

UNDERSTANDING AIR SPEED

THE SECRET TO SUCCESSFUL WIND INSTRUMENT PLAYING

Most of us are unaware of the concept of air speed for performing on wind instruments. This session will inform teachers and students of the concept that every note has its own air speed. Knowledge of air speed corrects intonation, quality of sound, accuracy, blending and endurance, and therefore increases confidence. This concept can be understood by beginners through university musicians. Teachers can introduce this concept with ease and keep their ensembles performing at the highest level.

Lower notes take slower air and higher notes need faster air, *but* – do not confuse the idea of the SPEED of the air with the AMOUNT of air. Notes at all dynamic levels must be played with fast air. The only difference is that notes at lower pitches will take *less* fast air than notes at higher pitches.

The tone quality at lower levels may suffer when the player doesn't realize that he/she has reduced the *speed* of the air along with the *amount* of that air. The high speed of the air must be maintained even when playing in the middle and lower registers. If there is a lack of a solid core or center to the sound, especially in the middle and lower registers, it is because the *air is too slow* and possibly the quantity is not enough. If the air is not fast enough, the sound will be *undersupported*. The important ingredient of good playing is *continuous fast moving air*.

Every note has its own proper and individual air speed. Use *consciousness* to let the muscles "learn" these air speeds. Don't be afraid to experiment, and stay alert so that you condition your body to memorize the speed of the air on different notes. When we know the air speed of a particular note, it is nearly impossible to miss that note.

Try this experiment: visualize a small birthday candle that is lit. Held the imaginary candle about 12 inches away. Blow it out and only use the necessary air speed to do so. Now move the imaginary candle twice as far away. When you blow it out again, you will need faster air to extinguish it.

Now apply that concept to your instrument. Try playing any note at *mf* and experiment with the air speed needed to sustain the note in pitch, quality and balance of sound. Then reduce that optimum air speed and listen to the negative results. Go back to the optimum air speed and remember it.

Repeat this several times until you gain good control of *that note at that dynamic*. Then increase the dynamic to *ff* and do the same thing repetitively to the same point of familiarity. Then do the same with a soft *pp* dynamic to the same result. Learning to control ONE note at all three dynamics is the beginning of learning to control ALL notes at all three dynamics.

AIR SPEED and AIR MASS are two different things! Do not confuse these two! Air speed alone does not create louder volume. More air, or *more mass* creates louder volume. Many students do not use enough air speed when playing soft passages. They confuse air mass with air speed in order to play softer. Encourage them to play softly

with more air speed. The notes will resonate, the intonation will improve, and the student will gain confidence.

A “slot” is where your airflow and aperture size become balanced acoustically. This is where you'll get the maximum overtones in your sound, the richest resonance, the best center of pitch of *that note* at *that dynamic*. This is where it will both *sound good* and *feel good*. We should always be striving to gain *efficiency*. It means getting the most sound out with the least amount of effort.

SOME THINGS TO REMEMBER:

Air is free! Learn how to use it.

Use air, not chops.

More compression equals faster air.

Faster air, higher. More air, louder.

The faster the air, the less pressure is needed.

Each note at *each* dynamic level has its own air speed.

IN CONCLUSION:

Knowledge of proper air speed increases player confidence through accuracy, sound quality and greater endurance. Learn to stay conscious. Too often musicians are operating on auto-pilot and not paying attention to what they are doing and how they are doing it. Learning this concept will unlock many mysteries and provide better and more efficient playing. The good news is, once you have learned this concept and remained conscious, it will become part of your everyday playing. All of this will result in a more rewarding experience each and every time you play.
