JTML, Vol. 4, No. 1, 70-84

PROCEEDINGS FROM THE EIGHTH NATIONAL SYMPOSIUM ON MUSIC INSTRUCTION TECHNOLOGY (2006)

On the following pages you will find both complete abstracts and short descriptions of presentations from the 2006 National Symposium on Music Instruction Technology (NSMIT), held in Bismarck, North Dakota on October 19-20. Dr. Sara Hagen (Valley City State University, ND) and Dr. Jane Kuehne (Auburn University, AL) organized and hosted the Symposium.

The NSMIT is affiliated with the *Journal of Technology in Music Learning* (JTML). The *Journal* is committed to publishing the Proceedings of the yearly NSMIT.

The NSMIT subscribes to (at least) three important tenants: (a) accelerating the exchange of ideas about music technology and education among practitioners and researchers, (b) encouraging appropriate uses of music technology in PreK-12 learning environments, and (c) disseminating findings to individuals who use, or want to use technology in music learning and teaching situations.

Note that abstracts are indicated with an asterisk (*) at the beginning of the title. All other entries are descriptions taken from the NSMIT 2006 program copy. Please feel free to contact the authors of these abstracts and descriptions for additional information. They will be pleased to respond to your questions. Email address for the authors may be obtained from the JTML Editor.

*Exchanging Music Philosophies via Distance: Broadening the Perspectives of Undergraduate Music Education Students

Dr. Sara Hagen, Valley City State University
Dr. Carolyn Fulton, Florida International University

[Editor's Note: This abstract was inadvertently omitted from the NSMIT 2004 Proceedings abstracts in the *JTML* Volume 3, numbers 1 and 2. The staff of the *JTML* apologizes for this error.]

Abstract. Using the Microsoft Instant Messenger and additional communications software, music education students at Valley City State University and Florida International University communicated with "live" video and audio via the Web. During the two sessions, students exchanged informa-

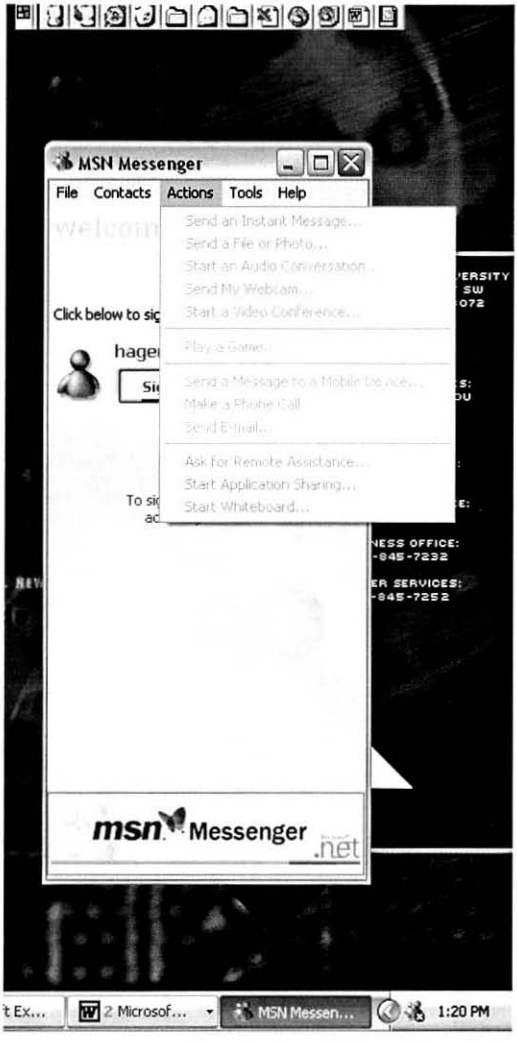
tion about their music education programs and also discussed their philosophies of music education. In exit interviews, students were asked six questions regarding both the effectiveness of the technology and their impressions of the interactions with each other. Students in both locations found the use of the Web in exchanging information about music education to be interesting and effective.

