# Going Beyond the Notes: Habits of Mind in String Performance

by Daniel Keeler

**Introduction**

Many students today are stuck on learning the notes and simply bypass the notes to read the finger numbers, or copy their teachers without thinking and evaluating for themselves. How can we push them to go beyond the notes on the page? How can we instill a sense of ownership and activity in the musical creative process? We humans have a relatively limited capacity for processing information. Yet, habitual mental processes like the act of walking or writing, once learned, do not require a lot of management in order to sustain that process. It is the learning itself that requires careful application of time in order to instill healthy habits. Committing the mental management of certain routines opens up our minds to approach problems with newfound ease, knowledge and understanding.

Professors Bena Kallick and Arthur Costa brought together attributes of what human beings do when they behave intelligently and refer to them as "Habits of Mind." They bring the idea that habits of mind are less about behavior, and more about a framework for how individuals think. I have taken their research and isolated eight of the habits and placed them in a musical context below. By providing meaningful habitual learning experiences in a musical environment, we can provide students with the tools they need to succeed.

**Develop Craft**

To truly *develop our craft* there are three main areas of growth: the development of intonation, rhythm, and sound/tone production. Intonation and rhythm, like the development of any other skill, require practice as skills to be learned. That means letting the students know when they are playing out of tune, playing along with them as a drone or exactly what they are playing in order to model and demonstrate for them what it means to have good intonation.

For rhythmic understanding, students not only need to have a foundational knowledge of note value hierarchy, but also the technical skills in order to implement the required articulation. We can break down those rhythms to emphasize counting within the measure (1 e & a, 2 e & a) or rhythms that emphasize pattern or beat, such as the Takadimi approach. Regardless of the notation you use, setting a standard notation increases in efficiency and understanding due to scaffolding upon common terminology. This also means that at the elementary level orchestra teachers can work with classroom music teachers for what students are already familiar with.

Sound production, or what could also be called tonal production, is the most sought-after of the three goals, yet it cannot happen without proper intonation and articulation. The fingers of the left hand need to be curved enough to allow space for the other strings to ring in a natural reverberation or sympathetic vibration referred to as "ringtones." It is these natural ringtones, in coordination with proper placement, pressure, and speed of the bow that allow our instruments to fill up the entire room with our sound.

**Engage and Persist**

As musicians, we often look at a daunting work with the mentality that it may not be attainable to perform. Yet, like many of the things we do, it is best to break it down into more manageable chunks. The first step to achieving that goal begins with analyzing the problem. Then we develop a system, strategy or structure to attack that problem, and learn when to move on to another approach if it's not working.

Chunking, adapted to string playing, is characterized by pauses between successive actions. This is great for short difficult segments. Some examples include taking straight 8ths or 16ths and doing short-long-short-long, or long-short-long-short. Additionally, one can pause on the first note of every group of four etc. These pauses placed between the notes provide students the necessary time to identify which finger in which position comes next. Additionally, it practices the shifts and transitions between those positions at speed. In most situations, the changes and improvements are not always noticeable or instantaneous and should be spaced out. Doing so instills the habit of fully *engaging* in the repertoire and *persisting* until the work has been completed.

**Envision and Audiate**

The ability of a musician to envision the way a piece of music is to be performed is critical to developing effective musicianship. A musician must develop a plan of action for the overall picture, maintaining that plan throughout one's rehearsals, and then reflecting on and evaluating the individual's work until its completion. There are two central ideas surrounding a musical plan and they are the analysis of the piece, and the ability to audiate (hear internally) and auralize (reproduce externally) what one wishes to play, either inside one's head or out loud but ideally both.

An example to reinforce this concept would be having students sing their line, as it can be a good indicator of their internal intonation. To hear each successive phrase of a piece, to internalize, develop, and *envision* it, then reproduce it in a way that is intended, is a skill that is developed slowly. As teachers, we have our own beliefs of the way a piece should sound and be played backed by years of experience and study, but we need to give the freedom of expression to students to envision new aspects and grow upon what they already see and hear. It is that freedom that will allow them to grow.

