MULTICULTURALISM, MUSIC, AND INFORMATION HIGHWAYS

The worldwide computer networks that form the Internet can broaden your information base.

BY HAROLD E. GRISWOLD

Information highways now circling the globe are rapidly developing into significant resources for teachers and students studying multiculturalism and music. The use of the Internet is growing at such a rate that there are now more than twenty-five million users. This number is expected to double each year, making the population of users of “the Net larger than that of most European countries.”

Most universities and many high schools, companies, and libraries are already connected to the more than five thousand discussion groups and twenty-five hundred electronic newsletters. These provide unprecedented opportunities for students and teachers to observe or participate in worldwide discussions on the latest research in practically any field. Being on the Internet not only connects you to people all over the world, but it also connects you to thousands of computers where you can freely access databases, sound files, picture files, and text files.

It has been predicted that, by the turn of the century, “network literacy” will be given as much emphasis in education as “computer literacy” receives today. How will worldwide dialogue affect the ways in which we teach, research, and perform music? How will this source of rapidly increasing information affect the ways students learn? How can on-line services help music teachers in their day-to-day functioning in and outside the classroom?

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Internet, Bitnet, and Usenet

The public Internet isn’t a single network; it’s the combination of all the sites and networks that can exchange messages across it, including the exchange of E-mail. It includes Bitnet, which is a network established among colleges and universities for the purpose of sharing information. Many sites have access to the Usenet, which is not a network per se, but a huge bulletin board, arranged in a hierarchy of topics ranging from the esoteric to the ridiculous.

There are networking groups devoted to the discussion of instrumental music, vocal music, world musics, jazz, electronic music, classical music, all styles of popular and ethnic music, music research, music education, music libraries, musical composition, and early music. These groups are referred to as “mailing lists” (or “lists”) on Internet and Bitnet, and “newsgroups” on Usenet. What follows are some ideas on how subscribing to these groups can affect our daily tasks as music teachers.

Internet and Multiculturalism

Since Internet users are electronically linked to more than fifty countries, the Internet is especially useful in teaching classes dealing with world musics. For example, the textbook used in my world musics classes did not supply text translations for two recorded examples of Mexican folk tunes. Six hours after posting a request for translations on the Usenet’s soc.culture.mexican, I received not...
only a complete translation, but a first-hand historical discussion of these songs from one of the many native Mexican subscribers to this newsgroup. As another example, I recently located written transcriptions of Indian ragas on the Usenet newsgroup rec.music.indian.classical. Extensive library searches did not yield this information.

The Internet is connected to tens of thousands of computers with files to share.

A very helpful Usenet group dealing with multiculturalism and music is alt.music.world. Its purpose is to discuss music based on any of the world’s classical, popular, and folk traditions. As the group claims, “If you would find it in the ‘World Music’ or ‘International’ section of a record store, then alt.music.world would be the place to discuss it.” Some recent samples of information available from this group include an extended discussion on using Greek folk songs for microtonal ear training; recommended recordings of Québécois Cajun songs; recommended books and videos on playing the Irish flute; directions for retrieving a huge database for tracing lyrics of Irish songs; listings of live performances of folk and world musics (by geographical area); discussion and recommended recordings featuring the penny whistle; and a listing of workshops on Swedish folk music. Mailing lists also contain valuable dialogue for teachers and students studying multicultural music. For example, BGRASS-L@UKCC.BITNET is a good resource for bluegrass music, and IRTRAD-L@IRLEARN.BITNET offers a discussion of Irish traditional music.

Other Usenet newsgroups I have found helpful include:

- rec.music.celtic
- rec.music.folk
- rec.folk-dancing
- rec.bluenote
- rec.music.afro-latin
- alt.exotic-music

There are dozens of newsgroups in Usenet devoted to popular culture and music. To name just a few:

- rec.music.reggae
- alt.elvis.king
- rec.music.funky
- alt.fan.madonna
- alt.rock-n-roll.hard
- alt.rock-n-roll.classic
- alt.rock-n-roll.symphonic

Discussion of terminology too recent to be fully discussed in hard-copy sources is also available. For example, a subscriber in Norway on the newsgroup rec.music.newage sent to one of my students a thorough explanation and discussion regarding a question that came up in class: “What is the difference between new wave and new age music?”