Distance education is not a new idea, nor is it utilized on a regular basis in music education at the undergraduate level. Schedules and lack of proper facilities and technologies are possible reasons for not using the Internet for real-time interchanges between peers in distant institutions. These obstacles were challenges in the current project between Valley City State University (VCSU) and Florida International University (FIU), but they were not insurmountable. Schedules were conducive to a real-time meeting, as the two music education classes were held with a 30 minute overlap on Monday, Wednesday, and Friday mornings from 8:00 to 8:30 a.m. CST. Since VCSU is a laptop campus, facilities and technologies were not an issue; however, the second author needed to relocate for the two exchanges to a room in the library where Internet access was available. She also had to use her own equipment, as the public computer did not have a camera and the correct software loaded. The instructors (the authors) in this project were experienced with distance communications, since they had presented a "live" distance presentation at the National Symposium on Music Instruction Technology 2000 (NSMIT) titled "To China with Love," in which the second author connected with the first author and Carl Hancock in Tallahassee from Beijing, China using the same technology.

The software used in this project, MSN Messenger, is a free, downloadable program for the PC, available from Microsoft. Messenger allows users to connect computers to IP addresses, Passport logins, or by dialing a telephone number. Once connected, a number of interfaces are available for communications, including audio, video, whiteboard, and chat. (iChat is available for the Macintosh and has received excellent reviews.) A simple USB camera was used to connect an IBM Thinkpad laptop for video. The second author used a Sony laptop with a built-in camera.

The process of connecting to MSN Messenger is a fairly simple matter: Under the Actions menu, one selects "Start a Video Conference." (see the figure, next page). This opens a window that allows the user to select a Contact or insert the information needed to connect to another computer. The Audio/Video Tuning Wizard under the Tools menu steps the user through setting the levels for input and for selecting various viewing options. The view presented in this project was a window-in-window view so that users could see with whom they were speaking within the large window. The users viewed video of themselves in the small corner window.

Students were prepared for the exchange through class discussions and readings in the philosophies of music education. The VCSU students were asked to prepare a mock presentation to convince the school board that the music department was an important curricular program within an imaginary school and should not be cut. The FIU students were still in the discussion



stage of their developing music philosophies and had no formal written presentations.

With only two students in the VCSU class, each delivered written remarks on the first exchange, immediately followed by questions and conversations between the students—with a focus on job availability and the type of teaching duties that might be expected. Students found each others' expectations of future employment to be very different. In North Dakota, most students expect to teach the entire K-12 music program. In Florida, students were much more specialized in their preparation for duties in marching band or high school choir. On the other hand, their ideas regarding how they will approach teaching, what they felt was important, and their own beliefs were similar.

On the second exchange (the next day), FIU students presented their ideas about how to motivate students through challenge, to teach with a caring attitude and how to instill values in their prospective students. The audio reception was excellent for the VCSU students, but was intermittent for FIU. The VCSU students communicated with chat and hand gestures as well as audio to provide feedback to those students at FIU. Possible reasons for the audio troubles were high Internet traffic or firewalls and other barriers at institutions concerned about security. In the exit interview, VCSU students felt that the technology worked very well; there was a delay the first day that was disconcerting, but did not stop the interchange. The second exchange was "clear as a bell" at VCSU. The accompanying video presentation with this paper showed these troubles, but nonetheless the exchange was seen as successful.

In the exit interview, students were asked several questions:

1. What were your expectations, and were they met, not met, or even exceeded?
2. Did you learn anything?
3. In your opinion, was the technology effective?
4. Did the experience affect your thinking about music education?
5. Was this experience helpful to you as a future teacher?
6. Would you like to add any comments?

Student responses to these questions are summarized below:

What were your expectations, and were they met, not met, or even exceeded?

