

TEACHING STUDENTS HOW TO MEMORIZE

by Faith Farr

Contests, recitals and auditions are all opportunities where students are expected to perform from memory. Some students have no problems; some encounter unexpected problems (“It was fine at home!”); and some students expect problems and indeed find them. Is there a way to teach students how to memorize so that they can perform securely and reliably, and maybe even have fun? Or do they just have to practice and hope that one day they wake up and the whole thing is memorized?

I remember a master class that Pinchas Zukerman gave ages ago when he was directing SPCO. In the Q&A at the end of the class, someone asked him how he memorized all the pieces he played. He actually looked puzzled at the question. And waited a moment. And then answered, “It’s not a question of ‘*memorizing*,’ it’s a question of ‘*knowing*.” That insight has helped me help my students with memorizing. They may memorize dates for tomorrow’s history test, but will soon forget them. But they “*know*” their brother’s middle name, their birthday, their phone number. At one point they had to learn these facts, but now that they “*know*” them they don’t have to review them every weekend; they don’t have to worry they’ll flunk if there is a pop quiz on their brother’s middle name. I need to help them “*know*” their piece.

Obviously, the first step in knowing a piece is learning it in the first place. I tell my students there are only 4 elements of accuracy—what they need to do for anyone to say they played the piece “correctly.” Those elements are: notes, fingers, bowings, and rhythm. In addition to accuracy we will talk about tone, dynamics, phrasing, technique—but if you’re not accurate you literally don’t *know* what you are doing; you’re not ready to memorize.

In order to achieve accuracy, students need to practice short sections. The trick is to choose the correct length of the section. In my opinion, the section should have *zero or one problems*. If there is more than one problem, the section is too long.

My recommended practice methods are *Three in a Row* and *Plus One System*. *Three in a Row* means you play accurately three times and go back to zero on any goof. If the section is small enough, *Three in a Row* is doable even on a new piece. *Plus One System* means you add one for every accu-

rate performance and subtract one for every goof; you stop when you get to Plus One. This is a great system once you are reasonably secure—if your first repetition is good, you’re at Plus One and you’re done. But this is really daunting if you aren’t secure: goof = minus 1; good = zero; goof = minus 1; goof = minus 2; good = minus 1. Climbing out of a hole of minus 5 or more is really tough.


While practicing for accuracy, students should also be getting to “know” their piece—adding facts to the sound and feel. Students need to be able to:

- say the letter names on the page
- pizz and say the letter names—thus naming the spot on the fingerboard
- clap and count the rhythm
- play and indicate the beat, for instance by tapping their foot
- describe the finger pattern they are using—high 2, low 2, regular, extended. In other words they need to know the whole and half steps
- describe their plan for every shift. E.g. “I have to play E \flat with finger 2. I’m going to put 1 on D and finger 2 is a half-step away.” Or e.g. “I just played A \flat with finger 1 on the D string; I’m going to put 2 in E \flat on the A string straight across from where 1 was.”
- on step-wise passages, identify all the whole and half steps and make the look of the hand match. (A person watching a video without sound should be able to tell if you played a whole step or half step.)
- play slowly; stop before every shift; sing, on pitch, the letter name of the shift note

My recommended practice methods for “knowing” are: *Your Pencil is Your Friend* and *Repeat Until the First Time Tomorrow will be Better than the First Time Today*. After you have painstakingly figured out the half steps or the letter name of the high shift or the funky counting—write something in! Write in anything that will help you play better next time. Then repeat until the knowing really is more secure. If you stop now, will you have to spend the same amount of time tomorrow figuring it out again? If so, don’t stop yet! It’s OK to spend 20 minutes on 2 bars if that means you really get it.

During the learning stage of accuracy

and knowing I find that where problems are chronic it is almost always the case that the knowing/seeing-the-music part conflicts somehow with the sound/feel part of playing. For instance, if a student plays a shift out of tune they may be hearing the pitch correctly in their musical imagination (e.g. F \sharp) from listening to the recording, but their brain may be incorrectly telling them it’s a G from misreading. Or a good reader may correctly know it’s F \sharp , but not having listened to the recording, hears G internally because a previous similar phrase shifted to G. In both cases in my experience, the result is that the finger does the only thing it can do when asked to play F \sharp and G at the same time—it splits the difference and plays between F \sharp and G. Once the student can sing the correct letter name on pitch, so the knowing matches the sound/feel, then I find the intonation problem is solved.

Syncopations and bowings across the beat are another area where the knowing/seeing may conflict with the sound/feel. When a syncopation isn’t quite right I ask students to clap and count, and then play and tap their foot. Especially for novice readers, the quarter note in  just looks like it should get the beat! When students play and tap their foot, in my experience one of two things happens: the foot stops tapping where the rhythm is a bit off (which I call a heart attack—the beat stopped); or the foot taps in the wrong place. Once the foot taps in the correct place, the structure of the beat is correct inside the student and what I hear is musical. Similarly the beginning of a slur usually feels like it the beginning of a beat. But in a passage slurred across beats, the student has to learn to tap their foot correctly on the beat note in the middle of the slur.

