An Innovative Approach Prepares Rural Students for the Future
CHALLENGES IN HIGHER EDUCATION

Educational institutions face multiple challenges today. Forty percent of all US college undergraduates drop out of college.\(^1\) Completion rates for two-year colleges are the lowest of any institution.\(^1\) And of two-year college students who do graduate, only 5% do so in two years.\(^1\)

With the average cost of tuition and fees for two-year colleges at $6,379, staying past two years, quickly adds up.\(^2\) While that’s good for the college, it compounds student debt.

COVID-19 added to education’s challenges by decreasing overall post-secondary enrollment rates nationwide by 25%.\(^3\) And while in a poor economy, enrollments in community colleges typically go up, that wasn’t the case with COVID. Enrollments in community colleges instead fell 10%.\(^3\)

Rural and ethnic communities were especially hard hit by COVID. Community college enrollments for Black men fell 20%.\(^3\) And The National College Attainment Network reported that, “The number of rural students filling out the federal application for financial aid, a sign of whether they’re even considering going to college, plummeted more than 18%.”\(^4\)

LACK OF EXPOSURE TO CAREER OPTIONS AND THE DESIRE TO STAY

Enrollment isn’t the only challenge for rural communities. Students in rural areas are often not exposed to all but a few career options.

According to the National Career Development Association, “Some rural communities have little exposure to the breadth of jobs available in the region. On the other hand, some communities worry the students will see colleges as the only way to ‘get out,’ therefore not returning to the community after graduation in furthering population decline.”\(^5\)

These realities are especially true in Bamberg County, in rural South Carolina, home to Denmark Technical College (DTC). In Bamberg County, as students leave to find careers in more urban settings, the population is decreasing. And companies are shutting down and/or moving elsewhere.

When companies leave an area, it can devastate a community and its economy. The State, a South Carolina newspaper, reported that one employer’s relocation cost Bamberg 110 jobs. That’s a significant loss in a county of 14,275 people with a median household income of $31,422, where every job counts.\(^6\)
DTC RISES TO THE CHALLENGE TO PREPARE RURAL STUDENTS FOR THE FUTURE

Denmark Technical College opened its doors to students in 1948. Today, it provides affordable post-secondary education to students from diverse educational and socioeconomic backgrounds. It’s also one of only eleven two-year Historically Black Colleges and Universities (HBCU) in the US.

In 2019, DTC was slated for closure. The State wrote, “Hanging in the balance is not just the state’s only historically black technical college, but also a primary economic engine in a particularly vulnerable part of the state.”

Soon after Dr. Willie L. Todd, Jr., president and CEO, and Dr. A. Clifton Myles, executive VP for administration, innovation and CSO, joined DTC. They brought a vision for a bright future where Denmark Tech, its students, and its community would thrive. Their mission: To change the way the college prepares students for the future.

To accomplish their mission, they needed a different approach. They needed to intentionally connect students to a broader range of career opportunities and the educational paths to get there.

My journey with YouScience started eight years ago. What I learned was that it was a phenomenal opportunity for us to get students faster to what they wanted to do in this world.

The fundamental approach that I have is to ensure that I connect the dots for the students so they can be transformational in this world. And that is paramount.

—Dr. A. Clifton Myles
HOW YOUSCIENCE ED TECH WORKS

Students take YouScience Discovery, an aptitude assessment that uses a series of brain games to uncover how students think, learn, and function in a group or individual setting. It also shows students a comprehensive list of best-fit careers and detailed information about those careers and why and how they're a fit. Because the careers students see are based on their aptitudes and in-demand careers in the real-world, students often find career paths they never considered or knew existed.

Students also see the education path — whether college or certifications — to prepare for those careers.

When a student's YouScience Discovery results point them to a career path where certifications are required or offer a competitive advantage, educators can use Precision Exams by YouScience, to certify students.

Precision Exams by YouScience offers industry-recognized certifications and exam standards within the 16 National Career Clusters and 21st Century Skills. Standards can be used to guide teacher curriculums. Exams can be used as stackable, end-of-course, or end-of-program evaluation outcomes. And reports let teachers evaluate growth, promote program improvement, and review data needed to meet Perkins, state, and federal requirements.
Having used YouScience in the past, Dr. Myles set out to incorporate it into an approach that DTC could use. To get there, he enlisted Leslie Holman-Brooks as program director for DTC’s Department of Career and Student Success. Holman-Brooks spent a year developing an intentional, strategic implementation plan for Denmark Tech known as the Panther Pathway. The guided program personalizes the student experience and empowers incoming freshmen to develop educational plans that help them meet their career goals.

