University of Louisiana at Lafayette

STEP Committee

Technology Fee Application

School of Music
MIDI Studio Update

Robert Willey and Garth Alper
Media Division, School of Music

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Signature of Dean

Title: MIDI Studio Upgrade Date: July 8, 2007
Name: Robert Willey and Garth Alper
Address: School of Music
Phone Number: 482-5204 Email: willey@louisiana.edu
Department/College: Music/College of the Arts

Abstract:

The MIDI Studio in the School of Music is in need of a more powerful computer, larger monitor, and new software. Four different music technology classes are taught in this facility and the computer is used by students around the clock. This enhancement will improve class conditions and help students produce better projects more efficiently.

Purpose of the grant and impact to the student body as a whole

The School of Music's MIDI Studio is a classroom in Angelle Hall in which four different music technology classes are taught—Introduction to MIDI, Advanced Synthesis, Film Scoring I, and Film Scoring II. These classes teach students how to use technology in the music-making process and rely heavily on the use of a computer for both instruction and student projects during individual lab hours. The computer presently in use is outdated and runs at a frustratingly slow pace for students, limiting the applications that can be run and scope of projects that can be accomplished. A new computer is needed to speed up the workflow, and to allow for new processes to be used, such as simultaneously running multitrack audio and software synthesis programs.

The first two classes teach students how to use computer sequencing programs such as Digital Performer and Reason. We would like to add the use of Logic, an industry standard application, and to show how it can be used in combination with Pro Tools, which is used in the audio recording classes that follow the MIDI classes. Logic has a number of software instruments and has many loop features and resources that our present software lacks.

The new hardware and software will be useful in the MIDI, as well as the film scoring classes, where students are taught how to create music in a variety of styles and are required to compose their own pieces on the computer. In Film Scoring I, students analyze film music in a number of styles (comedy, drama, suspense, etc.) and are asked to emulate these styles using Digital Performer. In the second semester of the class, students use the knowledge gained in the first semester to write music to accompany scenes from movies. Their goal is to enhance the emotional impact of the films by carefully crafting synchronized musical scores.

The latest generations of faster computers are now able to act as software synthesizers, while also running sequencing and recording programs. The variety of instruments and quality of sound has improved substantially over the past five years, enabling the computer to imitate instruments in a symphony orchestra, as well as hundreds of different types of guitar, keyboard, bass, and drum sounds. It will be able to generate sounds from the proposed sample library, superseding the outdated external hardware currently in used. This expanded instrument resource will allow students to compose using a wider range of instruments, accommodating more genres of music, from orchestral to contemporary popular music. The combination of this new sound production technology with video is one of the main reasons a much more powerful computer is

needed. The monitor requested is large enough to view a movie along with the windows used for music sequencing and sound synthesis software.

The goal of the Music Media degree is to prepare students for careers in the music industry. Music Media students now account for 45% of all Bachelor of Music graduates at UL Lafayette. Technology enhancements, which the School of Music itself cannot fund, have been crucial in equipping studios with current technology, helping to attract students to the program, and to train them when they come using contemporary techniques and equipment in preparation for future careers.

Projected lifetime of enhancement

The computer and software should last at least six years.

Person responsible

Dr. Willey will be responsible for the implementation, installation, maintenance, and operation of the equipment. He and Dr. Alper will train students on the operation of the software and equipment in the four affected classes.

Detailed budget description

1. Equipment

Macintosh Computer with: 5,626.00

- Two 2.66 Dual Core Intel Xeon processors
- 8 GB of memory
- 250 Hard Drive
- 3 x NVIDIA GeForce 7300 GT 256MB
- Apple Cinema 30" flat panel HD Display
- Apple Care protection plan

2. Software

Logic Pro 7.2 – audio recording software 299.00

- 34 software instruments
- over 70 audio effect plugins
- up to 255 stereo tracks
- layout and printing of complete professional scores
- support for Apple Loops (over 1000 included)
- [a] Final Cut file import and export

EastWest Quantum Leap Colossus synthesizer samples 535.50

- 32 GB virtual instrument library with 160 instruments (Africa, Americas/Australia, Europe, Far East, India, Middle East)
- NI Kompakt sample player
- professional sound quality with 32-bit processing
- up to 256 voice polyphony (simultaneous notes)

Budget Proposal

Length of Implementation (in years)	[1]	2	3
1. Equipment	5,626.00		
2. Software	834.50		
3. Supplies			
4. Maintenance			
5. Personnel			
6. Others			
Total	**$6,460.50**	**0**	**0**

Timeline

Fall 2007	All equipment and software will be purchased and installed.
Spring 2008	Equipment will be integrated into classroom teaching and students will be using computer and software for projects/assignments.

Previously Funded STEP projects

2006	Willey - New Pro Tools system for the Recording Studio, $41,337
2006	Willey - Resource Center upgrade, $4,657
2005	Willey - Recording systems for Angelle Hall, $8,762
2004	Willey - Resource Center video editing/DVD production station
2004	Willey - Postproduction studio equipment
1999	Alper - Music Technology Facilities, $69,910