

76 Trombones? - Developing Balanced Instrumentation

Fraser Linklater

A focal point for most instrumental-music educators is rehearsing and performing repertoire selections, the great majority of which have a certain specified instrumentation. This can prove quite a challenge for many ensembles, as it becomes difficult to perform music adequately that requires, for example, four horns when you don't have any horns. Although substitutions can be made, at some point that becomes untenable. It is one thing to substitute a euphonium for a fourth horn when performing portions of the Mozart Gran Partita, K. 370a, with a chamber ensemble of talented students, as Frank Battisti did at Ithaca High School. It is quite another to substitute saxophones for an entire horn section, as I have seen done more than once in high-school bands.

What can be done to alleviate this problem? "End run" possibilities that obviate the need for a balanced instrumentation do exist. They include playing pieces which do not need specific instrumentation (of which the "convertible bass line" of some recent junior-band compositions is the most notorious); playing pieces in which substitute instruments can be used (but only to a certain degree); or avoiding set-instrumentation repertoire altogether through a focus on improvisation and group creativity. The last can be an excellent part of a music-education program, but I don't believe it can form a complete wind-band program on its own.

The best long-term solution to this dilemma is to recruit and retain players who will constitute a reasonably balanced instrumentation. This can be done either at the outset, when students initially join the band program, or later as they alter (or are persuaded to alter) their interests. Let's start with the end in mind. What would be a reasonably balanced instrumentation in a grade-12 concert band of, say, 40 players? Here is one possibility:

4 flutes	5 trumpets
2 oboes	4 horns
2 bassoons	3 trombones
7 clarinets	2 euphoniums
1 bass clarinet	2 tubas
2 alto saxophones	4 percussion
1 tenor saxophone	20 brass and percussion
1 baritone saxophone	
20 woodwinds	

There is always room for debate on instrumentation, and this list is no exception. However, it is an instrumentation that would allow the ensemble, other things being equal, a reasonable chance of playing most contemporary and historical wind-band

literature. I might add that I have rarely seen a high-school group comprised of anything close to this instrumentation.

Now, with the end in mind, we can look at the beginning. What do we need to start with in order to have a reasonable chance of achieving such instrumentation? One thing we can be pretty certain of: we will need a larger pool of players at the junior level if we wish to have forty players in grade 12. Put in terms of a specific instrument, if we wish to have, say, two tuba players in grade 12, we will need to begin more than two tuba players at, for example, the grade 7 level. What ratio this requires one cannot say for certain, but my guess is that it is at least two-to-one. That is, if you wish a certain number of instruments at the senior high-school level, you probably should start at least twice that many at the junior-high or middle-school level.

Below is a chart (Figure 1) showing the numbers of students who might be started on various instruments; the shifts in instruments they might be persuaded, or may volunteer, to make; and the outcome at the beginning of high school, assuming that none of them drops out or moves away – an unrealistic assumption, to say the least.

Notice that all instruments are not begun at the outset. For example, many of the lower reed instruments such as bass clarinet, baritone saxophone, and bassoon might be started only once a student has had some measure of success on smaller woodwinds. Also, notice that neither saxophones nor percussion are begun immediately, in part because they are very popular and will tend to "overrun" the instrumentation. Finally, notice that in several instances, students are encouraged to "double." One of the most common doubles is a student who plays clarinet, bass clarinet, bassoon, oboe, or flute in the concert band, and who plays one of the saxophones in the jazz band. Doubling allows students to participate in both musical groups without overwhelming the concert band with saxophones. It is not uncommon to see contemporary high-school concert bands with more saxophones than clarinets, whereas the reverse should be the norm. In an extreme version of this, I saw the US Air Force Band perform in the early 1980s with 18 clarinets and a saxophone quartet.

