2005 ATMI Conference Abstracts

Thursday, 3 Nov.--St. Charles East

Using Classroom Response Systems to Enrich Student Involvement in Music Appreciation Classes (General)

James Grymes , The University of North Carolina at Charlotte

8:00 am, Thurs., Nov. 3, St Charles East

This paper will provide an overview of how Classroom Response Systems (CRS) can be used to enrich instruction in music appreciation classes. While music instructors typically rely on recordings to illustrate elements of music and to introduce masterworks, there is no real incentive for the students to become actively involved in the listening process. With a CRS, however, every student is motivated to listen carefully and react to guided questions using hand-held infrared transmitter units or wireless networked PDAs while the music unfolds. The CRS software compiles and displays the results, and the instructor is provided with real-time assessment that can be used to shape the rest of the lecture. Because each student transmitter has a unique signature that has been registered to its owner, performance data can also be tabulated to assess attendance, participation, and long-term progress. The result is a truly interactive environment that fosters a sophisticated level of experiential learning that would be impossible in large classes without this technology.

Cross-Platform Includes the PDA: Design Considerations When Creating Computer-Assisted Instruction in Music for the PDA (Advanced)

Don Bowyer, University of Alabama in Huntsville

8:30 am, Thurs., Nov. 3, St Charles East

This presentation will include a demonstration of various educational music applications that are designed to be run on the PocketPC or Palm platforms, as well as a discussion of some of the design considerations that need to be addressed to make software usable on these platforms.

Out in the Wild with the Music Pad Pro Digital Sheet Music Viewer: What Is It, Does it Work, and Should One Use It? (General)

Charles Menoche , Central Connecticut State University

9:15 am, Thurs., Nov. 3, St Charles East

In recent years, viable new consumer products broadly categorized as "digital sheet-music viewers" have begun to offer enticing alternatives to-and advantages over-traditional printed sheet music. The first such product to be widely available was FreeHand System's Music Pad Pro (http://www.freehandsystems.com). As might be expected with any new commercial product, the manufacturers' promotional materials touted the product as a solution to a number of common limitations of traditional print music (e.g., page turns, stand lights, wind clips, carrying extensive libraries of printed music, etc.). This presentation will begin with an overview of the product and its basic functionality. The second half of the presentation will focus on a overview of my

experiences, those of my colleagues participating in a trial program, and our real-world assessment ("out in the wild") before, during, and after a chamber concert in which all performers relied exclusively on Music Pad Pro's.

Rhythm Tools: New Software for Rhythmic Dictation and Sightreading (General)

Timothy D. Edwards, Columbia College Chicago

10:15 am, Thurs., Nov. 3, St Charles East

Rhythm Tools is a new program for Macintosh developed by Timothy Edwards at Columbia College Chicago, and implemented as an auxiliary resource in the Sightsinging , Musicianship and Eartraining course series there. It allows students to drill in rhythmic dictation and in the sight reading of rhythms. The program is customizable, allowing administrators to create and edit their own rhythms categorized by levels of difficulty. Users of the software complete rhythmic dictations by listening and notating rhythmic units chosen from a palette and by sight reading rhythms which appear on screen. A supplementary utility program "Rhythm Inspector" allows administrators to develop and proofread a custom set of rhythms according to their curriculum. Assessments of performance are recorded and reported after each session. The software's creator will demonstrate and discuss it.

Audio in Media: Digital Video Basics for Motion Picture Composers (Intermediate)

Bruce H. Frazier, Western Carolina University

Robert C. Johnson, Western Carolina University

11:00 am, Thurs., Nov. 3, St Charles East

An introductory session for media composers demonstrating techniques for blending audio with digital video using Apple's *Final Cut Pro* . A sample project will illustrate capture, importing, editing, adding transitions, applying plug ins, mixing, synchronizing, and exporting audio with video.

