Resuming Classroom Instruction During COVID-19
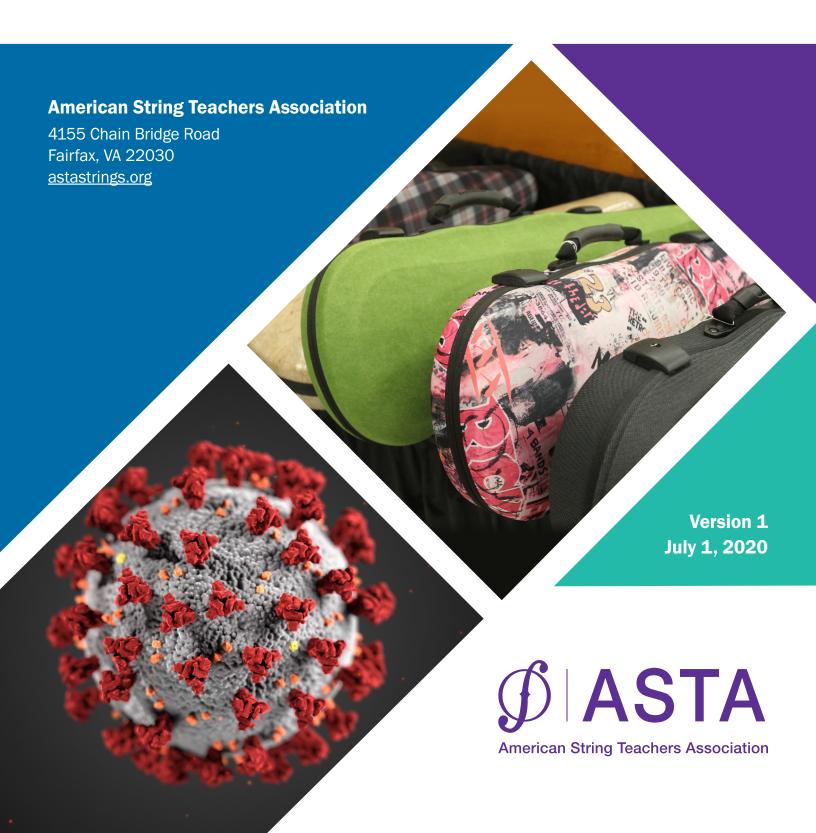
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INTRODUCTION

The American String Teachers Association convened the ASTA COVID-19 Task Force on May 21, 2020, to create a planning resource for string teachers as they prepare to resume string instruction in classrooms and studios in the fall. The following document provides suggestions for classroom teachers and ensemble directors as they navigate face-to-face, online, and hybrid instructional situations during the COVID-19 pandemic.

The impact of COVID-19 varies by state and community, so planning must take place within the guidelines determined by state and local officials. ASTA does not claim medical, legal, or scientific expertise; rather, we have summarized the current research available to assist teachers' planning efforts for fall. Research is ongoing and our understanding of the current situation will continue to evolve. This resource is a living document and will continue to be updated by ASTA. Student and teacher safety should remain a priority and we highly encourage teachers to stay informed and follow Centers for Disease Control and Prevention (CDC), federal, state, and local guidelines for health and safety.

ASTA COVID-19 TASK FORCE GOALS

ASTA's Vision: Enriching lives through universal access to fine string playing and teaching.

The following ideas guided the development of this resource, which is intended to support string education and the continuation of teaching and learning string instruments.

1) **Active music-making as part of a community of musicians can and should remain a priority.** The disruption created during COVID-19 provides an opportunity to rethink how music instruction is delivered. Virtual ensembles are a temporary solution but should not be considered a long-term substitute for in-person music collaboration.

2) **Curriculum continuity should be maintained as much as possible.** The learning goals and outcomes associated with teaching and learning a string instrument have not changed because of the pandemic; however, the time required and the ways in which we achieve those outcomes may need to be flexible. The ASTA String Curriculum can serve as a guide for designing both in-person and online instruction.

3) **This is a time for us to reflect on how to make string programs even better.** Encourage student projects where individual students or smaller groups of students perform, improvise, analyze, compose, and create. Consider providing opportunities for students to guide their own learning, self-assess, set goals, and report on those goals.

