

Articulation of Speech Sounds

Why Is Articulation Important in Speech?

Articulation focuses on pronunciation and talking. It deals with a person's ability to move the lips, tongue, teeth, and jaw to produce speech sounds. The practice of it is also called *traditional articulation therapy*.

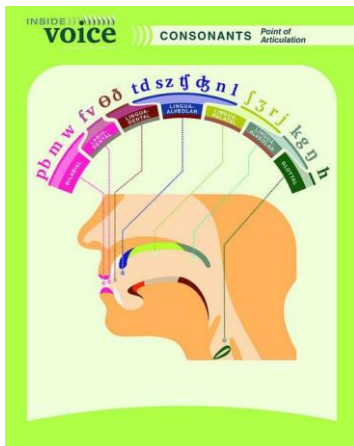
- it supports and improves the formation of words and sounds and determines how well you can be understood by those on the receiving end of your verbal information.
- it determines how well sounds, words, and sentences are produced and how clearly they can be interpreted by others.
- good articulation helps one engage in reciprocal conversations with ease and fluency.
- it affects how their language and social skills develop. Literacy skills, such as reading and spelling, are also influenced by articulation.
- The speaker also needs to use appropriate English patterns of stress, rhythm, and intonation.

There are four stages in the articulation of a speech sound: (1) get the lips into position * (2) produce the sound * (3) stop the sound * (4) relax the sound. The speaker also needs to use appropriate English patterns of stress, rhythm, and intonation.

Source: <https://speechandsoundclinic.com/>

Vocalization (VOC) Code:

v = voiced	- vocal chords vibrate, all the vowel sounds are voiced
un = unvoiced	- vocal chords do not vibrate (some consonant sounds such as /z/ are voiced, others, such as /s/ are unvoiced)
c = continuant	- sound can be continued as long as the speaker has breath, for example /s/, /m/ and /l/
s = stop	- the sound just stops and cannot be continued, for example /b/, /p/ and /t/
n = nasal	- sound comes through the nose, for example /n/ and /ng/



Consonant Sounds

The consonant sounds chart indicates which parts of the speech mechanism are used to pronounce English consonant sounds and how the sounds are produced. Also known as Speech Articulation. Note that the letter inside the slashes / / in the first column represents the sound – not the letter. This sound can often be spelled in different ways. Examples of both are included in the second column.

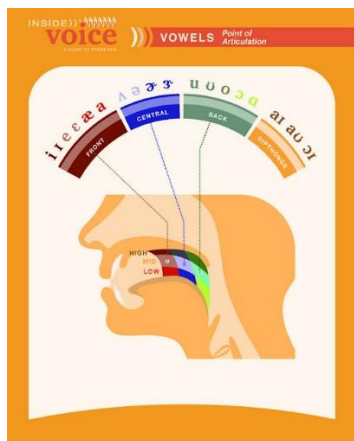
Sound	As in	Voc Code	How sound is made
/b/	bird knob	v, s	Stop air with lips together, open with a small puff of breath. Voiced equivalent of /p/.
/c/	cup duck school	un, s s	Tongue tip down, back of tongue touching lower teeth. Stop air with arch of the tongue and emit breath from back of throat. Unvoiced equivalent of /g/.
/d/	dish road	v, s	Lips and teeth slightly parted. Stop air with tongue tip touching roof of mouth just behind upper teeth. See lower surface of tongue – tongue is dropped as breath is expelled. Voiced equivalent of /t/.
/f/	fish, phone, laugh, staff	un, vc	Lower lip touching upper teeth lightly. Breath sound, continuant. Unvoiced equivalent of /v/.
/g/	girl, leg	v, s	Tongue tip down, touching back of lower teeth. Stop air with arch of the tongue and emit breath from the back of the throat. Voiced equivalent of /k/ or /c/.
/h/	hand, behind	un, c	Has no position of its own. Position the tongue for the vowel following it and give a breath sound with no voicing. A continuant.
/j/	jump, gentle ginger, badge	v, s + c	A continuation of /d/ and /zh/. Lips forward. Start with tongue tip touching the roof of the mouth behind the teeth (in the position for making a/d/). Stop the air; then release as a continuant. Voiced equivalent of /ch/.
/k/	kitchen, mark, sick, cup, Chris	un, s	Tongue tip down touching back of lower teeth. Stop air with arch of the tongue and emit breath from back of throat. Unvoiced equivalent of /g/. Same as /c/.
/l/	leg, roll, babble,	v, c	Tongue tip touches just behind the upper teeth. Air comes out along the side(s) of the tongue. This is a voiced sound.
/m/	man, lemon, same	v, c, n	Lips together. Air passes through the nasal cavity instead of the mouth. This is a voiced sound, a nasal sound, and a continuant.

