Courtesy photo

A music major uses the Mac Plus computer attached to a synthesizer in the lab for technology and music instruction to practice his aural skills. The music school hopes to eventually network the computers and run them off a hard disk.

Computers modernize composing, performing

Most musicians remember the many hours spent practicing scales on a piano or playing phrases of notes again and again searching for precision.

Practice is still a key element in a musicians life. But there's an easier way to train the ear to recognize the delicate sounds.

Last January the School of Music opened two new computer labs. One, a lab for technology and music instruction, provides a workshop for students to develop aural skills and a place for GTFs and professors to create lessons and work on papers and handouts.

The second lab is a music composing lab, where students use a Mac IIci and a series of sound modules to synthesize the music the composer creates.

"We want to be able to provide an environment for students, faculty and guest composers that will allow them to produce wonderful, aesthetic work," says Jeffrey Stolet, director of the composing lab.

The labs have actually been around for many years but were incomplete and unusable.

"When I got here two years ago, the studio was a disaster. There was no hope of producing anything like art. Now that is a possibility," Stolet says.

Assistant Professor Gary Karpinski was hired by the school in 1987 to teach and coordinate the aural skills program. When the school received additional funds in the fall of 1989, Karpinski was asked to help reopen the technology lab.

The technology lab contains three Apple IIs, three Mac Pluses, one Mac IIcx and a Pitch Master. Each computer is also hooked to a synthesizer.

The Mac IIcx, designated as the GTF/faculty work station, has programs for composition, word processing, desktop publishing and transposing music. It's integrated for writers and musicians.

"Computers should be used to support things we're doing in classes," Karpinski says. The goal of the School is to eventually network the computers and run off of hard drives.

"I hope to really expand it so theory classes will be able to use it," Karpinski says. "There are all kinds of applications that seem to come up as time goes on."

Karpinski also writes programs that are useful to music students and says there are many aspects to learning music.

"Students need to become intuitively familiar with the grammar of music," he says.

"Technology is an important aspect of any profession," says Stolet. "Music isn't any different."

Last June, Karpinski and Stolet won the Mac IIci now in the composing lab by submitting a music grant proposal to Apple Computers, Inc.

The Mac IIci is six times faster than the Mac Plus previously used in the lab and also allows the operator to do direct-digital synthesis.

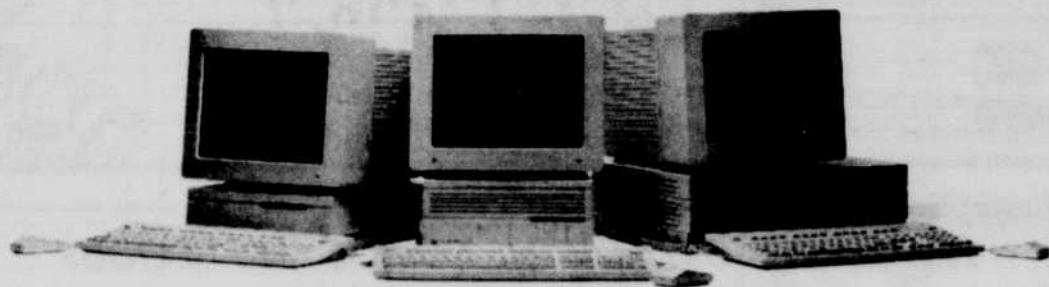"Computer composers design instruments by synthesizing sound," Stolet says.

A composer first composes the notes, then he balances the volumes and speeds acting as a conductor then he shapes the phrases like a performer, Stolet says.

"It's all-encompassing and, because it's all encompassing, a very rewarding experience," he says.

—Anna Rembecki