



TEACHERS' AID Dr. Faith Freeman works with Asheboro City Schools teacher Brianna King.

SOCIAL INNOVATION

A Catalyst for Positive Change in NC

Imagine a place where scholars are encouraged to teach, research, and publish – and translate that work into practical solutions that can scale up quickly and effectively.

While many universities reward faculty members who pursue patents, license agreements, and industry collaborations, it's less common to find an institution that also invests in social innovation and entrepreneurship.

"Social innovation is the intentional development of creative solutions to society's problems to create positive change," explains UNCG's Chief Innovation Officer Dr. David Wyrick. "It refers to the development and implementation of new ideas, products, or services that can be applied across the non-profit, public, and private sectors. Social entrepreneurship is similar, but there is an additional focus on applying entrepreneurial principles and generating revenue to achieve sustainability and scalability."

UNCG is building a deliberate culture of both social innovation and social entrepreneurship – and North Carolina communities are reaping the benefits.

It starts with the desire to solve an acute community problem. The need for trauma training among counselors and teachers. To address COVID-19 learning losses in K-12. To effectively recruit and retain teachers, who are currently leaving education in droves.

It's facilitated by UNCG's critical partnerships in our communities. Community leaders communicate needs and work with UNCG researchers to design and refine solutions in real-time.

It's possible because UNCG encourages its faculty to engage in creative thinking and collaboration across disciplines, most recently by bringing them together through idea incubators. Thanks to this expanding collaborative infrastructure, UNCG is advancing knowledge and making tangible, meaningful impact beyond campus borders.

Faculty Flex for USEFUL SOLUTIONS

For most faculty members, publishing their research in peer-reviewed journals is their bread and butter. But the next step, bringing that scholarship out of the laboratory or laptop, can be a bit of a conundrum. They likely will encounter unexpected hurdles as they venture beyond their field into the broader space of trying to make a societal impact.

As Dean's Fellow of Innovation in the School of Education, Dr. Scott Young has an entrepreneurial spirit that helps carve a path for UNCG scholars to apply their research to real world challenges. His guiding tenet: A solution is not useful if no one is interested in it.

He launched the School of Education's Impact through Innovation initiative, or ITI, a space for researchers to figure out what to do with their ideas for improving our world. The program offers tailored consulting to faculty as they re-imagine their research and optimize it for a broader social impact.

"In the beginning, you don't know whether or not an idea is a good idea," Young explains. "You start as an expert and ask why we have not been able to solve a particular challenge. Our participants come to ITI and start talking about it early as they're building their work and their research. ITI helps them connect with other experts, find resources, and hone ideas. And their thinking evolves. ITI provides the space and the environment for idea incubation."

Researchers in the Education's ITI are tackling myriad initiatives such as encouraging healthy habits through library programming and a mentoring program designed to help middle school girls overcome the societal stereotype that they don't belong in STEM.

"The research is already there," Young says. "We want to encourage our faculty and students to think about using their research to create tangible solutions for the people who will use it. Our innovation toolkit is designed to guide them through that thought process. The solution won't work if those it's intended for aren't interested in it."

ITI's model for academic to real world development has encouraged many School of Education faculty to flex new muscles with their work, exciting them and their community partners. Perhaps one of the most exciting outcomes: the creativity and ingenuity coming out of the initiative is contagious.



"ONE ITI INITIATIVE is the distribution of Spartan Innovation Toolkits, which encourage students to innovate and ideate on real-world problems they encounter and propose solutions," says Dr. Young. "From the School of Ed perspective, we think today's workers are increasingly asked to solve problems, so we want our students to have mechanisms to think about how to solve complicated problems."



TRAINED TO TAKE ON TRAUMA

Trauma-based care is a topic that has become ubiquitous within the mental health community in response to the many stressors people endure today – the pandemic, isolation, fear, poverty, health problems, crime, accidents, and abuse.

Counselors, psychologists, therapists, and other professionals struggle to help the vast numbers of traumatized people in their care.

“Traditionally within the mental health field, trauma was thought of as an area of specialization,” explains Dr. Rebecca Mathews, a clinical assistant professor of counseling. “But we have found that all of us need to know how to provide trauma-informed care. It should be a universal protocol.”

In response, UNCG’s Department of Counseling and Educational Development developed the Trauma-Informed Professional Practice certificate training program, or TIPP.

Designed for mental health professionals, counselors, school counselors, and psychologists, the virtual program launched in 2022 is interactive and module-based, using videos, readings, and discussions.

“It’s helping the helpers,” says Anita Faulkner, who directs the UNCG NC Academy for Stress, Trauma, and Resilience through which TIPP is offered. “It will help them operate in a trauma-informed manner.”

In response to community requests, Faulkner and Mathews have also expanded TIPP to include an educator-focused program.

“School districts reach out constantly to us for in-person training,” Faulkner says. “There is such a need, especially in rural schools who don’t have consistent access to mental health providers. This program helps educators and school systems by providing some understanding of trauma. We’re not asking educators to be mental health clinicians, but we are giving them the training to notice what’s going on in their classrooms and tools to effectively communicate with their students and the parents.”