/n/	neck, canal, fine, know, Ann	v, c, n	Lips and teeth slightly parted. Tongue tip up touching the roof of the mouth just behind the upper teeth. Lower surface of tongue shows. Air passes through the nasal cavity instead of mouth. This is a voiced sound, a nasal sound, and a continuant.
/p/	pan snap	un, s	Stop air with lips together, open with a big puff of breath. Unvoiced equivalent of /b/.
/r/	river write	v, c	Tongue tip up – near the front of the roof of the mouth, but not touching. Lips forward and squared. Round lips before voicing. This is a voiced sound and a continuant.
/s/	snake, city mice, cent bicycle, bass	un, c	Teeth close but not touching. Tongue tip approaches roof of mouth just behind the upper teeth, making a narrow opening. Air streams through this opening. A continuant and a breath sound. Unvoiced equivalent of /z/.
/t/	tent, melt, mitt	un, s	Lips and teeth slightly parted. Stop air with tongue tip touching roof of mouth just behind upper teeth. Lower surface of tongue shows. Tongue is dropped as a breath is expelled. Unvoiced equivalent of /d/.
/v/	valley, have	v, c	Lower lip touching upper teeth slightly. A continuant. Voiced equivalent of /f/.
/w/	woman, reward, whistle, knew	v, c	Lips forward and rounded. Air passes through opening. Tongue is in a neutral position. This is a voiced sound and a continuant. Note: /wh/ sound pronounced as above. A continuant and a consonant digraph.
/y/	yells, use (/yooz/)	v, c	Lips relaxed; teeth close together. Middle of tongue moves toward roof of the mouth without touching. Air passes over the top of the tongue. This is a voiced sound as in /ee/ and a continuant.
/z/	zipper, quiz his, teaches kids, fuzz eggs	v, c	Teeth closed but not touching. Tongue tip down. A continuant. Voiced equivalent of /s/.

/zh/	mea s ure tele si on, az u re, reg i me	v, c	Lips forward and squared. Teeth close but not touching. Tongue tip close to middle of roof of mouth. Tongue sides are up, forming a groove. Air passes through the groove. Voiced equivalent of /sh/.
/sh/	s hop, bu s h ch icane, miss i on, capt i on, mach ic ine, su r e	un, c	Lips forward and squared. Teeth close but not touching. Tongue down. Tongue has wider groove than in the /s/ sound. Continuant breath sound. Unvoiced equivalent of /zh/. A consonant digraph.
/th/ ¹	th anks four th	un, c	Tongue touches both upper and lower teeth. A continuant breath sound. Unvoiced of /th/ ² . A consonant digraph.
/th/ ²	th e, moth er , breath e	v, c	Voiced sound of /th/ ² . A continuant and a consonant digraph.
/ch/	ch ildren, kit ch en, mu ch , mat	un, s + c	A combination of /t/ and /sh/. Lips forward. Start with tongue tip up touching the roof of the mouth behind the teeth (in the position for making a /t/ sound. Stop the air; then release as a continuant. Unvoiced equivalent of /j/. A consonant digraph.
/ng/	ring	v, c, n	Lips open. Tongue tip down behind lower teeth. Back of tongue touches back of roof of mouth. Air passes through the nasal cavity instead of mouth. This is a voiced sound, a continuant sound, and a consonant digraph.

