Creating an Interdisciplinary Approach to Opera and Musical Theater
Kerry Ginger (Fort Lewis College)

As secondary and higher-education institutions confront budget cuts and shifting educational priorities, music departments face growing pressure to meet the evolving needs of twenty-first-century graduates, especially in the areas of critical thinking and interdisciplinary learning. As voice educators adapt to this environment, opera and musical theater programs offer rich opportunities for interdisciplinary teaching and learning in fields as diverse as history, politics, and race and gender studies. Programs that adopt a context-aware approach to musical stage works are uniquely positioned to encourage today’s diverse students to analyze and reflect upon their world.

This presentation offers tips to turn opera/musical theater scenes courses and stage productions into laboratories of interdisciplinary learning. Using the gender studies field as a case study, the presenter suggests curricular strategies to enhance critical thinking, teach basic concepts of non-musical disciplines, and deepen students’ understanding of the operatic and musical theater repertoire, all in the hands-on environment of the musical stage.

Experimental Music and Extended Technique for Beginning/Intermediate Piano Students: Music of Stephen Chatman
Manabu Takasawa (University of Rhode Island)

Frequently piano teachers are the guilty party when it comes to introducing contemporary music to students. They assume that students would reject the unfamiliar musical language filled with dissonance, or pitches not based on the standard scale system and chord progressions. However, they are often surprised at how accepting young students can be with things that they have not been exposed to. Giving beginning/intermediate students the opportunities to make music in different and nontraditional ways also expose students to new sounds early when they are more open to new and foreign ideas. The experience may even spark students’ curiosity and interest in creating their own sound as part of their music making.

The presentation introduces some of teaching pieces by Stephen Chatman, who is one of Canada’s leading composers and is on the faculty at the University of British Columbia. He has written elementary-level compositions that incorporate various unconventional contemporary idioms and techniques. Taken from compositions in Chatman’s published books Amusements, Books 1-3 and Fantasies, the following concepts will be introduced and demonstrated: 1) making percussive sounds and non-piano sound effects by such means as clapping, stomping, finger tapping and tongue clicking, 2) special notation symbols and instructions, 3) cluster chords, 4) aleatory music, and 5) improvisation.
**Explaining Tonal Structure to Non-Musicians Through Linguistic Analogy**  
Stefanie Dickinson (University of Central Arkansas)

One of the hurdles in explaining the structure of tonal music to non-musicians is navigating through the language barrier. Classically trained musicians speak a highly specialized language dependent on interpreting dots and lines into concepts of scale degree and chord progression. Breaking through this barrier to non-notation readers often seems insurmountable.

Ironically, the solution to explaining how music works can come through language—specifically by creating structural analogies with natural language. Such an approach draws from the innate understanding of everyday speech. Informed by Chomskian generative grammar, it draws on concepts inherent in both tonal language and natural language: a linear ordering of constituent parts and their expansion by recursion at multiple hierarchical levels.

This poster highlights the concrete steps such an approach would take. It begins with a visualization of single-word noun and verb phrases (phrase “heads”) and proceeds to their syntactic expansion through a recursive process. This process then consistently expands newly generated phrase heads. The purpose of introducing tonal structure by way of linguistic construction is to anticipate isomorphic properties of harmonic function, but in a familiar medium. Functional tonal categories of tonic and dominant are then presented as analogous to noun and verb constituencies. Even without Roman numerals, audiences can easily see similar patterns of construction between verbal and musical phrases.

Benefits of this approach are useful with pre-college musicians, non-music majors (music appreciation students), non-music faculty engaged in interdisciplinary work with musicians, continuing education departments, and upper administration seeking to understand the academic subdisciplines of music.

**Exploring Links between Mathematics and Music Theory:**  
*Investigating Pattern Processing Using Eye Tracking*  
Jane Piper Clendinning (Florida State University)

Widespread beliefs in links between mathematics and music date back to the Ancient Greeks. Although researchers have reported positive correlations between mathematical and musical abilities, scholarly literature provides little insight into these connections. In particular, there is scant empirical study of the association between mathematics and music theory. The Mathematics and Music Theory Project brings together four faculty members from two fields—psychology and music—to examine this phenomenon. To date, our previous research included study of data (N >1000) comparing undergraduate students’ performance in music theory and mathematics that provided statistical confirmation of connections between mathematics and music theory, followed by development and implementation of a screening tool that predicts which incoming students are likely to experience unusual difficulty with core music theory courses. Research demonstrates significant correlations between music theory performance and abilities to identify visual patterns (including geometric shapes, successions of letters, and notes on a musical staff) and the ability to recognize representations of rotated three-dimensional objects. Project members are now investigating these effective predictive tasks using eye tracking to reveal systematic differences in approach between subjects of varying abilities and experience. The Project examines whether experts (doctoral students and faculty in a prominent College of Music) and novices (undergraduate students who can read music with varying music theory experience) attend differently to high-information notes compared to notes that are less important to the task. This presentation gives an overview of our research to date, focusing on the most recent investigation using eye tracking.
The moments before a performance are perhaps the most crucial period of preparation in setting a musician up for either failure or success on stage. However, musicians often rely on intuition, past experience, or superstition in deciding what to do in the hour before they perform. Teachers who learn strategies used by sport psychologists, yogis, tai chi masters, and mind-body experts will be well-equipped to help their students to perform at their absolute best. One must use this time to obtain intense focus so that the mind is clear, energy is awakened, and the necessary muscles are engaged for both deliberate and spontaneous performance.

