

Report to the Chancellor 2020-2021

Overview

During the 2020-2021 academic year, the NC State College of Education was intently focused on exploring new ways to advance educational equity so all learners have the opportunity to thrive. This strategic alignment resulted in another banner year for our college. We received the most philanthropic gifts and commitments in our history, including our largest gift ever to support student scholarships and establish the Transformational Scholarships Program. We experienced a 2% increase in new student enrollment, and are positioned for a strong Fall 2021 when we anticipate welcoming one of our largest and most diverse incoming groups of students ever. And for only the second time (and for the second straight year), we ranked in the Top 40 in the *U.S. News & World Report's* rankings. Our faculty, staff, students, and alumni also continued to perform at a high level despite the challenges they faced with the ongoing COVID-19 pandemic and with racial injustices brought to the forefront. The initiatives we launched and advanced ensure that our college will continue to lead North Carolina in driving educational change and in transforming the practice of teaching, learning, and leading.

1. Enhance the success of our students through educational innovation

We expanded, modified, or introduced initiatives to deepen our collective impact and prepare educators, counselors, and leaders across the education spectrum who create equitable learning environments. At the graduate level, we waived GRE requirements for master's and doctoral program applicants to ensure they would not be burdened by in-person testing or home-testing arrangements, as well as any financial barriers related to COVID-19. This perhaps contributed to the 50% jump in the number of applications for our graduate programs from Spring 2020 to Spring 2021 (754 vs. 1,137); over the same time period, the number of Black applicants for graduate programs jumped 190% (122 v. 42). We also transformed our Master of Arts in Teaching program to 100% online delivery to expand access for prospective students in high-needs areas. As of Spring 2021, the MAT program serves about 200 students seeking initial teaching licensing in one of 10 content areas. In addition, our Ph.D. in Teacher

Education and Learning Sciences program area of study in educational equity welcomed its first cohort of students; and we established a new program area of study as part of the Ph.D. in Educational Leadership, Policy, and Human Development: Higher Education Opportunity, Equity, and Justice.

At the undergraduate level, we continued the expansion of our elementary teacher education program. Overall enrollment in the program increased by 31% (or 214 to 283 enrolled students). We also upgraded our workshop in Poe Hall 102 to incorporate 3D printing and cutting equipment and to more predominantly feature our MakerSpace, which reflects a complete revision of our technology, engineering, and design education program to prepare technology teachers who can teach at a higher grade level.

Across the college, enrollment continues to grow. We opened the academic year with a 2% increase in new student enrollment. We also welcomed 52 new students to the North Carolina Teaching Fellows at NC State program—the largest entering cohort in the state.

We are poised to prepare even more educators in the future. With a \$7.25 million charitable grant from the Anonymous Trust, we announced the launching of the Transformational Scholarships Program to prepare 100 teachers for counties in Eastern North Carolina with fewer resources but greater needs. One hundred undergraduate students from the area will receive \$10,000 per year over four years in scholarships, with the first cohort of 20 Transformational Scholars beginning in Fall 2022. This is the largest gift our college has received for student scholarships and among the largest of its kind ever awarded to any college of education in North Carolina to prepare teachers.

This new program will build off the success of our principal preparation program—which encompasses over a half-dozen leadership academies and cohorts, including the Northeast Leadership Academy (NELA), which prepares K-12 leaders to serve high-need schools in Northeastern North Carolina. Currently, 117 NELA graduates are serving as principals and assistant principals in the region. We'll expand our ability to prepare highly effective principals through a new six-year, \$4.5 million grant from the North Carolina Principal Fellows Program, a competitive grant program started in 2015.

Despite COVID, our students continued to receive life-shaping experiences. We successfully modified our field experiences and student teaching experiences so 504 teacher candidates could work with schools across 25 districts remotely, including increasing the use of Mursion, a virtual reality software that engages teacher-candidates in classroom simulations.

The quality of our students is reflected in their national honors. Danielle Moloney, a student in the Ph.D. in Teacher Education and Learning Sciences' elementary education in mathematics and science program area of study, was awarded an NSF Graduate Research Fellowship for "Positioned for Success—Teacher Learning of Positioning for Equity." Regina Ayala Chavez, a student in the Ph.D. in Learning and Teaching in STEM's science education program area of study, received a fellowship from the Climate Adaptation Science Center. And Talia Laing, a December 2020 Master of Arts in Teaching graduate, was named the N.C. Council for the Social Studies Student Teacher of the Year.

Our students go on to become many of the state's most effective educators. In the most recent employer survey from the N.C. Department of Public Instruction, employers rated NC State-prepared, first-year teachers as more effective in all areas than first-year teachers prepared at other institutions. We also had at least 14 alumni receive statewide and districtwide awards for their work in public schools, including Edgecombe County Public Schools Superintendent Valerie Bridges '02MSA, '10EDD, who was named the Central Carolina Regional Regional Superintendent of the Year.

Transformational Scholarships Program to Prepare 100 Teachers for Eastern N.C.

