

Common Issues When Dealing with Strings

By JoAnna Cochenet

| Issue | Why a Problem?/What it is | How to Teach/Fix/Understand | Other |
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| Balance Point | Location of horizontally balancing the bow since frog is heavier than the tip | To find it: try to balance using two fingers, laying the bow on top of the fingers until it balances evenly | Usually the better place to start and play most bowings when starting down bow or doing certain articulations |
| Finger Patterns | Usually a problem because most students start out with a basic finger pattern; will cause intonation issues especially in flats | Practice other key signatures before introducing them to music on the page | As a trained musician, you will be able to hear where the right scale degree is in finger patterns, just make sure to use the right finger and not develop a bad habit of incorrect use of finger patterns. |
| Basic Finger Pattern | Usually on the top two strings of violin/viola as: 0x1x2/3x4 <i>x=space between fingers / as fingers are close together</i> cello as: 0x1x3/4 bass as: 0x1x4 | Look at most method books which have a teaching chart in regarding finger positions and where to shift when necessary | |
| Shifting | Usually causes a lot of intonation issues | Remember that the further toward the bridge the fingers are, the closer the fingers are together because of the higher intervals; Many advanced method books (or intermediate) will help you prepare | Shifts on even-numbered positions are the most difficult (2 nd , 4 th , 6 th , etc) because they are contrary finger patterns than what is normally used in |

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| | | and show exactly where to go. | 1 st position. Shifts on odd-numbered positions are slightly easier (3 rd , 5 th +) because the finger patterns are more similar to 1 st /home base position. Cellos and basses cannot play most notes without shifting. They should learn this right away. |
| “Hi 2s” “Hi 3s” “Lo 2s” “Lo 4s” “Lo 1s” | Usually in Keys with more than 1 sharp or flat or in case of accidentals | All this means is that based on the Home Base Finger Pattern, a Hi 2 is a “regularly used 2” but a Lo 2 is out of the norm. Lo 1 st are used for Bb on the A string, Eb on the D string, and so forth. This may not be the same for celli and bass. | Alternate positions can be used depending on key signature: in AM on violin, use a high three on D, not a low four (this means G# not Ab) and so forth |
| Tuning of Instruments | Tune by the A string of the concertmaster | All instruments tune the A, D, and G together. Violas and celli to C string, and Violins and Basses tune E string. Remember the bass is tuned by 4ths and everyone else by 5ths starting from the lowest string to the highest. Basses should use their rotary pegs to tune, not fine tuners. | Weather conditions will DRASTICALLY affect the way the instruments are tuned. Extreme weather conditions are NOT GOOD for string instruments. Always tune to A440 to get the most accurate reading of an A. Sometimes harmonics especially in the basses are more easily heard to determine if the |

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| | | | pitch is correct. |
| Common Articulations | Anything other than legato or staccato might take extra time to work on, or anything other than a Down-Up-Down-Up pattern. | Practice! Watch for bow distribution when changing or keeping bow directions. Short articulations/off the string should be played nearer the frog unless “ricocheted.” | Using less hair of the bow will keep the dynamic more <i>mp</i> or <i>p</i> or a lighter, classical articulation (not Romantic or 20 th C) |
| Posture | Sagging instruments=tired or lazy students and poor intonation and bad posture | Elbows should not be at the side for any instruments. Bass should be leaning into the players’ left hip. All sitting players should sit at edge of chair, including cellists, for best support. Bases can sit if necessary. | You can also place a ball of paper on the “flat” upper string instrument to see if it rolls off. If they are level enough with the instrument, the paper will not fall off while playing. |
| Preparing the instrument | Will help improve sound Some causes of intonation issues: bridge is not centered, tailpiece is crooked, chinrest is out of place or loose. | Tighten and rosin bow (only pinky-width between hair and bow). Tune strings by fine tuners or pegs if really out of tune. | Do not let students touch pegs unless they have had some training with it, used in emergency tuning. |
| String Methods Books | Some are better than others | Listed in order of preference: New Directions for Strings Essential Elements/Advanced Technique String Explorer All for Strings Other | There are lots of books available for students learning to read music like “I can read violin” and also the famous Suzuki books with a bunch of well-paced repertoire and tonalization exercises |
| Bouncing Bows | The bow is bouncing along the string or “skating” over it with an airy sound | Usually the student is not directing the bow straight across the string between bridge and fingerboard and is | Bridge and fingerboard playing are used in some cases if the desired sound is |

