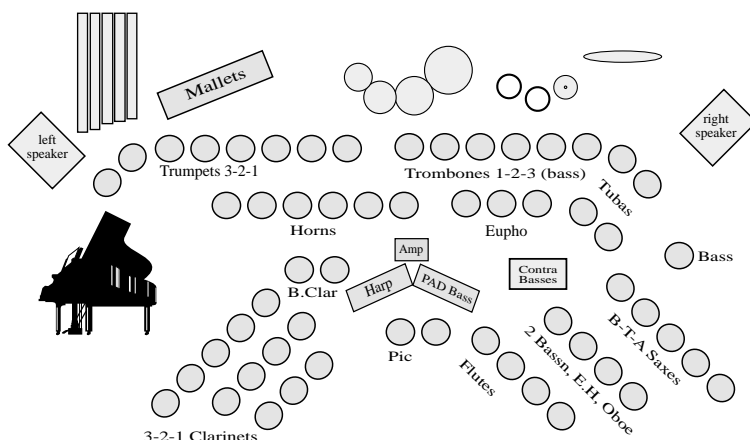


“Always teach to the needs.” For 25 years those words, spoken during one of many Music Education classes at the Boston Conservatory have echoed in my mind prior to every job interview, every school day, every utterance to an administrator, every rehearsal, every class. They swirl in my mind each time I am introduced as a guest conductor and before I set the first note of a new piece. I wonder if Miss Niccolucci knows!

Teaching to the needs takes guts. It means saying “no” to the many obstacles, real and imagined, while saying “yes” to the Ideal. It means staying true to Lincoln’s phrase, *“If I had eight hours to cut a tree, I’d spend six sharpening the axe.”* It’s raining. Hard. You need shelter. Very few will stay at that grinding wheel, knowing that in the long run, their Time has been strategically invested.

In my first year of teaching, I stood before an interesting group, certainly not the ideal ensemble in the diagram below. It was much more akin to the groups most of you face. I had one student, who has since graduated from Northwestern as a Concert Pianist. During the fall, two options came to mind. 1. Put her on cymbals. 2. Put her on mallet percussion. But then came those haunting words. *“Always teach to the needs.”* And so, option three was born!

Option Three meant meeting her needs as a Pianist. In 1980... *a technological upheaval ago...* synthesizers were just emerging. We took one such synthesizer, heavy and uncooperative, and attached it to a sound system. We covered it in plastic for foul-weather and we powered it by means of a marine battery. To hasten this story, we eventually rendered a shortened version of the *Warsaw Concerto* on the field. I wonder, even now, how putting Cindy in the percussion section might have changed her eventual accomplishments.



This remarkable new addition had to endure. In months we evolved the “*electronics section*” as I called it then, to what is now call the “*STORMSystem*”.

Since that time with my own band, and then in all of the “Storm” works that followed, I’ve written for an instrument called the **PAD Bass**. There has always been a multifunctional and strategic reason for doing this. The possibilities for dramatically improving the experience of Band are considerable. Yes, in the first year of the 3rd Millennium, it is not only possible, but indeed it is Time for a quantum enhancement in the *sonic scape* and educational possibilities of Band.

Previously mentioned as part of an article about commissioning Music, I want to thank *SB&O* for providing this forum for the continued pursuit of this information.

What is a PAD Bass? The term, *PAD Bass* evolved in this way. After our experience with utilizing the keyboard as a “piano”, we began to get our pitch from the pianist. *“Wait, that isn’t low enough. Might as well kill 2 rocks with one bird! Can you get a lower sound? Something in the string section. Ooh! That’s good, but take out the rosin. We need pure fundamental. Okay. Better, but now we need to go*

another octave down. See if we can get an octave below the tubas.”

I remember Glen Levy, our tuba player. A smile came when he realized that from that moment forward he would no longer need to sustain an unwavering Concert F. Now he too could join the ear-training game! **A quick aside:** *When the tubas go in to tune with this fundamental, another tuba will sound at the octave beneath the note the tubas are playing. This is an undertone which begins the journey toward many new colours previously missed in the band experience.*

Since the instrument's *function* is to supply a warm enveloping bass and since many synthesizers utilize names like, “Warm Pad”, *General Midi #90*, or “Slow String Pad”, the generic term *PAD Bass* was adopted to allow for as many variables in equipment as possible, and then utilized in all “Storm” works since 1986.

Because the instrument functions by supplying a fundamental which is at least one octave below the Tubas, it also provides for, and reinforces the correct path of listening from the wind players, which is towards the base or fundamental. Correctly implemented, the simple addition of this new instrumental colour provides for a whole new world of acoustic possibilities in the winds and percussion idiom.

