HANGUL AND PHONETIC CONCEPTS

GRADES: 9-12 **AUTHOR:** Karen M. Brooks

SUBJECT: Social studies, Linguistics

TIME REQUIRED: 3 class periods

OBJECTIVES:
1. Learn about the origins of the *hangul* alphabet
2. Identify, read and write a few *hangul* letters
3. Know that it really is not as hard to learn *hangul* as they might have thought

NOTE: This lesson does not teach students how to write all of the symbols in *hangul*. This is an introductory lesson that combines metacognition of phonetics with the understanding that *hangul* consonants are morphologically based. Students will learn how to write most of the Korean consonants.

MATERIALS REQUIRED:
- Copies of prepared handouts and assignments

BACKGROUND INFORMATION:
Teachers do not need to know anything about phonetics, Korean language or *hangul* to teach these lessons. Please do, however, practice the activities yourself before expecting students to do them. Skills in spatial relations and experience in learning foreign languages will be useful. The teacher should be willing to try out the sounds in front of the class by using exaggerated facial features so that students will see, for example, the tongue on the teeth for "l".

PROCEDURES:
CLASS PERIOD 1:
1. Distribute copies of phonetics handout 1 and phonetics assignment 1.

2. Lecture students or have them read about different sounds we make in English.

3. Have them practice saying "b" and "p" and feeling the air come out from their mouths with "p." Next, have them practice "g" and "k" and hear the sound in "g" that is absent in "k."

4. Show a chart of the various consonants in English. Have them define terms related to the sound of consonants and then give examples of consonants that fit each term.

5. Show a side-view of a mouth and have the students identify parts of the view on a chart.

NOTE: Help students read the handout and then give students time to do the practices. Or, assign the exercises on the handout as homework and then discuss it the next day.

CLASS PERIOD 2:
1. Distribute copies of phonetics assignment 2.

2. Show students examples of the mouth's side view and the consonants that they depict. Have students pronounce the consonants and then look at the side views of the mouth to get the physical connection to the view. Have students identify the consonant the side view is trying to depict.

3. Have students write a shorthand of what the different consonants are. After they are proficient with a few of these, tell them that the shorthand they are using is the Korean alphabet, called *hangul*.

Note: Students will probably have some troubles identifying sounds from pictures, so give them quick feedback by putting the answer sheet on the overhead after they have spent some time.

Class Period 3:

1. Distribute copies of the *hangul* handout and *hangul* assignment.

2. Have students read about the origin of *hangul* and how the scholars who developed *hangul* made the writing system reflect the actual morphology (shape) of the mouth. *Hangul* is the only writing system that does this. (Students see examples of other writing systems, and none reflect the shape of the mouth when the word is spoken. They are all based on ideograms, pictograms or mathematical concepts.)

3. Teach a few more facts about *hangul*, and have students practice writing.

EVALUATION:

- Observe and listen to students as they make sounds that are fricative, aspirated, etc.
- Have students identify sounds that are aspirated, voiced, etc.
- Correct assignments, quiz students and discuss the topics

ENRICHMENT:

- Have students focus on one of the types of sounds and then present a list of words that have that sound. Have students who know a foreign language find sounds that do not exist in the English language. If there is a native speaker of Korean, have that person identify sounds or words in Korean that fit the various definitions from this lesson.
- Have students find similarities and differences in the pronunciation of sounds in English andFrench/German/Spanish (or whatever language the student is studying in school). Have them draw the mouth shapes of some of the sounds that these languages have, that English does not. Or, describe in words where their tongues are in relation to the rest of the vocal tract when saying unusual vowel or consonant sounds in a foreign language. Have students present these differences to the class. This can also be done with dialects/accents of English. Try showing the film *Conrac* and have students identify the differences in sounds. Try to debunk ethnic or racial stereotypes by showing the morphology of how different sounds are made.
- Have students become "buddies" with ESL students and read aloud simple short stories by taking turns. Have each student identify two or three sounds with which the ESL student has difficulty. Then have the student show the ESL student how the mouth looks when pronouncing a particular sound. Have the students share with the ESL student the side-views of the vocal tract on the handouts in this unit and practice saying sounds from the side views. Then, have the ESL buddy teach the student a

phrase in his/her language that the student tries to pronounce correctly.

RESOURCES:

Kent, David B. "Universal Survey of Languages: Korean." <http://www.teleport.com/~napoleon/korean/index.html>
**This internet site has many short articles about the origins of Korean language and its changes over time. It is part of a huge web site about hundreds of different languages from around the world.

