



Henry Ford Community College

Technology Investment Fund

Progress Summary

NAME OF PROJECT DIRECTOR		DEPARTMENT/DIVISION
Katherine Howe/Suzanne Sample		Health Careers/Nursing
CURRENT DATE	SEMESTER GRANT AWARDED	PROGRESS REPORT STATUS
9/26/13	Winter 2012	<input type="checkbox"/> Interim <input checked="" type="checkbox"/> Final

PROJECT DESCRIPTION: *A brief summary of the project.*

Nursing wished to expand our usage of patient simulation technology by purchasing one high-fidelity (realism) adult patient simulation manikin and one maternal/neonatal patient simulation manikin. By expanding patient simulation technology we can provide the opportunity for all students to participate in essential, high risk skills and complex patient care scenarios as identified by the nursing faculty, without placing patients at risk.

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

NOELLE Maternal and Neonatal Birthing Simulator and Newborn with wireless streaming audio and SimMan (adult) 3G simulator with 12" patient monitor were purchased. All manikins were installed during July 2012 in the Nursing Simulation Suite at the School of Nursing and are functioning properly.

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

As a result of this project students will:

1. Participate in essential complex patient simulation scenarios requiring a high level of critical thinking and clinical judgement.
2. Demonstrate competency in complex or high risk skills before performing them on a live patient.
3. Engage in reflection on their performance immediately after completing the simulation.
4. Express increased satisfaction and comfort in providing patient care in clinical settings.

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.*

Outcomes

1. Simulation scenarios have been piloted by faculty in Nursing courses N-126, N-155, N-221/222. This semester all students will be completing simulations with the maternal manikin during N-250. These simulation scenarios require critical thinking and clinical judgement to be demonstrated by the students. Students have to work in teams and interact with “family members” and other health care providers to complete the simulation.
2. Advanced skills included in these simulations included airway management and oxygen administration, IV medication administration, blood transfusion, management of seizure activity, management of uncontrolled bleeding and demonstration of sterile technique during procedures.
3. Students participate in faculty led reflection after completing the simulation scenarios.
4. Tools are being used to collect feedback from students immediately after each simulation (see attached example). A specific question about simulation has been added to the course evaluation tool to track student satisfaction beginning with Fall 2013. Additional evaluation data will be collected as students exit the program. Initial feedback has been mostly positive, with recommendations from students to increase the number of simulation experiences.

Benefits

During simulation it became evident that students are not retaining skills that they had learned and performed competently in earlier courses. As a result we have begun offering a skills review lab for students before the semester starts.

Liabilities

We had not anticipated the amount of lab supplies that are being consumed to review skills that had previously been evaluated. We will need to review our budget and utilization of supplies as use of simulation continues to grow.

Strength of the project

A review of student feedback after completing the scenarios indicates that students are receptive to learning using the simulation manikins and want more simulation introduced in the nursing curriculum. They also desire to have simulation experiences in all courses..

Weakness of the project

Insufficient time to train additional faculty in use of simulation and the simulator manikins. This is especially problematic given the number of adjunct faculty within the nursing division and turn-over rate for these positions. We have also recently lost two of our full-time faculty simulation champions who had piloted many of the simulations.

The funding for this project was switched from TIF to Perkins which changed the deadline for purchase and installation of the equipment. We ended up exceeding the June 30 deadline for installation of the equipment and training occurred during July when many faculty members were not available to participate in the training course.