The two VCSU students had different expectations: One believed it would be a reading of their materials to each other and that would be "it." The other did not have a real idea about what the exchange would be like, but was "pretty excited about the whole thing." He was also "worried about the technology." Both felt that the experience exceeded their expectations because of the free interchange between the two groups. An FIU student commented, "I was expecting to hear about the differences about our local music programs in comparison to theirs. [My expectations] were definitely met. I did learn a great deal about their system."

Did you learn anything?

Both students believed they learned something from the experience, but gave different responses. One learned that "We basically have the same philosophies of what we want to do as music educators, but come from different backgrounds . . . but how we want to be a teacher is much the same." The other stated that "It was great to hear everyone else's philosophies." FIU students realized that "Their programs are much smaller than what is expected in our culture."

In your opinion, was the technology effective?

All the students agreed that the technology was effective. "On our end we seemed like we were more technology-ready, but it worked both times." "It was effective yet it had a very large delay and the picture was very blurry." "It got the job done."

Did the experience affect your thinking about music education?

One student from VCSU answered that she changed her thinking about big programs (of which she was a product) and decided that she liked small classes and having the opportunity to teach in a variety of settings. The other student commented that he was able to "concentrate more on what he wanted to do." He had trouble writing his philosophy and coming into this exchange, he was self-conscious about his ideas and worried that his opinion was different. He said that the discussions and everyone else's ideas helped him to affirm and solidify his own thinking that music should be fun

and that playing music should be a good time. "I'm an advocate for playing!" A response from FIU was from a different perspective: "Honestly, it made me aware of the things that were happening elsewhere and would have been very informative were I going to move to that state. Unfortunately, it did not affect too much about what I was thinking of using for my teaching."

Was this experience helpful to you as a future teacher?

"It was so much fun to see the technology that most students know how to use [MSN Messenger]...work in an educational sort of way." "It was fun to visit with kids my age, to hear that we're almost the same." "I could probably use this [technology]." An FIU student commented, "It made me more sensitive to other states."

Would you like to add any comments?

From a VCSU student, "It fired me up, I remember this. I was so excited. I had so much fun doing this. It was like going to a conference. It was that same kind of feel, but we didn't have to spend any money; we didn't have to travel anywhere to visit with people from thousands of miles away. It was the same idea as if we were sitting in the same room and sharing. It was very fun."

An FIU student commented that "I think it is great just to make people aware of what others go through. People should have the opportunity to know what is happening. Next time, try it with a state where the majority of the members of the classroom's field is strong. For instance, if you have a lot of future band directors, you probably want to do it with Texas or Indiana. Anything is helpful but these ideas would really make it memorable."

In sum, the technology is free and easy to use. The effectiveness of communication and exchange of ideas was clear in this case study of two music education classes from opposite ends of the United States. Students at VCSU were enthusiastic about the experience and felt it was a valuable and viable addition to their education. Students from FIU found the experience to be effective in learning about others and being more sensitive to their circumstances.

Creating Original Music and Original Listening Guides

Dr. Jane Kuehne, Auburn University

This workshop focused on creating music and listening guides to music. The first part was centered on creating music using Apple's GarageBand, which is part of Apple's iLife suite. The second provided participants with a refresher on Microsoft's PowerPoint software. The final part of the work-

shop allowed participants to combine their two newly-learned skills by creating music listening guide using their own (or other) composition and PowerPoint.

Ellectronic Portfolios: Organizing and Creating a Successful Evaluative Tool

Sara Hagen, Valley City State University

Electronic portfolios can take on many forms, depending upon the structure of the evaluation they service. The first decision when using a portfolio assessment is to determine "why" the format is being used and for what purpose the assessment will be valued. Portfolios often can be a collection of "stuff," rather than a focused documentation of skills, understandings, or growth. However, successful portfolio will have a clear purpose with a clear underlying structure from which to build the evidence.

Purposing the Portfolio

The following list is just an example of the many ways that a portfolio might be utilized.