Perhaps one of the most valuable aspects of networking is that it allows students to interact with thousands of their peers, including individuals living in the countries being studied—it is rather like an electronic “pen-pal” system using E-mail. There exists on Usenet an entire series of discussion groups devoted to specific cultures. Here is just the beginning of the alphabetized list:

- soc.culture.afghanistan
- soc.culture.african
- soc.culture.arabic
- soc.culture.argentina
- soc.culture.asian
- soc.culture.asian.american
- soc.culture.australia
- soc.culture.austria
- soc.culture.baltics
- soc.culture.bangladesh
- soc.culture.bosnia-herzegovna

Networking has considerably altered my methods of classroom teaching. For example, I am now offering students a choice of three types of final research projects. They can submit: (1) a term paper using traditional library sources; (2) a paper based on printouts documenting their pursuit of a subject in worldwide dialogue in at least three discussion groups on the Internet; or (3) a project based on materials received from other computers on the Internet, including databases, text (ASCII) files, and picture or sound (binary) files. For the latter two, students, before they begin work on their projects, must go to the computer center at the university, take out an account, and learn the basic commands used for networking. If they choose the networking projects, students are able to communicate with me via E-mail regarding progress on their projects.

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Internet and Ensembles

The Internet can be very useful to ensemble directors. For several months, I tried to find pieces to perform in one of my early music ensembles that required a rather unusual instrumentation: three soprano voices and two alto recorders. I asked the people who subscribe to EARLYM-L@AEARN.BITNET, the list devoted to early music, “Does anybody out there know of works written for 3 sopranos and 2 alto recorders?” The next morning, I received titles of seven different selections. Four of these came from Europeans on the list.
Have a question about choral music? For example, "Can anyone provide titles of choral works that commemorate the end of World War II?" For several weeks before the fiftieth anniversary of D-Day in France, fascinating answers to this question dominated the Internet mailing list known by the name CHORALIST-LIST@LISTS.COLORADO.EDU, a list on which you can exchange information and ideas with other choral directors worldwide. For questions on the more popular choral repertoire, including folk music: barbershoppers, madrigals, chorales, rockers, gospels and folkies.* Other resources for ensemble directors include the box shown in the sidebar.

Information on jazz literature, history, and performance is the major topic on rec.music.bluenote and JAZZ-L@TEMPLEVM.BITNET. An ongoing discussion about jazz trumpeter Miles Davis takes place on MILES@HEARN.BITNET.

### Internet and Music Research

For several years, I tried to find an updated discography that would provide titles of anonymous medieval and Renaissance works recorded on compact disc. After subscribing to EARLYM-L@AEARN.BITNET, I sent a message asking whether anybody could recommend an updated discography of such compositions. The next day I received a reply from a person at a university in California stating that he, during the last few years, had compiled a database/discography devoted to recordings of anonymous titles. I wrote back asking if the discography was published and how much it would cost. I received a reply stating that it was not for sale, but he would be glad to send it to me via E-mail if I would give him the margin width. I couldn't believe it! Within a week I had an enormous database of information on my home computer. This database has provided me with a valuable reference tool enabling me to run searches of key words in a given text in order to locate a CD recording of that particular work. Discussion groups are also good sources for reviews of recently published books and recordings.

Most lists offer indexes and databases from other computers. The Internet is connected to tens of thousands of computers with files to share. Lists devoted exclusively to music research include the list ATMI-L@LISTSERV.WEEG.UIOWA.EDU, the Internet mailing list for the Association for Technology in Music Instruction (ATMI); ETHMUS-L@UMDD.BITNET, a "global ethnomusicology forum" for all; TML-L@IUBVM.BITNET, a Thesaurus Musicarum Latinarum Database ("an evolving full-text database that will eventually contain the entire corpus of Latin music theory written during the Middle Ages and the early Renaissance"); MLA-L@IUBVM.BITNET, the Music Library Association List; and W1ML-L@IUBVM.BINET, devoted to women's issues in music scholarship. Two further lists located in England include: MUSIC-RESEARCH-REQUEST@PRG.OXFORD.AC.UK providing "an effective and fast means of bringing together musicologists, music analysts, computer scientists, and others working on applications of computers in music research," and MUSICAL-AESTHETICS@MAILVASE.AC.UK, created to encourage the exchange of ideas between philosophy and musicology.

### On-line Libraries

Electronic communication is rapidly changing the way students work in libraries. Library access multiplies in the Internet. With a modem in my computer at home, I can access not only the catalogs of our own university library, but also all the libraries in our state system, as well as hundreds of other university and municipal libraries on the Internet, including the Library of Congress. Many of these libraries offer interlibrary loan, a system that makes it possible to borrow materials from a vast number of sources.

