

## Sound Fundamentals

By

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What is a good clarinet sound, and how does one achieve it? Professional clarinetists perform with myriad sounds using a confusing array of equipment, yet they manage to achieve consistency in several key areas: response, projection, focus, resonance, stability, and ease. In this class, we will discuss the ways in which professionals balance fundamental techniques to achieve an acceptable clarinet sound.

### Embouchure:

- The purpose of the embouchure is to provide stability as it connects your airstream to the vibrating column of air in your instrument. The lower lip, just covering the lower teeth, acts as a fulcrum on which the reed vibrates. The muscles of the upper lip and corners of the mouth then “hug” the mouthpiece to provide a seal and direct the air.
- How much lip covers the lower teeth? Not much. Imagine stretching your lower lip across your bottom teeth to apply Chap Stick. Then bring your corners in to hug the sides of the mouthpiece.
- You should have a flat or “pointy” chin, tight corners, and relatively light bite pressure. If you find yourself biting through mouthpiece patches, especially the thick ones, you are probably biting too much.
- Your jaw muscles are much more powerful than your mouth muscles, and it is easy to fall into the habit of relying on bite pressure to stabilize the sound. This ultimately constricts the vibration of the reed, impeding your ability to play high notes, project, and play with even intonation.
- **The single most important thing to remember about the embouchure is that it *allows* the reed to vibrate.** (The embouchure does not *cause* the reed to vibrate!)

### Air Support:

- **Your air support *causes* the reed to vibrate.**
- A steady air stream provides stability in tandem with a good embouchure.
- You should support with your lower abdominal muscles when you blow, and you should be able to fill a large room with your sound.
- Focus on the lower abdominals when you inhale, then use those same muscles to exhale.
- Practice the “finger breath.”

### Tongue Position:

- Your tongue directs your airstream into the mouthpiece, focusing or unfocusing the sound depending on its position.
- The basic clarinet tongue position is high. Think “eee” or “shh” instead of “oh.” The back of the tongue should be between your molars, and you should

feel the air resistance toward the front of your mouth, rather than in your throat.

#### Fast Air vs. More Air:

- Clarinetists play with fast “cold” air at all dynamic levels when producing a focused sound.
- So what is the difference between “fast air” and “more air?” It might be useful to consider the analogy of putting your thumb over the end of a garden hose (tongue position eee or shh) versus releasing your thumb or kinking the hose (tongue position uuu or oh), and then consider what happens to the water (air). When your thumb covers the end of the hose, the exit point is narrowed (focused), and the water speeds out of this aperture. When you release your thumb, the same amount of water exits the hose as when your thumb was covering, but it travels much more slowly. When you kink the hose, you actually restrict the flow.
- The instruction “fast air” refers to focus, and is controlled by your tongue position. Some teachers also refer to variations in tongue position as the “color of the air.” The instruction “more air” refers to volume, and is controlled by your air support.

#### Equipment:

- Obtaining, maintaining, and caring for proper equipment is essential to the development of good fundamental habits.
- **Mouthpiece:** I recommend that students play a mouthpiece with a close facing (1.00mm to 1.05mm). I specifically recommend the D’Addario X0 in my studio.
- **Mouthpiece Care:** Do not allow anything to come into contact with the tip or rails of your mouthpiece. Even a slight ding to these areas will greatly affect its efficiency. Do not swab your mouthpiece, and brush your teeth before you play. When you are finished playing, you can wipe the mouthpiece with a small soft cloth to remove excess moisture. Periodically clean the mouthpiece by running it under cold water. If junk persists on the outside of the mouthpiece, it can be removed with lemon juice diluted in water: apply with a Q-tip. Do not clean your mouthpiece with abrasives, hot water, soap/detergent, isopropyl alcohol, or the dishwasher!!
- **Reeds:** Play premium quality reeds. Your mouthpiece will dictate the strength of the reed, but I find most of my students gravitate toward 3.5. I play light reeds to avoid the necessity of biting. Remember that vibration produces sound! You should be able to produce a great sound without creating excessive tension in your body (jaw, throat, neck, abdominals, shoulders, hands, forearms...).
- **Neck Strap:** Consider using a neck strap if you experience thumb pain when holding up the clarinet. This can free up your right hand.

Special thanks to D’Addario Woodwinds for supporting this class.

