No

- If yes, please explain:

Have you been abroad? (Circle one) Yes No

-If yes, please explain. For example, did you live, study or travel overseas? How long did you stay for? Did you do a homestay, or stay in a dorm?

Do you use English outside of school? (Circle one) Yes No

-If yes, please explain. For example, do you go to an English conversation school, use English in a part time job, talk to Japanese / foreign friends in English?

Appendix 4: Example Lesson with /ʌ/

Warm Up activity:

The students were asked to talk about their 'Top three family restaurants.' After some discussion several students were asked for their choices. This is done in order to elicit the name of a particular restaurant, ガスト (*Gusto*). The students are encouraged to notice the difference between the English pronunciation of *Gusto* /*gʌsto*/, and the Japanese pronunciation /*gʌsto*/. This is then followed by the following movie clip activity, to further introduce this phoneme.

Movie clip:

The following dialogue is from the Miyazaki Hayao movie *Laputa*. After discussing some questions about Miyazaki's movies, the students watch the clip and try to fill in the missing words, which all include the /ʌ/ sound. The dialogue can also be used to reinforce features studied previously.

Dialogue:

- Hang on tight!
- What happened?
- Nothing. Just a (gust of wind). Didn't bother us at all. The watch will continue. Afraid?
- No.
- I think I've got it now. Storm ahead. In my bag you'll find a length of rope.
- Right.
- We'll tie ourselves together.
- Right.
- The barometer is dropping fast Mama
- What bad luck. What a rotten time for a storm. When is (sunrise)?
- In an hour.
- The (sun's) rising.
- Something is wrong pazu, the (sun) shouldn't be in that direction.