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| | | not applying enough weight. | actually wanted. |
| Crunching Sounds | As it sounds, the bow is crunching on the string | Usually means there is too much pressure on the bow; lighten up the hold on the bow and stay a bit further from the bridge and/or do not push so hard! | Sometimes this articulation is good, especially for Shostakovich or some Tchaikovsky (think: style) |
| Getting the String to Speak | Usually violin E strings or celli and bass strings are the most difficult to control | Violins need to work on flatter bow hair and bow speed to get the string to speak or sing without sounding screechy. The lower strings just have thicker strings, and take more effort at first to get the sound to go. Don't be surprised if beginners cannot get the strings to "work." | |
| Pizzicato | Usually they rush or do not sound or are too accented | <ol style="list-style-type: none"> 1) the delay time for pizzicato is faster than when bowed, so they need to count! 2) Make sure fleshy part of finger pad pizzes and not the nail! 3) Pull diagonally across fingerboard, not straight across, to prevent accents | Left hand pizzicatos are first taught as using the left hand 4 th finger (mostly on open strings). This can be used on other notes, but is mostly for either show or just to prevent having to de-bow, pizz, then bow again, and saves extraneous movement. |
| Special Effects | Can be difficult to get just right | There are lots of books and information on string effects and bowings that can help. | <i>The Modern Conductor</i> for example |
| How Often They Play | In full orchestral music, not every section is always playing and could | Choose literature well, to keep everyone playing or from getting bored! | Usually the violins get a lot of the show, and sometimes the celli |

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| | pose discipline issues | | and basses more than the middle sections. |
| Breathing, in strings? | Poor phrasing, constant bowing throughout music | This is possible, unlike wind instruments, but students should learn to breath with the conductor or concertmaster for beginning of sections, pieces, or phrases. | Teach the strings to move, and not be at a stand still. With so many strings in sections sometimes, it can be difficult for the person in back to know exactly what is happening before them since most likely they cannot hear the rest of the section. |
| Bored Players | Fidgeting in class, complaints about music, etc | Sometimes this means the students are bored with their instrument. Give them new challenges outside of class and have them apply it to the music. | If you have enough instrumentalists to do this safely, have the student learn a second instrument and clef. Rotate string players within sections for a different feel. |
| Bowings | All issues | There is almost no ‘right’ bowing, but for experienced players, they choose what feels right and comfortable for them and the section. As long as sections are together (unless separate parts) there shouldn’t be a problem, but string players love to argue over bowings and fingerings. Most common is to start the first measure of any phrase/section as a down bow. | Also consult books like <i>The Modern Conductor</i> and other resources from classes because they are very well laid out. Most pick-ups are up bows. Anything slurred, tied, or slurred with staccato notes are still all in one bow direction. Accents will determine if they are to lift between down bows for another heavy accent, or just remain down- |

