

Developing a Palette of Sounds

Tone production on a stringed instrument is directly effected by three primary aspects of bow use: Pressure (or Weight), Speed, and Placement. As beginners, students are initially taught to use moderate but even pressure and speed, with bow placement directly between the bridge and the fingerboard. To vary dynamics, students then learn—usually by themselves—that the more they dig in to the string, the louder it gets. The effect of bow speed, however, often needs to be demonstrated and practiced. For some reason, the importance of placement seems to challenge students the most, often taking years to internalize.

There are some problems inherent in this learning sequence if allowed it to take this path of least resistance. One is that the three variables (pressure, speed, and placement) are not necessarily well-integrated in a student’s mind. In fact, students often assume that pressure alone affects dynamics; that bow speed has mostly to

Recently a young student identified a sound as “humble”—a word that might never have come to my mind to describe a sound, yet so potent and full of meaning to him that I felt truly humbled by it.

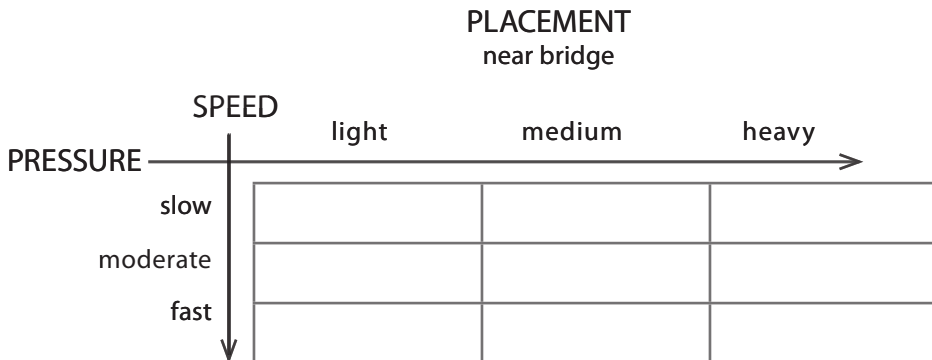
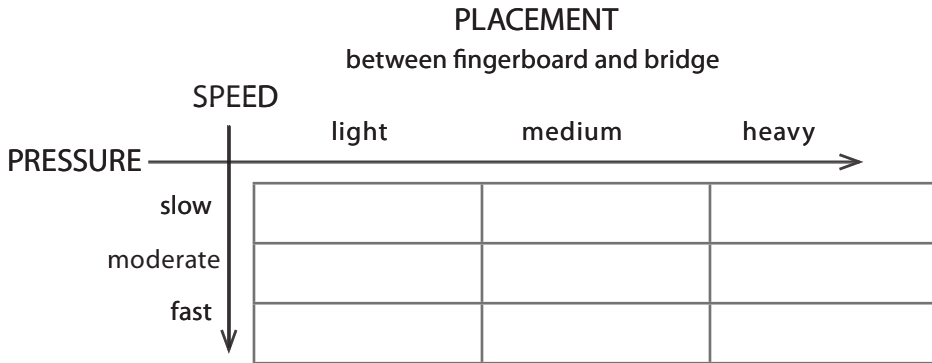
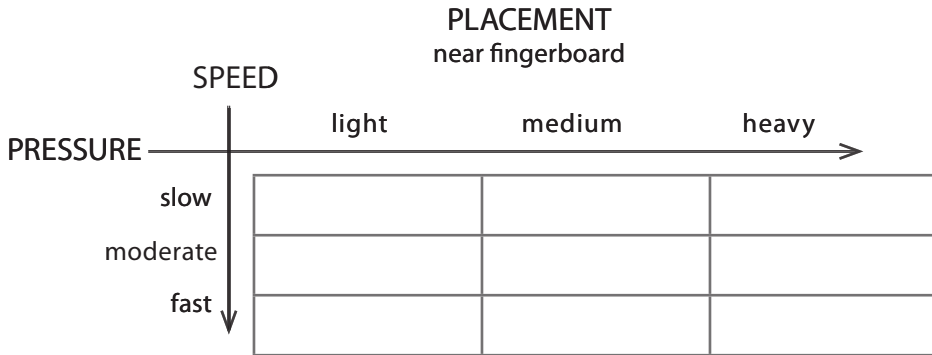
do with how many notes or beats happen during a bow stroke; and that placement is only adjusted when something sounds “bad.”

A more integrated approach to teaching sound production is to allow students to explore various combinations of pressure, speed and placement as wide-ranging expressive possibilities, rather than some that are “good”, “bad,” “loud” or “soft”. While of course it is true that particular combinations produce “A Great Cello Sound”, that sound is not ideal for every piece of music, rarely even for one piece in its entirety, and certainly not for every musical situation.

Students can begin this exploration of sound qualities with a simple fill-in-the-blank approach to combinations of pressure, speed and placement. Three variations of each element is plenty to work with—in other words, try light, medium, heavy pressure; slow, moderate, and fast speeds; and placement near the fingerboard, near the bridge, and in the middle. It is most methodical to fix one element in the process while gradually modifying the other variables. In the graph on the next page, the fixed element is the bow placement, and speed and pressure are varied one at a time.

The object of the lesson is to have students describe what they hear when they try the different combinations—not in terms of loud/soft or good/bad, but with adjectives rich in emotion, texture, and expression—words that would make an English teacher proud. In all there will be 27 different sounds, ranging from descriptions such as “feathery,” “ghostly,” “breezy,” and “distant” through “warm,” “plush,” and “generous” moving towards “brooding” and “aggressive” all the way to “angry,” “grating” and “metallic.” Some students might hear tones in colors: light blue, green, dark red, yellow, and so forth. Experiment with different kinds of *pianos* (such as austere, breezy, and peaceful) and *fortes* (maybe rushing, warm, and stormy), and create stories that fit with repertoire using their most compelling sounds.

Palette of Sounds Worksheet



Of course, some of the sounds discovered are not necessarily appropriate for normal music-making circumstances—particularly the heavy, slow bow at the fingerboard that sounds like someone is being strangled. Still, when students create, listen to and describe all these sounds, they start to make the important connection that how they use the bow has much more to do with making wonderful music than appeasing their teachers—a significant step towards independent musicianship. Besides, the emerging creativity of this kind of work can be enriching, engaging, and enlightening for teachers and students both. Enjoy the process!

*“Our heart has the most wonderful partner in our hands—
their gestures are the outward expression of what we feel inside.
Whenever we make a stroke with our bow, when we place a finger on a string,
we cause a sensation of sound and feel; and the gesture of the bow
and of the finger which brought that sound into existence
must breathe with the life of the emotion that gave birth to it.”*

~William Pleeth