4) **Assessment methods may need modification.** Consider the following while designing student assessments:

   • Allow for multiple submission formats (videos, audio, text, share documents, etc.).

   • Provide ongoing formative and summative feedback for assignments.

   • Allow for peer-assessment when possible.

   • Provide clear rubrics and assignment submission guidelines for students.

   The ASTA String Assessment Guide may provide some models and resources for string teachers.

5) **Differentiated instruction will be necessary.** Teachers may have little control over scheduling this fall. Be prepared to work with groups of students scheduled together out of necessity rather than by playing level. It may not be possible to add additional constraints to issues of scheduling. Mitigating risk should remain the priority when determining student cohorts and

class schedules. Additionally, every effort should be made to obtain student IEP and 504 plans to appropriately adapt instruction for all students.

6) **Equity and access must receive consideration.** The disruption created by COVID-19 has brought to surface additional issues related to equity and access. Be mindful of the resources available to *all of your students.* Some students may lack access to technology, internet, or an instrument; other students may be immunocompromised. There are many factors to consider so that students' needs are met. Increased *two-way communication* between teachers, students, and families is essential to maintaining engagement as teachers navigate face-to-face, online, and hybrid instruction.

ONGOING COLLABORATIONS

ASTA is committed to working with other arts organizations as we navigate our new reality. To that end, ASTA has partnered with a number of music organizations.

Arts Education Is Essential

ASTA was among 53 arts organizations to support and sign the joint Arts Education Is Essential statement in May 2020. The statement endorses arts education as an important subject to be included in every child's education. The opening statement reads: "It is imperative that all students have access to an equitable delivery of arts education that includes dance, media arts, music, theatre, and visual arts that supports their educational, social, and emotional well-being, taught by certified professional arts educators in partnership with community arts providers." ASTA affirms that:

- Arts education supports the social and emotional well-being of students, whether through distance learning or in person.

- Arts education nurtures the creation of a welcoming school environment where students can express themselves in a safe and positive way.

- Arts education is part of a well-rounded education for all students as understood and supported by federal and state policymakers.

International Coalition of Performing Arts Organizations Commission COVID-19 Research

ASTA has joined with over 100 arts organizations in support of ongoing research to investigate aerosol rates produced by wind instrumentalists and vocalists. This commissioned COVID-19 study is being led by Dr. Shelly Miller, Professor of Mechanical Engineering and faculty in Environmental Engineering at the University of Colorado Boulder. Dr. Miller is an expert on indoor environmental air quality including airborne infectious disease transmission and control, as well as air cleaning technologies. This report, along with others, will help inform our ability to reduce risk in collaborative rehearsal environments that include wind players and vocalists.

PHYSICAL SAFETY FOR FACE-TO-FACE AND HYBRID INSTRUCTION

SPACE MANAGEMENT

Room

- Determine the indoor room capacity based on the classroom size. Calculate the square footage of your space by multiplying the room length by the room width.

- Follow your local school/district guidelines for the number of students permitted in each room in adherence to distancing guidelines. To estimate room capacity with social distancing in place, use the following formula as a start:

  - Example with students playing 6 feet apart = 36 square feet per student; multiplied by 50 students = 1,800 square feet of space required.

  - Other methods of calculation could allow for a few more students within these spaces, depending on whether a square or circle radius is used and whether the centerline of a person to the centerline of the next person is calculated as 3 feet + 3 feet = 6 feet.

- Follow your local school/district guidelines for mask wearing, erring on the side of caution if social distancing cannot be maintained (Howard et al. 2020).

- If the current rehearsal or classroom space is not large enough to accommodate all students, consider initiating conversations to relocate to a larger space should one be available or revising the student schedules to see smaller groups at a time.

- Consider marking the chair locations with a school-approved gaffer's tape or other material.

Ventilation

- Consider outdoor rehearsals or classes when feasible. Fresh air, when combined with social distancing, lowers the risk of infection (Spahn and Richter 2020; Qian et al. 2020). Plan for music clips or plexiglass sheets to prevent sheet music from blowing.

- Follow your school or district policy regarding windows and doors. If permitted, consider opening windows or doors to bring in fresh air, especially between classes and lessons (Escombe et al. 2007; Morawska and Cao 2020).