In addition to eight core trauma modules, the new program has eight additional modules specifically for educators, Faulkner says. “We built it based on our research and conversations with K-12 educators from across the country who shared samples of the situations they encounter in their schools.”

Specific and timely, the program trains participants to recognize what trauma looks like in the classroom and apply trauma-informed principles to issues including school safety, classroom strategy, resilience, and educator wellness.



EXPERTISE ON DEMAND Dr. Christian Chan, seen above teaching a graduate class on group counseling theory, is one of the experts professionals learn from in the virtual program.



UNCG’s NC Academy for Stress, Trauma, and Resilience launched in 2021. In two years, NCA-STAR has offered trainings, outreach, and consultation impacting 1,200 teachers and school personnel, 15,000 K-12 students, and 500 community professionals.

Addressing teacher shortages

A collaboration between IPIe and Guilford County Schools is also addressing our pipeline of quality math and science teachers.

“We were facing severe shortages of math teachers, especially after COVID, when we saw a lot of teachers leaving the profession,” says Dr. Alison Coker, Guilford County Schools deputy chief human resources officer. What started off as a collaboration with IPIe for a math residency program designed to recruit, develop and hopefully

Erasing COVID Learning Losses



HELPING HANDS UNCG grad students Grace Finn (left) and Chidinma Ezugwu (right) tutor at Jackson Middle School, with Guilford County Schools tutoring coordinator John Brown.

Schools nationwide opened their doors to students following months of learning loss due to the COVID-19 pandemic. To address those losses, UNCG and Guilford County Schools have partnered to create The Tutoring Collaborative, bringing graduate students from across campus into K-12 as tutors. A \$2 million grant supports the program, offering graduate students stipends for 20 hours of tutoring a week.

"It's a crucial intervention, and we're honored to have the district's trust," says Dr. Holt Wilson, co-director of UNCG's Institute for Partnerships in Education, or IPiE, which secured the funding. Established in 2020, the institute facilitates long-term, community-based partnerships that bring solutions for pressing needs in schools.

The Tutoring Collaborative has proven to be agile and responsive to the needs of specific schools, and it has garnered national attention. The Biden Administration named Guilford County as one of 15 school systems nationwide using funds from the American Rescue Plan to their best advantage.

"We started with three graduate students. Now we have between 34 and 40 graduate student tutors each term," says program coordinator Megan Martin. "Over the past three years, we narrowed focus to best meet the needs of the district. We found the highest need

focuses on grades 6 through 12 in math and science."

The program uses high dosage tutoring, meaning students meet with their tutor for at least 30 minutes to an hour, depending on their age, at least three times a week. Research shows this tutoring model is most effective at raising student grades, IPiE co-director Dr. Faith Freeman says. Guilford high school students have seen major gains in math in the aftermath.

Successes don't stop at test scores.

"The Tutoring Collaborative was designed to address learning loss from COVID, but students also lost human connection, social engagement, and experience building relationships during that time," Martin says. "A lot of times we look to test scores to tell whether this program is successful, but Guilford County Schools and our program are also measuring success through attendance rates. Kids are showing up to school more because they have a tutor there who cares for them three days a week."

The Tutoring Collaborative is now scaling up and adapting its model to include hybrid in-person and online tutoring, with the goal of expanding to rural counties.

retain skilled math teachers is now the Math and Science Teachers of Tomorrow, or MST2.

MST2 builds on UNCG's strong teacher education expertise by targeting a growing group of people with content knowledge in math and science, who want to learn to teach.

"The future of teacher education is changing, and we're likely to see a lot of folks entering the profession with a bachelor's degree in something other than teaching and a passion and interest in working for kids," says Dr. Nicholas Kochmanski in teacher

education and higher education. "They have the content expertise but don't have the background in how to support kids' learning."

Guilford County Schools pays for these new instructors to pursue a master's of teaching at UNCG, where they also receive coaching on meeting statewide requirements to continue teaching in North Carolina. In return, participants commit to one year teaching in Guilford County Schools for each semester they spend in the MST2 program.

Tailored Teacher Development

UNCG is also working with school districts to develop micro courses for K-12 educators that can even lead to graduate course credit. The work, led by IPiE, started with Asheboro.

"Asheboro City Schools is committed to improving the teacher experience and re-professionalizing education and teaching," says Wilson. "They're funding the micro courses and putting their teachers at the frontier of what we know about good teaching and learning. It's an awesome effort to elevate teachers and their work."

The process began with a survey of faculty in the district to understand what development opportunities were most needed and wanted. The resulting micro courses each involve five in-person sessions.

"It's a way for us to support the school districts while also giving the educators credit towards an advanced degree," says Freeman, who also serves as a micro course instructor for Asheboro. "This is consistent professional development where they can build on their learning."

IPiE has since expanded these offerings to Orange, Randolph, and Guilford County school systems. Courses are tailored according to each district's needs and choices.



GRAD CREDIT Wilson (left) and Freeman conduct a micro course session with Asheboro City Schools teachers Belinda Cox (second left) and Brianna King.

