Advancements in technology have enabled greater opportunities for collaborative research. As two researchers working together long-distance, we have discovered several helpful ways to use online tools. In this session, we will give audio and visual examples of online communication, research instrument development, and document editing. We will use two of our coauthored research studies to illustrate the collaborative process.

Communication - Successful research collaborations require excellent communication among authors. We achieved this through email and video calls, using both Skype and Google Hangouts. Both services offer free video conferencing and chat capability. As of the writing of this proposal, Google has been more reliable overall, although having access to both is ideal. An advantage of Google Hangouts is the free screen-sharing feature (requires a premium membership in Skype). We found this particularly useful in the final stages of editing manuscripts for submission to journals and, later, for revisions. One researcher can share his screen so the other can see, in real time, how the draft is developing. This is helpful for reviewing files together from programs, such as Word or Excel, that do not support online collaboration.

Instrument Development - Our first study focused on detailed live interviews with participants in four locations across the country. We were able to develop our interview questions collaboratively, and share our audio recordings and transcripts of the interviews as Google docs for comparative analysis. In our second study, we developed and distributed a survey to a large number of participants across the country. We were able to track and analyze data together, and eventually shift those results into a collaborative writing stage.

Document Editing - One of the first goals of collaborative research is getting all minds on the same page--both figuratively and literally. By drafting manuscripts in Google Docs, both of us had easy, internet-based access to our latest version at all times. Updates to the document were saved almost immediately, allowing for simultaneous editing by both researchers. Each author could see what the other was typing in real time. This proved to be a big benefit, as we could quickly divide duties and monitor progress during our online meetings.

The Google Docs comment feature may be one of its strongest advantages over desktop applications like Microsoft Word. Word supports comments on a manuscript, but does not support dialogue or responses to comments without the creation of a new comment. In Google Docs, collaborators can respond to comments within the comment thread, allowing everyone to see the manuscript with the discussion beside it, including the person’s name and the time of editing. Google also emails new comment responses to all collaborators so they can monitor changes. Collaborators can simply reply to the email to make an automatic addition to the comment thread.

Challenges - The main challenge we encountered was an occasional lack of connectivity for online video and audio communication. We were able to mitigate that through choice of provider and sometimes through removing the video feed, while keeping audio connected. Google Docs has fewer editing features than Microsoft Word. For example, hanging indents are more difficult and tables and figures do not have the same formatting. We were able to address these problems by separating our process into a writing period and a finishing period. In the writing period, we stayed in Google Docs and worked out the organization and wording issues. In the finishing period, we took turns working on formatting issues.
issues through screen-sharing and by emailing a single Word document back and forth. We purposefully delayed this stage as long as possible to maximize our collaborative time, knowing that unattractive details in the Google Docs version would clear up quickly once transferred to Word.

Conclusion - We have been meeting weekly since the 2010 Biennial National Conference, where we both presented research on a similar topic. We are currently working on our third study together and are pleased to be able to demonstrate how we have collaborated successfully over the last three years. We believe that research collaboration enhances the building and connecting of the knowledge needed to inform music teaching and learning.


There has been a growing unrest in many research fields about the almost exclusive reliance upon statistical significance testing. One of the largest concerns is that statistical significance of a particular variable having a demonstrable effect upon some outcome (statistically called p values) is itself a reflection of sample size. Many researchers, journals, and the American Psychological Association (APA) have recommended reporting the effect size in addition to statistical significance. Reporting of effect size will provide valuable data to readers and other researchers. It will offer information on the practical significance of the results rather than simply the statistical significance. Reporting the size of an effect will also allow for the assessment of the stability of results over samples, measures, and statistical results. In addition, it will aid in conducting power analyses for future research and provide important information for meta-analyses. The purpose of the presentation will be to provide an understanding of the importance of reporting effect size, the different types of measures, and how to interpret them. The two factors that determine the size of statistical significance are a variable’s effect size and the sample size. Variable effect size is the strength of association between the independent and dependent variables. In an analysis of variance, a treatment that has a large effect on the dependent variable will result in a larger F statistic, other factors being equal. In addition, larger samples have more degrees of freedom and therefore have greater power to identify statistically significant differences between means than would smaller samples. Statistical significance, therefore, could be the product of either a large effect size or a large sample size, but not necessarily both. Since sample size influences the testing statistic, the statistic alone is not adequate enough to judge the relationship between variables. Information about the magnitude of the effect is needed to make some judgment about the practical implications of the results. There are over 40 different measures of effect size and that number is getting larger.

