# Technology in Your Studio

by Frank Horvat

As teachers, we all face the sometimes difficult challenge of motivating our students. One especially versatile tool we can use is a computer. Computers, paired with an electronic keyboard and the relevant software for theory, ear training, history, or composition, can complement a traditional lesson format and provide students with an additional means of fostering musical comprehension.

#### Computer Equipment

Obviously, the first step is to acquire a computer. In recent years, computers have become more affordable and are well within the reach of many households. A growing number of music teachers rely on computers for keeping studio records, bookkeeping and submitting students' examination applications. A detailed discussion about how to choose a basic computer is outside the scope of this article, but in this technological age, you will not have to look far for helpful advice.

For musical activities, I strongly suggest that you also invest in an electronic keyboard – an instrument similar to a piano but much more compact – because many music-related computer activities require the participant to play notes, intervals, chords, or rhythms. Look for a keyboard that is MIDI-compatible. "MIDI" is an acronym that stands for "musical instrument digital interface." Simply put MIDI is a connection that allows computers and instruments to interact with each other.

### Music-Related Computer Software

In addition to a computer, you will need music software - programs you load into a computer to run particular activities. But before you rush out to shop for software, I suggest you find out what types of programs are available and choose subjects to focus. Here are a few possibilities.

### Theory

Many students do not enjoy theory, but a well-chosen computer program might be just the thing to spark their interest! For example, a student preparing for a rudiments examination may difficulty with key signatures, scales, or time signatures. An interactive theory program can provide activities that present this material in an alternate fashion. Most theory software caters to specific age groups or levels. Programs aimed at younger children may use cartoon characters to guide students through exercises in a step-by-step approach. Programs aimed at older students play back harmony and counterpoint exercises so students can hear what they have written and judge the musicality of their work.

#### Ear Training

Have you ever wished that students preparing for a practical examination could practice ear training effectively at home? Ear training software can emulate the role of the teacher by playing intervals, triads, melodies, and rhythms for identification and keeping score so that the student will know which areas need improvement. Furthermore, many ear training programs include activities that link several theoretical concepts together, thus helping to answer that oft-asked question, "Why do I have to do this?"

#### History

Whether you are trying to develop music appreciation in a beginner or prepare an advanced student for history examination, computers allow your students to explore the many music-related CD-ROMs now available. ("CD-ROM" is an abbreviation that stands for "compact disc read-only memory." A CD-ROM, like an audio CD, can store large quantities of information. A single CD-ROM might hold as much information as a number of books!)

Music history CD-ROMs, present information in an interactive format that allows students to search their way through a particular era or subject using keywords and pointers. A good selection of CD-ROMs will complement the more traditional history materials in your studio and will go a long way in demonstrating that music history is more than names and dates!

### Composition

With music notation software and an electronic keyboard students who are interested in composition can hear their work as they revise a composition and produce a clean score that is easily read. Score creation can also expand a student's theoretical knowledge and skills. With a professional-looking score, a student composer will feel they have created something they can rightly be proud of.

### Resources for Choosing Software

Whether you are setting up your own workstation or making recommendations to students, the most important step is research. It is essential that your students use the software that is appropriate for their needs. Music software can vary widely in price, depending on the type and complexity, but a more expensive product is not necessarily better. Don't be put off by the seeming complexity of all this. Over the years, computer software has become much more user-friendly. The endless array of products on the market may seem hopelessly confusing, but you have excellent resources close to hand.

- Local music stores often carry a variety of computer products from mouse pads to sophisticated notation software. Arrange to visit the store when it is not busy so that staff have time to answer your questions and provide guidance about the particular products they carry.
- 2. Look for articles and product reviews in music magazines and consumer journals. You may already subscribe to some of these publications. Others are available at public and university libraries.
- Your colleagues are also a valuable resource. Music teachers who already have a studio computer system will likely be happy to let you explore the possibilities of various programs, and ask questions.
- 4. If you already own a computer and have access to the Internet, you can do some of your research right at home. If you don't have a computer at home, go to your local library. The staff there will be able to help with your search and may well direct you to other resources as well.
- 5. Most software manufacturers have websites that provide detailed information about their products, and some offer free trial versions that allow you to test software products at home. These can usually be downloaded from the manufacturers' websites but may also be available by mail or through a sales representative. Hands-on experience is essential, especially if music programs are a new area for you.
- If you are not even sure what you are looking for, web directories can be helpful.
  For example, at Google (www.google.ca or www.google.com) click on
   Directory>Computers>Multimedia>Music & Audio>Software.
- 7. Finally, here are a few questions that will help you to evaluate music programs and accessories.
  - What age of students is the product geared for?
  - What level of musical experience will students need to make use of the product?
  - What specific areas does the product address?
  - How much does the product cost? Is it within your or your student's budget? Will this product provide good value for money?

## Computers for You and Your Students

If you have a large studio or an extra available room, you can set up your own computer corner, equipped with a MIDI keyboard and a small library of programs and CD-ROMs. Some teachers encourage students to arrive early so they can take advantage of extra activities before their regular lessons.

Perhaps your studio space is limited, or computer equipment is simply not practical for your particular situation. It is still to your advantage to be up to date on the latest music software and accessories. This knowledge will allow you to provide students and their parents with expert advice on suitable choices for home use.

We cannot ignore the advantages of incorporating elements of technology into our teaching. Computer-based activities can nurture independent learning and solidify a student's musical knowledge. Today many children are exposed to computers at an early age and are receptive to them because they are both stimulating and fun to use. If our goal is to nurture a love of music while fostering growth and progress, there is no doubt that making effective use of new technology will benefit our students.

Originally published in the March/April 2003 edition of Music Matters (RCM Examinations)

www.frankhorvat.com