- Locate the air supply vents and return air vents, as well as noting the direction of the airflow. When possible, arrange students perpendicularly to the air flow in the room. For example, if the air flow supply-to-return flows north to south, arrange students in an east to west formation (Feng et al. 2020).

- Consider having students all face the same direction in class, staggered in rows.

- When possible, designate single entrance and exit locations to control traffic flow. Prop doors open, if allowed by building policies. The American Academy of Pediatrics recommends the elimination of high-touch surfaces over frequent cleaning. If it is not possible to leave classroom doors open, plan to disinfect doors and handles regularly (AAP 2020; CDC 2020b).

- Enhance practice room safety:

  - Review the ventilation and air exchange in practice rooms. Ask Facilities about air filters and air purifier units.

- Regulate practice rooms through sign-up sheets, allowing for cleaning and disinfecting as well as air exchange breaks between students.

- Keep cohorts of students consistent, assigning rooms to a specific group of students in order to aid contact tracing and minimize exposure (CDC 2020a).

• Enhance instrument storage room safety:

- When possible, designate single entrance and exit locations to control traffic flow. Prop doors open, if allowed by building policies.

- Consider temporarily moving instrument storage closer to where students sit during class to minimize movement and maintain social distancing within the classroom.

- Plan to clean instrument lockers and other frequently touched areas.

- For smaller instrument storage rooms, ask Facilities about air purifying units.

DISINFECTING AND CLEANING SURFACES

Establish a schedule and method for cleaning

The following considerations may help in thinking through your specific situation in order to mitigate risk of infection through coming in contact with surfaces.

• Consider modifying routines at the beginning and ending of classes or lessons to include personal hygiene and cleaning protocols.

• Use cleaning products that conform to schoolwide policies and are deemed safe for student use.

• Inform yourself about students with allergies and sensitivities.

Instruments and bows

Cleaners can and will cause damage to instruments if used improperly. Contact your local luthier for additional advice.*

• What *won't* work.

- Many products that advertise the ability to sanitize and clean coronaviruses won't work for the purposes of cleaning varnished wooden instruments. What won't work includes gels, anything alcohol based, strong dyes (blue colored soap for example), moisturizers, bleaches, and more.

• What *may* help.

- Refer to the Instrument Cleaning Tips on the ASTA website for up-to-date information about instrument cleaning during COVID-19.

• Equipment

- Reduce shared materials where possible. When not possible, such as chairs and stands, follow your school's protocols for cleaning/disinfecting surfaces. In the absence of such protocols, disinfectant wipes or a soapy damp cloth may offer a convenient means to clean shared items or high-touch points. A list of items that may need cleaning: Rosin containers, rock stops, music stands, chairs, locks/locker handles/shelves, and pencils.

• Agreement/contract/pledge

- Create a learning environment that gives students the structure, support, and guidance they need to take responsibility for their own actions and to demonstrate compassion for their classmates. Add hygiene and cleaning guidelines to your written expectations for students. Have students and parents sign the agreement.

* Personal communication with a national-level luthier informed our thinking about cleaning instruments and bows.

SCHEDULING

- Prepare for the possibility of seeing students less frequently and for the possibility of shorter class periods.

- To accommodate smaller groupings of students in face-to-face settings, consider organizing students into:

  - Chamber-sized groupings

  - Homogenous instrumentation classes

  - Heterogeneous instrumentation classes

  - First-year students together

  - Hybrid or virtual classes, including alternating between virtual and face-to-face instruction

- Work with school administrators to stay informed of schoolwide scheduling plans and any opportunities you may have to influence decisions, such as homogenous or heterogenous instrumentation, grouping students by ability level, or placing beginning students together.

- Plan more flexibility into repertoire selection to allow for disruptions to teaching and learning.

PERSONAL HYGIENE

- Promote healthy behaviors. Protect yourself and others by practicing everyday preventive actions, including monitoring yourself for symptoms and staying home if you are sick.

- Require hand washing/hand sanitizing. Wash hands for 20 seconds prior to each class/lesson or thoroughly use disinfecting hand sanitizer.

