Research Grant – Spring 2013

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Unit: School of Music

Project/Proposal Title: Musical Working Memory: Results of an Aural Skills N-Back Task

Abstract:
The purpose of this project is to support dissemination of research data collected to support the validity of a new measure of musical assessment at the International Symposium on Assessment in Music Education (ISAME) held in Taipei, Taiwan from April 10-13, 2013. An abstract, “Musical Working Memory: Results of an Aural Skills N-Back Assessment,” underwent peer review and was accepted for spoken presentation. In addition, I am participating in a panel presentation, “A Comparison of States’ Approaches to Music Education Assessment in the U.S.” Dissemination is necessary to build my scholarly reputation among the international leaders in music education.

Proposal:
The International Symposium on Assessment in Music Education (ISAME) provides opportunities for faculty to disseminate research, develop collaborations, and promote scholarship. The goals of this project are to promote scholarship in music education assessment and to develop international collaborations. Specifically, the abstract entitled, “Musical Working Memory: Results of an Aural Skills N-Back Assessment,” underwent peer review and was accepted for spoken presentation. This research provides data to validate the Aural Skills N-Back task by examining the performance of musicians and non-musicians on a novel working memory measure that includes melodic, harmonic, and combinations of melodic/harmonic stimuli. The task is modeled upon a standard neuropsychological task, the N-Back task. N-Back tasks require responses to stimuli presented [N]-times ago. In the musical domain, music consists of sequences of notes rather than isolated pitches. Unlike many auditory N-Back tasks developed in other fields such as psychology, this task utilizes sequential musical material, rather than isolated pitches. Results indicate that musicians perform significantly better on harmonic trials and combinations of melodic and harmonic trials compared to non-musicians. I also examined differences in performance between woodwind and brass instrumentalists who completed the Aural Skills N-Back task. No significant differences between woodwind and brass players were found on the Aural Skills N-Back. Data collectively indicate that the Aural Skills N-Back may be sensitive to skills utilized in musical training.

A separate abstract was reviewed and accepted for a panel presentation at the International Symposium on Assessment in Music Education entitled, “A Comparison of States’ Approaches to Music Education Assessment in the U.S.” I am collaborating with faculty from across the United States to report upon assessment development and contemporary practices. My role will be to discuss Florida’s contribution to music assessment in my work as a writer and reviewer on the Race to The Top (RTTT) Project. I am working to review items for the Florida Fine Arts Elementary Music Assessment. Other states represented by faculty on the panel include: Glenn Nierman from the University of Nebraska-Lincoln; Michele Henry from Baylor University in Texas; and Mark Hudson from the University of Colorado at Pueblo.

This conference offers opportunities to showcase research with many implications for the field of music education assessment and music psychology. The mission of the University of South Florida, College of the Arts (CoTA), and the Center for Music Education Research (CMER) supports international and cross-disciplinary research and scholarship exchange to promote music education initiatives. Presentation at the ISAME will represent USF and CMER in scholarship exchange while offering opportunities for dissemination to an international audience.