Why the PAD Bass? The *PAD Bass* provides a previously missing, hence new fundamental for the Band of the 3rd Millennium. Since 1980, we tuned the ensemble to the Tuba. But that was like beginning the construction of a skyscraper on the second floor. We were missing the acoustic foundation, a fundamental which exists in the complete Orchestral palette. As soon as this fundamental was reintroduced to Band, horns began to sound like horns again, the low brass were more resolute and played with a greater sense of harmonic awareness. The woodwinds enjoyed a richer mix of overtones in their spectrum and the low reeds had a new fundamental with which to merge in deeper, more colour-enriched ways.

That was 21 years ago! Now, the possibilities are even greater. Any band director who has had the opportunity to experience the possibilities born from one simple, cost-effective, properly employed addition simply “cannot imagine band being done any other way”. Those aren't my words. You can visit www.stormworld.com for the names of many band directors who have volunteered to speak about this experience, and for no other reason than they are dedicated Educators. Like you, they search for ways to continually improve everything associated with their Teaching.

While accomplishing the task of releasing new overtones in the *sonic scape* of Band, the *PAD Bass* also provides an inviolable fundamental and tuning reference. Intonation and Tuning are immediately improved.

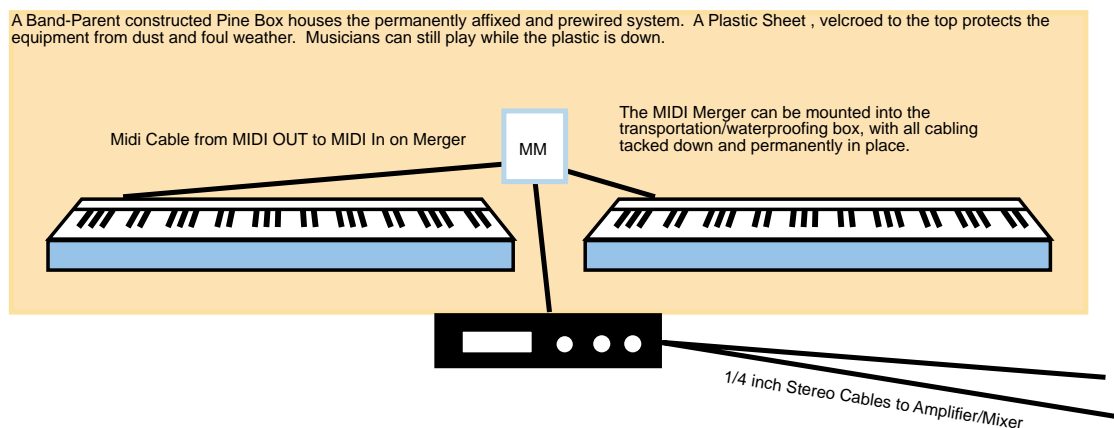
In addition, Music Education is enhanced by means of the following collateral processes:

1. Students who might otherwise not be a part of the band program, pianists by example, now have a place and important purpose.
2. The instrument (*instruments, when including the synth-Harp*) presents the opportunity for consistent rehearsal practices, including the commencement of a rehearsal by the simple sounding of the concert F.
3. Access to the keyboard in the rehearsal environment provides for greater student interaction with

instruments belonging to a more complete inventory of the modern Orchestra. It also provides a medium for exploration, experimentation and of course, the demonstration of score passages, etc.

4. You can utilize the *PAD Bass* to establish the rehearsal by providing the reference fundamental. From the concert F, the entirety of the rehearsal logically unfolds.
5. The students' regard to Tuning is always referred to an inviolable fundamental. As a result, Tuning and Intonation improves.
6. Many sonic experiments and colours become possible.
7. The listening experiences of students outside of Band is now more closely emulated. The Band experience begins to take on the *sonic scape* and dimensionality of the Orchestra and recorded Music world.

This new addition in its efficient form as diagramed below, can be readily justified to administrators. It can be utilized with Marching Band, Concert Band, Jazz Ensemble, Orchestra and of course, MIDI Music labs. It is multifunctional and nowadays, extremely cost-effective.



Teaching to the needs? Wherever I've been, whatever group I've worked with, **Tuning and Intonation** have been the weakness. As a result, did you know that there are now *professional* ensembles that utilize the *PAD Bass* on all their recordings? Many Teachers now clinic this process and slowly but surely dedicated band directors are exploring the new possibilities. Having tasted the finest of meals, it's difficult to go back to fast foods. If you can tackle a few easy logistics obstacles and stay true to consistent experimentation a whole new opportunity for Teaching awaits you.

To learn more about the *PAD Bass*, see other articles and hear from directors, you can visit www.stormworld.com. For technical support, contact Brad Slate at Sweetwater Sound. brad_slate@sweetwater.com