Korean Overseas Information Services. "Korean Language." <http://korea.emb.washington.dc.us/korea/language.htm>
**This internet site is part of a larger site called "Window on Korea," and is put out by the Korean embassy.

Ladefoged, Peter. *A Course in Phonetics*. 2nd ed. Los Angeles: UCLA.
**A college-level course book on how we create sounds -- phonetics.

Luscombe, Stephen. "On-Line Phonology Course--Stirling University." <http://www.stir.ac.uk/epd/celt/staff/higdox/stephen/phono/phonolg.htm>
**This is a great do-it-yourself tutoral on sounds we use in English and how they can be described in pictures and words.

Park, Hee Seo. *The Korean Language; Fundamental 1*. Laguna Hills, CA: Korean American Center for Education, 1992.
**This is a workbook that teaches how to write *hangul*, with some English explanations. It is suitable for children. Contact Dr. Park at (714) 360-1151 for more information.

Yamada Language Center, University of Oregon. "Yamada Web Guide to Korean: Korean Fonts." <ftp://128.223.95.87/fonts/korean/korean.sit>
**A source for fonts for the MAC. Also has links to PC-based fonts.

Phonetics -- Handout 1

How do we make sounds?

The basis of making sounds that become speech is the air that moves from our lungs out of our mouth. Try talking when breathing IN. It is hard! (Only in the Danish language do people regularly make sounds with the air going INTO their lungs.) When we make sounds of speech, air goes FROM our lungs, through our **trachea** (windpipe) and then through the two, narrow muscles we call the **vocal chords**. They are not chords at all; in fact, they look like two miniature fingers next to each other. When the vocal chords are open, the air can go out easily. When they are adjusted to be almost closed, the air will cause them to vibrate.

Say the following words while touching your throat & Adam's apple with your fingers:

"hello" "a - e - i - o - u" "President Reagan"

You should be able to feel your vocal chords vibrating. Sounds that are produced when your vocal chords vibrate are called **voiced**.

Say the letter "v": "vvvvvvvv" Now say the letter "f". "ffffffff"

Your vocal chords do not move with the consonant "f". It is called a **voiceless** consonant.

Try saying these words and identifying whether the first letter is voiced or voiceless. When you do this, understand that most vowels are voiced, so pay attention to the very first consonant:

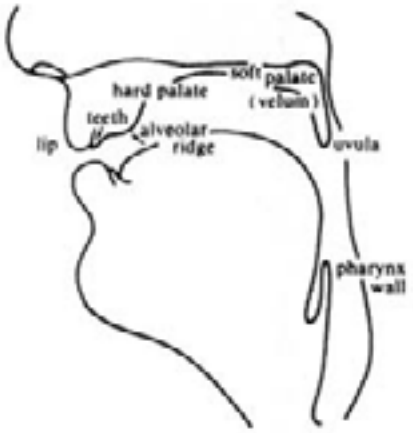
"vat" "fat" "sapped" "zapped" "thing" "them"

Can you think of other paired words that have a voiced and then a voiceless first consonant?

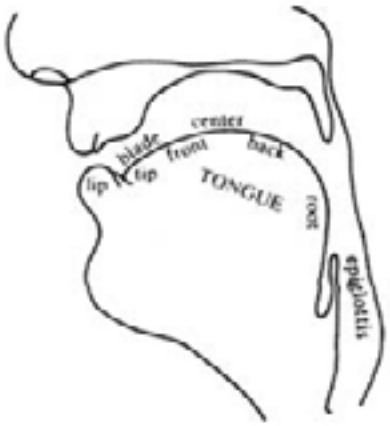
All of the sounds we make with our mouth are from the **vocal tract**, which includes the whole mouth and nasal passages. The shape of the vocal tract changes each time we say a different sound. Sometimes, the space in the vocal tract in the mouth is very big, as in the sound, "aaahhh." Sometimes it gets very small, as in "eeeeee." (People who speak the Thai language say that we Americans talk as though we have a hot potato in our mouths. Does that mean that the sounds they usually hear are from vocal tracts made into smaller shapes?)

Sometimes one part of the vocal tract touches another part as air goes through the tract. These are called **consonants**. Say the sound for "d." The tip of the tongue touches the top part of the mouth right behind the top teeth. Now say the sound "k." The back of the tongue touches the top of the mouth.