Given the large number of measures of effect size it is extremely important to tell the reader which measure of effect size is being used so that the results can be properly interpreted and compared across studies. There are several different types of effect sizes. The most common effect sizes fall into two different categories: standardized mean differences and variance-accounted-for effects. There are also “corrected” and “uncorrected” effect size statistics. Ideally, the sample and the population should prove to be identical and would yield the same results if tested. However, each sample has its own personality or variance which is unique, creating differences between the sample and population. When calculated, effect sizes computed for a sample are inflated due to this sampling error variance. Corrected effect sizes were developed to compensate for this bias. Standardized-difference effect sizes calculate the difference between the means of the groups and divide this difference by the standard deviation for the measure in the population. Two of the most common effect sizes in this category are Cohen’s d and
Glass’s \( \Delta \). Representing effect size using standardized mean difference formulas will result in values that represent the effect in units of standard deviation. Variance-accounted-for effect sizes are the ratio of explained variance to the total variance. All parametric analyses are correlational and part of a single General Linear Model (GLM) and therefore produce effect sizes comparable to the Pearson \( r^2 \). There are both “uncorrected” and “corrected” variance-accounted-for effect sizes. Uncorrected effect sizes include \( r^2 \) (Pearson \( r^2 \)), \( R^2 \) (multiple regression), \( \eta^2 \) (eta-squared), and partial \( \eta^2 \) (partial eta-squared). Corrected effect sizes include the Ezekiel correction formula used with \( r^2 \) and \( R^2 \) and \( \omega^2 \) (omega-squared).

In addition to calculating effect size for multivariable ANOVA designs, it is also possible to calculate the overall quality of the model. Model quality is evaluated by computing how much total variation in the dependent variable was explained by each of the main effects and their interactions. Effect size provides valuable information beyond statistical significance that can improve and support one’s findings. When reporting effect size it is essential that the measure being used is correctly labeled and interpreted for readers so that the data can be placed into proper context.

The measure of effect size used is subjective and should be determined by the design and nature of the data. Providing measures of effect size provides a more objective measure of the practical significance of the results.

Hancock, Carl, Heath, Timothy and Coates, Brian. University of Alabama, Tuscaloosa. Price, Harry A. Kennasaw State University, Kennasaw, GA. **A Survival Analysis of Citation Speeds for Journals Affiliated with Music Education Research.**

It is widely recognized that articles published in different journals are cited with greater or lesser frequency based on the prestige of the journal itself. A cumulative tally of citations is used to determine the importance and influence of specific authors, articles, and journals, which scholars refer to as an impact factor. Despite the many criticisms of impact factors, it is interesting to find that while this summative score is important, it ignores an obvious and perhaps equally important measure of the research enterprise—the speed of research dissemination or the time elapsed between publication and citation. This study examines the citation speeds of journals and articles in the field of music education research. A large and rich data set was created using internet search engines, indexing services, and published databases to identify references to music education research originating from publications in the arts, education, music, and other fields. Citation data was processed using a series of computer scripts and the time elapsed between publication and the first citation in a journal was recorded. Citation time and frequency data were analyzed to determine cumulative probability of a first citation by year using parametric Kaplan-Meier estimators, Cox Regression, and multi-level time-series analysis. Results reveal a clear research dissemination hierarchy for the different journals similar to results from prior studies examining journal eminence and the JRME.

This study establishes a clear order of adoption for research results that may help scholars, editors, and the general public know how scholarship spreads and is adopted by the profession. * This study builds off an earlier work by the lead author.

Reese, Jill. SUNY Fredonia. Pellegrino, Kristen. University of Texas at San Antonio. Kastner, Julie. University of Houston, TX. Russell, Heather. Cleveland State University, OH. Bridget Sweet, University of
During this session, we will share how we, five researchers living in four different states, used technology to collaborate virtually on projects for research, presentation, and publication. Virtual collaboration tools included social media, virtual conferencing technology, web-based document sharing programs, and web-based programs. Advances in technology have made virtual collaboration, “the practice of teams of people working across boundaries of time, space, and organization,” and mediation of data via digital media increasingly commonplace in business (Biuk-Aghai & Simoff, 2004, p. 57), learning environments (Karpova, Corriea, & Baran, 2009), and research (Tobias, 2013). Using technology, we devised strategies to overcome the boundaries we encountered due to geographical differences, and successfully collaborated in ways that transformed potential limitations into advantages.

Virtual collaborations present opportunities for synchronous (same-time activity) and asynchronous (different-time activity) modes of collaboration, or a combination of both to facilitate productivity and creativity (Biuk-Aghai & Simoff, 2004). In this session, we will highlight synchronous and asynchronous technologies and strategies we used to collaborate on projects for research and publication. We will also describe how we combined synchronous and asynchronous technologies simultaneously to maximize our productivity and to potentially surpass that which we could have done in the same room without such technology. For example, we met using in-time virtual conferencing technology to formulate an analysis plan (same-time collaboration), separately transcribed raw audio data and shared transcriptions via the web-based document sharing program (different-time collaboration), and then used multiple technologies to meet and examine the outcomes of our coding and share and compare interpretations until consensus was reached (simultaneous same-time and different-time collaboration).

