November 2006
Volume 2, Issue 3

VCMEP

Virtual Continuing Membership Education Program
Kappa Kappa Psi National Honorary Band Fraternity

Malinda M. Matney, Ph.D., National Vice President for Colonization and Membership
This month with Michael Osborn, Immediate Past President

http://www.kkpsi.org

Music and the brain: How does music shape thought?

Most of us know that music makes us perform better in other areas of our lives. We learn intellectual skills from rehearsal, stress management skills from performance, and an appreciation for our cultural heritage. However, knowing more precisely why this happens can help us improve our experiences.

In this issue, Mike Osborn, Immediate Past President, describes recent research on how the brain is shaped by musical activity. By learning about how we shape our ability to think, we learn how to explain to others why music is so important to us. This is the first of two VCMEPs describing the role of music in shaping how we think.

If you have questions, contact me at mmatney@umich.edu. Your work in band today can lead to greater heights tomorrow!

Malinda

Mapping: How our brain is organized

by Michael Osborn, Immediate Past President

Have you ever sat around campus and watched your fellow classmates only to wonder why it is that you and your band friends seem so much more intelligent than many of the people you observe? Ever noticed in high school that the most intelligent, highest achieving students were sitting in band with you (or was you) or involved in another music class? Ever heard the reports that many top executives took part in musical activities as a youth or that major corporations are looking for students coming out of college with musical experience to fill their job openings? Is music some magic medicine that sets you apart from your peers? The answer appears to be yes.

Many of us grew up hearing that there was a correlation between music study and achievement, or that by listening to Mozart as an infant you would be smarter. Often times these concepts were believed but not always backed up in strong research. Times have changed. Brain research currently demonstrates the relationship between long term involvement in music education and enhanced brain function.

The brain is composed of many sections and parts, all of which have long scientific names. The mystery over the years has been learning how these various areas of the brain interact and are used for the various academic pursuits we deem important in our world. By mapping brain activity of individuals engaged in intellectual pursuits, researchers have found the various academic disciplines (math, reading, science for example) utilize very specific brain sections to perform their tasks. In some cases these overlap, but for the most part there are very specific areas used for each discipline.

Kappa Kappa Psi

PO Box 849
Stillwater, OK
74076-0849
800-543-6505

Malinda M. Matney, Ph.D.
National Vice President
for Colonization and
Membership
mmatney@umich.edu

Strive for the Highest

We're on the Web!

See us at:

www.kkpsi.org

How does brain mapping differ for those involved in music?

When the same mapping is done on participants in musical pursuits it is found that there are many more brain areas engaged, including those which easily overlap with the other academic disciplines. This leads researchers to believe that music education serves an important academic function in using, exercising and expanding those areas of the brain that are vital to other areas of intelligence. Therefore, your study of music has unknowingly provided your brain with some development that does in fact enhance your abilities in other areas. This brain enhancement happens in a way that is not reciprocal from those areas back to music – other academic areas do not equal music in their development of your ability to think.

So, when your parents allowed you to become one of the privileged music students back in the day, little did you know that what they were doing was providing you with an added tool toward your success as an adult. Imagine that, an activity that is so much fun in which to participate might be one of the best things you can participate in for your long- term cognitive development.

So what does this mean to you now? Keep involved in musical activity. In an era that is very interested in maintaining vital brain function, as one grows older, could it be possible that something as simple and enjoyable as playing music could be a major key in keeping your brain fresh and strong? Yet another potential life benefit you were granted when you chose to continue to participate in music. As you move on from these college years, keep in mind that muscles that are not used deteriorate and weaken. Do not allow that to happen to you. Keep involved in various community or civic bands, or other activities that continue your involvement in reading, analyzing, interpreting, listening and performing music!

Music: Truly a healing art

While we have discussed how your brain develops using music, music also helps address damage or loss of function throughout a lifetime:

- Florida State University researchers are developing ways to use music to help premature babies develop brain activity more rapidly.
- Willamette University researchers are helping autistic children learn communication skills and master social behaviors with the help of instrumental music.
- Southern Methodist University researchers have both explored the ways in which music helps decrease the hospice patients' perception of pain, and also improves the level of respect from medical staff caring for these patients. Additionally, music is helpful in work with the families involved to help them with their feelings and issues.

Music is more than a casual hobby, or a pleasant experience. Music develops all aspects of intelligence and perception, affecting how we think, how we interact with others, and ultimately, how we live. In these ways, music truly is the universal language.