Panel Discussion: Online Education: Bonanza or Boondoggle? (General)

Moderator--Sam Reese, University of Illinois

Participants--Eugenie Burkett, University of Central Arkansas

Carlos Maldonado, Connect4Education

Grace Ohlenbusch, University of Central Arkansas

Scott Stinson, University of Miami

1:00 pm, Thurs., Nov. 3, St Charles East

University administrators are beginning to address the issues of electronically offered instruction through the creation of standards/principles of implementation, faculty copyright ownership, and licensing agreements. Given the cost effectiveness regarding this form of instructional delivery, scalability features, and the inherent possibility of turning this market into a "cash cow" for continuing education and distance learning departments, more programs, courses, and materials

will continue to be developed and implemented through commercial and non-commercial publishers. While many teachers are willing to incorporate technologies as an enhancement to their teaching or to provide better, more efficient delivery, many administrators are at a loss as how to document and compensate this type of instruction in terms of contact hours and teaching load. Members of the panel discussion will identify key success factors for effective implementation of web-based education and the administrative approaches that predict success and/or failure. The members will also discuss current levels of student performance using web-based instruction, institutional policies for faculty load and compensation, policies related to copyright and licensing, and standards for electronic course delivery.

Steiner MIDI EVI and the Realization of Expressive Potential (Novice)

Frank Clark, Georgia Institute of Technology

2:30 pm, Thurs., Nov. 3, St Charles East

The Steiner MIDI EVI (electronic valve instrument) is a unique trumpet-style MIDI instrument with exceptional expressive capabilities. Its considerable musical potential is largely unrecognized outside of recording studios for commercial music, film, and television. This paper documents the scope of the instrument's functionality, details its optimal operational parameters, and provides an overview of the synthesizer/sound module settings for a variety of musical styles and effects. These findings are valuable not only for the MIDI EVI , but apply to most wind/breath controllers.

Using CSound in Live Performance (Advanced)

James Bohn, University of Massachusetts, Dartmouth

3:00 pm, Thurs., Nov. 3, St Charles East

CSound is a computer-based sound synthesis language that descends from the first program of this kind (Music 1, written by Max Mathews). CSound is a free cross-platform program that has a large user community, providing a huge amount of free materials online. While CSound is usually used as a scriptable language (that is that a script of text describing the sound is rendered outside of real time), it can also be used in real time with MIDI (Musical Instrument Digital Interface). Translating existing orchestral files such that they will respond to MIDI is a bit tricky, but learning how to do so can open a world of sound possibilities for use in a live performance situation.

OASYS - An intimate overview of Korg's Open Architecture Synthesis Studio
SPONSORED SESSION

Steve Knowles, Korg Canada

4:00PM, Thurs., Nov. 3, St. Charles West

This session provides an in-depth introduction to OASYS, the acclaimed, innovative new platform for creating, composing and producing music. OASYS provides a full set of audio production tools for the demanding composer, performer and educator, that reflect the changing nature of today¹s music making process. Presented by Korg experts involved in the design and

development of OASYS, this session includes overviews of OASYS' studio quality effects processing, second-generation KARMA technology, advanced MIDI sequencing, 16-track audio HD recording with CD burning, flexible MIDI control surface and more.

The 50% Quartet: A Jazz Duo Performance With MIDI Accompaniment (General)

Jay Alan Jackson, Rochester Institute of Technology

Jonny Johansson, Yonkers Music Academy

7:30 pm, Thurs., Nov. 3, St Charles East

The 50% Quartet is a jazz ensemble consisting of nine-string guitarist Jonny Johansson, drummer Jay Alan Jackson, and the (fictitious) Ware twins, Hardy and Sofia. The group's repertoire features original compositions utilizing polyrhythms , multitempos , and odd meters in live improvised performances combined with sequenced bass lines and piano comping.

" EEE !" Eastern's Electronic Ensemble (General)

Anthony Cornicello , Eastern Connecticut State University

8:00 pm, Thurs., Nov. 3, St Charles East

EEE ! is Eastern's Electronic Ensemble, a performing group consisting of mostly electronic instruments. Students perform on laptops, motion sensors, CD scratchers , MIDI instruments, and a host of electronic effects. The music played by EEE ! ranges from ambient to hip-hop, and most of the pieces are composed or arranged by the students.

