FEATURE

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A FULL ORCHESTRA IN THE SCHOOLS: WHY THEY ARE IMPORTANT, WHERE TO START, AND HOW TO CONTINUE

by Robert Gillespie and David Hedgecoth

The sounds of winds, percussion, and strings playing together in school orchestras are ones to cherish. Coming from classrooms, rehearsal halls, stages, gymnasiums, cafeterias, and "cafetoriums," these symphonic orchestras enrich the musical experiences of students, their teachers, parents, administrators, and community members.

However, these sounds are not often heard in today's schools. While we have many robust string performances in schools across the country, the presence of the full, symphonic orchestra rarely occurs.

When instrumental music instruction first appeared in the schools, led by pioneers such as Joseph Maddy and Will Earhart, full orchestras were the center of the music program. This article presents some of the most important rationales for full orchestras in schools; describes challenges and offers solutions that can arise with such orchestras; proposes strategies for creating full orchestras; and suggests approaches to further develop full orchestras that already exist in schools.

Authors' note: For our purposes, we refer to the ensemble as a *full orchestra*—one that is comprised of percussion, wind, and string instruments.

Values

Why should we create and keep full orchestras in the schools? To answer this question, we went directly to music teachers in high school music programs. Last summer, we surveyed and completed follow-up interviews with nine full orchestra teachers. We purposefully sampled participants who represented a wide range of backgrounds to help us get a more complete understanding of the role and state of full orchestras in schools.

Those surveyed included string specialists who conduct full orchestra; band directors who also conduct full orchestras; band directors who encourage their wind/percussion students to play in a full orchestra; band directors who are now teaching strings full time; and teachers who are responsible at their schools for teaching both band and strings.

In the written survey and live interviews, we asked the teachers the following four questions: Why do you conduct a full orchestra in the school? What are some of the challenges faced in teaching full orchestra and what are some possible solutions to these problems? What are important questions for band directors to consider when collaborating with string teaching colleagues to either create or maintain a full orchestra in schools? What are important factors for string teachers to consider when either thinking about creating a full orchestra or working to maintain one that is already a part of the music curriculum?

In response to the first question, teachers provided the following fifteen fundamental reasons for conducting a full orchestra in the school. The reasons benefit students, teachers, music departments, and the school music curriculum.

- 1. Gives students and teachers a broader musical experience.
- 2. Promotes a sense of unity within the music department.
- 3. Helps students build personal relationships between bands and orchestras at a school.
- 4. Increases the breadth of the school music curriculum so that more students can get involved in music study.
- 5. Promotes teamwork among music department teachers and students.
- 6. Enables closer relationships between teachers in the music department.
- 7. Brings joy to both students, their teachers, and their concert audiences.
- 8. Improves the musicianship of students involved, i.e., more opportunities to develop personal refined rhythmic skills, sound production skills, aural skills, balance, blend, articulation, musical styles...
- 9. Offers a fun experience for the students—personally, socially, and musically.
- 10. Helps develop the personal musicianship of the teacher.
- 11. Gives students, especially winds/percussion students, opportunity to play original music composed of some of the greatest composers of Western art music, e.g., Bach, Beethoven, Brahms, Mozart, Haydn.
- 12. Provides another way to help retain students in the school music program by giving them an additional opportunity to perform a different genre of music.
- 13. Helps keep students engaged in positive activities outside of school through after-school full orchestra rehearsals, concerts, and social activities.
- 14. Brings more recognition and visibility to the school music program.
- 15. Provides live, student-performed music at school district events, such as graduation ceremonies, student recognition receptions, and honor society gatherings that feature cross-curricular (both band and string) students.

Wow! Maybe there really is something about having full orchestras in the schools after all!

Challenges

If full orchestras are that beneficial, why are there not more of

them? The teachers identified the following ten obstacles and possible solutions:

- Challenge: Reading transposed parts.
 Solution: Consult with the band director.
- Challenge: Wind instrument technique.
 Solution: Ask the band director; observe rehearsals; work with the band director to rehearse the winds in the full orchestra.
- 3. Challenge: Scheduling.

Solution: Perhaps only after school rehearsals are possible because of schedules. If that is the case, work during the school day with smaller groups of students who are in the full orchestras (e.g., strings only on full orchestra music, band students alone, instrument sections only, individual students only). Band and string teachers should together develop a long-range plan to offer a common rehearsal time during the day that allows more advanced wind/percussion players to rehearse together.