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| | | | up like usual. |
| Balance & Blend | Few players in sections | You could, as mentioned, double a student in a section and have them learn another instrument. Or you could arrange parts for other sections to play cues and parts if the parts blend well. | The most common lacking sections are violas and basses. Most abundant are violins. Try to balance the violin sections evenly or by player abilities. Also checking the literature is important to show off your stronger sections only if you have decent support from other sections. |
| Page Turning | Who turns the page? | Always the inside person. The orchestra is separated in “half” between seconds and violas. Those closest to that half turn pages of the stand unless sitting separately or if basses have individual stands. | Usually basses are best with individual stands. They’ll have time to turn and they won’t be crowded or bang up on each other. |
| Watching/Leading | An orchestra member, section doesn’t watch, follow, or lead the music | Teach the students to know their part well enough to listen to other parts, watch other section leaders and players, and the conductor. | This is how they learn to communicate and breathe together! |
| Tuning..Again | How to keep the group organized tuning when they are younger | The easiest way to do this is in small groups. Stand by the piano and have each student in line to tune their instruments to the A, D, G, C, E that you plink on the piano. | This is how I learned the notes on the piano, by watching where my teacher played these notes to help me tune. They can eventually do this themselves by making the string “sound the same” as the piano sound. |

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| Personality | Violinists and some cellists are most arrogant | You'll just have to deal and use them to demonstrate techniques to others. More likely than not it will benefit more than harm the group. Just don't get into a brawl with them or another student | Especially true when they take private lessons, and if they take from a VERY highly respectable teacher. Hint: contact their teacher for help! |
| Suzuki Students | Usually they have problems reading music but do not have a problem listening to other musicians and following directions or leading. This is what they have been trained to do. | Use flashcards or something visual before diving into a method book. Use I Can Read Music books or something similar. | These students might struggle and feel frustrated that they cannot learn as fast. Try to incorporate both listening and seeing the notes on the page at the same time during lessons. |
| Private Lessons at School | Normally you cannot meet with every student individually on a regular basis unless you have a good program going or it is a small school. | Group lessons work well with about 2-4 people. You can get work done and handle the whole class and dilemmas at once. | |
| Chamber Groups | To change up the program a bit from the norm | String orchestra, full orchestra, string trios, string quartets, string sextets or octets, duets, concertos, piano concertos with orchestra, vocal arias, Masses with choirs | Creates interest while educating students about more literature, and opportunity for solo parts |
| Harmonics | These are difficult to speak and find | Think of how you divide a string (in $\frac{1}{2}$ equals an octave). Lightly touch the third or fourth finger without depressing string to the fingerboard. | Pull the bow fast in order to make it sound, do not press the bow into the string, nor skate it across it. |
| Double Stops | Can be out of tune, especially if the lowest pitch is not | Practice lowest pitch first then second. Usually two pitches are | Most double stops are not played together anyway |

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| | in tune. | feasible for one player, but triple/quadruple stops are mostly for soloists or should be split between sections (bottom=inside, top=outside players) | (esp trip/quad) and must be broken by playing the lowest note or two first, then adding the top separately) |
| Bow Hold | One of the worst problems students have, can cause discomfort and incorrect playing positions/poor bow strokes | Learn the different bow holds for the instruments yourself based on another string teacher (an actual string player) or pictures online or in a method book. They might show you wrong ways to hold it as a cautionary approach as well. Start with small exercises and short ones to build muscle. | *Never let students go past the first few months of playing with having the right thumb on the pearl of the frog. It should be curved and on the inside of the frog area. No collapsed fingers or overstretched fingers. |
| Grasping the Instrument | Particularly with violins and violas, some students cannot shift because they are holding too tightly the fingerboard of the instrument. | Work on getting them more relaxed. With their left hand curved up as it should be, the instrument will never be out of their grasp and fall. | Incorrect holds may also be attributed to the slanted head. The head does not need to be at a 45 degree angle to the instrument, but holding it comfortably for individuals by the chin rest, without clamping. |
| Vibrato | Usually it doesn't happen without some instruction, or those who use it usually have poor technique if not instructed otherwise. | Fortunately, everyone has their own vibrato but the most common types are arm, finger, or wrist vibrato, using the respective body parts to help vibrate the string. In order to vibrate, the movement must move somehow either along the length of the string, or perpendicular to it. | Vibrato can be grossly out of tune if too wide. The students should not go above the pitch, and not necessarily below, but warm the given pitch with a touch of vibration instead of pure movement along the string. |

