

Research Reconsidered—The Benefits of Testing
Daniel C. Johnson, NCMEA Research Chair

In this edition of “Research Reconsidered,” a review of selected 2006 NCMEA Research Posters, we consider the benefits of testing and evaluating for both students and teachers. This regular series is intended to bridge the gap between academic research and classroom application. Featured in this article are assessment and testing strategies on music instruction as researched in two different education settings, by Dr. Brett Nolker at UNC-Greensboro and by myself assisted by a group of music education majors at UNC-Wilmington. Note: to view all the abstracts from previous Research Poster Sessions and previous editions of this column, visit the Research link of the NCMEA website at www.ncmea.net/research.htm

Although testing is considered by many teachers as a “necessary evil,” unless teachers have definitive ways to measure students’ success, they can only guess about how effective different instructional methods are. With heightened attention on the quality of each student’s musical experience, there is an increased need for investigating individual learning outcomes in different music education settings. In recent years, both ensemble directors and general music teachers are being held increasingly accountable for the musical skills their students attain. A better understanding of different pedagogies may assist teachers in maximizing individual students’ learning outcomes. To investigate these aspects in greater detail, I investigated Orff-Schulwerk using a content analysis of published research. In a related study, Dr. Nolker explored the effect of individual testing and feedback on students’ sight-singing success in a high-school choir.

Assisted by a group of undergraduate music education majors, I investigated the Orff-Schulwerk approach. This pedagogy uses a five-step, child-centered process: observation, imitation, exploration, improvisation, and creation. This approach holistically addresses the child’s overall development through a process that emulates natural play and exploration. In addition, the Orff

approach encourages active music making in group settings and is intended for all students, not just the musically talented or inclined. All students learn in a progression that invites and honors their ideas and creativity. The students build not only their understanding of music but also their social and emotional development through their participation in classroom activities. With such a multi-faceted approach, we determined that a multi-faceted analysis was needed.

To develop a more complete understanding of the Orff-Schulwerk approach, we undertook a content analysis of the existing research literature. Assembled for online publication, the Orff Research Weblibliography (Wang, Abril, Johnson, & Sogin, 2006) was analyzed for research methodologies and variables to be used in designing an assessment plan. The authors investigated how the Orff approach has been studied with respect to its impact on student learning. They then designed a multi-faceted, yet practical assessment plan including six focus areas: listening skills, verbal descriptions of music, improvisation, attitude, performance skills, and knowledge and understanding of musical terms and concepts.

During a follow-up practical phase of our study, we collected qualitative and quantitative data during a pilot project titled, The Cape Fear Orff Ensemble. This project involved area fourth and fifth-grade students and was funded by a Cahill grant from UNC-Wilmington. Using video tape recordings, written tests, and CD-ROM technology, we documented students' performance in a variety of areas. The response from the participants, their parents, and music teachers was very positive. We expect to analyze and present the findings from this pilot study at the 2007 NCMEA Research Poster Session.

In a related study, Brett Nolker at UNC-Greensboro investigated how students learn to sight sing using an individualized testing approach as compared to a traditional group instruction. He intended to develop instructional materials and methods for optimizing individual learning while within a group-learning environment. Dr. Nolker inquired if students given a systematic program of

individual testing while within the ensemble would show a significantly greater improvement in individual sight-singing than students given only traditional group sight-singing instruction.

To carry out his study, Dr. Nolker worked with 240 singers randomly selected from six different high school choirs. Students participated in either the experimental group (receiving individualized testing) or the control group (receiving no individualized feedback). All students' pretest and posttest performances of a sight-singing piece were audiotaped. In the individualized testing group, the students were given feedback on their performance during twelve separate sessions within their regular choir rehearsals. Dr. Nolker found that there were some significant benefits in both pitch and rhythm scores associated with the experimental individualized testing, as compared to the ordinary choral music rehearsal.

The traditional approach to music education, driven by the need for public performances, may not allow music educators to promote and measure individualized learning outcomes. In the present educational environment, building individual musical skills will require efficient and effective methods of instruction and assessment of the individual student while in the large ensemble or classroom setting. In the future, additional researchers may collaborate with other K – 12 music educators to evaluate the benefits of giving individualized feedback to students in their programs. Ideally, students, teachers, and researchers will all realize more benefits from testing.

Daniel C. Johnson is the Chair of the NCMEA Research Committee, and the Assistant Chair of the UNC-Wilmington Department of Music. He may be reached at johnsond@uncw.edu, 910-962-7559.