At this point, the question is: "How do I get students to choose the instruments needed for a balanced instrumentation?" Most potential students know of some, but by no means all, the instruments. The music teacher's task in recruiting is threefold: 1) to provide all "stake holders" (students, parents, and colleagues) with a clear idea of both the opportunities and the challenges that come with joining a school-band program; 2) to promote instruments which are not well-known to students; and, 3) to match students' physical and musical characteristics as closely as possible to the demands of the instrument.

The first of these tasks is beyond the purview of the present article. Bear in mind, however, that no student should be barred from participation in the band program. Music teachers check students' skills, interests, and background in order to serve their needs best, not to refuse them admittance.

The second task requires identifying those instruments which are in short supply (usually low brass and double reeds, but sometimes others as well) and making certain that potential students hear these instruments performed well, and also have an opportunity to receive some brief but enthusiastic instruction in how to play them. Carefully selected local professional musicians, band-teacher colleagues, university students, music-store representatives, or high-school students could serve as "instructors." However, often the most persuasive "sales people" are peers – successful band students just a grade or two ahead of the new candidates. An appropriate performance on oboe or horn by a grade-8 student will often convince their younger peers more than a professional player might, though making use of both approaches is ideal.

The third task requires much patience and effort on the part of the music teacher, as well as open lines of communication among teacher, student, and parent. Once potential students have decided to join the band program, they must decide or be persuaded what instrument they will play. There are three types of students: 1) those who absolutely know which instrument they must play; 2) those who have a few ideas on what they might play, but are reasonably flexible; and, 3) those who have no idea what to play. In my experience, the first and last groups are much in the minority. The bulk of the students have some ideas, but no firm commitments. Therein lies the "wobble room" that music teachers need to improve their instrumentation.

Bear in mind that we are not assigning instruments to students. Rather we are influencing students to study instruments that will give them the best chance of success, and that will also provide a reasonably balanced instrumentation for the ensemble. Usually offer students a first, second, and third choice of instrument (though actually the third choice is rarely used, being more a psychological ploy - "Well, at least, I didn't get my last choice!")

Of course, braces on teeth can cause difficulties with high brass instruments, double jointedness is a problem with woodwinds, and small children have more trouble with big instruments. Beyond these issues, here are some additional characteristics to consider when matching students to instruments:

Flute: the student can form an embouchure and produce a clear tone on the closed and open head joint within 5 minutes

Clarinet: the student's fingers are large enough to cover the tone holes, and the hands are big enough to assume the "home" positions comfortably

Trumpet: the student can form an embouchure and produce a clear tone almost immediately; within 5 minutes s/he can play at least three "open" notes on the instrument (likely second-line G, low C, and third-space C)

Horn: the student can form an embouchure and produce a clear tone almost immediately; within 5 minutes s/he can play at least four "open" notes on the instrument (likely low C, E, G, and either Bb or middle C); good pitch acuity; some successful piano (or other keyboard) background

Trombone: reasonable pitch acuity and can play three first-position tones on the instrument

Euphonium (Baritone): student can form an embouchure and produce a clear tone

Tuba: reasonable pitch acuity and can play three open tones on the instrument

Percussion: reasonable pitch acuity; good rhythmic feel; some successful piano (or other keyboard) background; good sense of responsibility

Naturally, musical skills already developed (often manifested as previous experience with private piano lessons) are always welcome. A good way to sense the students' musical skill level is to ask them to sing and move – for example, to sing a familiar song and to move rhythmically to recorded music. Reasonable pitch acuity translates as being able to sing, hum or whistle a couple of simple songs ("Frère Jacques," "Twinkle, Twinkle," or "God Save the Queen" work well; "O Canada" and "Happy Birthday" are harder). Published musical aptitude tests (most prominently, the series developed by Edwin Gordon) provide an accurate musical portrait of individual students, though they are time-consuming to administer and sometimes quite expensive to purchase.