Combination Sounds with /k/

/k/ + /w/	q uarter, acqu a int	(un, s) _ (v, c)	See /k/ and /w/. The two sounds are produced one after the other in combination. In written English, q is always followed by u except for Qatar, Aqaba etc. However, in these cases the sound is /k/, not /k/ + /w/!
/k/ + /s/	box k , look s pick s	(un, s) + (un, c)	See /k/ and /s/. These two sounds are produced one after the other in combination.



Vowel Sounds

All vowel sounds are voiced continuants. They can be described by

- where in the mouth the tongue forms a hump.
- whether the lips are rounded or unrounded.
- whether the muscles of the lips and tongue are tense (tightened slightly) or lax (relaxed).

The best way to describe how a vowel sound is made is to indicate the position of the tongue hump. The following chart shows where the tongue hump is positioned for each of the English vowel sounds.

	Front	Central	Back
High	/ē/ beat /i/ bit		/oo/ boot /uu/ book
Mid	/ā/ bait /e/ bet	/er/ bird /u/ but	/ō/ boat /aw/ bought /ow/ hound
Low	/a/ bat	/o/ pot	

Sound	As in	VOC Code	How sound is made
Front			
/ē/	eat, eel, we, three, key	v, c	Lips drawn back, teeth close together. High/front, tense, unrounded.
/i/	in, bit, if, Lynn	v, c	Lips and teeth slightly closer together than for /e/. Lower high/front, lax, unrounded
/ā/	cake, bait, rate paint, day	v, c	Mouth open, teeth about a half inch apart. Tongue down. Mid/front, tense, unrounded.
/e/	bet, feather, head, Ed	v, c	Lips and teeth slightly closer together than for /a/. For better use with students, compare only with sound already learned – not long vowels.
/a/	apple, bat	v, c	Wide jaw opening. Tongue down. Low/front, lax, unrounded
/air/	air, pair, stare, bear	v, c	Wide jaw opening. Tongue down. Low/front, lax, unrounded.
Central			
/er/	her, girl, bird, burn	v, c	Tongue tip down. Lips forward, almost squared. Mid/central. Tense.
/u/	up, but tough	v, c	Medium jaw opening. Relaxed lips. Lower mid/central, lax, unrounded.
/o/	olive, pot	v, c	Low/central, lax, unrounded.
/or/	door, horn	v, c	Lips forward with a “three-finger wide” opening.
Back			
/oo/	room, boot, flute, blue, chew	v, c	Lips forward and rounded, with a “one-finger wide” opening. Prolong the sound. High/back, tense, rounded.
/uu/	wood, book,	v, c	Lips forward, almost squared. Lower high/back, lax, rounded.

	bush, could		
/ō/	boat, home slow, go	v, c	Lips forward and rounded, with a “two-finger wide” opening. Mid/back, tense, rounded.
/aw/	law, all Paul, taught, thorn	v, c	Lips forward, wide jaw opening. A “three-finger wide” opening. Lower mid/back, lax, rounded.

Diphthongs

A vowel sound that starts out as one vowel and moves to another vowel sound position. Diphthongs are continuant, however, only on the second sound.

Sound	As in	Code	How sound is made
/ai/	time, night, l, tie, my	v, c	A diphthong combination that starts out as /ī/ and then moves to /ē/.
/oi/	oil, boy	v, c	A diphthong. Combination of /aw/ and /ē/. Start with lips forward for /aw/, then draw back for /i/.
/ou/	house, how, about, mountain	v, c	Starts out as /o/ (low/central) as in <i>pot</i> and moves to /uu/ (lower/back) as in <i>book</i> .
/u-er/	cure, pure fewer, lure	v, c	Starts out as /yoo/ as in <i>uniform</i> and moves to /er/ as in <i>ermine</i> .
/ow/	hound, bound, loud, tower	v, c	Starts out as an /a/ sound and then moves to /w/.
/ē/ + /er/	ear, career, here, year, pier	v, c	Starts out as /ē/ and then moves to /er/.