Friday, NOVEMBER 4, ST CHARLES EAST AND WEST

Music and Animation (General)

Ron Mazurek , Bergen Community College

Francis Schmitt, Bergen Community College

8:00 am, Fri., Nov. 4, St Charles East

Students at Bergen Community College, in our disciplines of electronic and computer music and 2D and 3D animation, have created original works in their exploration into the digital arts. This presentation focuses upon some of these new media collaborations which encourage students to think about the arts in an interdisciplinary way: that is, looking for common threads of vocabulary and thought that connect these related modes of human expression. Building on the strong technological infrastructure of the newly created multimedia laboratory, this program offers our students hands-on education in new art and communication technologies.

Music Professionals' Judgment of the Quality of Recorded Music (General)

Richard Repp , Georgia Southern University

Emerging technologies have made high-fidelity recording a possibility. In today's market, musicians are often judged by recorded material they produce rather than a live presentation. A panel of experts in the field of music will judge recordings of audition music. The judges compare high-fidelity recordings with recordings that are of lower quality or that have noise added. The experiment produces a set of standards that shows the amount of data reduction that can take place before music professionals can hear the difference in recording qualities. This information will serve as a guide for those producing recorded auditions. The performers can weigh the cost of recording services with any advantage of the better-quality recordings.

Bridge: The Evolution of a Multimedia Work (General)

Andy Jaffe, Williams College

Jay Alan Jackson, Rochester Institute of Technology

This presentation features a multimedia work that highlights an original composition for string quartet, clarinet/alto sax, and tabla . It consists of approximately eight minutes of digital audio that intersperses synthesized sources with a live concert recording. It contains additional features that encourage educational exploration, such as an animated notational score, closed-captioned text containing commentary and analysis, and supplementary MIDI track, instrument sounds, images, and video. The talk is intended to be an informative documentary on the making of the work as well as an exhibition of its finished form, including a demonstration of its interactive and instructional capabilities.

Can your Theory Students Run on Auto Pilot? Online Basic Skills Tests to Bring Them Up to Speed (Intermediate)

Susan Piagentini , Northwestern University

There are many websites which offer practice sessions focusing on the rudiments of music theory. While useful in part, they do not require any type of fluency from the student, allowing them to take as much time as they need to answer basic questions. As a result, students are not forced to internalize these rudiments. They may be able to develop the problem-solving strategy to solve a basic task such as determining chord quality, but they lack the rehearsal environment to develop an almost automatic response to any given question. These sites also fail to place these fundamental skills within the context of rich musical scores, more closely modeling real-life professional situations. The presentation will introduce a series of online practice and test modules, as well as an inside view of their planning and programming. The basic skills tests are presented in a variety of settings, gradually adding to the task until it is an application of the analysis experience in preparation for performance. Students and instructors receive immediate feedback upon completion of both the practice sessions and timed tests. The feedback not only includes the number of correct answers, but also itemizes the types of errors. The instructor database not only tracks student progress, but also includes information on strategy and timings between keystrokes. The modules are presented in four different visual and user input templates.

In addition, the flexibility of each template allows the instructor to vary the visual presentation, data collection methods, tracking, and timings.

Crossing Borders: Multi-dimensional Media Collaboration (Novice)

Mike Nord , Willamette University

9:15 am, Fri., Nov. 4, St Charles East

This presentation will detail both the product and process of Crossing Borders, a project developed by musician Mike Nord and visual artist Ann Kresge . Crossing Borders is a collaborative music and visual arts suite incorporating digital video, improvisation, composition, and ensemble performance incorporating synthesis, electronics and MIDI control, electric guitar, percussion, and winds. This multi-dimensional work is realized in both intermedia and multimedia incarnations, and blurs the boundaries between them. The presentation will conclude by offering a practical model for pursuing this and other types of collaborative media art making in either the music classroom or professional artistic contexts.

PDQ Bach vs. iMovies : Authentic Learning and Assessment (Novice)

Cynthia I. Gonzales, Texas State University, San Marcos

9:15 am, Fri., Nov. 4, St Charles West

Many people are familiar with PDQ Bach's famous (or perhaps, infamous!) narrated rendition of the first movement of Beethoven's Symphony No. 5. Teachers of music literature and aural skills can relate all too well, as we speak over the music to point out events in the music while our students attempt to listen both to the music and to our words about the music. Elementary music educators solve the problem by creating graphic music maps or listening guides. But the problem of coordinating an aural event with its label persists. Yet this is exactly the skill we aim to teach: to hear a musical event and to name it.