Some libraries offer on-line search systems. For example, ERIC, a national information system that provides access to all aspects of education, is available in our university library system, VICTOR. At home, using my modem, I am able to search magazine and journal articles on ERIC without going to the library, parking, or waiting in line. For a fee, I can have some of the selected articles in the ERIC system faxed to my home!

### Performance and Pedagogy

Instrumentalists will find discussion groups devoted to performance and pedagogy of their instruments...
invaluable. More will certainly be added to the Internet, but, at this time, these lists include those mentioned in the sidebar on “Resources for Instrumentalists.”

Teachers of instrumental music will find these lists particularly helpful as they seek information about sources and prices of instruments and equipment, reed and mouthpiece problems, embouchure problems, CD reviews, instrument repair, repertoire, holding positions, special warm-up exercises, and the latest research in instrument manufacture. Discussions on percussion instruments take place on Usenet’s rec.music.makers.percussion. Vocal pedagogy is the topic often discussed on the list CHORALIST@LISTS.COLORADO.EDU. At present, there are no lists devoted to piano or strings, but music performance and pedagogy for teachers of these instruments are often discussed on the list MUSPRF-L@CMSU-VMB.CMSU.EDU. There are several newsgroups devoted to guitar performance:

- alt.guitar
- alt.guitar.bass
- alt.guitar.tab
- rec.music.classical.guitar
- rec.music.makers.guitar
- rec.music.makers.guitar.acoustic
- rec.music.makers.guitar.tablature

Want to buy or sell an instrument? Try rec.music.marketplace.

Musical Composition

One of the most active groups for musical composition is rec.mus.compose, which covers a wide range of subjects, including discussions of music written by composers of the 1990s, establishing computer labs in schools, copyright issues, music-writing software, working with MIDI, and questions on interfacing hardware. Both EMUSIC-L@AUVM and alt.emusic are devoted to electronic music and its composition. The discussions range from aesthetics to the technology (synthesizers, MIDI, and so forth), and all types of musical software are discussed and reviewed. The mailing list FILMUS-L@UBVM.BITNET is for composers of film music.

A newsgroup intended for the discussion of computer music research is comp.music. An active newsgroup for information on prepared MIDI sequences and synthesizers is rec.music.makers.synth. Another source for actual sounds available is alt.binaries.sounds.music. (Check for viruses, please!) Microtonal composition is discussed at length on TUNING@VARESE.MILLS.EDU. A captivating on-line discussion about writing popular songs recently appeared in rec.music.country.western.

Just for Teachers

The Bitnet list MUSIC-ED@GMNN1.BITNET is open to all subjects dealing with music education, as is Usenet’s K12.ed.mus. The database for TIME (Technology in Music Education) is “a collection of information about music instructional software” and may be searched by Internet users (see the sidebar listing “Some Sample Commands”). Valuable information on teaching methods can be found on several Bitnet lists: TEACH-L@UAL-TAVM.BITNET allows teachers to exchange ideas; TEACH-L@UICVM.BITNET deals with “classroom dynamics”; teaching effectiveness is the topic that is shared on TEACHEFT@WCU.BITNET; TEACHING@MCGILL1.BITNET is a general discussion group for teachers.

Another vigorous newsgroup is k12.chat.teacher on Usenet, where participants discuss everything from conflict resolution to job openings. There are also numerous on-line networks devoted to various teaching fields.

Another on-line service available at no cost to MENC members is the Pepper National Music Network (PNMN or “the Pepper Network”), an electronic bulletin board that links users with more than seven thousand music educators; administrators; music industry representatives; book, music, and software publishers; and
Some Sample Commands to Get You Networking

Getting Started

If your local site has E-mail software for the Internet, you will be able to join most of the discussion groups in this article. For example, if I were going to subscribe to the discussion group devoted to choral music, I would send an E-mail message to LISTSERV@LISTS.COLORADO.EDU with this command typed in the message area: “SUB CHORALIST Harold Griswold” (don’t type the quotation marks). You will have to ask the technician at your local site how to log on to Usenet. At my site, I simply type “news” at the $ prompt.

Find the Research You Need

Want to read the abstracts of all the research papers published in Research Studies in Music Education? “Gopher” is a program that locates information using a hierarchy of menus. If you have Gopher at your local site, try the following: Type “gopher gopher.usq.edu.au”; then select from the given menus in this order: Faculties/Arts/Music/Australia—England/Research Studies in Music Education; from here select the desired issue and abstracts.

Accessing the Library of Congress

The command “telnet” is helpful to music educators and researchers because it will connect you to thousands of other computers on the Internet. For example, if you want to reach the catalogs at the Library of Congress, type the command “telnet locis.loc.gov” and follow the menus.