**Express**

Similar to envisioning and audiating a given mental plan, *expression* requires a toolbox of informed practices. It requires not only technical tools, but a knowledge and understanding of musical styles in order to implement those tools. One of the greatest technical forms of expression by a musician is the use of vibrato. It provides a color or tone that adds to the ever-expanding palette of tools in our repertoire. However, having a continuous vibrato and an effective understanding of forearm, wrist, and finger vibrato is not enough. It is about being able to use it in context. Using the exact same wide vibrato for all that we play is like adding black pepper to all of our food. It certainly is a spice and is needed in some situations, but too much of one thing is not always good. It is our job as educators to not only model and emulate those expressions, but provide students with the context in which they can use them effectively. By emulating what we teach, we provide students with a firm example and the means to develop and

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*express* their own musicality.

**Listen and Observe**

When a young musician spends much of their time practicing their own individual part, oftentimes the way that the part fits into the whole gets overlooked. The act of truly *listening and observing* the musicians around oneself is an acquired skill. In an ensemble setting this can be seen through knowing which instrument plays the motif after and how to model an individual's phrase to emulate those who played it before. As instructors, we listen for balance, blend and intonation between the various musicians. We need to be able to articulate what type of tone we are looking for, and give suggestions as to how they can reach that goal. As a student or performer, this means gaining an intimate understanding of how the bow and the string interact in order to produce the desired sound. We must listen more deeply to the music we create, to feel how the notes are interconnected, and how intonation reacts with the natural ringtones of the instrument.

**Reflect**

Reflecting on our mistakes and our playing is one of the hardest things to do as a musician. Improvements in the music can be made daily, not just after a performance. It takes a mindset that strives for accuracy and betterment by holding oneself at the highest standard to help reach that goal. That mindset cannot be created overnight, and is not just about overcoming mistakes, but also asking oneself the right questions.

The habit of systematic *reflection* will draw lessons from prior experiences and eventually lead to a behavioral change. In a lesson, have students give feedback first. Avoid black and white feedback as it would not be focused or goal directed, making it ultimately ineffective for retention purposes. Three generalized questions that I ask my students are: What went well? What did not go as well? Lastly, what would you do to practice differently or improve upon for your next performance? For things that went well, this could be a specific measure, or an overarching theme such as phrasing or articulation. Take what the students say and expand upon it, providing both a learning experience and showing your own active listening and critical thinking skills. Student responses can provide valuable insight for an instructor to identify faulty or inefficient practice techniques while also providing the opportunity to refine and demonstrate additional techniques from their own toolbag.

**Explore and Stretch**

Throughout that process of learning a new piece, there are many opportunities to *explore* different genres and musical styles and *stretch* our limitations. Activities that do so also require us to take risks. There are two types of risks we can take: venture and adventure risks. In a venture risk, the risk is calculated by thorough study beforehand, organizing ideas, and then implementing them. The adventure part of risk taking is the experience of the project itself. Teachers must always strive to create a safe learning environment for their students, and provide positive reinforcement and constructive feedback when the students seek opportunities to explore and stretch.

In an ensemble or group setting, this could take the form of an improvisation session. One example is improvisation on a D major scale. Have all students start with a 1-octave D major scale to a set quarter note beat. Then have students play any set of notes in the scale along to that beat. By having all students in the group participate, it creates a space where students feel safe enough to take those responsible risks. In a studio setting, these risks could take the shape of simply adding additional ornamentation into music or creating a cadenza of one's own. Students can make a detailed and prepared plan of attack before implementing them with previously studied turns, scales, trills and other ornaments minimizing the risks involved and providing a greater chance for success. We need to continually provide our students with safe, open, and interactive spaces to *explore and stretch* their creative faculties in making musical decisions.

**Understand the Music World**

With each introduction of new technologies, music has adapted itself to fit society's wants and needs. For example, with the introduction of the internet, we saw the expansion of music as it began to blend together in today's society. We hear and see music everywhere, and it plays a vital role in daily life. To truly *understand the music world* around us, we must immerse ourselves in the live music of the past, present and future. One way to accomplish this is by programming repertoire from a wide variety of genres and cultures. By taking music that is structurally relevant and familiar to students, teachers can establish broader learning in tone, articulation, and technique, allowing for continued scaffolding. Understanding and exploring the various characteristics, elements and styles of the music that we hear allows us to engage with our musical tastes and converse with others at a deep and informed level. It is only by immersing ourselves with the interplay between all art forms and daily life that we can begin to *understand the music world*.

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