- 4. Challenge: Multiple levels of instrument skills. Solution: Organize chamber music groups for winds and strings. Create a chamber orchestra of band and string students who have similar levels of playing skills.
- Challenge: Key signature differences between wind and strings.

Solution: Choose repertoire that is in the easiest-to-play in common keys, such as C and F majors.

- 6. Challenge: Commitment of wind players. Solution: Increase the support and involvement of the band teacher, maintaining a high standard of concert performance, playing full orchestra music that is high quality and musically interesting to the students; creating enjoyable and challenging rehearsals in addition to successful band/string student social activities.
- 7. **Challenge:** String students have rehearsed the music more than the band students.
 - **Solution:** Either the band teacher and/or the string teacher rehearse the band students before combining them with the string students.
- **8. Challenge:** Tuning between winds and strings. **Solution:** Know the instrument idiosyncrasies.
- Challenge: Not knowing the best vocabulary to work with wind students.
 - **Solution:** Study wind texts; discuss with band teacher colleagues; observe band rehearsals.
- **10. Challenge:** Choosing the most appropriate rep for the ensemble.

Solution: Discuss strengths and weaknesses of the wind/percussion students with the band teachers and then choose repertoire that best matches the playing skills of the students.

Unique Challenges for the Band Teacher

One of the unique challenges with full orchestras in schools is helping your band teacher colleagues with questions they will face as they either decide to support a full orchestra or help sustain one that already exists.

We asked our participants to identify important questions for band directors to consider when collaborating with string teaching colleagues to either create or maintain a full orchestra. Below are nine questions they provided for band directors to consider:

- 1. What are the strengths/weakness of the playing skills of my students, especially those of the double reeds players?
- 2. Are my students rhythmically independent and able to project a solo sound?
- 3. Does the school schedule currently allow, or can it be tweaked to permit, the strongest wind and percussion students to rehearse with the string players at the same time during the school day?
- 4. Can my students adapt to the stylistic demands of symphonic orchestra music?
- 5. Can my wind students produce a sound that blends within a small wind section and with string sections?
- 6. Should I be willing to give up some of the rehearsal time on band music so that my students have the opportunity to play in a full orchestra?
- 7. Can and should I collaborate with the string teacher at my school to give my students the opportunity to play in a full orchestra?
- 8. Will my band students start to like playing in the full orchestra more than playing in the band? What will I have to do if this happens?
- 9. Should all of my students have the experience of playing in a full orchestra or just a select few?

Unique Challenges for the String Teacher

In turn, we asked string teachers what are important factors they need to consider when either thinking about creating a full orchestra or working to maintain one that is already a part of the music curriculum. They offered the following eleven questions for consideration:

- 1. How much rehearsal time will be available for band students to play in the full orchestra?
- 2. When will the full orchestra rehearse?
- 3. Where will the orchestra rehearse?
- 4. Is enough money available to purchase music for the full orchestra?
- 5. Should I try to schedule full orchestra rehearsals and concerts during marching band season?
- 6. Do I have the classroom management skills to run a full orchestra rehearsal?
- 7. Are there enough of the band students who play at the level needed to perform full orchestra repertoire?

- 8. Will there still be enough rehearsal time in the school schedule for me to continue to develop the playing technique of my string students?
- 9. Is my string orchestra large enough to balance wind and percussion players for a quality experience with full orchestra music?
- 10. How committed and involved will my band colleagues be with full orchestra? Are they willing to participate in the orchestra's rehearsal/concert/social activities and help me select the best repertoire for the ensemble?
- 11. Are my colleagues willing to consider the needs of the band students in the full orchestra when scheduling band performances?

The Next Steps

We covered some of the benefits of involving students in a full orchestra, and provided some ideas about how to begin to solve some of the challenges you might face with a full orchestra. If you are committed to the idea of a full orchestra, there are a few other considerations in order to get started. Below we discuss how to get ready for the first rehearsal, listening in new ways with full orchestras, and some basic rehearsal strategies.