Three Databases You Can Use

Three important databases for research in music education are MBI (Music and Brain Information Database), CAIRSS for Music (Computer-Assisted Information Retrieval Service System), and MRIS (Music Research Information Services).

To enter MBI: (1) Type “telnet mila.ps.uci.edu” (2) At Login, enter “mbi” (3) At Password, enter “nammbi” (4) At TERM, press return (5) Follow the menus.

To enter CARISS for Music: (1) Type “telnet utsaibm.utsa.edu” (2) At TS>, press return (3) At the large UTSA screen, type “library” (4) Select from the menu: CMUS (5) Follow the menus.

To enter MRIS, which includes the TIME database mentioned in this article, (1) Type “telnet runner.utsa.edu” (2) At Login, enter “imr” (3) At Password, press return.

To Get Text, Sound, and Picture Files

FTP (File Transfer Protocol) allows you to access remote computers and retrieve text, sound, and picture files. If your Internet site has FTP software and you would like to have a list and discussion of works for chorus and band, (1) Type “ftp ftp.sdsmt.edu” (2) At the Name prompt, enter “anonymous” (3) At Password, enter your full E-mail address (4) At type>, type “dc pub/choralist/repertory/lists” (5) At ftp> type “get chor-ins.rep”. This sequence of commands will transfer the file to your local Internet site. To get the files into your home computer, consult your local site technician.

Other Ways to Cruise the Internet

Besides E-mail, Telnet, Gopher, and FTP, some sites offer additional ways to search the enormous archives found on the Internet. These include “Jughead,” which will get you menu information from other Gopher servers, and “Veronica,” which locates titles of Gopher items by means of keyword searches. “Archie” will help you locate FTP files. “WaIs” allows you to make keyword searches of huge banks of files. One of the most powerful search systems, “World Wide Web,” links key words in one document at a site to other documents at other sites using combinations of all the search systems as it travels through the vast universe of the Internet.

The world is truly at your fingertips!
composers. You can communicate directly with other users and even place orders from your computer. Through PNMN, you can access the Music Association Newsline, a network that provides a direct line to other teachers, MENC publications, and news from MENC's national office and state organizations about issues relevant to music teaching. A free brochure on the Pepper Network is available from MENC at 1806 Robert Fulton Drive, Reston, VA 22091-4348.

Getting On-line
Check out the availability of Freenets (free community-provided access) within your telephone area code. The fast-growing freenet system is part of an organization called the National Public Telecomputing Network (NPTN), a nonprofit organization dedicated to providing free public access to the Internet. Many of the most recently published books about the Internet include lists of these and other public access numbers.

Ask a friend already connected to the Internet to post this question on Usenet's alt.internet.access: "Can someone give me the phone numbers for Freenets and/or public Internet access in the ___ area code?" Or have a friend subscribe to the Bitnet list PACS-L (Public Access Computer Systems). Send the command SUB PACS-L to LISTSERV@UHUPVM1.BITNET.

Teaching Internet Use
Most E-mail sites offer training sessions to teachers and students, or can at least provide them with training guides and reference manuals in order to get them started with the commands needed to subscribe to various lists and newsgroups. One of the best easy-to-read yet comprehensive books on the Internet is The Internet Complete Reference (McGraw-Hill, 1994) by Harley Hahn and Rich Stout. Another popular book is the updated second edition of The Whole Internet, User’s Guide and Catalog (O’Reilly and Associates, 1994) by Ed Krol.2

After you get on-line, one of the best resources for learning to function within the Internet is a discussion list, HELP-NET@TEMPLEVM.BITNET, "a reference base for inexperienced and experienced users of the Bitnet and Internet networks." On Usenet, the newsgroup called news.newusers.questions is the best on-line resource for learning your way around.

One of the most frequently used words on the networks is "help."

A Global Community
The generosity of people on the networks and their willingness to share information never ceases to amaze me. Most network users never hesitate to lend a helping hand to questions you might have regarding a particular topic. I have witnessed some instances where people obviously spent hours in order to assist another subscriber from another part of the globe. In fact, one of the most frequently used words on the networks is "help." Ask for help with a particular topic and, within hours, you will receive excellent advice—if not the answer, at least tips on where to look for the answer. Through networking dialogue, it is easy to establish friendships through mutual concerns and interests. At international conferences or workshops, I often meet individuals with whom I have been networking for years.

The impact of worldwide electronic dialogue will not only accelerate advances in the arts and sciences, but will, no doubt, play a role in solving global problems. The explosion of shared information through network-