Centering is a technique used in meditation, yoga, tai chi, and martial arts that serves all of these functions while alleviating anxiety and engaging right brain function. The “center” is an actual physical spot in the body that is thought to gather vital energy, or what is referred to as chi or prana. Shared strategies include stretches and physical exercises that awaken an understanding of the physical center in one’s body, as well as breathing exercises, meditation, and focal techniques that can be used before walking on stage and while sitting at one’s instrument in the moments before the performance begins. Video footage shows how these techniques can be introduced in performance classes. This engaging, experiential workshop allows participants to try these techniques, leaving with a specific set of steps and a pre-performance timeline as well as resources including books, videos, and apps.

Undergraduate experiences within a liberal arts model offer tremendous creative opportunities. A survey of selected mission statements from U.S. institutions reveal such frequently used terms as “engagement” and “transcendence.” These invite explorations of a reflexive relationship between the goals of a core curriculum and the inclusion of improvisation as a natural element. A third objective, “discovery,” provides the gateway for a broader dialogue with culture, society, and student conceptions of self and other. When considering undergraduate pedagogy and identity formation, how might the incorporation of improvisation lead to a broader and richer understanding?

Enabling students to engage with broad concepts of identity from varied perspectives and generating reactions that draw upon the creative process creates a curricular space for dialogue, interdisciplinary conversation, and creative inquiry. If successful the experience provides students with a deeper recognition of art’s ability to address complex and often difficult historical and contemporary considerations of race, gender, sexuality, and social justice.

This presentation explores improvised sound and movement within an intensive interdisciplinary creativity course for liberal arts undergraduates, addressing challenges, shared vocabularies, and ways in which performative elements can blueprint faculty and student collaboration. A discussion of the ways in which improvisation reaches across disciplines informs both creative expression and methods for response. By drawing upon the various discourses imbedded within the seminar that include cultural and societal conceptions of race and identity formation, students can explore improvised sound and movement with both an appreciation of its inherent dialogue and its possibilities for broader communication.
Jocelyne Binet’s “Cycle de Mélodies”: Unearthing a Forgotten Song Cycle
Matthew Hoch (Auburn University)

Jocelyne Binet (1923–1968) was a French-Canadian composer and professor of composition at the École de musique Vincent-d’Indy (1951–1957) in Montréal and Laval University (1957–1968) in Québec City. Although primarily remembered for instrumental works, her 1955 Cycle de Mélodies sur des Poèmes de Paul Éluard was programmed in the same year by the French baritone Gérard Souzay in a performance that was most likely the world premiere. Unfortunately, Binet’s Cycle de Mélodies was never published and the work was soon forgotten. In addition, Souzay—who was a prolific recording artist—never recorded the songs, further contributing to their obscurity. Upon her death, Binet’s papers were donated to the Bibliothèque et Archives Nationales du Québec, where the archive has remained ever since.

In 2016, the author discovered the original handwritten manuscript pages for the Cycle de Mélodies and began reconstructing the score with the help of a professional engraver as well as current scholarly editions of the poetry of Paul Éluard (1895–1952). This scavenger hunt led to some interesting discoveries: who—for instance—is François Bernier (to whom the score is dedicated), and how many songs are in the cycle, six or seven? Who was Souzay’s pianistic collaborator at the world premiere? This paper presentation introduces this work to a new generation while attempting to answer these questions and others. The author’s critical edition of Binet’s Cycle de Mélodies will be published in 2018 by Classical Vocal Reprints.

A Methodology Designed to Understand Differences between Undergraduate Students’ Sight Singing Levels of Ability
Justine Pomerleau Turcotte (Université Laval)
Maria Teresa Moreno Sala (Université Laval)

Sight-singing is an important component of musical training in higher education. However, there are major differences between undergraduate students’ levels of ability with this task. The role of cognitive processes to account differences between students in sight-singing is still unknown, but interesting results have emerged from studies about instrumental sight-reading and performance. For example, pianists with high working memory (WM) tend to sight-read better than the others, even if the role of expertise is taken into account. Also, musicians with higher WM display a better control of their stress during a performance. Sight-singing induces a major load on WM, especially because it necessitates the integration of both visual and aural modalities, and because evaluation causes stress that can impair cognitive functions.