Apple's iMovie provides an effective, efficient, and easy way to identify musical events as they occur, so that students hear the musical event and see the label simultaneously, without the teacher (or PDQ Bach) shouting above the music. Although iMovie is a powerful multimedia software, only two of its features are needed: audio and titles. The procedure is basic: import the sound track, and if needed, edit it. Insert titles to provide labels where desired. Save and export as a QuickTime movie, a cross-platform format that can be burned onto a CD-ROM for in-class use, or uploaded to a website (preferably one password-protected since the movie's sound file is probably from a commercial recording that is copyright protected).

ATMI Plenary: Vignettes from ATMI's Thirty Years: The Little Organization That Could! (General)

Ann Blombach, Ohio State University

Michael Arenson, University of Delaware

David B. Williams, Illinois State University

10:00 am , Fri., Nov. 4, St Laurent Centre/North

As we celebrate the anniversary of the Association for Technology in Music Instruction and look forward to its future, we take a moment to honor its thirty-year history with a series of historical and humorous vignettes from its past. From its naively optimistic beginnings in 1975 to its vibrant present, ATMI's chronology is marked with ups-and-downs and zigs-and-zags. As we musicians, educators, and technologists navigated our way from mini and mainframe computers, to the first personal computers, to multimedia and the Web, to the mobile-laptop world we experience today, this band of ATMI'ers has moved fearlessly forward into the next new world of technology, exploring new ways to support our teaching and to open new doors for our students to experience music. Our series of vignettes begin with the organization's inception as the National Consortium for Computer-Based Music Instruction (NCCBMI) and its early relationship with the Association for the Development of Computer-Based Instructional Systems (ADCIS), through to its transformation into ATMI and its long-standing association with the College Music Society. Join us for a special hour of paying tribute to the people who *are* this group we call "ATMI"!

Exiting the Lab: Real vs. Virtual Space in the Teaching of Multimedia (Intermediate)

John Mallia , New England Conservatory

11:15 am, Fri., Nov. 4, St Charles East

Multiple workstation computer labs currently function as the primary teaching facilities in most music technology and multimedia studies programs. While this environment facilitates tutorial-based instruction and sharing of student work, courses taught in labs often fail to stress the importance of actual space in the electronic arts, or to provide students with an adequate opportunity to explore the potential of incorporating real space into their artworks. This paper presents a methodology for introducing the concept of spatial composition to music technology and multimedia students at various levels of study. A variety of potential venues, technological tools, projects and techniques will be discussed ranging from collaborative hallway installations, to outdoor site-specific works organized in the manner of a sculpture walk, to interactive performances/happenings occurring in a fully equipped theater designed especially for multimedia. The concepts and techniques included in the presentation are based on my experiences teaching in several music and art departments that vary widely in curriculum and available facilities. Excerpts of collaborative and individual student works will be described and presented.

GarageBand Projects with Third-Party Instruments

SPONSORED SESSION

Lee Whitmore--Soundtree

11:15 am, Fri, Nov. 4, St Charles West

GarageBand can become a very large compositional palette with third-party virtual instrument libraries added. In this hands-on session participants will use Korg's Legacy Collection and Ultimate Sound Bank's Sonic Boombox to create and edit patchlists, install them in GarageBand, and create musical projects.

The Underware : Strategies for Enabling Student-Constructed Learning in Music Technology Courses (General)

Peter R. Webster, Northwestern University

David B. Williams, Illinois State University

1:00 pm, Fri. and Sat., Nov. 4 and 5, St Charles East

This two-session presentation will focus on constructionist approaches to introductory music technology courses. These sessions will focus on how this approach can be used in designing courses that (1) introduce music technology concepts with related hardware and software and (2) provide a basis for continued learning long after the class is finished. The emphasis on these presentations will be less on the technology and more on the teaching and learning strategies. Session I will describe this philosophical approach to course design and will highlight practical ways to engage students in constructing their understanding of music and technology for a lifetime. Session II will show student work and highlight what works and well and what does not.