- Tools for discussion with peers, teachers, and parents
- Opportunities for students to demonstrate their skills and understanding
- Communication of reflections regarding growth and change
- Evidence of development and growth, abilities, attitudes, and expression
- Demonstration of learning styles and differentiation, cultures and multiple intelligences
- Chances for students to make critical choices about content
- Occasion for students to review and comment on their own development and learning
- Opportunities for students to make connections between prior learning and new ideas

In addition, a clear focus on how the portfolio will be applied such as:

- Will the portfolio be short- or long-term?
- Will it contain only music or will it be cross-curricular in nature?
- Will it be viewed school-wide, district-wide, or just in my classroom?
- Will it be utilizing standardized criteria or my own?
- Is it reflective in nature for the students or just a collection of "stuff"?
- Will it be used for self-evaluation by the student?
- Will it be used in parent-teacher conferences?
- Will it contain pieces already graded or are the pieces to be graded within the portfolio, if at all?

- Will it be used in the final grade?

Setting up the Portfolio

Setting up the portfolio for success begins with a clear definition of its purpose, followed by careful selection of items with which to document that purpose such as:

- Open-ended tasks
  - Think, solve, communicate, perform
    - Composition
    - Student-directed performances
- Projects/exhibitions
  - Defines goals, develops plan, produces a product
    - Discover principles in music
    - Historical exploration
- Group presentations and performances
  - Peer evaluations
  - Critical evaluation of performance
- Culminating exhibition of mastery
  - Proficiencies
  - Performances with explanation and defense
- Concept Map or Webbing
  - Webquest
  - Drawing maps of connections for understanding

Once these decisions are made, then the "what" is easier to select for inclusion in the portfolio. In addition to the above suggestions, the following also may be helpful:

- Complete or "in progress" works or a combination of the two
- "Best" work only
- Student or teacher selection process or combination
- Should teacher and/or peer comments be included?

Following is a list of possible selections for the portfolio, depending upon its purpose:

- Homework
- Group work
- Learning logs
- Reflective journals
- Community projects
- Written work
- Rough drafts or process pieces
- Digital media artifacts
- Audio/video samples
- Pictures
- Questions for a conference

- Interviews
- Observation checklists
- Self-assessments

Organizing the portfolio

Regardless of the purpose or content within the portfolio, a systematic and organized presentation always includes at least the following items—and also consideration of the optional content:

- Creative cover
- Introduction of the student
- Table of contents with a written and/or audio comment about each item or section of the portfolio, explaining why it was selected
- Self-assessment/reflection
- List of future goals (optional)
- Letter from teacher or parents including comments, feedback, or encouragement (optional)

Designing the portfolio

Obviously, all parts and links within the electronic portfolio need to be checked and double-checked to be certain that everything works according to the design. Some designs will include separately linked sections for each content area, e.g., the table of contents may serve as the main portal to all of the different sections. When each section is completed, the reviewer is automatically returned to the table of contents. Alternatively, in a growth and development portfolio, the content may be organized longitudinally, providing a timeline of items documenting evidence. Design options are too numerous to discuss here, but one should carefully consider how the reviewer will examine and assess the portfolio when making this decision.

Sharing the portfolio

How the portfolio will be shared is an important part of the planning process as well. When deciding on the purpose, take into account who will view the portfolios and when also is critical. Consider the following:

- Student/teacher conferences within the classroom
- Parent/teacher conferences in the traditional manner
- Student/peer group conferences within the classroom
- Cross-age or cross-curriculum within the school
- Student/parent or student/parent/teacher meetings at school
- Student/parent meetings at home with a question guide or comment sheet to return
- Portfolio exhibitions in the science fair tradition
- Pen pal Internet buddies or other organized group outside the school

Knowing how the portfolio ultimately will be used as part of the evaluation process also is very important. Consider the following assessment options:

