Teaching an artistic violin vibrato

By: Rebecca B. MacLeod


Made available courtesy of North Carolina Music Educators Association: https://www.ncmea.net/member-resources/music-educator-journal/music-educator-journal-archive/

***© North Carolina Music Educators Association. Reprinted with permission. No further reproduction is authorized without written permission from the North Carolina Music Educators Association.***

Abstract:

Vibrato is an essential musical element in string instrument playing that enhances and facilitates expressive performance. However, the acquisition of a beautiful vibrato remains one of the most difficult skills for a young string player to obtain and for instructors to teach. There are many reasons that vibrato is a difficult skill to master. The vibrato motion is complex and can only be executed if the fundamental instrument position and left hand position are established.

In recent years a group of researchers, including John Geringer, Michael Allen, and myself, embarked on a systematic investigation that explored some of the central issues debated by string pedagogues. Through a series of investigations we explored elements of string players’ vibrato including: pitch center, continuity, initial direction of motion, finger employed, positions/pitch register, dynamic level, instrument type, and performers’ experience level. Although many questions remain, results from these studies provide interesting information to teachers that may be beneficial when describing and designing instruction relative to vibrato. In this article, I will focus on the outcomes of a case study that investigated the vibrato of one of the former concertmasters of the New York Philharmonic. This investigation provides some important information that can help us identify the component motions of a violin vibrato (Allen, Geringer, & MacLeod, 2009).

Keywords: music education | violin | vibrato

Article:

***Note: Full text of article below***
TEACHING AN ARTISTIC VIOLIN VIBRATO

By DR. REBECCA B. MACLEOD
University of North Carolina at Greensboro

Vibrato is an essential musical element in string instrument playing that enhances and facilitates expressive performance. However, the acquisition of a beautiful vibrato remains one of the most difficult skills for a young string player to obtain and for instructors to teach. There are many reasons that vibrato is a difficult skill to master. The vibrato motion is complex and can only be executed if the fundamental instrument position and left hand position are established.

In recent years a group of researchers, including John Geringer, Michael Allen, and myself, embarked on a systematic investigation that explored some of the central issues debated by string pedagogues. Through a series of investigations we explored elements of string players’ vibrato including: pitch center, continuity, initial direction of motion, finger employed, positions/pitch register, dynamic level, instrument type, and performers’ experience level. Although many questions remain, results from these studies provide interesting information to teachers that may be beneficial when describing and designing instruction relative to vibrato. In this article, I will focus on the outcomes of a case study that investigated the vibrato of one of the former concertmasters of the New York Philharmonic. This investigation provides some important information that can help us identify the component motions of a violin vibrato (Allen, Geringer, & MacLeod, 2009).

In this particular study, a video recorded performance of the concertmaster was slowed down so that the vibrato motion could be viewed at one-quarter of the original speed. The slow motion video allowed us to observe the preparatory motion that initiated vibrato as well as other important elements. The slow motion video of the violinist revealed that the first knuckle joint of each left hand finger was flexible, allowing for a forward and backward motion around the center of pitch. Although pitch center of vibrato has been debated for years, the majority of research has revealed that vibrato oscillates both above and below the intended pitch (Allen, Geringer, & MacLeod, 2009; Geringer & Allen 2004; Geringer, Allen, & MacLeod, 2005; Seashore, 1932; Small, 1936; Shackford, 1960). We also found that his left hand fingers were placed on the string such that the fingernail faced towards the G-string side of the bridge. The left hand fingers contacted the string on the “inside”, or thumb side of the finger, not through the center of the pad of the finger. Additionally, there was a preparatory motion that preceded the initiation of the vibrato, where the base knuckle of the index finger was released towards the G-string side of the bridge. This preparatory motion is essential to a vibrato that is balanced and free of tension (see Figure 1b).

**Teaching Vibrato from the First Year**

Much of the vibrato research conducted over the past century reinforces activities that pedagogues have been promoting for years. Below is a step-by-step approach that promotes the acquisition of a beautiful and artistic violin vibrato.

1) Establish and reinforce proper instrument position from the first lesson. It is essential for the student to hold the instrument on the shoulder correctly. A proper shoulder position is one where the instrument is supported on the collarbone, is relatively parallel to the floor, and the end button is slightly to the left of the hollow of the student’s throat. All the joints are flexible from the shoulder to the fingertip and the instrument can be supported without the help of the left hand for short periods of time. Shoulder rests, shoulder pads, or raised chin rests are all helpful tools for establishing the proper shoulder position. Each student is different, so flexibility is required to help find the correct position for each individual.

2) The left hand must be balanced and free of tension. Violinists’ and violists’ left hand position has three points of contact or “touch points” that allow for box shaped fingers. Most teachers will identify the base knuckle joint of the index finger on the left hand as the first point of contact. This is an effective starting point. However, hand size and finger length vary from person to person and the ultimate goal is for the fingers to create a box shape. This may require a touch point that is slightly higher or lower than the base knuckle joint. The second touch point is the pad of the finger. The observations from the Allen et al. 2009 study show that the first three fingers should contact the string on the inside or thumb side of the finger while the fourth finger contacts the string through the center of the finger pad. The third touch point is the thumb. Teachers and performers recommendations regarding the position and location of the thumb vary. The most important element is that the thumb is loose through the joints into the wrist. It is also important to establish the appropriate amount of space between the neck of the instrument and the hand.