- Wear facemasks if required and teach coughing/sneezing etiquette. Cover any coughs or sneezes in the crook of the elbow.

- Discourage face touching. Avoid touching the mouth, nose, and eyes.

- Avoid sharing food or drink.

- Reduce shared materials. Avoid sharing instruments, music stands, and other items if possible.

ONLINE AND HYBRID INSTRUCTION

PREPARING TO TEACH ONLINE

Effective online instructional delivery is dependent on learning about, understanding, and successfully incorporating information about learning management systems, equipment, policies, and best practices. The following recommendations are based on a review of numerous research-based and other scholarly documents on effective online teaching (Hanover 2014; NEA 2003; Diehl 2016), as well as on advice from teachers experienced in these areas (NEA 2003).

- Learning management systems: Your school district may have a dedicated learning management system (LMS) such as Canvas or Blackboard. Before designing your class, be familiar with all aspects of your LMS including multimedia, communication, organizational, assessment, and other capabilities.

- Equipment and setup: Online instructional delivery may require specialized equipment and setup considerations. Your school may need to invest in the following:

  - An affordable condenser microphone may be helpful for recording lectures or for modeling on your instrument. Consult your school/district IT support staff for suggested models that will complement other classroom technology.

  - External cameras may improve video quality and allow for more mobility as you move from your laptop to your instrument or other equipment.

  - Wear headphones while interacting with students online to prevent external noise from appearing on the audio feed. Simple earbuds work fine in many cases.

  - When using virtual meeting platforms, students and instructors may find that overall sound quality is significantly improved by turning off any automatic sound compression in the audio settings.

- Virtual setup and performances

  - Consider lighting, sound, and the strengths and limitations of various online communication platforms when designing your courses.

  - If you are interested in putting together a virtual performance, this video guide may be helpful.

  - For those interested in using software such as Acapella for virtual performances, see this guide.

- Reverse-design your courses: "Start with the end in mind" (Duke 2005). Consider the objectives and assessments appropriate for your online course, and then determine how and what technological components will promote these processes. Avoid creating assignments that fit a technological tool simply because the tool is interesting or available.

  - Familiarize yourself with district policies on student privacy and double-check that your instructional delivery, communications, assignments, and assessment practices are compliant. Continue to adhere to school district and other governing policies in accordance with the Americans with Disabilities Act (ADA), the Family Educational Rights and Privacy Act (FERPA), and the Individuals with Disabilities Education Act.

- Consider Universal Design Learning (UDL) principles (CAST 2018): UDL principles can be defined as "products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Connell et al. 1997). UDL principles will help make sure all of your students have opportunities to learn despite individual differences. Information and other guidelines for UDL can be found here.

- Guidelines for online interaction and etiquette: Online teaching experts recommend that you establish guidelines for online etiquette and interaction similar to guidelines you establish for a face-to-face classroom. You can find ideas on online etiquette here.

SYNCHRONOUS AND ASYNCHRONOUS INSTRUCTION

Best practices for online instruction continue to evolve based on insights from practicing teachers. The following is a general list of recommendations for maintaining an engaging, safe, equitable, and effective online classroom environment. One of the first decisions to make is whether instruction will be delivered synchronously or asynchronously. Synchronous instruction occurs online, but regularly includes live interaction among students and teachers. Asynchronous instruction occurs online without real time interaction. There are benefits to both depending on student preference, availability of technology, and other resources.

- Synchronous instruction

  - Synchronous sessions should be collaborative and less dependent on lectures or teacher-led instruction. Mix discussions, small group work, audio/video examples, guest lectures, brainstorming, role-playing, team projects, etc. to increase variety and promote student autonomy and engagement.

  - Lecturing should be limited to 10–15-minutes for high school students and shorter in duration as student ages decrease.

  - Record live meetings, if permitted by the school district, for students who may need to miss class. Flexible attendance policies may be necessary due to inequitable access to equipment, differences in internet bandwidth, and family situations. Check school district policies to assure you are in compliance with student privacy policies.

  - Organize lessons into learning units and provide consistent due dates for assignments. For example, videos due Monday, discussions due Tuesday, performance samples due Wednesday.

  - Chunk activities into 10–15-minute blocks.