The pathway starts as soon as a student’s application is submitted by having them take the YouScience Discovery aptitude assessment.

Holman-Brooks said, “As you enter college, one thing you do know is that it’s costly. So, if we can put measures in place that will potentially cut down on changing majors and extending graduation dates, that is great.”

That’s important because roughly 80% of college students change majors at least once. By taking YouScience Discovery and developing their Panther Pathways, students can:

- Pick their first courses
- Explore career options and majors
- Outline their education path, which may include industry-recognized certifications, if applicable, through Precision Exams by YouScience
- Prepare for specific jobs

Students work with advisors in their introductory course to review Discovery results and create a portfolio to use throughout their college experience.

Faculty and staff are able to work closely with the student to map out a course not just during college, but after. This long-term path is called the perpetual pathway.

We wanted to make sure that the students had a program major that solidified their skill set.

We didn’t want students to be moving from program major to program major. We knew that in hindsight, it would impact them financially.

—Leslie Holman-Brooks
Dr. Myles’ vision for the students at Denmark Tech was to “create a way to remove the barriers” that so many students faced. He wanted to help students discover their strengths and find their callings in life. “The goal was to create an approach that would facilitate a process to eradicate those barriers and help them realize their true sense of being and what they could accomplish in this world,” Dr. Myles commented.

Dr. Myles first used YouScience working in a high school in Decatur, Georgia. “When I implemented YouScience, I recognized that we had something that was so different from what we had been doing with aptitude tests and IQ and career assessments. We were now having real data conversations with students and giving them tools that would help them transfer the knowledge about themselves to the career they wanted to make.

“Not only did we give them that gateway to success, but we also helped them to really understand it’s not about just taking the assessment, it’s about the crosswalk.”
THE VALUE OF CERTIFICATIONS AND COLLEGE

A study by the Thomas B. Fordham Institute on career and technical education (CTE) courses and how they impact student outcomes found that “Students with greater exposure to CTE are more likely to graduate from high school, enroll in a two-year college, be employed, and earn higher wages.” The same study found that the graduation rate for students focusing in CTE courses was 13% higher than the national average.

And the outcome isn’t just true for high school students, it applies to students throughout their education. CTE courses help answer the question of “Why am I learning this?” They equip students with skills that can be used in real-world applications. When students have the option to earn an industry-recognized certification that can land them a job, their motivation to learn increases.

Offering certifications based on industry standards and requirements helps Dr. Myles and DTC give students a competitive advantage. Dr. Myles likes offering his students both an aptitude assessment to help identify careers and the certifications to get jobs that use them.

“As a two-year institution, YouScience is such an easy fit for us. When we picked up the certification piece, to know we could have every student on campus in every program be assessed as to whether or not they’re connected to industry standards, not only improves the opportunity for the student, but it improves the opportunity for our faculty to ensure that our students are mastering the skills that are necessary for them to be efficient.”

BRINGING COMPANIES — AND HOPE — BACK TO DENMARK

DTC’s work has the potential to bring companies back to Bamberg County. As Panther Pathways and YouScience deliver career paths and skilled prospective employees, YouScience Employer Connections makes it easy for companies to connect with future employees.

Using the YouScience Employer Connections portal, companies can appear in the YouScience Opportunities section of Discovery. Companies can share the skills they need from students who are prospective employees; post jobs, internships, or apprenticeships; and create a company profile to make it easy for students to get to know the company.

Students then use YouScience Opportunities to research prospective employers and find careers based on their aptitudes, education, and certifications.

We’re really working more intentionally to partner with industry so that they can see we’re going to have the graduates here. What we need is an opportunity to get industry here.

—Dr. Willie L. Todd, Jr.
HELPING STUDENTS AND THE LOCAL COMMUNITY

YouScience helps Denmark Technical College get students fully engaged in their educations and uncover opportunities. Learning who they are, what their potential is, how their brains work, and what careers they're capable of according to their innate abilities, inspires Denmark students to work harder and stay in in town, which benefits both students and the community.

And “Helping to connect students to what their fundamental purpose is in this world,” is the sole purpose of education for Dr. Myles. Students look at their YouScience data and can make informed decisions about what career paths to pursue. They come to know themselves in ways that can change the trajectory of their futures and even break the cycle of poverty.

RESOURCES
3 The Hechinger Report, Number of rural students planning on going to college plummets, Dec. 18, 2020, https://hechingerreport.org/number-of-rural-students-planning-on-going-to-college-plummets/
7 The Oracle, 80 percent of students change their mind, Mar. 4, 2021, www.hamlineoracle.com/8575/variety/80-percent-of-students-change-their-mind/