One strategy that helps determine where the students should touch the thumb to the neck of the instrument is to have them hold their hand naturally without the instrument, mimicking the left hand position for violin. Have the student create a box with the index finger and draw a line on the base knuckle at the precise location that creates the correct box shape. Then draw a corresponding line on the thumb that is aligned with the mark on the student’s index finger. This process will allow for a balanced hand shape on the instrument.

---

**Figure 1b**

*Teaching Vibrato from the First Year*

---

**Figure 1a**

*Teaching Vibrato from the First Year*
3) Begin pre-vibrato activities during the first year of instruction. While the left hand is being established, pre-vibrato activities can commence. Students are able to begin developing flexible first knuckle joints during the first year. Figure 1a demonstrates an activity that promotes flexibility in the first knuckle joint of each finger. Have the student create a circle with their index finger and thumb. Then ask the student to practice straightening and bending the first knuckle joint. This exercise should be repeated with each finger.

4) Transfer the flexible knuckles to the instrument. This exercise is performed on the body of the instrument prior to performing on the string. Align the student’s left hand on the body of the instrument so that the finger being practiced is lightly touching the neck and the fingernail is facing the bridge. The violin fingerboard will provide a physical guide as the student practices the backward motion with a flexible first knuckle joint (see Figure 1b). This will reduce the tendency for the hand to have extra twisting motion. A related exercise, the “manual assist”, allows the student to practice both aspects of a correct vibrato motion. Paul Rolland recommends tapping activities on the instrument where the left hand propels forward using a swinging motion from the wrist (see Figure 1e).

5) Practice disengaging the base knuckle of the index finger prior to moving the vibrato to the strings. It is important for the student to release the base joint of the index finger from the side of the instrument for two reasons: (1) Disengaging the index finger allows for a small space to exist between the index finger and the neck of the instrument so that the hand can “wave”. (2) Opening the thumb joint of the hand frees the hand of tension so that it can “wave” smoothly (see Figure 1d).

6) Include activities that promote both a forward and backward motion. Although the vibrato pitch does not actually vibrate exclusively from the pitch and below, exercises that promote this motion are very effective when teaching vibrato. Some method books notate an exercise from the pitch to a half step below and this backwards motion is an excellent activity that promotes flexibility in the left hand first knuckle joint (Allen, Gillespie, & Hayes, 2000). Pairing this flattening exercise with a forward motion recommended by Rolland in the Teaching of Action in String Playing, allows the student to practice both aspects of a correct vibrato motion. Paul Rolland recommends tapping activities on the instrument where the left hand moves backwards with a swinging motion using the flexing their knuckle (see Figure 1c). This exercise is also beneficial when developing arm vibrato.

7) Combine the forward and backward motion into one motion. Have students “polish their strings”. With the thumb in the heel of the neck, place the second finger directly over the thumb without any weight in the string and have the students move their second finger back and forth, first with a very wide motion that gets smaller until they are simulating a vibrato motion (see Figure 1f). Repeat this activity with all four fingers.

8) Simulate the bowing motion in the air prior to attempting the first vibrato motion with the bow on the string. Before combining the right and left hand together during vibrato, it is helpful to have the student bow in the air using a vertical motion. Left hand and right hand independence are important and younger players frequently have trouble executing a smooth bow arm during initial vibrato activities. Bowing in the air or having students participate in partner activities where one student vibrates the left hand while another student bows for him can be both fun and helpful.

9) Practice the vibrato motion with a metronome. The final step to achieving a beautiful vibrato is correct repetition with the use of a metronome. Students should set the metronome at 60 bpm and begin vibrating from the pitch and below using eighth notes grouped in 2, followed by triplets, sixteenth notes, and finally a natural vibrato motion. Careful rhythmic practice will create a vibrato over which the student has some level of control that will enable them to utilize their vibrato for expressive purposes.

Conclusions

Everyone should have the opportunity to learn to vibrate with a beautiful sound. The most common barrier that students face when attempting to vibrate is improper set-up. Careful attention to proper instrument and left hand position along with a step-by-step approach that is introduced early in the instructional process will facilitate student success in acquiring a beautiful vibrato.

References


AUTHOR
Dr. Rebecca MacLeod is Associate Professor of Music Education at the University of North Carolina in Greensboro, where she specializes in string pedagogy. A native of Pennsylvania, she taught elementary, middle, and high school orchestra in Hollidaysburg and Beaver, Pennsylvania, where she was chair of music activities. Dr. MacLeod is published in the Journal of Research in Music Education, International Journal of Music Education, Bulletin for the Council of Research in Music Education, Update: Applications of Research in Music Education, String Research Journal, and the Florida Music Educators Journal. Her research on working with underserved populations, vibrato technique, music teacher education, and music perception has been presented at the International Conference of Music Perception and Cognition, Music Educators National Conference, National Association for Music Education National Conference, American String Teachers National Conference, Midwest Band and Orchestra Clinic, Society for Music Teacher Education, and several music educators state conferences.

Dr. MacLeod received her undergraduate degree from Duquesne University in Pittsburgh, Pennsylvania and her MME and PhD from Florida State University in Tallahassee, Florida. She continues to serve on the faculty of the high school summer music camps at Florida State University and the University of North Carolina at Greensboro. She is a frequent guest conductor and clinician throughout the United States.