Research, Creative Activity and Teaching: Overlapping, Synergistic and Effective in Preparing 21st Century Business Professionals

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Agenda

- Background
- Teaching and Research Philosophy
- The Model
- Research Innovation
- Instructional Innovation
- Outcomes
Background

- Underlying Education and Industry experiences drove Teaching and Research Philosophy
  - Undergraduate work in Mechanical Engineering
  - MS and Ph. D. (emphasis: MIS) at Clemson University
  - Worked for several years in IT industry
Teaching and Research Philosophy

- Challenging AND Encouraging
- Mentor scholars and business professionals
- Focus on 21st Century Preparation
- Continuous Improvement – Use the synergistic, iterative model

“The current and future health of America’s 21st Century Economy depends directly on how broadly and deeply Americans reach a new level of literacy—‘21st Century Literacy’—that includes strong academic skills, thinking, reasoning, teamwork skills, and proficiency in using technology.”

-21st Century Workforce Commission National Alliance of Business
Synergistic And Iterative Model

Research

Evaluate

Curriculum Development

Teach
Research Innovation

• Research to inform teaching and vice versa – the iterative process
• Subject area research
  ◦ Requirements Engineering, UML, Extreme Programming, Virtual Teams
• Research on teaching technical material
  ◦ CSE, Classroom Culture, Online vs. F2F, Expertise Development
• 21st Century Skills
  ◦ STEM, Virtual Teams - Communication, Critical Thinking, Computer and Cultural Literacy
Synergistic And Iterative Model

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Teaching and Research Philosophy

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- Evaluate
- Curriculum Development
- Teach
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- 21st Century Skills
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Instructional Innovation

- **Objective:** How to best prepare our students to succeed in the 21st Century?
- **Method:** Use Research to inform curriculum development and instruction
  - Consult with Employers, Consider other top-notch MIS Programs, research findings, etc.
  - Teach cutting-edge concepts, techniques, models, methods, technologies based on research findings
- **Result:** Cutting-edge Curriculum based on 21st Century skills and real-world projects
- **Outcomes** – Very encouraging!
Partial List of IS Projects Developed by students for community

Some of these projects represent between 500 – 800 student hours not including my hours guiding and supervising them.

Pitt County Government - Greenville, NC
Walter B. Jones Alcohol and Drug Abuse Treatment Center
Plantation Golf Club - Reidsville, NC
ECU Football Recruiting Information System - Greenville, NC
Pitt County Humane Society - Greenville, NC
Kevin Bank - Training Information System - Wilson, NC
Mini Soccer League - Greenville NC
Communities in Schools – Greenville, NC
Grant Application Processing – Pitt County Government
Sportsman’s Inn - Plymouth NC
Boys and Girls Club – Greenville NC
The Friends of the Pitt County Animal Shelter – Greenville, NC
Dance Studio B - Wilson NC
ECU COB – Proctoring System
Rock Springs Center – Greenville
Law Offices of Frank Cassiano – Greenville
The Hammock Source – Greenville
Commerce Club Member System - COB
Ayden Rec. Center – Ayden
Building Hope Community Center – Greenville
Give 2 Troops - Greenville
Outcomes

- Improved Student Learning and Engagement? Yes
- Energized Research and Instructional Agendas? Yes
- Increased service to community? Yes
- Improved Student Placements in 21st Century Businesses - Yes!
- A WIN – WIN – WIN situation!