  - Allow students to interface with the course using various modalities. Examples include emoticons, non-verbal signals, and chat.

  - In general, chunking materials, providing breaks, mixing large and small group activities, and allowing for individual work will maintain engagement during long synchronous learning units.

- Asynchronous

  - Establish learning modules on your LMS to promote self-directed learning and to facilitate students' understanding of the connection between topics, assignments, activities, assessments, and outcomes.

  - Maintain consistent due dates and format asynchronous work units uniformly so that students get a sense of routine, which will be critical due to other disruptions in their lives.

  - Chunk activities into 10–15-minute blocks, similarly to live teaching activities.

- Use a variety of formats for content delivery (videos, blogs, podcasts, TED talks).

- Allow for multiple and alternative forms of assignment submission. Remember that students do not have equal access to time, technology, and other resources, and may exhibit skills in non-traditional or alternative ways.

- Avoid multiple long assignments. Create short, cumulative assignments instead. Assignments should lead to a culminating academic or artistic product built on previous work.

• Student online safety

- Lock meetings after everyone has arrived.

- Encourage neutral backgrounds that do not give away a student's living condition, place of residence, or other features. This security can be facilitated by asking everyone to use a virtual background or hang a blanket or other neutral surface behind them.

- Students may not have parental permission to be present on camera or recorded. Work with administration to ensure you are following all school guidelines related to student privacy.

- Disable private chat between students. In cases where chat is integral to the class activity, make sure you can monitor the chat room to avoid inappropriate comments or bullying.

- Make sure online sessions are accessible to all students. Enable closed-captioning and other features, as needed.

• Access to technology and internet/alternatives

- Consider creating physical learning packets with alternative media such as DVDs and CDs. Deliver instructional packets in central locations (church, park, library, school) or through school lunch delivery program. Mailing materials to students may be possible if funding is available. Create procedures for submitting non-digital work and feedback.

- Allow students to use phones to attend synchronous classes.

- Create synchronous "cohorts" so students can attend live classes with other students who might have access to necessary technology.

- Consider the amount of time and bandwidth that your activities require. Remember that there may multiple students and families sharing one computer or internet connection.

- Create low-resource materials that do not consume excessive bandwidth or provide alternatives to high-resource materials when possible.

- Familiarize yourself with new screen time guidelines for online learning, which have been adjusted for our new environment. New guidelines allow for more screen time due to the pandemic.

SCHEDULING

Reducing risk should be the primary focus when scheduling students. There are a number of models currently under consideration by various school districts, and teachers should be active in discussions at the district and local level to ensure that music instruction may continue.

• *Student cohort models* are being recommended by many school districts to reduce risk by limiting the number of people interacting with one another. This model may also require that students remain in one classroom while teachers move from classroom to classroom. If your district is considering student cohorts, talk with administration to increase consistency for issues related to instrumentation, sequencing instruction, choosing repertoire, and so on.

• *Alternating-day model*—This model suggests that 50 percent of the students attend class while the other 50 percent of students attend virtually. Students then alternate face-to-face and virtual attendance each day.

- *Split-day model*—This model alternates morning and afternoon attendance: 50 percent of the students attend school in the morning for face-to-face instruction; the other 50 percent of the students attend in the afternoon for face-to-face instruction; additional support is given for virtual learning.

- *Shortened-day model*—All students come in the morning, but complete asynchronous assignments in the afternoon. Some districts also choose to rotate which students come in the morning.

- *Alternating week models*—One cohort of students attend school face-to-face for either one or two weeks; the remaining cohort attends virtually during this time. These cohorts then switch after one or two weeks.

- *Pull-out models*—Schools across the United States vary greatly in terms of pull-out instruction. Some schools continue to offer pull-out lessons at the middle- and high-school levels in addition to daily ensemble instruction. Some districts offer pull-out lessons at the elementary level only. We encourage maintaining these opportunities because they allow for high levels of instructional support and differentiated instruction to be implemented. When pull-out models are used, please refer to the guidelines for health and safety for face-to-face instruction listed above.

- *Combinations of group and individual approaches*—This allows the most flexibility for teachers and school districts where 100 percent face-to-face instruction is not viable or where a combination of face-to-face and virtual learning is used.

