music+MATH

Over the years the news media has made much of the oft-speculated connection between math and music or the sciences and music. Certainly there's plenty of anecdotal evidence to suggest that such a connection exists, whether or not the so-called Mozart Effect is actually real or not (personally I doubt it, but I enjoy the idea). Microsoft Corporation, notoriously peopled by math wizards and science nerds, has its own employee orchestra, aptly named the Microsoft Orchestra. And should it surprise anyone that Phillips Petroleum corporate headquarters also had its own orchestra? Our *Opus* magazine editor's father-in-law, a chemical engineer, was concertmaster.

I recall a brilliant piano accompanist when I was singing in the men's chorus in college. The young (22-years-old) Ph.D. candidate was able to sight-read orchestral scores and perform all manner of pianistic acrobatics, but he was at his core a mathematician. And while never reaching any kind of musical skill of that caliber personally, I did devote some twenty years to piano study. Thinking back to junior and senior high school, the only thing I ever "lettered" in was math team. How embarrassing to confess, but there it is. Some time ago, I even subjected our administrative staff to a screening of *Donald Duck in Mathmagic Land*. The video, which I had recalled from elementary school, detailed all kinds of interesting ways in which math exists in our everyday life, including music. Okay, so the video wasn't as fascinating as I had remembered it but maybe my kids will enjoy it.

David Chambless Worters, President & CEO

This past summer, classroom and music teachers traveled from around North Carolina to spend the day at the North Carolina Symphony's Teacher Workshop. This day long event introduced teachers to the various components of the coming season's education concert. Teachers exchanged ideas about classroom techniques and activities that can support the learning provided by the North Carolina Symphony.

At the workshop, educators also had a chance to discuss the debate between teaching the arts in schools for their own sake vs. using them as a tool for increasing performance in more testable areas such as math or reading. For me, the debate is purely academic since the arts are so obviously critical staples of any young child's educational diet and healthy development. They are both valuable in their own right and for their mind-expanding benefits that transfer to all other kinds of learning.

Exposure to and participation in the arts is not only enjoyable and emotionally satisfying, but promotes creativity, personal expression, discipline and commitment, as well as dexterity and motor skills. Depending on the setting, the arts can also enhance social skills and foster lasting friendships.

The fact that for some students hearing the North Carolina Symphony in the fourth or fifth grade represents their only exposure to the live performing arts is rather sad, and I wish that we did our work in an environment that values the critical importance of the arts to overall education more than it does. In today's world, however, testing drives the curriculum. Schools compete based almost entirely on standardized testing. Too often, arts experiences such as participation in a North Carolina Symphony-provided program, are pushed out of the way. We are fortunate to be partners with the North Carolina Department of Public Instruction which benefits us and school children in many ways. But still, schools have de-emphasized arts education in favor of the more "traditional" subjects (i.e. "testable") in recent years.

One of things we learned a long time ago is that there is very often a common denominator among all of you who regularly attend classical performances of your North Carolina Symphony. That connection is the experience of playing a musical instrument as a child. Grant Llewellyn and I rediscover this fact just about every time we convene a group of ten or twelve donors for lunch, often on the Friday afternoon before a first performance in Meymandi Concert Hall.

As we go around the room introducing ourselves and hearing our supporters' stories, inevitably we learn that contributing to interest in music is some sort of early childhood experience of actually holding and playing an instrument. If this experience is in fact an early contributor to the development of a lifelong love and appreciation for fine music, then what the Symphony does as an organization for music education is all the more important to even our own future success. Along these lines, I do wonder if the mathematical and scientific aptitude of our audience is significantly higher than that of the general population. I wouldn't be the least bit surprised to learn that this is the case. If you see an SAT-style math test at a future concert, you'll know why.

In this issue of *Opus,* we take a look at two individuals for whom the connection between science and music is exceptionally vivid: entrepreneur John Q. Walker of Raleigh and our own Vic Benedict, bassoonist in our orchestra since 1973. We encourage you to read their stories and reflect on how your own love of music was created, and what that might mean for the education of today's students.