Transformational learning: A case study of community college student research in support of community rebuilding post Hurricane Florence.

Dr. James Blalock
Associate VP of Institutional Research and Technology & Instructor of Computer Science
Along with students: Zebrina Kurnik and Michael Taylor
Topics of Conversation:

• Overview of seminal literature pertaining to student success
• About Carteret Community College, Hurricane Florence, and our project
• Overview of conducted research and findings
• Overview of benefits of this initiative
Student success per the literature... and with a little bit of James thrown in there

For this presentation, we will focus on what I call the student success Triangle. It is basically a summarization of all the literature into a very easy to grasp concept.
Student success per the literature... and with a little bit of James thrown in there

Please reference Handouts #1 and #2

Hopefully they are something you can take with you to your institution and share
Trying to Reason With Hurricane Season! – Jimmy Buffett

About CCC:
* one of 58 community colleges in NC
* Located on the southern Outer Banks
* Curriculum students = >2200
* Cont. Ed. Students => 5000
* Heavily focus on the Applied Sciences with a Marine Trade focus

About Florence:
* Direct hit to Carteret County / highest recorded sustained winds and rain fall. (One town received over 36” of rain in 2 days)
  • Almost $20 Billion in damages
  • Over 150,000 people receiving FEMA assistance
Our Project: Are commercial and residential locations safe from an air quality perspective?

Despite having Duke, UNC, East Carolina, and NC State in our backyards, CCC was largely the only academic center positioned to provide scholarly assistance and support to this community.

First – Identify a need
Second – Secure funding
Third – Execute as fast as possible

I was able to secure funding for our project from the NC Space Grant housed at NC State University:

*NC Space Grant is a consortium of academic institutions that promote, develop and support aeronautics and space-related science, engineering and technology education and training in North Carolina. We partner with NASA, industry, nonprofit organizations and state government agencies to conduct programs designed to equip the current and future aerospace workforce of North Carolina. [https://ncspacegrant.ncsu.edu](https://ncspacegrant.ncsu.edu)*
Our Project: Are commercial and residential locations safe from an air quality perspective?

Our project:

Almost 50 students involved
Four curriculum classes
10 students in the community collecting data (from all academic disciplines – largely college transfer)
A class of 24 students in an Introduction to Programming and Logic course performing the analysis
2 students documenting findings (both in support of their English course)
1 student in a Project Management course assisting with logistical planning
1 student in a Photography course
Our Project: Findings

Our project:

50% no damage reported and 50% reported minor roof damage – but still inhabitable

Testing was for non-visible air-born contaminants (mold, mildew, dust, etc)

Among those who reported minor damage, very few, <40 featured levels of mold or mildew that would be considered a minor health issue. Among these, findings were communicated.

Two locations that reported no-damage were deemed unsafe (one was a local cabinet shop, another was a local gym locker room). Findings were shared with the owners and all data kept confidential.

Over 200 locations received free services.
Our Project: Findings

Our project: Benefits Discussion
Questions and/or Comments