The University Music Technology Lab: Basic to Advanced Workstations and the Latest Presentation Equipment (General)

Sanford Hinderlie , Loyola University, New Orleans

2:00 pm, Fri., Nov. 4, St Charles East

This PowerPoint presentation will focus on the composition of a university music technology lab, including who will build it, how it will be funded and what disciplines will use it. Beginning with instructional objectives and the listing of equipment, details of a simple lab and a "dream" lab will be discussed and supported with photographs. University support for continued upgrades and maintenance are important issues mentioned. The specifics of a lab include hardware and software consideration, including projection systems, surround sound, networks, servers, interfaces, peripheral equipment, screen to screen, synthesizers, software programs and computers.

Object-oriented Design: Extending Flash with ActionScript 2.0 Classes (Advanced)

Scott D. Lipscomb, Northwestern University School of Music

2:15 pm, Fri., Nov. 4, St Charles West

Many educators have realized the advantage of using interactive materials to enhance the learning experience for students in the music classroom. Macromedia's Flash has become one of the favorite authoring tools for such development, due to the cross-platform and cross-browser compatibility of the web-ready SWF files created. Using the new capabilities inherent in ActionScript 2.0, this presentation will begin by demonstrating how easy it is to "correct" a frustrating inconsistency in the Sound class provided with Flash. By creating a new class that extends Macromedia's Sound class, all references to the playback location in a digital audio file can be referenced in millisecond values, rather than the inconsistent referencing scheme used in the methods created by Macromedia . . . sometimes using milliseconds, sometimes using seconds. Once attendees have experienced the ease with which such powerful changes can be made, the presenter will show several classes-some extensions of existing Macromedia classes, others

created from scratch-that were constructed to facilitate the playback of digital music files and their visual representation as a means of facilitating musical learning.

Bridging the Gap: From Tutorials to Finished Compositions in MAX/ MSP (Intermediate)

Jeremy Van Buskirk , Longy School of Music

2:45 pm, Fri., Nov. 4, St Charles East

Teaching computer music to students who have a great deal of musical training, but very little technical experience presents unique challenges. Their musical training and creativity far outweigh their technical ability when working in a computer music studio. Undergraduate and graduate students studying composition have been exposed to computer music in concerts and in the classroom. Live electronic music has seeped into almost every musical style today. Many students are eager to write live computer music. MAX/ MSP is one of the most common programs being used to compose live computer music. MAX/ MSP is well suited for learning basic computer-music concepts because it comes with outstanding tutorials. However, learning standard techniques and composing a piece of music are two very different endeavors. Organizing the large amount of data required to compose a moderately sophisticated piece in MAX/ MSP can quickly become daunting. The MAX Composition Environment (MAXCE) can help students create live computer music by providing a standardized modular environment with built-in event scheduling to ease the task of organizing compositional processes.

Electronic Portfolio Development for Music Education (Novice)

Stefani Langol , Berklee College of Music

3:00 pm, Fri., Nov. 4, St Charles West

What is an ePortfolio ? What is the purpose of an ePortfolio ? How do student's view the ePortfolio process? In the words of Pearl and Leon Paulson, "the portfolio is a laboratory where students construct meaning from their accumulated experience." This demonstration session first examines various types of portfolios-learning portfolio, assessment portfolio, employment portfolio, working portfolio, presentation portfolio-then will explore the process of creating electronic portfolios using a variety of multimedia tools, including digital video, digital audio, and web authoring tools such as Apple's iLife Suite (iMovie, iTunes, iDVD, iPhoto, and GarageBand), and AquaMind's NoteTaker.

ePoster : Coding Sound, Decoding Gesture: The Relationship between Interactive Arts Technology and Sign Language Research (Novice)

Allison A. Johnson, Occidental College, Los Angeles

4:00 pm, Fri., Nov. 4, St Charles East

This poster will chronicle and analyze various significant interactive art/sound pieces (MIDI-based and other) and their attendant technologies along with correlated advances in and the use of gesture-recognition systems, real-time data acquisition, Hidden Markov Models, and embodied conversation agents of current sign language research. The multi-sensory, multi-media, and multi-modal nature of interactive art and music technologies has significant intersections

with research on machine-based systems for gesture and sign language recognition. Composers and sound artists developing and using such software and hardware as data gloves, softVNS (utilizing Max/ MSP), STEIM's BigEye , and the Composer's Jacket (MIT Media Lab), complement research involving ASL (American Sign Language) and other sign languages with gesture-recognition and pattern-recognition devices. It is in these practices, which mirror the layered intricacies of gesture/utterance synchronization and the formation and extension of language iconicity, that the art and science of sounding and gestural bodies find common ground.