Another way to glean information about potential students is to talk to their present music teachers. Hopefully, the entire music-education community in a school division works together for the benefit of all the students. Ideally, we are trying to bring musical skills and understandings that students have already developed to a new experience – playing a wind, brass, or percussion instrument. There is nothing inherently musical about clarinets or trumpets – they are simply pieces of wood or metal. The player brings his or her musicianship to the instrument – you can't take music from an instrument.

You will notice several things about the list above. First, I have high standards about the requirements for certain instruments. In my opinion, players can be "created" more easily on some instruments than on others. I have found it difficult to "create" flute or trumpet players, especially given the constraints often imposed upon me by full timetables and large classes. Hence the rationale for requiring players on these instruments to get the "trick" of producing clear sounds quickly and intuitively.

Conversely, I believe that it is easier to "create" a clarinet or euphonium player since certain tone production difficulties on these instruments can more easily be resolved, at least in a group setting. Therefore, these two instruments have only minimal

"requirements." You will also notice that percussion has a lengthy list of requirements, not least of which is rhythmic feel, which can be ascertained through having students move to recorded music, imitating the teachers' moves and beats.

To provide an example of how things might work in practice, a very common choice of instrument for students could be: 1) flute; 2) clarinet; 3) something else. Schedule a separate meeting with these students and ask them if there is some flexibility between their choice of flute and clarinet. For those who indicate they do, have them try flute again versus clarinet. If the flute is unresponsive, mention the potential difficulties and then try them on the clarinet – reverse the mouthpiece on the clarinet and let them blow while you finger the notes. Often this sort of success will persuade students to choose clarinet (which you need more of) over flute (which you need less of).

Another common choice scenario could be: 1) trumpet; 2) trombone; 3) something else. What sometimes happens is that these students lack both the embouchure firmness and control to succeed easily on trumpet and the pitch acuity to succeed easily on trombone: enter the euphonium. In a separate meeting, try these students on the (most likely unfamiliar) euphonium. In my experience, euphonium is the most easily approachable brass instrument, combining the ease of valves with the more relaxed embouchure of a lower brass instrument. With a bit of effective demonstration, students can often be convinced that euphonium will make a successful choice for them (and being able to rent it from the school at a fraction of the cost often convinces parents as well!).

What about the student who "really wants" to play a certain instrument? Of course, students should have the option of playing their "must have" instrument, but even in these cases there should be some pause for reflection. In one of my final years of public-school teaching, I had a girl entering grade 7 who "just had to play horn." She was unable to easily match pitch, her embouchure was naturally flabby, and she had no piano experience. I suggested perhaps clarinet, which was duly tried, and, in my professional opinion, would have been more successful. However, both the girl and her mother were adamant and I wanted more horn players, so I let her have her way. The result? A frustrated horn player who wanted to quit before Christmas, even after repeated one-on-one extra help sessions. The biggest motivator is success! Take the time necessary to ensure that students are matched with instruments on which they have a good chance of achieving success.

A balanced instrumentation will not just "happen." It will need planning and time, and probably a good deal of co-operation between junior-high/middle-school and high-school band directors. However, developing a long-term instrumentation plan is as valuable as developing a long-term budget plan and the rewards of a balanced instrumentation at all levels will be felt throughout the school division or district.

The above may seem somewhat Machiavellian, and perhaps it is, but consider the alternative. What we really want is for students to convince themselves that a particular instrument is their best choice. In no case are we assigning an instrument on which they seem unlikely to succeed simply to satisfy our quest for perfectly balanced instrumentation. We are simply expanding the choices open to students and guiding them in directions that have good possibilities of success both for individuals and for the instrumental-music program as a whole. In my opinion, a band comprised of flutes, saxophones, trumpets, and drums is rarely a source of musical satisfaction to anyone.

Fraser Linklater is an Assistant Professor of Music and Education at the University of Manitoba. He directs the University of Manitoba Wind Ensemble and Chamber Winds, as well as teaching courses in music education and conducting. For more information or feedback contact: fraser_linklater@umanitoba.ca