Though we considered the collaborations successes, we worked hard to negotiate interactions considering the limitations of the technology. Wainfan and Davis (2004) found that three factors contribute to the success of such virtual collaborations: contextual variables (factors related to the group environment), process variables (characteristics of interactions), and group outcomes (results of collaboration). In this session, we will describe how these particular factors contributed to our experiences and the success of our collaborations. For example, when considering context variables, the group found it necessary to establish guidelines for working norms, group size, and social interactions, as well as consider background and experience of each group member before diving into virtual interactions. One method we used to navigate group size was to cycle between large group meetings, small group meetings, and work as individuals depending on the task. When considering process variables, the group carefully developed strategies for consensus-reaching, communication efficiency, and information exchange. One strategy we used for consensus-reaching was simultaneously combining virtual conferencing technology (same-time) with a web-based document sharing program (different-time) for collaborative editing sessions. The combination seemed to facilitate an efficient exchange of ideas between authors. When considering group outcomes, the group paid careful attention to satisfaction of the group, choice or shifts in opinion, and polarization or cohesion of members. Though many strategies for monitoring group outcomes seemed covert and subsumed by the typical balancing-act of social interaction, we agreed to use the comment-box option in the web-based document sharing program during different-time exchanges to communicate shifts in opinion when editing documents and to facilitate interaction until the group reached satisfaction. Though virtual collaborations are becoming more common and are often successful, they are different from face-to-face collaborations and present specific challenges, such as varying levels of comfort with technology and lack of nonverbal social cues (Karpova, Corriea, & Baran, 2009; Wainfan & Davis, 2004). Despite these challenges, technology
presents opportunities for collaborative research projects, unrestricted by the boundaries of time, space, and organization. We will share our perceptions of the benefits and challenges of virtual collaborations and suggest strategies for using technology to facilitate future research collaborations in qualitative and quantitative paradigms. Music education researchers may find these strategies valuable for transcending boundaries of time and distance and promoting inter-institutional and cross-disciplinary collaborations.

Rohwer, Debbie and Svec, Christina. University of North Texas, Denton. Perceived Value of Research Preparation Opportunities for Future Music Education Professors

The purpose of the study was to describe research leaders’ perceptions of the relative importance of various research preparation opportunities for future music education professors. The 122 questionnaire respondents answered 38 Likert and open-ended content questions that asked about research experiences, research skills, research resources, and research coursework. The highest rated research experience was having each doctoral student do an oral presentation of his or her research, the highest rated research skill was ability to choose an important research question for a study, the highest rated research resource was SPSS, and the most common response for what coursework should be required for doctoral students was a basic course that introduced the students to research concepts. Conclusions address the possible programmatic applications of the results.


There is little research to be found on the role of the dissertation/thesis in the doctoral degree in the US. Although traditionally this culminating project has been the report of a large-scale research project in monograph form, an alternative that has garnered interest recently in a variety of field is the “project-based” or “three-project” dissertation. While there are variations, the typical project-based dissertation is composed of three related, publishable projects including an analytical literature review or theoretical position paper and two separate, research-based projects. All three papers/projects are written in the form of submission-ready journal manuscripts, and the dissertation begins with an introductory overview chapter and concludes with a synthesis chapter much like a traditional "discussion," providing overall conclusions situated in the related literature with implications and suggestions for future research. Typically at least two of the three projects are completed post-comprehensive exams. The articles comprising the project-based dissertation provide the student with three potential publications, versus the monograph length dissertation, which is difficult for authors to reduce to journal article length, and depending on the ethical standards adhered to by the profession, may result in only one empirically-based publication. Some argue that the articles generated via this process are of higher quality than those produced pre-comprehensive examinations.

Although this style of doctoral dissertation project is accepted by many Graduate Schools at universities around the country, the use and/or acceptance of the project-based dissertation in the field of music education appears to be in the very beginning stages at a few institutions. This study was designed to survey the awareness of the project-based dissertation among music education program area heads in doctoral granting institutions, the extent to which project-based dissertations were being considered or used, and additional attributes of doctoral programs and attitudes of faculty related to the dissertation in general and this option in particular. Music education program area heads from the 53 NASM
institutions with accredited doctoral degree programs in music education were surveyed. Faculty representing 44 of these programs (83% response rate) completed the survey. The vast majority of participants responded that their institution’s students did not have an option for completing their doctoral dissertation in any other format than the traditional dissertation—only 6 did report having other options available. Only 51% of respondents were at least “somewhat familiar” with the project-based doctoral dissertation, which may explain the relatively neutral responses to questions regarding the appropriateness of the project-based format. About half indicated that this type of project would provide an advantage by eliminating issues related to “piecemeal” publishing of monograph style dissertations. At this early stage in the implementation of the project-based dissertation option in music education, only one participant reported that one student had completed such a dissertation, with about 18 students in progress or planning to do so at seven different institutions. Faculty at institutions without this option, or who did not know if it was permitted, were only moderately interested in the format and believed that their colleagues would hold about the same level of interest, but indicated that their students would be interested.

