Vocal Exercises to Improve Projection

MIT Biological Engineering Communication Lab

Whether you are speaking in a packed lecture hall or presenting a poster one-on-one, effective voice projection is essential if you want people to hear you clearly and take you seriously as a speaker. Projection has a depth to the sound and uses air pushed from the diaphragm to create the volume. Speaking loudly or yelling uses vocal cords, which causes strain and will make your throat feel sore.

Effective voice projection depends on a combination of three key areas:

- Breathing technique
- Resonance
- Pitch

There are plenty of exercises to develop all of these areas, but here are a few that will really make a difference to the way your voice sounds and travels. Practicing regularly, such as 20 minutes each day (in the car, watching TV, etc.), will help you strengthen your muscles and become accustomed to projecting your voice. Then, incorporate it as you practice your presentations.

A Quick Note: The following exercises are intended to help you develop control over voice projection. Vocal projection requires the coordinated integration of breathing, muscle relaxation, and movement of the vocal chords, which can be difficult to master. Your voice will be strongest when you are relaxed, so you should not be straining while practicing any of these exercises. If you have concerns or difficulty, consult a qualified speech-language pathologist, a vocal coach, or a Communication Fellow.

Breathing Techniques

Breathing from the diaphragm is key to learning how to project. The diaphragm should move down and push the belly out when breathing in, and move up, pushing air out of the lungs and pulling the belly in when you breathe out. Good posture will give your diaphragm space to expand and will reduce unnecessary neck, shoulder, and back muscle tensions.

Exercise 1:

Place on hand on your belly (below the ribcage, over your belly button) and one hand on your back. Breathe in slowly, and feel the gap between your hands get wider as your belly moves outward. Take a few deep breaths in and out and feel the hand on your belly moving out and in as you do so.

Exercise 2:

Now place your hands, with fingertips touching, across your belly, just below the ribcage. Breathe in and feel your belly move out, then breathe out making a hard, quick "Ha" sound – you should feel your belly contract as the sound comes out. In this exercise you are using all your air at once on one sound so you can force that sound out loudly so that it carries across a farther distance. Repeat several times.

Resonance

Resonance is the reverberation of sound. When someone speaks, resonance is created in the body as well as in the surrounding area.

Exercise 1:

Say "Mmmmm." See if you can feel the buzzy sensation in the front of your face. Another way to produce it is to simply say "Mmm-hmm," like an enthusiastic "yes." Now say, "Mmm-hmm one. Mmm-hmm two. Mmm-hmm three." Can you feel that sensation carry over into the words "one," "two," and "three?"

Exercise 2:

Humming is another way of improving resonance: Hum at a comfortable pitch, then move the pitch slightly lower and pay attention to how your chest feels. Continue humming until you can feel the vibration in your chest – try to increase the vibration in your chest. Then move the pitch slightly higher and pay attention to how your head feels. Let your mouth open gently. Hum until you feel the vibration in your tongue and lips, behind and above your mouth. Then continue humming, attempting to increase the vibrations in your mouth, tongue and lips. Finally, return to your chest again. Repeat the whole exercise, but always ensure you end with your chest in order to develop a full, luscious sound.

Note: Remember to breathe frequently, and stop if you get light headed.

Exercise 3:

Create resonance at the beginning of a sentence and try to keep that sensation in the words that follow. For example, say "Mmmmmm. It's great to see you." Did you feel the resonance in the mask as you spoke "It's great to see you," or did it fade away? Try it again. This does require some practice.

Pitch

Pitch is the rate of vibration of your vocal chords. The sound of your voice changes as the rate of vibration changes, with higher pitches corresponding to faster vibrations. Finding your optimum pitch (which is usually lower than your normal speaking voice) can help all of your vocal muscles work together to project your voice loudly and clearly.

Exercise:

To find your optimum pitch, place your hand on your chest, at heart level. Breathe with your diaphragm (see above) and say a long "Oooooooh" starting with a high pitch and swooping down to the lowest pitch you have and then up again. Pay attention to the vibration on your chest - there will be a specific pitch level in which you feel more vibration than the others. This is your optimum pitch - the more vibration you can achieve the better. Practice speaking at or around this pitch (but not monotone!).

