



Henry Ford Community College

Technology Investment Fund

Progress Summary

NAME OF PROJECT DIRECTOR		DEPARTMENT/DIVISION
Chad Richert		Architecture/Construction Technology
CURRENT DATE	SEMESTER GRANT AWARDED	PROGRESS REPORT STATUS
9/20/2014	Winter 2011	<input type="checkbox"/> Interim <input checked="" type="checkbox"/> Final

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

The Architecture/Construction Technology profession has been in transition over the past two decades from traditional manual drafting to computer-aided drafting (CAD). In the fall of 2011, with the support, encouragement and direction from our advisory committee, the hand drafting studio was converted into a digital visual communication studio.. Additionally, the Architecture/Construction industry is branched into multi-functional software to effectively communicate design and construction using digital media in both 2D and 3D formats. This transcends the basic use of computer drafting (2D) to the level of 3D Building Information Modeling for design and construction communication. The upgraded studio allows our curriculum to further develop in this area to support student preparedness for employment opportunities.

Instruction is now greatly enhanced by the use of large true color/high resolution LCD monitor displays along with cameras to allow projection of large format drawings and for recording student presentations for inclusion in a digital resume'. Additionally, with the incorporation of digital three-dimensional modeling, students will be able to develop digitally produced physical models of their design communication projects. This studio has been essential in the development of curriculum that meets the needs of students as well as exposes them to the skills necessary to be successful in the workplace

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

- 18 Computer Workstations incl. cpu, monitor, keyboard & mouse
- 1 Software costs for additional seats (Autodesk plus SketchUP)
- 22 Network drops
- 18 Computer Security Lockdowns
- 1 Custom Workstation Furniture and Associated Storage
- 2 Network Switches with Security Lockdowns
- 1 Large format plotter/scanner
- 1 Color LaserJet Printer - Tabloid
- 1 Color LaserJet Printer - Letter

The lab was disassembled from the Dearborn Heights Center in the summer of 2014. All items from this project were moved, and reassembled in room T186

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

Student success = Project success. If we are successful in implementing these curricular changes through the expanded use of digital visual communication tools, the project will be a success.

Transitioning to upgraded equipment will improve transfer opportunities for students, as well as allowing them to compete for jobs.

In addition to impacting current students the software and technological improvements would bring new students to the program.

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.*

The project has been qualitatively evaluated based on a substantial improvement to the professional quality of student work being prepared by ACT students. When reviewed by industry professionals, the quality is competitive to 4 year institutions.

Since the proposal, the industry has migrated almost exclusively to the parametric production of architectural design and construction documents. Without having made this change, our students would not be employable. We have seen an increase active professionals taking our courses for skill improvement, and continued learning.

Several of our graduates have been recently placed in technical design jobs thanks to the experience they had with our program and software. National CAD is a Farmington hills company that provides CAD services nationally. Two of our graduates are currently employed, and excelling at those positions. This is just one example of successful employment opportunities.

The software and technology have also been used recently to collaborate with the Interior Design department on the Henry Ford Historic Home preservation project. Drawings and graphics produced in our labs have been used to communicate effectively across departments, and with Industry professionals.

Lastly, thanks to the changes made, we have solidified and/or improved our students transfer opportunities with other universities. Specifically, we have a new agreement with University of Detroit Mercy, allowing our students to transfer in as juniors.