As the learning stages of accuracy and knowing become solid, practice should follow the CPR system: Consistent, Precise and Reliable. *Consistent* means that three repetitions will have the same fingering and bowing. *Precise* means each repetition will be exactly in tune and rhythmic. *Reliable* means that there is a good chance that tomorrow’s repetitions will also be Consistent and Precise.

Memorizing will be possible when the piece is accurate, with correct notes, fingers, bowings and rhythms, and the four aspects of sound, sight, feel and facts match and

reinforce each other.

My first stage of memorizing is: *Play Until Your Brain is Full*. Start at the beginning and play as much or as little as you want, reading from the music. Once. Then close your eyes or close the book and play that exact passage by heart. Stop at the same place; do not grope onwards just because you got lucky. If you can't play by heart, your brain overflowed because the passage was too long. Open the book and play again, with the music, a shorter passage. Only the player will know when their "brain is full."

Once students recognize when their brain is full, then they work through the piece in little sections, with 5 steps on each section: play with the music, play by heart, play with the music again just to make sure; play by heart. The fifth time is player's choice—music or memory. As time goes on and the piece becomes more familiar, the length of the sections in the *Music-Memory-Music-Memory-Choice* practice becomes longer. Until we have the whole piece.

Every piece will have traps, for instance first and second endings where the music is similar but not exact. Whenever a student notices a trap they must become a detective and discover what I call the "corner"—the exact note where the change occurs. In Handel's *Bourree*, the "corner" is the last note of bar 4—which ascends to begin the scale sequence the first time, and descends at the same spot of the phrase at the end of the piece. Once traps are identified, you must practice with the *Card Game*. When there are two places, as in Handel, colors will work—red cards for the first way and black cards for the second way. If there are more than two places, I use suits. The rules of the *Card Game* are: shuffle the deck; choose a card; play the passage that card designates. If you play correctly by heart you get to win the card and set it aside. If you goof, you practice with Music-Memory until you get it, and you put the card back in the deck. Your goal is to win the entire deck by the end of the week.

I also use the Card Game for memorizing sections—instance the Suzuki Bach *Musette* needs four suits: hearts, hearts, clubs, spades, diamonds, repeat back to clubs, spades, diamonds. With longer pieces, I have students choose the sections and we use as many card numbers as we need. Then we write out a cheat sheet; you choose a card and refer to the cheat sheet to remind yourself what the section is. My cheat sheet for Dvorak *Silent Woods* begins: Ace = theme with the corner note of C; 2 = theme with the corner note of B \flat ; 3 = start upbow on E \flat ; 4 = downbow eighth-two-sixteenths; 5 high theme, etc. There are two benefits of the Card Game. If the student doesn't cheat, they get the additional repetitions they need on the part they don't know because those cards keep going back into the deck. The second benefit is that the student has lots of spots in the middle of the piece where they can start. If they do get flustered in performance, a reliable place isn't too far away and recovery is possible.

Once the student is able to play through the whole piece from memory, at least some of the time, at least at home, it's time for pressure testing. Strategies include:

- *One Chance Practice*. In the middle of homework, pick up your instrument, play your piece once, and go back to your homework. Or have your friends or family be an audience—but play only once, as you will in the concert.
- *Distraction Game*. Perform while a "practice helper" (parent or sibling) tries to distract you. My rules are: I'm not going to touch the student or make a noise, but anything else is OK. Sometimes I dance around, move the music stand, wave my hand right in front of their face, pass a pencil underneath their tailpiece... When students realize they can close their eyes and go deep inside to access the music within, they have learned an excellent performance strategy.

- *Silent Practice*. Put your instrument down and just imagine the piece—sound, sight, feel and fact. I "hear" the piece; I "see" a video of my performance (where my bow is and how my left hand is moving) although many of my students report they "see" the music on the page; I "feel" the movements of both hands; I know the pitches and the beat count. The goal is to have a vivid experience of the entire piece. Often the beginning will be fine, then there will be something foggy, then it will be fine again. You must fix the foggy places. Practice with the music and put into your brain whatever was missing from sound/sight/feel or fact until *Silent Practice* is vivid.

For pacing, I find my students usually have secure performances when they can play the entire piece by heart three weeks before the concert. Then we have plenty of time to pressure test and pay attention to the musical nuances that will make the performance fun. If you have never played the piece the way you really want to, it is unlikely that you'll get lucky at the performance when it really counts. Nerves are your body's way of telling you you aren't ready. But if you have performed from memory in many one-chance situations, then it is likely that you'll have a great performance when it counts. Your sense of calm and focus within the excitement is your body's way of telling you you are ready to have a great time.

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