- *Online only*—Please see discussion of synchronous and asynchronous instruction.

PEDAGOGICAL CONSIDERATIONS

TUNING

Tuning during the pandemic

- Face-to-face

  - In face-to-face beginning classes, the teacher will need to tune the students' instruments. Whenever possible, tune the instruments before students enter the room. Cleaning fine tuners and pegs prior to tuning may reduce risk.

  - Prioritize safety by teaching students to tune their own instrument as soon as possible. Take time to instruct students how to manipulate fine tuners and pegs.

- Online

  - During the pandemic, teachers will need to teach students and parents how to keep the instrument in tune. Model for students and parents how to tune using a tuning app with both a sustained reference pitch and by using visual information from a tuner dial/lights.

  - Record a video for your beginning students and their families demonstrating how to tune—it will inspire them more than having them watch someone else's YouTube videos. Remind them to tune the instrument every day. A slightly out-of-tune instrument is much easier to tune than a very out of tune one. Also, remind families to store instruments at a stable temperature/humidity indoors, away from heat/air vents, windows, or other unregulated spaces.

BEGINNING STUDENTS

Recruiting

- Create an online recruitment video.

- Determine how students will enroll online.

- Create a signup sheet that will increase opportunities for communication with families. Increasing two-way communication with families is essential to student success. Consider employing the following practices:

  - Ask if parents prefer to be contacted via phone, email, or text. This will increase communication between teachers and families.

  - Find out the best time of day to contact families.

  - Learn the primary language spoken in the home and provide translations to increase accessibility. In some cases, older siblings or the student may need to serve as translator.

Preparation

Teaching beginners online is daunting. Considerations must be made for safely sizing students, distributing instruments, and delivering instruction.

- Before creating your own content, consider looking online for materials contributed by other teachers. This can save an enormous amount of time.

- Prepare a few weeks of musicianship and body format lessons (see the ASTA String Curriculum) that students can complete prior to receiving their instrument. These lessons will provide a solid foundation and give the teacher time to organize instrument distribution, which may be time consuming.

- Consider creating instructional kits for students to use at home while waiting for their instrument. Instructional kits may include items such as:

  - Foot placement map

  - Straw to develop the bow hold

  - Dowel rod to train proper bow motion

  - Toilet paper roll to train proper bow motion

  - Paper towel roll to help shape cello and bass hand frames

  - Box violin or viola

Sizing

- Arrange to meet with parents and prospective students outdoors or in a large space, such as a cafeteria, that allows for social distancing. Alternately, schedule parents and prospective students individually or in small groups if a large space is unavailable.

- If you are unable to size students using instruments for safety reasons, use a measurement stick. Online resources are available to provide sizing guidelines using a yard stick.

Instrument preparation and distribution

- Work with local music dealers to have instruments set-up and tuned and then delivered either to the school or directly to the student.

- Many teachers use finger placement markers for the left hand. These placement markers should be placed on the instrument prior to pick-up or delivery. After the instrument has been touched by the teacher or music dealer, it should sit for a minimum of three days (NFHS 2020).

- If the school owns instruments that students will take home, the teacher should prepare the instrument with all necessary materials and then allow the instrument to sit for a minimum of three days prior to pick-up or delivery.

Initial instruction

- Be prepared to deliver less content, increase repetition, and deliver content more slowly.

- Consider asking older students to serve as mentors by providing one-on-one online lessons to new students (MacLeod et al. 2020).

- Model for students in both synchronous and asynchronous lessons.

- Video content should include no more than three instructional goals, and these should be presented clearly and one at a time.

- Make video content interactive, allowing students to repeat after and play along with the teacher.

- Provide frequent opportunities for assessment by asking students to submit photos of instrument position, brief videos, and other methods of assessment.

Parental/Guardian involvement

Parents, guardians, and family members are important partners for string teachers, but their role takes on increasing significance during the pandemic. String teachers must inform parents about musical development, home practice, and how to provide appropriate guidance and feedback to their child. The teacher should explain to parents how to structure home practice in a consistent manner (e.g., same location and time of day for daily home practice sessions) and advise parents on strategies to make practice sessions enjoyable and productive. Frequent communication to families of students (e.g., weekly brief emails) can communicate your ongoing expectations to both students and parents.