Actually, all of these parts have names. For example, the **hard palate** is the bony part of the top of our mouth, right behind our top teeth. The **soft palate** is the--you got it!--soft part of the top part of our mouth, by our throat. The place where your tongue went when you said "d" is called the **alveolar ridge**. It is on the hard palate, right behind the top teeth. Of course, you already know the names for your upper and lower lips (called **labials**) and teeth (called **dentals**).



Any of you who are thinking of going into medicine as a career--consider taking a course in Latin. Most of the scientific names of our body parts are from Latin. For the rest of us, well, let's see we can learn a few anatomical terms.



We just learned the names of the top part of the vocal tract. The bottom part consists of our **tongue** (which is divided into the **tip, front, back** and **root**). You already know these words, because they are not based on Latin.

Here are examples of types of sounds made by consonants. Try saying them and seeing if you pronounce them the way they are described:

bilabial (made with the two lips):	"pie" "my" "buy"
labiodental (lower lip and upper front teeth):	"fie, vie"
dental (tongue tip with upper front teeth):	"thigh, thy"
alveolar (tongue tip with alveolar ridge):	"die, tie, nigh, sigh, zeal, lie"
velar (back of tongue with soft palate)	"ck" as in "hack", "g" as in "hag", "ng" as in "hang"

A few more vocabulary words are needed to round out your understanding of basic phonetics. You already know about consonants (sounds produced when parts of the mouth either touch or are close together) and **vowels** (sounds when the vocal tract is more open).

Fricative consonants are "f, v, th, s" and "z." Fricative means that a "windy" or "hissing" sound is produced when two parts of your mouth move very close together, as in:
"fie, vie" "thigh, thy" "sigh, zoo."

Most consonants are non-fricatives. They do not make a hissing sound. Say these words, which have non-fricative consonant beginnings:
"car" "bar" "pear""dare"

There is another word that describes a type of consonant. Say the following words out loud:
"pie" "tie" "kai"

Then say: "buy" "die" "guy"

Now, say them again, but put your hand right in front of your lips. Go ahead!
"pie" "tie" "kai" "buy" "die" "guy"

You should feel a bit of air coming out of your mouth after the "p," "t" and "k" in the first three words. Try saying the six words again. This bit of air is called **aspiration**. In aspirated consonants, you let out a bit of air right after the consonant, and this air makes the consonant sound different from **unaspirated** consonants. Aspirated and unaspirated consonants go in pairs: "p, b" "t, d" "k, g".

Did you know that there is a consonant that we say, but we don't have a way to write it? It is called a **glottal stop**. The most common glottal stop is when we say "no" by saying "uh-uh." The breath of air just stops in the back of the throat (when the vocal chords close). Compare "uh-uh" with the sound we say when we want to say "yes" --"uh huh." With "uh huh" the vocal chords are open. One definition of a glottal stop is a "sound (or, to be more exact, the lack of sound) that occurs when the vocal cords are held tightly together" (Ladefoged 50).

Some of you may be familiar with Hawaiian words. In fact, that language is FULL of glottal stops, which are marked with single apostrophes (ʻ). The name of the state, Hawaiʻi, has a glottal stop between the last two letters.

What you have been doing is learning some of the basic rules of **phonetics**, which is the study of speech sounds that occur in the languages of the world. How are these sounds made? What patterns of sounds do languages have? How do the sounds change in different circumstances?

Phonetics is just part of the study of languages, called **linguistics**. Other parts of linguistics describe the order words go in sentences (like adjective before noun in English), how the meanings of words have evolved, what writing systems are used, and other topics.

Computer programmers have to learn the linguistic syntax (rules) of their programming languages. Linguistics is similar in many ways to mathematics. In fact, some of the most famous mathematicians are also linguists.

Why study phonetics? Those of you who have learned a different language already know that there are some sounds in that language that English doesn't have. It is hard for English speakers to say the rolling "r" that is common in Russia and Scotland. Many Asian languages have words that are pronounced "ngoo." English does not have an "ng" (as in "song") sound at the beginning of words, only at the end.

Foreigners have as much difficulty pronouncing English as we do their languages. Anyone who has heard an Italian accent knows that often, the Italian speaks with an extra "vowel" sound after final consonants, as in, "It's a bigga day" (for "It's a big day"). In Japanese, there is only one consonant for both "l" and "r." So, a Japanese person who has not mastered English pronunciation might say, "flied lice" instead of "fried rice." Many languages do not have the "th" sound. Even American kids will often say, "go dat way" instead of "go that way." So, a basic understanding of phonetics helps us understand our own language as well as learn and pronounce other languages better. Besides, it's kind of interesting!