- Not graded–just show and tell
- One grade for the entire portfolio with predetermined criteria
- Each piece graded separately with criteria for each assignment and no overall grade or evaluation
- No grade on the final but collection is used for next year's teacher
- "Best of portfolio" selected each year for senior portfolio growth and development assessment on key abilities
- Senior portfolio or capstone project used for college applications or job interviews

Additional questions may be considered once the process is completed:

- How will the portfolios be saved
- Where will they be stored
- Will students receive a copy
- For how long will the portfolios be archived

Electronic portfolios can be very flexible assessment tools, if careful planning and design issues are handled in advance of the project. The larger the portfolio and its purpose, the greater the need for planning; i.e., classroom projects require less coordination than school-wide assessments. Careful communication and clear understanding of procedures by all participants in portfolio assessment is the key to successful portfolio evaluations.

*Valley City State University Garage Band

Dr. Sigurd Johnson, Valley City State University

Garage Band is halfway through its third year of existence as an ensemble and class in the music department at VCSU. The program was conceived by professor of music education and technology Dr. Sara Hagen, instructor of guitar Jon Rudolph and director of bands and percussion Dr. Sigurd Johnson. The initial idea behind the program was to offer a type of performing ensemble that differed from the more traditional department offerings such as concert band, choir, jazz ensemble etc. It was hoped that the department would at the same time attract and involve new students to the department; students who not necessarily were interested in performing in those traditional ensembles, but nonetheless were seeking an outlet for the performance, songwriting, and other musical components the class offered. The growth of the new music degree with an emphasis in business at VCSU also helped to solidify and strengthen the curriculum developed for the class.

Bands for the class are formed at the beginning of each semester, either by students deciding among themselves that they would like to be in a group, or by the instructors placing them in groups. This process takes into account the need for balanced instrumentation, a desire to place students in groups that present opportunities to perform music they enjoy, and a hope for a variety of musical styles within the various bands themselves.

On October 19th 2006, four ensembles from the garage band class performed for members attending the 8th annual conference of NSMIT in Bismarck, North Dakota. The bands were representative of the diversity of musical styles found in VCSU's Garage Band program. Conference participants heard traditional rock ensembles *Three Mile Island* and *Hole in the Ceiling* (Guitar, Bass, Drums and Vocals) performed as well as *Hone and Whisler*–an acoustic male/female duo. Each band in the class is required to write and perform at least one original composition per semester, a very important component of the Garage Band program. The bands that performed original music at the conference for the NSMIT were pleased with the reception they received from the audience–a standing ovation!

*Building International Bridges for Multicultural Learning

Dr. Sara Hagen, Valley City State University
Dr. Carolyn Fulton, International School, Tianjin, China
Allan Molnar, Percussion Arts Studio, New York City

In this presentation, participants were introduced to live videoconferencing with iChat (Mac) and iVisit (PC) software in order to build international bridges for authentic multicultural experiences. Getting to know teachers face-to-face from around the world is a very powerful force in furthering relationships and understanding cultures from a first-person point of view, rather than from reading texts or watching movies. Actively engaging teachers from other parts of the globe provides insights and opportunities beyond the traditional passive ways students learn about history and culture of other lands. Two issues need to be addressed in making these learning environments possible: technology and teacher networks.

Technology is available for this type of learning environment in many software and hardware configurations, but many are too expensive for schools in both time and money. However, there are some "consumer-type" technologies that are freely available and accessible without too much time or money involved in learning how to operate them and to get quite good results for the purpose of reaching out to others in a more personal manner compared to email or audio exchanges.

Two software packages were used in this demonstration, iChat for the Mac and iVisit for the PC. iChat is a multiway video and audio conferencing software package, operating directly from the Mac desktop with picture and

conversation capability. iChat for Macintosh Tiger operating systems uses H.264 or MPEG-4 Part 10 quality video compression for excellent picture quality. The H.264 actually scales to the available hardware and software to take advantage of bandwidth for improved performance. iChat handles up to 10 people at a time. iVisit can handle up to 16 people at a time and is a cross platform program (Mac and PC). Little support is available for this software, however, making it somewhat more cumbersome to use. The video quality is not equal to iChat, but it does work well for larger groups with various operating systems.