More advanced exercises to put it all together¹

Practice varying loudness using vowel sounds:

- 1. /ah...../ (soft \rightarrow loud)
 - Take a breath and say the vowel sound "ah" as follows (in American English this is the vowel as it sounds in the word body). Start softly and then gradually, and as smoothly as possible, increase your loudness. Remember, you are not trying to shout or scream but to create a contrast between a soft conversational voice (e.g. talking to someone just one meter away) and a louder conversational voice (e.g. talking to someone about three meters away).
- 2. /ah...../ (loud \rightarrow soft)
 - Try the reverse of Step 1. Be careful that you do not use a hard sound when starting loud. If you do find that you are hitting the vowel too harshly, simply put a short /h/ sound before the vowel (/hah..../).
- 3. /ah...../ (soft \rightarrow loud \rightarrow soft)
 - Doing this exercise gently and smoothly almost sounds a little like a car approaching you and then passing by and away the engine is quiet to begin with, it gets louder as it approaches and then quiet again as it moves off into the distance.
- /ah...../ (soft → loud → soft → loud → soft)
 Alternate between soft and loud, soft and loud.

Repeat with different vowel sounds:

When you have completed all four exercises repeat them again, this time using the following vowels:

/oo/ as in the word booed

/oh/ as in bode /ay/ as in bayed

/ee/ as in bead

Practice varying loudness using numbers:

When performing the following counting exercises, perform the volume changes in the same breath. Keep the utterance to a size that you can speak comfortably in one breath, without straining. For example, Exercise 1 requires you to count to 10. If you cannot slowly count to 10

on one breath, then you can divide it into two – taking a breath after 5. It is usually easier to replenish your breath supply after speaking a loud sound.

- 1. Count slowly and gradually increase the loudness. Go from one (soft) to five (loud), then repeat from six (soft) to ten (loud).
- 2. Count slowly and gradually decrease the loudness. Go from one (loud) to five (soft), then repeat from six (loud) to ten (soft).
- 3. Count slowly and increase the loudness on every 2nd number (odd numbers are soft and even numbers are loud).
- 4. ... loud on every 3rd number
- 5. ... loud on every 4th number
- 6. ... loud on every 5th number

Practice varying loudness using words and phrases:

In these exercises exaggerate the vocalization of the vowel sounds by lengthening each vowel and continuing the voicing through the whole word (a technique called intoning). Imagine you are filling the room with a rich, resonant sound but be careful that you are not increasing the muscle tension in the head and neck area or in your general posture.

Single words:

1.	moon	moan	mourn	mane	mean
2.	mooning	moaning	morning	mining	meaning
3.	memory	minimum	marmalade	maneuver	manager

Phrases:

When speaking phrases, imagine that you are speaking just one long word and keep the vocalization going from the start of the phrase until its end. There should be an almost continuous voicing with no breaks between the words.

- 1. many men munch many melons
- 2. Mandy made marinade in May
- 3. Major Mickey's malt makes me merry
- 4. my mom's marvelous modern manicure
- 5. Mervin Maclean's mess marred my marmalade

Sequences:

Using the same intoning technique recite the following. Again, you will need to give some thought as to when you will take a breath, e.g. after every three words when reciting days of the week and months of the year; after every five numbers when counting.

- 1. numbers 1 to 20
- 2. days of the week
- 3. months of the year
- 4. etc.

Additional Resources

- 1. Williamson, Graham. "Voice Projection Exercises." *SLTinfo*, 2017, www.sltinfo.com/voice-projection-exercises/.
- 2. Peters, Kate. "Speak Up! A Guide to Voice Projection." *Six Minutes, Speaking and Presentation Skills*, Mar. 24, 2010, http://sixminutes.dlugan.com/speak-up-voice-projection/.
- 3. Oppelt, Elisabeth. "Projecting Your Voice Without Yelling." *Theatre Folk*, May 4, 2015, https://www.theatrefolk.com/blog/projecting-your-voice-without-yelling/.
- 4. Matthews, Sonya. "Voice Projection Exercises." *My Voice Exercises*, Dec. 24, 2011, http://www.myvoiceexercises.com/voice-projection-exercises/.
- 5. "3 Simple Techniques to Improve Your Voice Projection." *Salt Box*, http://www.salt-box.co.uk/uploads/1/0/1/9/10196192/3-simple-techniques-to-improve-your-voice-projection.pdf.