

Henry Ford Community College

Technology Investment Fund Progress Summary

NAME OF PROJECT DIRECTOR		DEPARTMENT/DIVISION
Katherine Howe/Suzanne Sample		Nursing
CURRENT DATE	SEMESTER GRANT AWARDED	PROGRESS REPORT STATUS
February 17, 2014	Fall 2012	[] Interim [X] Final

PROJECT DESCRIPTION: A brief summary of the project.

Purchase of 45 laptop computers and 2 security storage and charging cabinets for monitored test taking.

ITEMS PURCHASED: Please indicate how you spent the funds allocated to you. Where are items purchased currently being used? (Attach separate sheet if necessary.)

Ordered on 12/4/12

Requisition # 13680 for computers = \$31,500

Requisition # 13681 for charging carts = \$1800

Items are currently being used for monitored testing in the nursing building.

OUTCOMES EXPECTED: What were the outcomes/goals expected from the project as listed in your original proposal?

Our biggest goal with this project was to help improve our student's ability with computerized test-taking. Nursing students must take a NCLEX licensing exam after graduation in order to practice in our profession. This exam is on the computer. Our measurement criterion was to be improved success for first-time testers on this exam.

PROJECT EVALUATION: Please summarize how the project was evaluated and the result of that evaluation. What evidence do you have that the outcomes/goals were or were not met? Please include data collected--questionnaire results, etc. Were there any benefits you may not have expected? Any liabilities? Please share any strength and weakness of the proposed project--your honesty will be of help to others.

One of our program goals was to get students in all four semesters doing computer testing. To be most effective, students should have used this technology throughout their entire curriculum. Our current computer lab space would not accommodate all four semesters, so the additional computers were requested to help us get more student involvement and improve pass rates on our NCLEX exam.

A review of this project indicates that our outcome has not been met at this time. Our first – time pass rates on the NCLEX exam are continuing to trend down. Our most recent graduating classes of 2013 fell below our program benchmarks.

Data for 2012 = 86.96%

Data for 2013 = 79.26%

In reviewing the recent downward trending and this project, we have identified several reasons that this project has not been as effective as we anticipated so far:

- 1. When the computers arrived, it was discovered that the loaded software was incompatible with our operating systems. All of the 45 computers needed to be re-programmed. This took a significant amount of time for our computer tech. He worked to complete them when he was free from other normal duties. As a result the computers were not available for use until late in the Winter 2013 term. Thus the graduating classes of Spring 2013 were not able to use the laptop technology. They only had computer testing in their fourth semester.
- 2. The laptop computers were used in a limited capacity in the Fall 2013 term. Of our four program semesters, only the first and the fourth were doing computer based testing. Thus, when our students graduated in December, they only had computer testing in the fourth semester as well. With only half of the program using the computer lab, we were able to maximize our current computer lab space most of the time.
- 3. The strength of the computers is the ability to do the testing in a classroom setting. This will continue to be an asset as the second and third semesters in the program begin doing more computer testing. In Winter 2014, we are expanding with the first, some second, and the fourth semesters doing computer based testing. Also, we are beginning a new curriculum in the Fall 2014. The intent is to include computer based testing in this new curriculum. However, it will take several years to see the results on NCLEX exams from this technology.
- 4. The use of the portable computers indicated several issues that are problematic:
 - a. The loaded computer carts are very heavy to move about. The average nursing faculty does not have the strength to move them easily to the classroom. The nearest nursing classroom to the storage area is N156. It is easier to switch classroom assignments to have the class needing the laptop computers use this nearby classroom. This does provide more disruption of students than was originally anticipated.
 - b. It takes more time to set up and tear down for the actual testing. Faculty intending to use the remaining class time for lecture found this extra time cutting into their intended class time. They needed to re-arrange class content to accommodate this extra time.
 - c. One of the problems that occurred with the laptops was found to be a Moodleroom software problem, not a hardware problem with the laptops. When the exam was set-up with multiple questions per page, the computer did not always save the previous answer correctly. This was corrected by having the exam set-up with one question per page.
- 5. We continue to see the value to this technology and plan to expand the use of the mobile computers as the number of courses using the computer based testing expands with our new curriculum.

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