UNIVERSITY OF LOUISIANA AT LAFAYETTE

STEP Committee

Technology Fee Application

Percussion Controllers

Title

Robert Willey and Troy Breaux

Name of Submitter

(Faculty or Staff Only)

School of Music and Performing Arts

Organization

Title: Percussion Controllers Date: 1/10/2012

Name (Contact Person): Robert Willey
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Department/College/Org: School of Music and Performing Arts

ABSTRACT

Two state-of-the art computer instrument interfaces will be acquired for use by percussion students in the School of Music and Performing Arts, in order to support and improve student learningand prepare them to work in the 21st century. These instrument interfaces will provide a platform to learn and practice new techniques instrument interfaces are for composing, recording, and performing, using equipment that is increasingly used onstage and in studios. These devices are designed to connect to computers and synthesizers that the School of Music already uses in its studios and classrooms.

15% of music majors play percussion as their principal instrument, and study marimba and vibraphone (played with mallets), and drums (played with sticks). These acoustic instruments cannot be plugged directly into electronic recording, synthesis, and performance systems. 21% of percussion students are pursuing a concentration in Music Media. These students are at a disadvantage compared with keyboard players and guitarists in their class, who are able to use their instrumental skills in music production projects and homework, while developing skills on electronic instruments that they will be able to market in the future.

The two requested controllers—a MalletKat (played with mallets) and an Octapad (played with sticks and foot pedals) offer percussion students a chance to learn to operate and perform with contemporary percussion technology. This will open up new opportunities in their studies and professional life, by allowing them to incorporate advances in digital audio systems in their composition, recordings, and performances.

DESCRIPTION

Two electronic instrument interfaces are proposed to allow percussionists in the School of Music and Performing Arts to learn and practice new techniques for composing, recording, and performing,

15% of music majors play percussion as their principal instrument, and study marimba and vibraphone (played with mallets), and drums (played with sticks) as part of their training. These acoustic instruments cannot be plugged directly into electronic recording, synthesis, and performance systems. 21% of percussion students are pursuing a concentration in Music Media. These students are at a disadvantage compared with keyboard players and guitarists in their class, who are able to use their instrumental skills in music production projects and homework, while developing skills on electronic instruments that they will be able to market in the future.

The two requested controllers (see photos that follow)—a MalletKat (played with mallets) and an Octapad (played with sticks and foot pedals) offer percussion students a chance to learn to operate and perform with contemporary percussion technology. This will open up new opportunities in their studies and professional life, by allowing them to incorporate advances in digital audio systems in their composition, recordings, and performances. Electronic interfaces require a different type of playing technique. They have a different feel and responsiveness. Both of the requested instruments have nuanced, dynamic articulations, allowing students to develop expressive playing styles. In addition to adapting to a different feel in the playing surface, students will learn to select complimentary synthesizer sounds to trigger, and to create rhythm patterns in the unit's built-in drum machine, and in the process learn to play along with a rhythm track. These are skills that are vital to a contemporary percussionist aspiring to work in a recording studio.

In addition to the benefits to the benefit to percussion students, these instruments will be used in numerous ensembles, recording sessions, and classroom activities, helping to educate and inspire their colleagues and the students attending their performances, contributing to an image of ULL as a center of 21st century music making. This will also allow for a wider range of musical styles to be studied and presented, by providing resources to play electronics-assisted repertoire. The Octapad also has the capability to be driven by acoustic drums, something that is often done by drummers in bands. This allows triggers on acoustic drums to play sounds on the Octapad, which are then in turn fed into the amplification system to enhance or extend the acoustic sounds. This is something that most students have not experienced, but need to become familiar with in order to work in professional situations. Students in MUS422 (Live Sound and Postproduction) will also have the possibility of learning to work with this type of device when operating loudspeakers.

Music majors are required to play in an ensemble every semester. Most of the percussion students enroll in the Percussion Ensemble, in addition to Jazz Ensemble or one of the three jazz combos. These instruments will be used in these and other ensembles. The MalleKat would be a welcome addition to the Percussion Ensemble and Marching Band, where it could be used to play bass lines, adding a contemporary element and support to athletic program. These experiences, along with use by students in their own projects and Music Media classes, will expose students throughout the program to what is possible and approach percussion in a new way.

In between performances and recording sessions, the equipment will be available for students to use when practicing in the Percussion wing. Since it is electronic it can be played at low volume, which is not as easy to do on a drum set in a small practice room. This equipment will give students a platform to practice on while using a normal amount of physical energy in order to develop strength and coordination, without adding to the amount of high volume sound they are exposed to, which gradually leads to noise-induced hearing loss. This experience will show them the possibility of practicing with electronic controllers, and how they can be used to develop healthy practice and stage habits.

