Grant Recipient Names: Michelle Butina and Kim Campbell

Grant Period: August 2012-June 2013

Report Date: April 23, 2014

Digital Video Clips to Enhance MLS Curriculum

Specific Aims of the Project

- Identify lecture topics that would benefit from incorporation of appropriate video clips
- Identify institutions that have instrumentation and would allow filming
- Identify how best to incorporate video clips into curriculum (lecture or laboratory course)
- Evaluate value of video clips incorporated into curriculum

Progress on Project Objectives

Objective 1: Dr. Butina and Mrs. Campbell will research and purchase digital video recorder ideal for the purpose of this project

PROGRESS: COMPLETED

Objective 2: Dr. Butina and Mrs. Campbell will hire a student worker (familiar with technological needs) to assist with the filming, editing and uploading process

PROGRESS: COMPLETED

Objective 3: Dr. Butina or Mrs. Campbell will review their respective course documents to identify content that would be enhanced by video clips

PROGRESS: COMPLETED

Objective 4: Dr. Butina or Mrs. Campbell will identify which local clinical laboratory has the appropriate technology and schedule filming

PROGRESS: COMPLETED

Objective 5: Dr. Butina or Mrs. Campbell will conduct the filming session along with the student worker PROGRESS: COMPLETED

Objective 6: Student worker hired will edit video, if necessary (add voice or text), and upload video to Blackboard course (under direction of Dr. Butina or Mrs. Campbell).

PROGRESS: COMPLETED

Objective 7: Dr. Butina or Mrs. Campbell will assess the MLS students to determine effectiveness of video clips.

PROGRESS: COMPLETED

Progress on Outcomes

Student Learning Outcomes

Medical Laboratory Science students, after viewing the video clip, will:

Outcome 1: Explain the role or purpose of modern instruments

Outcome 2: Explain the methodology of the instrument or principle of the testing (depends upon the instrument)

Outcome 3: Describe the operating steps

Progress toward outcomes: Survey responses from the MLS students indicated that the outcomes above were met via the video clips. Due to this success, the video clips will continue to be used in future classes.

Project Summary

The purpose of these brief digital video clips was to expose all MLS students to new or specialized laboratory instrumentation during the didactic portion of the program (pre-practicum). To begin this project, a student worker, skilled in digital photography and movie editing was hired. The support of a local hospital laboratory was gained and the instrumentation that would most benefit the students was selected. A total of 6 video clips were made during this grant period to supplement lecture on laboratory instrumentation. These video clips were shown in three MLS courses with the majority being shown in MLS 461 Clinical Microbiology taught by Mrs. Campbell. Videos were shown in class, during the appropriate lecture, and made available on Blackboard for student viewing pleasure.

After the last video was shown in that course, the students were given a brief survey to establish the video's effectiveness. Cumulative survey results are provided below.

Table 1. MLS Supplemental Curriculum Video Survey		
ITEM	YES	NO
Presented in an appealing manner	100%	0%
Zooming effects were beneficial	95%	5%
Video text emphasized main points	100%	0%
Appropriate length	100%	0%
Contributed to your knowledge of the topic	100%	0%
Provided a learning opportunity (not readily available in student lab)	100%	0%
Should be shown to future classes	100%	0%

Overall, student comments were positive except for those regarding background noise in the laboratory during filming. Unfortunately, the student worker was not able to reduce the background noise using the current editing software. Due to lack of financial resources and time, it was decided to show the videos even though the background noise was evident. The student worker did incorporate text in the videos to highlight the important steps.

Since these videos were initially shown and outcomes evaluated, faculty members have continued to supplement their lectures with these brief video clips. The creation of additional video clips is being

considered. This project and its outcomes were presented at the 2014 Clinical Laboratory Educator's Conference via poster presentation and received positive acclaim.