A **NEED** for Library Media Coordinators

The success of MST2 attracted the interest of Charlotte-Mecklenburg Schools after they identified a need for media centers staffed by qualified media specialists. At the time the problem was identified, 40 percent of the district's schools were without a dedicated library or media specialist.

They've tapped UNCG's online master's in library and information science program to train a cohort of 10 teachers.

"We could not have done this program without IPiE," says Dr. April Dawkins in the information, library and research sciences department. "When Charlotte-Mecklenburg approached us with the idea for the cohort, the institute helped us figure out the logistics for funding the cohorts' course tuition."

Following the MST2 model, Charlotte-Mecklenburg funds

tuition costs for each cohort member. In exchange, the teachers earn their MLIS degrees and pledge to stay with the school system for a minimum of two years.

For the teachers in the cohort, their courses apply to their positions in real time.

"Our partnership with UNCG is an essential element of our efforts to recruit and retain highly effective school library media coordinators," says Kimberly Ray, director of Digital Learning & Library Services for Charlotte-Mecklenburg Schools.

"After only one semester following the launch of this collaboration, already the positive impact has been felt by several thousand students who now have access to a school librarian enrolled in a high-quality library program."

EXPANDING ITI ACROSS CAMPUS

When Wyrick heard about the School of Education's successes, he saw their model's potential to benefit the university as a whole. Wyrick's Innovate UNCG team focuses on helping faculty translate their research and scholarship to spur impact.

"When I learned about what Scott and other groups in education were doing, I realized that every school or college on our campus should have an Impact through Innovation hub," Wyrick says. "In the hubs, faculty with ideas for impact will connect with other innovative faculty in their disciplines. And then those hubs will connect together through Innovate UNCG, bringing innovative faculty across campus together to explore proven strategies for taking ideas to scale, particularly in the context of social innovation and social entrepreneurship."

These ITI spin-off efforts are already underway, beginning within the School of Health and Human Sciences, or HHS. There, Dr. Jeff Milroy, associate professor and graduate program director in the Department of Public Health Education, has been named the inaugural faculty fellow for the HHS Impact Through Innovation Hub.

HHS is a promising location for the next ITI hub: it's a vibrant academic unit where faculty are actively engaged in research relevant for local individuals, families, and community well-being, says Dr. Esther Leerkes, associate dean for research in HHS and Jefferson-Pilot Excellent Professor in Human Development and Family Studies.

The school has been a top producer of contracts and grants on campus for many consecutive years, adds Dean Carl Mattacola. "This hub allows us to harness the exciting energy of research to create more shared products and ideas that directly benefit patients and consumers."

As Milroy steps into his new role, he is meeting with HHS faculty and mining their conversations to determine ways he can help them reach their goals and overcome hurdles related to translating their science for societal benefit.

"What are the really cool things that are going on already, and where are our faculty encountering barriers? Is it funding, translation, or the true community-engaged piece of it? Where does Innovate UNCG fit into their goals?" said Milroy.

Rather than starting from scratch, Milroy is collaborating with Young to replicate what has worked well in the School of Education.

For example, Young might have a roadmap to help a faculty member start a nonprofit that Milroy can share with HHS faculty who have a similar goal.

"Every faculty member is going to be at their own pace," Milroy says, reflecting on what he has learned from Young. "They're going to have their own needs and challenges. Sit and listen. Ask good questions, but listening is going to help you meet their needs."

Milroy is also working closely with Wyrick to connect HHS faculty to services within Innovate UNCG that could be useful for them: a collaboration that Leerkes said is especially helpful.

"The hub, and strengthening our relationships with experts in Innovate UNCG, will facilitate faculty efforts to apply their knowledge," she says.

These impactful hubs don't come together by happenstance. Rather, dedicated UNCG faculty and staff members' knowledge of nonprofits, engagement with the community, and desire to foster cross-disciplinary connections are making innovation a reality.

These leaders continue to evolve their offerings to foster social innovation at UNCG. This year, Innovate UNCG launched their Impact Through Innovation Community of Practice platform – a virtual space designed to connect impact-minded students and faculty with one another, curate knowledge, manage events, and provide training opportunities.

This platform is intended to be a one-stop shop for faculty and students to engage with one another and learn about innovation across campus, including engaging in entrepreneurial training and receiving badges for skills they master. Down the road, Wyrick envisions the platform as a virtual space to connect the ITI hubs across campus, jumpstart societal impact, and break down disciplinary barriers.

"What we want to do is drive research and innovation that's multidisciplinary," Wyrick says. "We'll have these hubs that are within a school, but then we'll use this virtual community to bring people together and come up with new grant proposals, business plans, and nonprofit ideas."

*by Alice Touchette, with contributions by Rachel Damiani
learn more at innovate.uncg.edu & soe.uncg.edu/rdi/iti & ipie.uncg.edu*

HHS RESEARCH IN ACTION The Moving On! program guides college athletes through the difficult transition from the highly structured environment of collegiate athletics to independent adult living, by introducing them to nutritional guidelines, alternative physical activities, and goal-setting for well-being. The program – launched by kinesiology's Dr. Erin Reifsteck and her collaborators – has been implemented at over a dozen NCAA institutions, while an online module also impacts thousands of additional student-athletes.