ePoster : Doctum : A Software Prototype, Created in Director, for Quickly Generating Music Fundamentals Worksheets and Tests (General)

Jason Kissinger, SUNY Fredonia

4:00 pm, Fri., Nov. 4, St Charles East

Despite the onslaught of technology currently available to music teachers, one area is severely lacking. Currently, no contemporary program exists that can easily generate paper-based handouts for drills, exercises, and tests, all three of which are crucial to any fundamentals classroom. Doctum is a program prototype designed to fill this gap. The need for such a program is unmistakable as no contemporary source, whether paper or computer-based, effectively accomplishes what Doctum proposes. Computer-assisted instruction, workbooks, notation software, and other programs cannot produce worksheets of the same caliber as Doctum . This program further supersedes these alternative sources by providing students with a stronger and more inclusive education through its content, use of repertoire, oral skills practice, and keyboarding drills.

ePoster : A Multimedia Presentation of Analyses of Three Melodramas in Arnold Schoenberg's *Pierrot lunaire* , Op. 21 (General)

Mary Elizabeth Neal, Birmingham-Southern College

Patricia Gray, Associated Colleges of the South

4:00 pm, Fri., Nov. 4, St Charles East

This paper examines three melodramas from Arnold Schoenberg's freely atonal work *Pierrot lunaire* , opus 21. Those selected are numbers 10, 13, and 16, so grouped for their dramatic texts and musical setting. Each piece includes a discussion of the of text setting and word painting as well as an analysis of pitch relationships and rhythmic motives and their relationships to the work as a whole, specifically focusing on the recurring seven-note motive found in the first piece of the work, " Mondestrunken ." This paper originated as a plain-text document but has been enhanced by conversion to an online format allowing for the inclusion of animated scores samples, as well as streaming audio and video taken from the live performance given at the 2003 Associated Colleges of the South New Music Festival.

SATURDAY, NOVEMBER 5, ST CHARLES EAST AND WEST

Preference for Eye Guidance in Computer-Aided Sight Playing at the Piano (General)

Sara Hagen, Valley City State University

Cynthia Benson, Bowling Green State University

8:00 am, Sat., Nov. 5, St Charles East

The purpose of this study was to determine the preference for three differing types of eye tracking used by software programs which could be used for sight playing at the piano. Several software programs on the market are designed specifically for use in piano teaching and have two primary means of guiding the eye: highlighting an entire measure or highlighting note by note as the music is displayed in real time. A third option involves a moving vertical line in a sweeping forward motion. However, there is no research to suggest which tracking or guidance system is superior to another. This study examined preference for the three types of tracking in collegiate piano classes at two different universities, one large and one small from different areas of the country. Results will be shared and recommendations for further study will be discussed.

High Touch in High Tech Classes: The Human Element in Online Learning (Novice)

Judith Bowman, Duquesne University

8:00 am, Sat., Nov. 5, St Charles West

This paper explores the perception of online presence and its effect on student learning and satisfaction with their learning. Included are course design considerations, issues of presence and immediacy, and their practical application in online courses. Strategies for enhancing the human element in online courses, including ways to build a comfortable environment into the course and interaction techniques that help transcend the bounds of text-based courses are provided.

Using Director in the Group Piano Classroom (General)

Martha F. Hilley , The University of Texas at Austin

8:30 am, Sat., Nov. 5, St Charles East

Macromedia Director and Dreamweaver combine to present the perfect presentation tools for reinforcing course content in group piano. Demonstration will include technique exercises, sight reading, keyboard theory, harmonization, transposition and improvisation.

Integrative and Collaborative Music Learning Using Blogs (Intermediate)

Eddy K. M. Chong , National Institute of Education, Singapore

Soo Wai Man, National Institute of Education, Singapore

8:45 am, Sat., Nov. 5, St Charles West

Increasingly, educators are realizing the educational benefits of blog as a tool for learners to engage in self-reflection and collaborative learning. This study explores using community-owned blogging instructional strategy to help students integrate their study of music history, music theory and composition in a collaborative manner. The students' blog participation, their blog

discourse, and the quality of their group projects will be evaluated to assess the pros and cons of community-owned blogging strategy for education, and its effectiveness in complementing classroom pedagogy. Solutions to overcome some of the difficulties encountered will be suggested.