The goal of this project is to study how students might differ cognitively during a sight-singing task. First, the panel investigated strategies, combining objective observations from eye-tracking, and subjective perceptions of participants from interviews using retrospective verbal protocol. During the task, the panel gathered pupillometric data to measure cognitive load. In addition to the sight-singing task, the experiment also measured WM capacity, with the Operation Span Test, and anxiety level, using the STAI. Data allows people to understand if cognitive differences can explain performance variability and if strategies and anxiety can modulate this effect. Pedagogical approaches are suggested in order to help students with various levels of ability.
**The Milken Archive of Jewish Music: Possibilities for Teaching, Research, and Performance**

Jeff Janeczko (Milken Archive of Jewish Music)

While progress toward diversifying contemporary music education has been significant, non-Western musical traditions are often relegated to separate courses in world and popular musics based primarily on geographic provenance. Additionally, courses and presentations of American music often struggle to address diversity within classical music in any significant way. Exploring the Jewish-related music of the large number of émigré and native-born American composers of Jewish descent offers a starting point and potential model for addressing this issue. It can also open the door to broader discussions about race, privilege, and religious/ethnic minorities in art music more generally.

This poster session highlights the resources available from the Milken Archive of Jewish Music: The American Experience, a collection of recordings, scholarship, and historical and performance materials that explores the American Jewish experience through music both sacred and secular. Those resources include 625 recorded musical works by some 200 composers, a library of more than 700 scores, extensive biographies and program notes, and an oral history project that includes such prominent American composers as Bruce Adolphe, Samuel Adler, David Diamond, and Yehudi Wyner.

This poster session presents the breadth and depth of the Milken Archive’s collection of music—from liturgical and ritual traditions to theatrical, chamber, and symphonic works—and point towards some of the ways in which its supplementary materials and resources can be used in teaching, research and performance.

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**“Official State Rhetoric”: The Civic Motets of Adrian Willaert**

Jonathan Harvey (Fitchburg State University)

There is a body of Renaissance music that has been essentially forgotten. The traditional taxonomy of Renaissance vocal repertoire includes two categories: liturgical music (Latin for the Roman Catholic, vernacular for Protestant), and secular music (vernacular settings like chansons, madrigals). This categorization omits a body of repertoire that illuminates patronage bonds and intellectual trends of this era: settings of secular Latin texts.

Often, secular Latin-texted works from this period are what Albert Dunning calls *staatsmotetten*, or civic motets. Dunning defines *staatsmotetten* by social function: they are works composed specifically for a particular state ceremony, in the official language of that state. These works leverage the sacred weight of Latin text to add gravitas to music for civic events such as diplomatic visits and military victories.

Five such pieces by Adrian Willaert were included in a 1539 printed collection of his five-voice motets. Willaert was at this time the head of music at St. Mark’s in Venice (a position later held by Gabrieli and Monteverdi), and he was regarded by musicians of his time as an almost perfect composer, serving as a model in the treatises by Zarlino and others.

Willaert’s civic motets illuminate the patronage ties that he maintained outside of his Venice church position, sustaining connections with wealthy benefactors in Florence, Vienna, and Milan. They also serve as case studies of the frequent but historically neglected intermingling of the sacred and the secular during the Renaissance.
This poster illustrates commonalities between musical and linguistic structures through an examination of reversing operations found in language games and pitch patterns found in serial music. Although serial transformations have been argued to be complex and difficult to aurally comprehend, we demonstrate that the structure of these transformations parallels language games that involve systematic manipulation of linguistic structure. Language games can be characterized as rules that are applied to words in a given language to create game forms. Such games typically involve a change in the sequence of elements in a word or the addition of some consistent material. For example, the well-known English game Pig Latin involves both a change in order and the addition of a fixed sound. The game form of any word in Pig Latin is created by moving the initial sound in the word to the end and adding the vowel ‘ay’. This results in ‘igpay atinlay’ as the game forms for the words “Pig Latin.” Similar games are found across languages and are often learned by children without explicit instruction. Linguistic studies have demonstrated that a limited set of rules are capable of capturing the range of sequential manipulations found in games across languages. We will demonstrate that the same rules which are applied in language games can also be used to characterize pitch-class transformations in serial repertoire. The resulting analyses provide a simple, intuitive way of understanding and hearing pitch-class transformations.

In the past few decades, “world music ensembles”—ensembles devoted to genres outside the Western classical canon—have flourished in music programs across the continent, implemented primarily in response to increased calls for cultural diversity in higher education and an emphasis on hands-on student learning. Yet, even as many such ensembles remain systematically marginal in curricular placement and logistical implementation (i.e. are taught by contingent faculty), their very existence has transformed not only local campus communities, but transnational pedagogical and artistic relationships. Drawing on historical and ethnographic research into transnational world music communities as well as a decade’s lived experience across four institutions in studying, teaching, and finally administrating world music ensemble programs, this paper examines sustainability in world music ensemble programs from a systematic perspective. Using Indonesian gamelan ensembles as the primary case study, this paper demonstrates how the implementation of these ensembles since the initial programs began in 1958 has fundamentally altered Indonesian-American artistic exchanges, as well as embodying broader changes in American world music pedagogy. Through discussion of historic and ethnographic examples, the paper argues that issues of economic instability are exacerbated for pedagogue-performers who are foreign nationals as opposed to other contingent faculty, potentially inscribing neocolonial values. Finally, by examining three case studies from music departments in liberal arts colleges to large schools of music, the author suggests some ways in which ensemble and community sustainability may be achieved.
Taking the Sonata Form off the Small Page and into Public
Jennifer Beavers (University of Texas at San Antonio)

At many universities, sophomore music majors progress from learning how to analyze relatively short dance-movement forms to large-scale sonata forms in one or two semesters. Oftentimes one of the hardest things for the students to grasp is the sheer size of these larger movements. This poster presents a unique approach to studying “really big form”—one that enlarges the standard 8.5x11 score to nearly 65 feet. This poster will allow viewers to experience a really-large formal analysis completed by my sophomore music theory class. Viewers will see how the score was annotated by groups of students with formal and harmonic analysis, as well as fun and funny facts, much like that of a VH-1 pop-up video, audio clips, and more. Our project is first displayed in the classroom, annotated by the students, and then hung within our building as a community art piece. We then take the piece on tour. In the past, we have presented the analyses in art galleries, participated in research symposiums, as well as displayed it in the lobby of our city’s symphony hall. During presentations, students act as docents to the sonata form art piece and give visual/sonic tours of the chosen composition. Everyone is encouraged to participate by adding their own observations, such as performance notes, sonic experiences, and historical contexts. In this way, this project takes the sonata form out of the classroom and into the general public.

A Tangled Mess or an Intricate Web? Connecting the Dots across the Curriculum
Cassie Keogh (North Dakota State University)

There are many moving parts of any collegiate music curriculum, and teachers see the importance of every aspect of that curriculum. Students, however, often compartmentalize those different classes, assignments, and rehearsals in an attempt to manage the many tasks they must accomplish in a given day, and consequently often fail to see the common skills that they develop in one class and transfer to another class. Yet often in attempts to prepare students in specific areas, teachers neglect to connect the dots with students to show how each subject they study applies to every other subject in their musical education.

This paper shows how educators might help their students see and develop the common skills that are used across the curriculum, beginning with ear training and analysis and spreading to vocal and instrumental ensembles, applied lessons, music history, and music education courses. Demonstrations include some simple activities that are incorporated into each learning setting to turn students’ compartmentalized checklists of projects into an intricate web of musical understanding and common skills. To test the development of core skills and students’ comprehension of those skills, teachers track students’ success in this comprehensive musicianship model as they progress through the curriculum; this paper concludes with the results of that study.
Growing out of an oral folk tradition from Mexico, changes in transmission have occurred as mariachi entered the public school and higher education sphere. To date, there have been few research studies regarding mariachi pedagogy at the K-12 level and no research at the higher education level. This poster presentation displays results from a case study that examined mariachi pedagogy at the collegiate level at a School of Music housed in a Hispanic serving and emerging research university in Central Texas with an active and robust mariachi ensemble. Ladson-Billings created a pedagogy of culturally relevant teaching that ensures that students become academically successful because teacher’s lessons and methodology are informed by the students’ backgrounds and knowledge. This pedagogy serves as a framework to explore the totality of the mariachi program.

Data collection over two semesters includes observations of rehearsals, performances, formal structured and unstructured interviews with the ensemble directors and students who take part in the ensemble, and material culture collected. Data reveals that the collegiate mariachi program contains elements of each of the six prongs of culturally relevant teaching created by Ladson-Billings. Rehearsal techniques incorporated a variety of activities that resemble a typical choral and instrumental ensemble, but also include teaching strategies specific to the mariachi genre. Results uncovered systemic and institutional barriers that makes participation difficult for students. Suggestions for supporting diversity and inclusion through participation in the mariachi ensemble along with the unique pedagogical strategies used in rehearsals are also presented.