In the open-ended responses in a comments section provided by 21 of the participants, nine described requiring several projects prior to a single-study dissertation, eight expressed reservations or opposition, and six wrote comments that were positive to thinking about or implementing this type of dissertation. Advantages noted included the opportunity to provide choices for students and the potential for publications. Disadvantages mentioned included the acceptance by future employers and preferring the status quo. Given that the survey went to the heads of music education programs, it is likely that the participants represent a large number of “senior” faculty who may be more entrenched in the current system. Further exploration of this idea with more recent doctoral graduates and current doctoral students may yield differing results. As music education students begin to complete this style of dissertation, it will be valuable to monitor the degree to which this becomes accepted in our profession, and the success these individuals experience with publications and in the job market.

The implementation of project-based dissertations is in the initial stages in some music education programs, and representatives of additional programs are considering this as an option. The results of this study will help inform faculty in doctoral programs as they contemplate and debate the possibility of permitting their students the option of this alternative-style of doctoral dissertation.


For many of us whose job descriptions include the words “professor,” research output may be a requirement, an expectation or perhaps only an ambition. In the 1930’s, the phrase “publish or perish” began to be used to describe an academic atmosphere in which the publication of research was directly related to a faculty member’s success – measured by the achievement of tenure. Now, in the second decade of the 21st century, this phrase may certainly still be true for many. Professors who, for example, focus on the teaching of undergraduates may find themselves at a disadvantage in securing tenured positions at large universities.

Administrators may argue that beginning faculty should become engaged in research to make use of their skills, fresh from graduate school, and establish a method of balancing their responsibilities. Others, however, argue that this pressure results in poorly constructed research and a tendency to engage in easily completed projects.
For those who do pursue a research agenda, the process can be rife with both joy and frustration, of meaningful contributions to a much-beloved field achieved while overcoming obstacles and setbacks. A professor’s teaching load, administrative expectations, family responsibilities and access to mentoring may all affect his/her success in publishing original research.

Review of Literature: What motivates researchers to engage in research activity is an area in need of further study. One research study in this area explores the research practices of 50 university music professor-researchers in the fields of music theory, music history, music education, and music therapy (LeBlanc and McCrary, 1990). They studied the motivations and perceived rewards for conducting research. The participants’ responses regarding motivations for research were found to fall into four general categories: intellectual curiosity, enjoyment, self-improvement, and perceived duty. Rewards the faculty members believed they enjoyed as a direct result of research production included satisfaction of curiosity, material rewards, respect from colleagues and students, self-improvement, and enjoyment and satisfaction. The achievement of publication was considered the most important reward conferred by their discipline, and having their own research questions answered was thought to be the most important aspect of personal satisfaction.

The purpose of this study, then, is to further explore the attitudes, experiences and motivations of music education researchers. Specifically, this study seeks to answer the following research questions:

1. For what reasons do music education professionals pursue research agendas?
2. Which portions of the research process are most enjoyable or satisfying to the music education researcher? Least enjoyable or satisfying?
3. How do music education researchers feel about the applicability of research to the music practitioner?
4. Is it possible to create a profile of a “typical” music education researcher, or does a degree of variation exist in researcher practices and beliefs?

Method: In order to explore various aspects of the music education researcher’s perceptions of their own research practice and that of the music education research community, a survey was constructed. In it, participants will be asked a variety of questions addressing the four research questions outlined above, and respond using a 5-point Likert-type scale. Participants will be invited to participate in the survey using a link to the online survey instrument Qualtrics. Possible subjects for the survey will be identified by emailing first authors published in the Journal of Research in Music Education (JRME) from 2010 to the present, editorial board members of several eminent music education journals, including JRME, Bulletin of the Council for Research in Music Education, and Contributions to Music Education, music education faculty members with email addresses listed on university websites of the 108 universities classified as “Very High Research Activity, formerly called “Research I Universities,” as well as other known researchers in the field (as identified by the author). Every attempt will be made to invite all practicing music education researchers in the United States to participate.

Data Analysis: For each question, the mean responses on a 5-point Likert-type scale will be calculated. Results will then be analyzed using the independent variables of number of articles published, gender, age, and level of seniority, and using the means for each question as the
dependent variable. Analysis will be conducted using the t-test, Analysis of Variance (ANOVA), and possible relationships between questions may be calculated using the Pearson Product Moment Correlation.

References: