Outreach efforts in rural Louisiana culminate in the launch of an IT business incubator

Chester Wilson, Louisiana Tech University

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What is the outcome or accomplishment? (1-2 short sentences describing it and why it is transformative; 50-word maximum suggested)*

Dr. Chester Wilson, a researcher at Louisiana Tech University and the Consortium for Innovation in Manufacturing and Materials (CIMM), is leveraging years of outreach efforts in the community to develop a business incubator in Farmerville, Louisiana. Incubator partnerships have been developed with Louisiana Delta Community College (LDCC) and local businesses. The goal of the incubator is to foster the growth of high-tech companies in the area. In order to develop the workforce needed for these ventures, courses to train and certify local students in critical skills are being created. The first such course was piloted in the fall of 2019.

What is the impact? (1-2 simple sentences describing the benefits for science, industry, society, the economy, national security, *etc.*; suggested 50-word maximum)

Dr. Wilson and his team offered a semester-long prep course for Fundamentals+ certification to juniors at Union Parish High School. Fundamentals+ is the foundational certification from the Computing Technology Industry Association (CompTIA) for most IT career pathways. The course is on par with a college-level class, and successful students can transfer these credits to LDCC to enter a technical training program there.

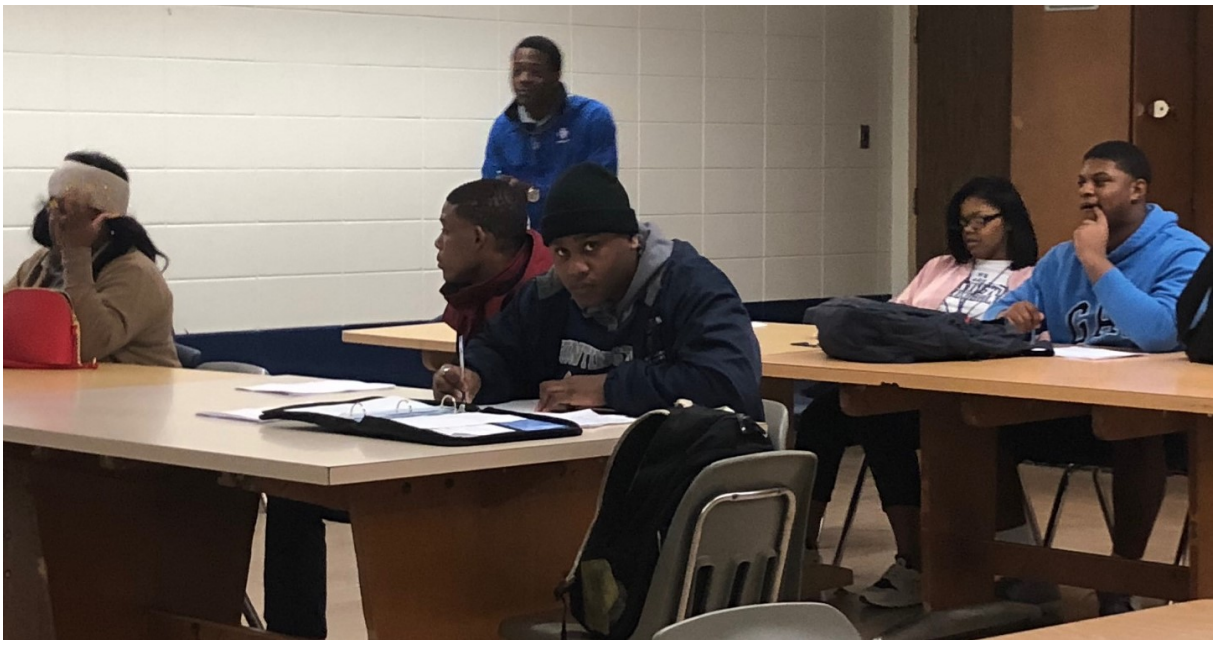
The Fundamentals+ prep course consisted of an online course covering IT concepts and terminology, software development, database fundamentals, networking and security. The online course was enhanced with in-person labs in which students learned to identify hardware components by taking apart desktops and laptops and reassembling them. In-person labs were led by Dr. Wilson and students from Louisiana Tech. The course culminated in a visit to LDCC to encourage students to pursue technical education after graduation.

What explanation/background does the lay reader need to understand the significance of this outcome? (1-2 paragraphs that might include, for example, more on who, when, where;

NSF's role; support from multiple directorates/offices; what makes this accomplishment unique; additional intellectual merits; or broader impacts such as education, outreach, or infrastructure improvement that are integral to this outcome; suggested 150-word maximum)

Rural areas like Farmerville, Louisiana face a shortage of employment opportunities, compounded by the lack of a skilled workforce. Attracting talent from outside of the area has proven to be ineffective for both building the workforce and building businesses. Developing *in situ* training programs tightly coupled to the needs of existing businesses and businesses interested in investing in the area will result in a highly skilled local workforce capable of supporting economic growth in the area.

Dr. Nicholas Groden discussing computer hardware components with students taking the IT Fundamentals+ prep course at Union Parish High School. *Credit: Chester Wilson, Louisiana Tech University, chester@latech.edu*



Students prepare to take a practice certification exam. *Credit: Dr. Chester Wilson, Louisiana Tech University, chester@latech.edu*