Getting Ready for the First Rehearsal

There are several physical elements to consider prior to placing the wind players in the ensemble. Perhaps most important is floor space. Woodwinds benefit from being centered in the ensemble, most typically as near as possible to the second violins and violas. If there is enough depth to the stage/rehearsal room, brass players are often placed behind the woodwind block. If there is not enough space available (front to back), bell front brass instruments are sometimes placed in a separate block between the woodwinds and string basses.

Due to the construction of brass instruments, two notes of caution are appropriate here. First, since the bell flare of the horn projects sound backwards and away from the group, it is important for the horn section to have room for their tone to move into the hall/rehearsal space. Second, bell front instruments can often present a sound that is too strong if they are centered onstage. We recommend placing trumpets and trombones off center so their sound travels into the hall at an angle rather than directly into the acoustical space.

Placement of percussion depends on the equipment needed. Limited scoring of percussion parts can allow percussionists to be placed almost anywhere behind the ensemble. Battery instruments (snare drum, bass drum) are often placed back and center, auxiliary equipment off center to the left, and keyboard behind the back row of violins.

If risers are available, in good condition, and there is enough space to place them center stage behind the second violins and violas, then use them. They allow the sound produced by the woodwind players to project into the hall more easily. Placing brass players on risers can provide the same advantage; however, depending on acoustics and strength of musicians,

such positioning may create brass sections that overpower woodwinds and strings, especially in sections that call for subdued, delicate playing. Some groups place sound panels between bell front instruments and orchestra personnel seated directly in front of them. This protects the ears of musicians in close proximity of brass players in addition to tempering their tone projection.

Listening in New Ways

The nature of string playing calls for a different approach to listening compared to a wind ensemble. Since your wind players will most often be entering your rehearsal from a band environment, it is important to draw their ears (and minds) to the subtleties unique to an orchestra. The nuance of soft string playing has several common elements with delicate wind ensemble compositions, including control of tone, pitch, direction of phrasing, etc. How the timbres in a string group mix with brass and woodwinds players, however, will be a new experience for your wind players. In short, they will need to be taught *how* and *what* to listen for when playing.

Another important difference in the orchestra environment is instrumentation. Your wind players often will be assigned one player per part. This can be a challenge for a younger player who is accustomed to sharing parts with multiple players. Every voice in the wind section is a solo voice. This point must be stressed to the wind players. While some arrangers may use block scoring to make complex pieces attainable for younger groups, most works will require great competence and confidence due to the independence of parts. Proper air support and tone production are essential. Musicians that have a solo must be taught to project their sound above the group.

Rehearsal Strategies: Tuning

Prior to the start of rehearsal, it is important to allow the wind players a few moments to warm up. Not only does this allow for their bodies and minds to gain focus, but a purposeful warm up also brings instruments to room temperature, thus, playing more in tune. A cold instrument is typically flat, while a hot instrument becomes sharp; opposite of string idiosyncrasies.

If your string section tunes to a concert A, many woodwind players will be most comfortable with this tuning procedure. The principal oboe traditionally provides this pitch reference. While brass players also can use the same tuning pitch, a concert B-flat is more appropriate so these players can tune the open horn without depressing valves or moving slides. The oboe can provide this pitch, but if you have a competent tuba player to play the reference note, this also is acceptable.

Rehearsal Strategies: Rehearsal Vocabulary

While the language of the music rehearsal often will be the same in a full orchestra rehearsal compared to a band setting, certain elements of wind playing are different pedagogically from string playing and should be addressed. Common descriptors such as longer, shorter, louder, softer, etc., are representative of vocabulary often heard in music rehearsals,

but wind players benefit from additional pedagogical supports specific to their instruments. A few examples include:

- Clarinet player is flat on solo passage. Remind them of faster air, better air support, placement of tongue inside the oral cavity, pushing in at the barrel/between the joints when appropriate.
- Brass player is sharp. Draw their attention to the
 placement of the tuning slide, but more importantly,
 remind them about an open oral cavity and consistent
 attention to, and release of, any buildup of tension in the
 face, neck, shoulders.
- A brass or woodwind player's articulation is not clear.
 Shorter pulses of air, a more pointed tongue, breaths or lifts between notes are all examples of language that can assist is achieving the style you desire.



Conducting a full orchestra in the schools benefits students, teachers, music departments, and the school music curriculum.