Building bridges internationally begins with having an address and a person to contact. This session began by connecting the participants to Dr. Carolyn Fulton of the International School in Tinajin, China. Dr. Fulton presented a short introduction of her principal and then introduced one of the Chinese teachers in the school to teach the NSMIT participants a short song. The participants gathered around the computer to "see and be seen" by those "on the other side." Greetings and thank-you remarks were exchanged. Questions were asked and answered on both sides, mostly just getting to know one another. Dr. Fulton gave a brief background of how one becomes involved in international schools before signing off. iVisit was used in this demonstration and the Bangkok school was not able to participate due to technical difficulties. They were visible, but NSMIT could not hear them and the same was true for them. Practice time and patience is needed to work in this environment.

Allan Molnar, a presenter at the NSMIT 2004, agreed to join the demonstration from his home studio in New York City. His presentation was on iChat, which was very clear and the sound was also very good. He performed two selections on the marimba and spoke of his regular performances via the Internet. He offered to bring his performances to the schools of the participants, which was met with excitement.

Following the demonstration, participants discussed the uses and possibilities for this type of technology in their own schools. They were very excited about the idea of building a teacher network across the globe and thought this was a very good start toward that end. All participants were given instructions and contact information to pursue these endeavors on their own.

Distance Leaning in Music: The Auburn Model

Dr. Jane Kuehne and Dr. Kimberly Walls, Auburn

This presentation was a demonstration of the distance learning model used by Auburn University. Students from distance classes as well as on-campus classes were connected with the presenter to speak about their impressions of the program and the technology used to facilitate the program.

*Effective and Efficient Ways Sequencers Can Enhances Rehearsals and Classroom Learning

Carrie Jirava
Waubun Ogema White Earth School District, Minnesota

This presentation and demonstration was designed for teachers just getting started with using technology in the classroom, or teachers looking for a way to enhance rehearsals in an efficient and effective manner. It can be for choir, band, or general music teachers, but the demonstration focused on choir. Using Cakewalk, there is a wide range of ways that technology can be used to enhance teaching and learning. For each piece of music, voice parts can be recorded so that students are able to practice in sectionals. This is especially useful in classrooms without student accompanists. It also enables the students to take home, on a CD, recordings of various voice parts and combinations to rehearse with. Also by using the recording technology, students are able to record and playback their own voice. This way, they can listen to how they sound while seeing their voice pattern. There is also a possibility for the student to record their own voice and compare their recording to the teacher recording and see and hear the discrepancies. This will lead to improved intonation and a higher level of self evaluation, which in turn could lead to music produced at a higher, more detailed level. Teachers can also design theory and ear training exercises, which can lead to better music reading skills and critical listening skills.

*Recording Rehearsals for Better Performance

Shannon Gunn,
Woodbridge Senior High School

Teachers having trouble finding ways to incorporate technology into their classroom at a price they can afford will be interested in knowing how they can record rehearsals for little to no cost. Using *Audacity* software, a *SmartMusic* microphone, and a school computer, the presenter demonstrated how recording rehearsals can be easy, helpful to the ensemble, and inexpensive. The presentation included videos of teachers' recording ensembles and a demonstration of how to use *Audacity* software. When asked their reactions to recording the rehearsal, students commented that they were able to hear some fine tuning issues for the first time. Mistakes that may have seemed enormous became miniscule in the overall affect as students heard how their part fit it. On the other hand, sections that were previously ignored became important as they realized who had the melody. Recording rehearsals can be a very constructive learning process that helps students teach themselves. This is all possible at little cost to music educators.