MIDI Isn't Dead, It's Just Gone Loopy (Novice)

Jay Dorfman , Northwestern University

Marc Jacoby, VanderCook College

9:15 am, Sat., Nov. 5, St Charles West

The concept of loop-based composition and song construction has crept into the traditional MIDI sequencing paradigm. The addition of digital audio recording in even the lowest priced programs further blurs the boundaries of digital music creation. This presentation will explore the market of loop-based composition software at various levels of complexity and will provide suggestions for use of this type of software for students of varying age groups and backgrounds.

Technology Teaching Facility: Redesigning the Music Education Curriculum to Incorporate Computing and Multimedia

A. C. "Buddy" Himes, University of Louisiana at Lafayette

Robert Willey, University of Louisiana at Lafayette

11:15 am, Sat., Nov. 5, St Charles East

Research has demonstrated that strong technology components in music curricula have been effective in attracting pre-service teachers to, and retaining them in, music education programs. A grant was written to enhance this music unit's music education program. This focused on training pre-service teachers in the utilization of twenty-first century methodology and techniques in the discipline of music. The goal was not only to provide instruction in music technology, but to be aligned with real needs of PK -12 music educators and to meet all state certification requirements. Hence, the project provided for collaboration among School of Music, College of Education, and public school faculty.

Teaching with Virtual Instruments and MIDI Controllers

SPONSORED SESSION

Lee Whitmore--Soundtree

11:15 am, Sat., Nov. 5, St Charles West

Explore current trends for instruction, composing and performance in a networked music lab. Featuring hands-on projects using Korg's Legacy, analog and digital editions, instructional techniques for integrating hardware and software instruments with computers will be explored. The demonstration lab will be fully-networked with an audio controller for group instruction.

The Underware : Strategies for Enabling Student-Constructed Learning in Music

Technology Courses (General)

Peter R. Webster, Northwestern University

David B. Williams, Illinois State University

1:00 pm, Fri. and Sat., Nov. 4 and 5, St Charles East

This two-session presentation will focus on constructionist approaches to introductory music technology courses. These sessions will focus on how this approach can be used in designing courses that (1) introduce music technology concepts with related hardware and software and (2) provide a basis for continued learning long after the class is finished. The emphasis on these presentations will be less on the technology and more on the teaching and learning strategies. Session I will describe this philosophical approach to course design and will highlight practical ways to engage students in constructing their understanding of music and technology for a lifetime. Session II will show student work and highlight what works and well and what does not.

Motion in Sound: Some Thoughts on Designing Sound for Interactive Dance Performance (Intermediate)

Dan Hosken , California State University, Northridge

2:00 pm, Sat., Nov. 5, St Charles East

Interactive performance is a fast-growing area of electronic music composition and performance. The development over the past decade of computers fast enough to crunch audio in real time and mature, powerful interactive programming environments such as Max/ MSP have led many electronic composers to abandon fixed media for live interaction. Along with the development of these powerful processing engines, a number of performance interfaces, both commercial and custom, have been developed to allow MIDI performers, traditional acoustic performers, and, increasingly, dancers to participate in this interactive boom. In this paper I will present a brief overview of interactive programming environments and performance interfaces, and discuss my recent experiences in composing for interactive dance along with examples of that work.

Modeling Tonal Tension and Attraction with Time-Based Multimedia (Advanced)

J. Kent Williams, University of North Carolina, Greensboro

2:00 pm, Sat., Nov. 5, St Charles West

The presenter will demonstrate and describe a suite of multimedia animations and "movies" which represent Fred Lerdahl's theories regarding tonal tension and attraction in ways that are suitable for presentation to undergraduate and graduate students, as well as professional theorists. To ensure that these illustrations represent Lerdahl's theories as accurately as possible, the presenter has consulted with professor Lerdahl during the development process.

