

## **The Importance of Breathing**

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The title of this article seems obvious. Everybody knows that breathing is important; we stop breathing and we die! What I wish to discuss is the fundamental necessity of good breathing and support for playing a wind instrument.

Whenever I see a new student for the first time I like to ask them some questions about support: what is it, how does one do it and why, what is this diaphragm thing, etc. Pretty often I find that the students only have the vaguest notions of what it is all about. Granted, it can be pretty darn difficult to explain, but a lot of these kids really have no idea.

In my opinion this needs immediate addressing. I believe that support is the foundation of all wind playing and therefore one of the most important things to teach. We tend to concentrate more on the other physical attributes: fingerings, embouchure, hand position, etc., and not necessarily spend time teaching students how to breath properly. Don't get me wrong, these other attributes are all very important and must be taught well and closely monitored, but lets make sure that breathing is not neglected in the process.

I tend to relate the following personal story to a lot of these students: When I was in high school, my band and orchestra conductors, and my bassoon teacher would ask me if I was using my diaphragm and supporting. I would nod my head and say "yes sir/ma'am" when in fact I really didn't know what it was or how to use it. I knew that there was this thing called a diaphragm somewhere in my torso, and that I was supposed to do something with it, but I didn't really know what or how. Telling this true story often gets a student to admit that they feel the same way; that really they don't know what support is. This then leads to an explanation of the breathing process, the muscles involved, etc., often with some dramatic results in the student's tone.

So, what IS this diaphragm? It is a muscle attached to the bottom of our rib cage which is used in the breathing process. Everyone has one and uses it day-in and day-out while they breathe. Essentially the muscle contracts and pulls downwards when we breath in, and expands and pushes upwards when we breath out. The way that we use this muscle for wind playing compared to normal breathing is akin to the way a marathon runner uses their leg muscles as opposed to some non-athlete just walking. We all have the same type of equipment, but we have to use the diaphragm in a highly specialized and intensive way. We become "athletes of breathing," if you will. I like to have students locate one part of their diaphragm by placing a hand on the 'spongy' felling area just below the V of the rib-cage. This is the front of the diaphragm. I then have them simulate a short, loud cough, or laugh. I will demonstrate it first and then they must imitate me. They should see and feel the muscle jump outwards along with the sound. I then like to have them play a note on their instrument that only requires one hand if possible (G on the sax, low C on the clarinet, middle C on the bassoon, etc.) I have them place their free right hand back on the diaphragm, pushing in slightly, and feel what it does when they play the note. They should feel the diaphragm pushing steadily out against the hand. If they don't then I work with them until they can. After doing this a little the student can feel when the diaphragm is in use even without having a hand pushing against it, so they are free to play notes that require both hands.

A hidden danger lurks at this point, one of the other most common breathing problems that I have encountered. When the student is PUSHING with their diaphragm their entire body tenses up to become like a caricature of Arnold Schwarzenegger when he was Mr. Universe. This tension particularly affects the throat and jaw, closing them off so that the air does not get through properly. The student is working so hard to support and push and tense their diaphragm muscle that they inadvertently strangle the sound with the tension they produce in the rest of their body.

As I said, this seems to be particularly common, and a solution is rather hard to teach. In essence the player needs to simultaneously be as relaxed as possible from the upper torso, shoulders, and neck up, while correctly using the diaphragm in the athletic manner already described. I have been working to find a good way to teach this phenomena for a long time with various degrees of success. I used to tell students to imagine their body is schizophrenic; like Arnold Schwarzenegger on the bottom half and super-relaxed on the top. Or, I would have them imagine that they were cloned and that one clone was tensed and the other relaxed, then a magician comes along and saws them both in half and puts the relaxed top on the tensed bottom.

Both of these had some successes, but not enough. What I am doing now which seems to work more consistently is to concentrate mostly on the relaxation aspect. I have even worked to change the language that I use while describing the process. I never use the word "tension" anymore, that is something that I am trying to avoid inducing in the student, instead I have the student think of "expansion." I make sure first of all that the student is breathing deeply. I point out that when filling a bucket of sand it the sand goes to the bottom and fills up towards the top. Likewise, a glass of water fills from the bottom to the top. But what if you are blowing up a balloon? Even if you stand with the balloon dangling towards the floor the air does not fall to the bottom and fill from there up, it fills from the closest point and expands outwards. Our lungs are like the balloon. We can just have a little air in them and it will only be in the top of the lungs. I get the student then to imagine that they are filling their lungs like they are pouring a glass of water. Draw the air all the way to the bottom and fill upwards to the top. This usually gives them a larger quantity of air to work with. Next, I have them take a deep breath and hold it for a while to feel how fully expanded their lungs and rib-cage are. It is this same feeling of expansion that I want them to emulate the entire time that they are blowing into the instrument. If they do this correctly they will start to produce a more open, supported sound with less tension.

I then 'coach' them somewhat while they play. Encouraging them to "support, support, stay open, support, stay open," etc. They will tend to fall back into their old habits of either not supporting (everything is relaxed) or supporting with tension in the rest of the body (everything is tense) and will need your encouragement to keep the balance of support and relaxation. Eventually it will become the new habit and they will be able to monitor themselves.

It takes some effort to go through this process with students but the results are well worth it. Remember that these techniques can be taught in group situations as well as the one on one private lesson with some success. Once a student starts to play with the combination of support and relaxation it makes the other elements of playing tend to fall into place more easily. The student is encouraged because they sound better, and, after the initial learning period is over, it is actually easier for them to play. These are WIND instruments after all.