ENSEMBLE SUGGESTIONS

Diversify your curriculum

Take this opportunity to explore diverse genres of music, encouraging students to learn about and perform an expanded range of pieces. Include non-Western/world music, vernacular/indigenous music of the United States, chamber music (such as traditional string quartets and trios), or other small-group configurations. Genres may include fiddling (Celtic, old-time, Texas, bluegrass, and more), Turkish/Arabic taqsim, Eastern European tamburitza, rock, jazz, mariachi, Latin, klezmer, and other music of the world.

- Encourage students to work individually and in small groups. Make connections for a broader group of your students through performers, cultural groups, or by featuring other ethnic music found within your students' families and community to increase authentic music making between the school and home.

- Provide opportunities for students to interact with one another. Consider establishing a buddy system for students by pairing them into smaller groups and encouraging the groups to meet online during the week to listen to model recordings, play for one another, and mentor each other.

- Organize the class by module/unit studies. As suggested previously in this document, student choice is a powerful motivator. Consider offering a menu of possibilities that students may explore. For example, the teacher may offer four modules but ask the students to complete two of their choosing.

Unit examples

- *Solo/Technique preparation:* Consider assigning orchestra members solos and technical work to improve their individual playing and keep them engaged. Provide a list of solos from which students may choose one or two. The ASTA Certificate Advancement Program provides a virtual opportunity for students to receive national recognition and feedback.

- *Improving individual musicianship:* Students may complete a learning unit that sequentially teaches them how to practice and improve musicianship by playing and recording an excerpt with a metronome, with a drone, playing and recording a duet with oneself, and improvising, arranging and performing all four parts of a Bach choral.

- *Music theory/History project:* Assign small research projects about a composer, genre, or social topic in music. These assignments can enrich the existing curriculum. Writing program notes, conducting harmonic analyses, composing, or arranging—including non-traditional/free notation—are all assignments that may be delivered online or in-person and that can enhance students' understanding of music.

- *Learn to improvise:* There are incredible tutorials and resources now for learning to improvise. Build a learning module that encourages students to find their creative voice.

- *Produce a recording:* Students may choose to collaborate in the creation of an in-person or online performance of a chamber piece, original composition, or arrangement.

Maintain program visibility and relevance

Activities should promote greater opportunities for students to showcase their talents and achievements beyond the traditional school concert. Students may create digital performances of their own works, bring together musicians from both inside and outside the school (including family members), and present their completed projects or performances on social media or for designated community groups (e.g., creating recorded performances for retirement homes, health care facilities, community organizations, school boards, or other groups for music advocacy).

A note about virtual ensembles

The pandemic has caused a huge void in the space normally occupied by music and the arts for our students, teachers, and communities. Virtual music ensembles became a popular medium for students to stay engaged with their colleagues while having to be physically apart. Creating virtual performances, however, is not a permanent substitute for ongoing, live instruction and performance. In addition, if a district or school is requiring the teacher to produce a virtual orchestra, please keep in mind that performances such as this may cause anxiety for the student performer.

The "virtual orchestra" is primarily a technology project where students record themselves (which can have benefits) and submit those individual recordings to the teacher or someone with the ability to master, mix, and produce a final audio and video product. These are labor intensive projects (primarily for the teacher or producer) and do not promote long-term student learning and development. In addition, the final project must frequently be highly engineered to produce a product that is cohesive and sounds reasonably in-sync. In such cases, individual student performances may get omitted or altered. Further, virtual ensemble performances often require licensing to adhere to copyright law, if they are broadcast beyond the school.

Appropriate uses of technology

The ability to use digital resources effectively is an important skill for music educators and performers. Within the hybrid teaching situation, uses could include: (1) learning how to set up a small digital studio at home using microphones, software, and other technology to make and edit recordings; (2) using backup recordings and accompaniments, which are available both as downloads and in online libraries; (3) submitting individual recordings and assignments via video to teachers through online platforms; (4) presenting compositions and research projects; (5) presenting students' digital performance projects; (6) showcasing guest presenters and artists; (7) facilitating cultural exchanges with student ensembles from around the United States and the world; and (8) assessing student progress using both formative and summative models. Such uses of technology, however, must keep equal access for all students at the forefront in order to meet the needs of all learners.