Rehearsal Strategies: Blend/Balance

With scoring for wind parts limited, it is critical for the sounds of like voices to blend as consistently as possible. Intonation is the first step to being in *tune*, but being in *tone* is of critical importance as well. As with pitch, a quick reminder to wind players to be constantly aware of how sounds are blending within and across sections will benefit the final musical product. Associated with this is the balance between the strings and wind players. Both groups will be inexperienced in listening for new voice timbres, thus taking a few moments in the context of rehearsals to explicitly address what voices to listen for is appropriate.

Rehearsal Strategies: Entrances and Releases

Preparatory breaths have often been associated with conducting gesture as a means to facilitate wind players timely and properly supported entrances. Wind players will look to you as a reference for tempo, and in turn, how to prepare their entrance based on the style of the piece. Great control is needed when releasing pitches. Be attentive how your musicians stop playing. Clipped notes or notes that change pitch due to lack of control are possible. State clearly how the passage should end.

Rehearsal Strategies: Articulation

When addressing style/articulation, certain language elements transfer easily from string pedagogy to wind and percussion performance. The important difference here lies in *how* these players execute the desired musical element. Air speed and weight of tongue, in addition to proper air support, are all crucial elements in achieving appropriate articulation. Using specific syllables for articulation are important so the instrumentalist has a clear concept of how to play.

Rehearsal Strategies: Do Not Be Afraid!

Your brass, woodwind, and percussion players will undoubtedly be excited to perform in a full symphony orchestra. Hopefully your strings players will share the enthusiasm of this unique opportunity. You, the teacher, will play an essential role in the success of this collaboration!

While building enthusiasm and consensus may take time, preparation is key for effective, efficient rehearsals. Chances are your time will be limited. Make the most if it! Make a point to address/engage your wind players in rehearsal. You are dealing with one ensemble, not two. Guest musicians will need feedback on their contributions; make a deliberate effort to provide meaningful instruction.

Rehearsal Strategies: Percussion

We have elected to address percussion separately from the wind and string players for three reasons. Placement of percussion will most often depend on available rehearsal space behind string and wind players. Advance planning is required to ensure that proper percussion equipment is available and competent personnel is on hand.

Next, we suggest taking a few moments in your initial rehearsals to educate your string players about the element of pulse provided by percussion. As with winds, this can be a nuance that is new to many string players; making them aware of *what* to listen for and *when* can pay dividends later in the rehearsal cycle.

A final note on percussionists. These musicians are often the overlooked, lost ensemble members. Help them! Humor aside, regardless of how integral or simple the percussion parts may be, their musical contribution to the group is critical. Maintaining a percussion section engaged in the rehearsal will make your management of full orchestra music easier.

The Call

We hope this article motivates you to reflect on the values of having full orchestras in schools. Below are four positive outcomes we've identified:

- 1. A broader music experience for wind, string, and percussion students.
- 2. Unity and collaboration within the school music department.
- 3. For band and string teachers, expanded teaching expertise, additional musical experience, opportunity to collaborate, and personal enjoyment.

 For the community and taxpayers, an expanded school music curriculum, increased number of concerts to attend, and visible results of tax support for the schools.

There are many challenges that face the organization and development of full orchestras in schools, but we hope the content of this article will allow you to discern fact from fiction and pave the way for a new collaborative endeavor in your music programs. We hope that you have some ideas about creating and maintaining full orchestras as a vital part of the school music curriculum. Perhaps a curriculum is not complete without a full orchestra. We encourage you to accept the call to provide your students a taste of the richness of playing in a full orchestra.

For Further Reading

Books

Anatomy of the Orchestra - Norman Del Mar

Brass Performance and Pedagogy - Keith Johnson

Complete Instrument Reference Guide for Band Directors: Conductor's Manual – Richard Williams

Guide to Teaching Woodwinds - Frederick Wetphal

Handy Manual Fingering Charts for Instruments – Clarence Hendrickson

Improving Intonation in Band and Orchestra Performance – Robert Garafolo

Tuning for Wind Instruments: A Roadmap to Successful Intonation – Shellye Jagow

Strategies for Teaching Strings (2013, Third edition) – Don Hamann and Robert Gillespie

Online

SmartMusic – https://www.smartmusic.com/blog/band-directors-need-know-teaching-orchestra/

BandDirector.com – http://www.banddirector.com/article/pg-strings/survival-tips-for-orchestra-directors?productguide=312



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