Analysis of Electroacoustics : A Pedagogical Model for Electroacoustic Studies (EaSt) (General)

Kevin Austin, Concordia University, Montréal

2:30 pm, Sat., Nov. 5, St Charles East

This is an introduction to the pedagogy of the analysis of electroacoustic materials based on technological, sociological, psychological, psychoacoustic, and compositional principles in the development of the discipline of Electroacoustic Studies.

Introduction to Apple's Logic Pro and Logic Express (Intermediate)

Raymond Riley, Alma College

3:00 pm, Sat., Nov. 5, St Charles West

This hands-on workshop provides participants with a basic understanding of Logic Pro and Logic Express and will attempt to demystify some of the routines and functions of this powerful music production environment. Using fairly simple example files, common workflow techniques are covered including opening songs, editing audio and MIDI, working with Apple Loops, mixing, effects, and saving and exporting projects.

Developing a Pedagogy of Electronic Orchestration: Making Sense of Infinite Choices (General)

Lynn Purse, Duquesne University

3:15 pm, Sat., Nov. 5, St Charles East

Thousands of different sounds are available in most modern synthesizers; in addition, software synthesizers and digital audio resources have added an infinite number of sound choices for use in arrangements, compositions, and sequences. Faced with the dilemma of too many choices and no guidance in their use, students tend to retreat to a small cluster of sounds with which they are comfortable and familiar, and rarely explore or use effectively the wealth of electronic sound resources currently available for sequencing, arranging, and composing. Electronic Orchestration, as a pedagogical approach with practical applications, has been developed as a course in order to enable the student to fully explore the infinite range of possible electronic sounds and their effective and artistic use in orchestrating a variety of musical projects. A wide sampling of student projects will be used to illustrate course outcomes as realized through software synthesizers, sequencers, notation, and digital audio programs.

SUNDAY, NOVEMBER 6, ST CHARLES EAST

Dr. Trombone: The Development of a Computerized Musical Training Aid (General)

Sean Atkinson, Florida State University

8:30 am, Sun., Nov. 6, St Charles East

While the use of computer-assisted learning is not new, current computerized musical training aids for wind instruments cannot evaluate a performance and offer immediate feedback. "Dr. Trombone," a program created using Cycling 74's Max/ MSP software, can do just that through the use of waveform displays (visual representations of performed passages), which appear on screen immediately following a user's performance. By comparing these waveforms to pre-recorded, ideal versions, the user can see parameters such as the squareness of attacks, the space

between notes, and the overall dynamic shape, and then can listen to both the pre-recorded version and his or her version for a further understanding of how to improve these techniques. A study by Dr. Mark Britt of Furman University has shown that the combined process of looking at waveforms and hearing one's performance is extremely beneficial in improving a player's overall technique.

Constructing Music: " Musikbaukasten ": A Music Discovery Tool for Children (General)

Timm Jeschawitz , Trinity College, Dublin

9:00 am, Sun., Nov. 6, St Charles East

How can an interactive multimedia music tool for children encourage the child in its musical learning and development process at the elementary level? Existing software and hardware applications leave children often detached from their own intuitive world. This presentation will outline the creation and implementation of the music discovery tool Musikbaukasten for children. Emphasis lies on the intuitive and constructive discovery of various music elements and objects. Project examples with children are described. The possibilities for further development of the tool and possibilities and implications are outlined. It is argued that when children work within such an explorative constructive music environment that it will help to enrich their musical development and allows them to discover basic musical concepts in a playful way. One key aspect of this project is the examination of the area of small-scale music creation by children using elements and objects they are already familiar with. Children are engaged in the creation and "use" of musical patterns, musical building blocks and small-scale musical form. With Musikbaukasten , children are able to explore basic music elements and discover music without the knowledge of traditional music notation and without the constraints or perquisites of traditional forms of music making and creation.

Technology Strategies for Teaching Music Theory (Novice)

Scott Watson, Parkland School District

10:15 am, Sun., Nov. 6, St Charles East

This session will offer many practical, field-tested technology solutions for delivering and augmenting both the written and aural theory curriculum. A variety of software applications and strategies for use by both teacher and student will be demonstrated. Even music theory teachers with only modest technology experience will be able to take something useful away from this session! Included in this survey will be procedures for creating analysis nomenclature with notation software, steps for creating effective multimedia presentations, applications for digital audio, highlights of some popular theory software, and an idea for a final composition project employing music and multimedia technology.