ENGAGING AND SUPPORTING STUDENTS

TEACHER AND STUDENT WELLBEING

Student wellbeing is associated with improved learning outcomes and can be cultivated through various methods (Gutman, Morrison, and Vorhaus 2012). Our current environment is rapidly shifting, and students and teachers are confronted with increased stress. We recommend the following domains and practices as means to cultivating wellbeing for teachers and students.

- Mindfulness practices have been shown to improve focus and self-regulation and to reduce stress among teachers and students (Diaz, Silveira, and Strand 2020). Here are some suggestions on incorporating mindfulness into your classroom:

    - Take short breaks for guided deep breathing, focused meditation, quiet time, and other mindfulness exercises.

    - Create a mindfulness and other wellness materials section (readings, exercises, guided meditations) in your Learning Management System (LMS) for students to access.

    - Create a discussion board where students can express how they are feeling, provide support for each other, or express gratitude.

    - Additional resources on mindfulness and its incorporation into educational settings can be found on the ASTA website.

- Restorative practices promote building relationships, problem-solving, and conflict resolution in lieu of more traditional forms of discipline and have been shown to contribute to more positive school climates.

SOCIAL AND EMOTIONAL LEARNING

"Social and emotional learning (SEL) is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (CASEL 2020).

Many school districts are encouraging the implementation of SEL, which focuses on self-awareness, social awareness, responsible decision-making, self-management, and relationship management (Zins 2004). Music classrooms provide an ideal environment to help students acquire these skills and ways of thinking. Intentional Music SEL can begin with four concepts (Edgar 2018):

- **Connection:** Every opportunity needs to be made for students to connect with us, the music, and each other. Relationships are primary for any meaningful teaching and learning to occur. Two of the best ways to build relationships between music educators and student musicians are to honor students' voices and give them choices. Allow students to take ownership and have an active role in the educational process. This often means we need to give up "control" and allow students to make musical and classroom decisions. Choice is critical for students to feel their voices are valued.

- **Repertoire:** One of the most important elements of repertoire is that it can connect with students. As teachers consider music to include in the curriculum, consideration should always be given to how we can make it personal for our students.

- **Experiences:** Students have to be given the opportunity to do Music SEL. This is the culmination of connection, repertoire, and reflection in a musical experience that allows for students to explore, create, contribute, choose, and encounter music with other students. These experiences must be intentional, thoughtful, and elevated to the same level where we have traditionally placed performance.

- **Reflection:** In order to achieve voice, choice, and student connection to the music, every performance, activity, or objective should have a student reflection component. The process is just as important as the product and can help unpack creativity, self-awareness, self-assessment, and student goal setting.

Additional resources on SEL can be found on the ASTA website.

SELF-REGULATED LEARNING STRATEGIES

Self-regulated learning strategies will help students navigate their learning independently (McPherson and Zimmerman 2002).

- Provide students with specific goals.

- Reinforce goals by communicating with students/parents to affirm success.

- As students make progress, ask them to articulate their own goals. Over time, have students set their own self-goals, self-reinforcement, and develop self- efficacy.

- Provide a structure for practice and model effective practice strategies. Then, provide a detailed practice list.

- Encourage students to choose their own repertoire. Research shows that students practice longer on pieces they select.

- Include "informal" activities in their practice list, such as playing or improvising by ear.

- Routine is helpful, so encourage your students to practice every day at the same time.

- Model "metacognition" techniques for your students; think aloud about how to learn certain pieces and what to do if certain problems occur.

- Ask students to self-evaluate and reflect upon their own performances.

- Design a fun assignment for beginners/parents by encouraging them to create a plan for managing their physical practice environment. For example, where will students practice and what tools will they need (e.g., metronome, backing tracks with audio playback, music stand, appropriate chair, method/solo books) so that maximum learning can occur.

- Teaching beginning students how and where to seek help can be really beneficial. Help them consider their resources including parents, peers, method book resources, and assigned websites.

- Consider meaningful ways to involve parents/guardians in the teaching and learning process. Research demonstrates the benefits of parental involvement in education, including music.

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