Many teachers have a computer in their classrooms. Those who do not may be able to find a computer expressly for this purpose through their technology department or may opt to purchase a miniature recorder. This presentation covered setup and installation of *Audacity* as well as connecting the speakers and microphone to the computer. Once the setup was described, the presentation demonstrated the application of recording rehearsals in practice. Editing .wav files, burning them to CD, and importing audio files also was described. *Audacity* is very easy to use and is accessible for even the most inexperienced computer user. Indeed, some may take the technology a step further and record their concerts, although better software and microphones are recommended for this type of recording.

Music, Computers. and Standards in Perfect Harmony

Brad Lambrecht, Casselton Public Schools

This presentation shared what a 5-12 grade teacher is doing in the classroom with technology in music courses. Activities range from *SmartMusic* to research with the Internet to using *PowerPoint*.

Garage Band Goes to the Movies

Ronal A. Hemmel, F.A.G.O.
Westminster Choir College of Rider University

The current version of Apple's iLife Suite includes a new version of Garage Band—one with video capabilities. Garage Band already had the potential to allow students to compose and arrange music.[1] Educators now can facilitate opportunities to compose music to accompany video or still images, and foster discussion and consideration of the relationships between sight and sound, between aural and visual art forms.[2] My demonstration showed this process in real time. Formats for importing and exporting were explained, and time was made available for questions from the audience.

[1]Especially relative to the National Standards for Music Education, Standard 4: Composing and arranging music within specific guidelines.

[2]ibid, Standard 8: Understanding the relationships between music, the other arts, and disciplines outside the arts.

A Comparison of Student Achievement and Perception of Instruction in a Traditional and an Online Section of Music Appreciation

Kevin Eakes, Auburn University

This presentation summarized an action research project comparing achievement and perception of instruction in a traditional and an online section of a music appreciation course at a community college.

K-12 Music Education and Technology, the Road Ahead:

Panel Discussion and Forum

Dr. Jane Kuehne, Dr. Ronald Hemmel, Dr. Sara Hagen, Brad Lambrecht

Music educators from various parts of the country and therefore, different perspectives, shared their visions for the future of music technology in the classroom. Participants were encouraged to join in the discussion.

*Can I Get a Little Help?

Ronald Hemmel
Westminster Choir College of Rider University

Can I get help in designing a meaningful and helpful graduate level music technology course for music educators which will satisfy a theory requirement?

My university offers a four-summer MME degree designed for experienced teachers. Two courses (6 credits) are required in music history or theory. For several year, the summer offerings have been staffed by adjuncts. The chair of the Music Education Department recently asked the full-time members of my department (Music Composition, History and Theory) to participate in the summer program.

After attending last year's NSMIT conference, I came away with the impression that there may be many K-12 teachers who would welcome the opportunity to learn more about the educational possibilities inherent in music technology, and to do so for graduate credit.

Is there an opportunity here? It would be easy to offer a summer course called "Music Technology for the Classroom Teacher." Such a course, while it could be quite useful, seems more appropriate as an elective, rather than a theory or music history course.

What about composition? Composing and arranging music within specified guidelines is included in the National Standards for Music Education. This

could be the central idea which could connect music technology in the classroom with theory-worthy credit. Also, teachers who do not have a composition background could improve their skills and learn ways to help their students satisfy the Standards goal.

The working title is: "Composition Technology for Music Educators." Participants experienced four kinds of programs where composition and technology intersect (loop-based, sequencing, digital audio and notation). Works were composed using each system, and classroom activities and/or lesson plans were created by the participants, designed for the grade level(s) they teach.

College teachers frequently design courses without consulting the people they plan to teach. I could certainly do so with this course, but would like a little help.

My conference presentation is one part of my plan. I hope to collect constructive criticism from the attendees that will help me to structure this course proposal before I submit it to my Department, the Music Education faculty and the faculty committee that oversees new courses. Should the course be offered in the summer of 2007, I hope to be able to report the results at next year's symposium.