

University of Louisiana at Lafayette

STEP Committee

Technology Fee Application

School of Music
Recording Studio Upgrade

Robert Willey
Media Division, School of Music

Signature of Dean

Title: Recording Studio Upgrade

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Department/College: Music/College of the Arts

Abstract:

The School of Music's Recording Studio underwent a major upgrade last year, replacing its analog board with a 24-track Pro Tools HD system. Three additions are proposed to capitalize on the investment. Three microphones increase the number of instruments that can be recorded improve the quality of the recording process. Monitor speakers and acoustic treatment will allow for more accurate mixing.

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

Last year a STEP grant created an opportunity to purchase a new Pro Tools recording system for the School of Music's Recording system. The current proposal will improve the facility in three ways:

1) The new Pro Tools system allows for recording 24 tracks at a time, but we only have eight microphones. It is standard industry practice to use six for the drum set alone (kick drum, snare, two overhead, two toms). Adding three microphones will therefore allow students to record more instruments, taking advantage of more of the capabilities of the system. The recordings will also be made with greater clarity. Presently none of the microphones we have is suited for recording a bass drum, which is one of the most important elements in a drum set. The other two microphones requested make up a k sessions and to make it possible to implement an accounting system in order to keep the microphone collection from being lost.

2) Critical listening is vital to the training of engineers and audio production work. We are limited due to the present loudspeakers that are inadequate for mixing. We have a pair of Yamaha NS-10 speakers from the original studio which are good for giving an idea of what a listener might have in their home, but they do not give accurate frequency response across the spectrum, and so students do not know how much high and low frequencies to add to their mixes. A studio should have a good pair of accurate monitor speakers to be used the majority of the time, and a pair of speakers like the NS-10s for occasional comparison. The proposed ADAM P11A are modestly priced but would provide excellent imaging and accuracy in frequency response. This would allow students to hear what they are doing better and produce higher quality mixes that would translate better to a variety of listening situations outside the studio, an important goal when making CDs and DVDs.

3) The Recording Studio is in an odd-sized room that has poor acoustic conditions. This makes it difficult to do mixing, since sound bounces off a number of untreated surfaces, changing the frequency response for the engineer. For example, presently moving one's head a few inches makes drastic changes in the amount of bass frequencies heard. RealTraps is a company that produces high-performance acoustic treatment products at affordable prices. Their "Mondo" room kit is designed to control early reflections and trap bass frequencies by placing panels on the wall and ceiling. This will create a situation in which the stereo field is clearer (allowing students to control

spatial effects like panning and echoes) and the bass response more accurate (making it possible to add the proper amount of low frequencies when mixing), reducing the variations in tone due to one's position in the room. This will greatly enhance the recording process.

Music Media students (the largest concentration in the Bachelor of Music program at UL Lafayette) learn audio production during three classes in the School of Music's Recording Studio. The facility is also used to record student ensembles, and for postproduction of concerts recorded elsewhere in the building and off-campus, resulting in CDs, DVDs, and broadcasts via KRVS and the School of Music's podcast. Recordings are necessary for students to get feedback on how they sound, since during a rehearsal or concert musicians are occupied with the act of performing and unable to be objective, or to take the time to study how the music sounds from the listener's perspective. Recordings also increase student satisfaction, since they provide objects that can be shared with friends and family, used in portfolios, and put on public display. All performers need to be familiar with the recording process, and to use it to reach their artistic and professional goals. Media Students especially need high quality tools to hone their craft.

Projected lifetime of enhancement

The loudspeakers are expected to last for 10 years, and the microphones for twenty years. The acoustic treatment will be a permanent enhancement for the facility.

Person responsible

Dr. Willey will be responsible for the implementation, installation, maintenance, and operation of the equipment. He will train students in the use of the microphones and incorporate the accounting system into the studio operation as part of the recording classes. Student volunteers and graduate assistants will help install the acoustic treatment, gaining experience in the design of a system and how the sound before and after compares.

Detailed budget description

1. Equipment

Microphones

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| • AKG D112 kick/bass instrument microphone | 219.90 |
| • (2) AKG414 microphones | 1,999.97 |
| • Locking storage cabinet | 160.00 |
| • Shipping for storage cabinet | 65.00 |

Loudspeakers

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| • (2) ADAM P11a powered monitor speakers | 1,999.00 |
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Acoustic treatment

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|----------------------------|----------|
| • RealTraps Mondo room kit | 2,299.99 |
| • Shipping for room kit | 200.00 |

Budget Proposal

Length of Implementation (in years)	1	2	3
1. Equipment	6,943.93		
2. Software	N/A		
3. Supplies	N/A		
4. Maintenance	N/A		
5. Personnel	N/A		
6. Others	N/A		
Total	\$6,943.93	0	0

Timeline

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| 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

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| 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 |