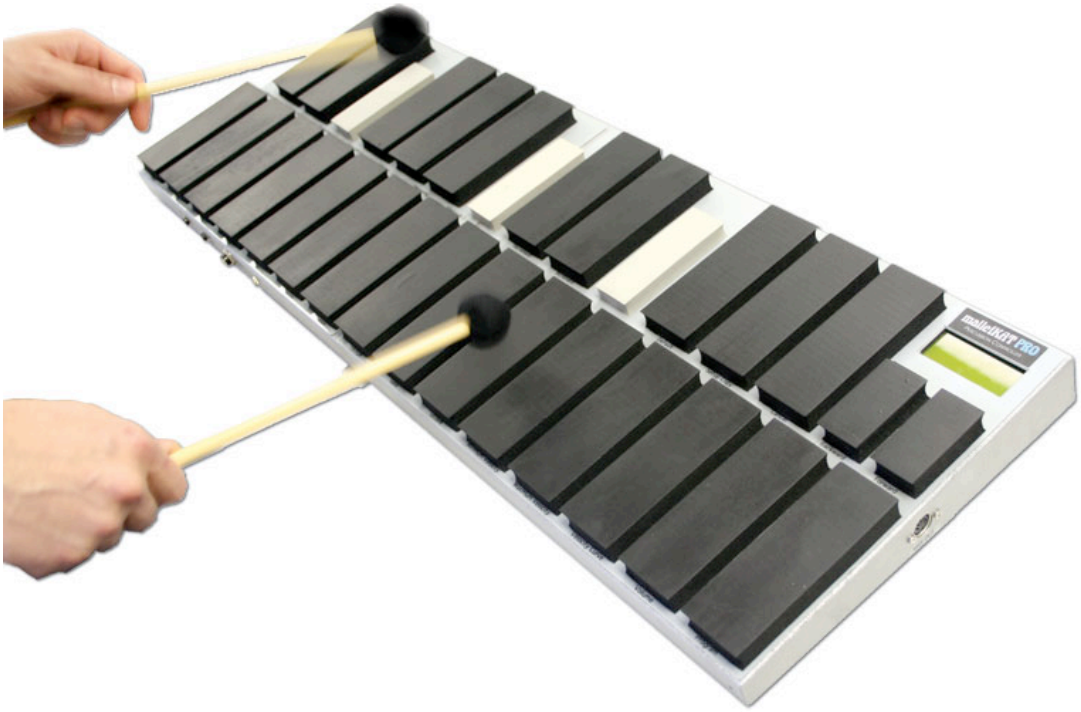
Projected lifetime of enhancement - 10 years

Person(s) responsible for

i. Implementation - Robert Willey
ii. Installation - Robert Willey and Troy Breaux
iii. Maintenance - Robert Willey and Troy Breaux
iv. Operation - percussion students
v. Training (with qualifications) - Robert Willey (Music Media division coordinator) and Troy Breaux (Percussion Professor)

Additional information. Photos of requested equipment.

Roland Octapad with pedals



MalletKat

Budget Proposal

1. **Equipment** **$ 3,531**

MalletKat $2,289
Students will play on this with mallets, applying techniques learned on marimba and vibraphone. Has a wide variety of built in sounds to trigger.

MalletKat stand $119
Support MalletKat for playing at a convenient height.

Sustain pedal $29
Prolong notes, as on a vibraphone

Roland Octapad $699
Drum pads with built in sounds and drum machine. Students will play on it with sticks, like a drum set. Has a built in drum machine for programming patterns, along with many types of sounds to trigger.

Octapad mount $46
Attach Octapad to a drum stand at a convenient height to play

Hi Hat controller $149
Play hi hat parts, as a drummer normally would

Kick drum trigger $120
Play kick drum parts, as a drummer normally would

2. **Software** **$ 0**

3. **Supplies** **$ 0**

4. **Maintenance** **$ 0**

5. **Personnel** **$ 0**

6. **Other** **$**

TOTAL: **$ 3,531**

Previously funded STEP projects:

Multimedia Studio Development. Added video recording the Recording Studio.

Software for School of Music. Purchased software for Music Education Lab and studios where students do their homework.

Hearing Test Equipment. Funded equipment for hearing testing for student service and research, for joint projects with the Department of Communicative Disorders.

Recording Microphones. Used to record concerts in Ducrest-Gilfry Auditorium.

Server for the School of Music. An Apple server to distribute student work produced in the Music Education Lab and studios.

Music Production System. A Pro Tools system for a new studio used for students to do assignments for classes taught in Music Education Lab.

Performing and Live Recording System. A small public address system for groups to perform with and record events outside the Auditorium.

Recording Studio Upgrade. Improving input and output.

CD Recording System for Auditorium. Record concerts on CD.

Resource Center Upgrade(s). Computers and software for study lab.

School of Music Pro Tools Recording System. Pro Tools system for Recording Studio.