With a \$7.25 million charitable grant from the Anonymous Trust, the NC State College of Education will launch the Transformational Scholarships Program and provide 100 undergraduate students from Eastern North Carolina with four-year scholarships totaling \$40,000, study abroad stipends, and support for experiences related to mentoring, experiential learning, and leadership development. The college will start with a cohort of 20 students in 2022-2023 and add 20 more per year over the next four years to build a pipeline of highly effective teachers for one of the state's most economically distressed regions. "This new program will transform the lives of 100 students from Eastern North Carolina who may otherwise not be able to afford college. Through the preparation they will receive in our college, these aspiring teachers will go on to transform the lives of those children and youth they teach," said NC State College of Education Dean Mary Ann Danowitz.

2. Enhance scholarship and research by investing in faculty and infrastructure

We have built an infrastructure that encourages and supports our faculty to ground their research in real-life education with a focus on high-needs communities. As of July 1, we had been awarded over \$15.5 million in external grants to support 63 projects. In all, our faculty and researchers are engaged in

over 120 active research projects totalling over \$85.6 million. In addition, we have spent \$16,364,472 on research expenditures during the 2020-2021 academic year as of May 2021, placing us at the top among colleges of education in North Carolina and in the top 5% among colleges of education in the nation. Over the past five years, the college's total expenditures have increased 39%, which is the highest five-year increase across all colleges at NC State.

Examples of projects funded in the past year include a \$1.1 Million NSF CAREER grant to Assistant Professor K.C. Busch for "Redefining Scientific Literacy at the Community Level— Researching Science Learning Using a Social Network Approach"; a \$1.9 million NSF Discovery Research K-12 grant to Professor Sarah Carrier for "Supporting Elementary Teacher Learning for Effective School-Based Citizen Science"; a \$1.4 million grant from the U.S. Department of Education to Associate Professor Dennis Davis and Assistant Professor Jackie Relyea for "Supporting Reading Comprehension for English Learners Through Inquiry-Based, Language Focused Instruction"; a \$1.4 million NSF grant to Assistant Professors Erin Krupa and Robin Anderson for "Design and Pitch Challenges in STEM: Merging Entrepreneurship and Mathematics Learning"; and a \$1.3 million NSF grant to Associate Professor Cesar Delgado for "Virtual Reality to Improve Students' Understanding of the Extremes of Scale in STEM."

Our faculty members also continue to be recognized nationally with awards and honors. Professor Hollylynn Lee was named one of three finalists for Baylor University's Robert Foster Cherry Award for Great Teaching. Professor Joy Gaston Gayles was elected president of the Association for the Study of Higher Education. Assistant Teaching Professor Nolan Fahrer was given the designation of Emerging Leader Recognition from the International Technology and Engineering Education Association. Alumni Distinguished Graduate Professor Alyssa Rockenbach was selected as a member of the American College Personnel Association Foundation's 2021 Diamond Honoree Class. Professor Stanley Baker received the Chi Sigma Iota Counseling Academic and Professional Honor Society International's Thomas J. Sweeney Professional Leadership Award. Professor of the Practice Ken Ender received the American Association of Community Colleges' 2021 Leadership Award. And, for the second straight year, Associate Professor Anna Egalite made *Education Week's* list of Top 200 education scholars who had the biggest influence on educational practice and policy in the past year.

Professor Hollylynne S. Lee Finalist for Baylor's Robert Foster Cherry Award for Great Teaching

Hollylynne S. Lee, a professor of mathematics and statistics education in the NC State College of Education and senior faculty fellow at the Friday Institute for Educational Innovation, has been selected as one of three finalists for Baylor University's 2022 Robert Foster Cherry Award for Great Teaching, a biennial award that honors outstanding professors who have distinguished themselves as exceptional teachers. She is the first NC State faculty member to be named a finalist for this prestigious honor. "I always said that I became a mathematics teacher educator because I wanted to widen my impact on students' and teachers' educational experiences," said Lee, a widely recognized expert in the design and use of technology to support student learning of mathematics and statistics. Lee was also named a fellow of the American Statistical Association in August 2020 in recognition of excellence and advocacy in data science and statistics education and the professional development of teachers.

3. Enhance interdisciplinary scholarship to address the grand challenges of society

Our scholarship addresses North Carolina's most urgent educational problems, including those related to equity, literacy, STEM skills, and workforce development. Our faculty published 163 journal articles and five books over the past year, and were cited over 70 times in local and national media outlets. Notable publications include Professor Paola Sztajn's *Activating Math Talk: 11 Purposeful Techniques for Your Elementary Students*; Professor Carla C. Johnson's *STEM Road Map 2.0: A Framework for Integrated STEM Education in the Innovation Age*; and Associate Professor Anna Egalite's "What Great Principals Really Do," an article she co-authored published in *Educational Leadership*.

We also apply research to practice. Over the past year, our faculty held numerous workshops and professional development courses that address timely topics, including the following: Professor Gail Jones held a statewide workshop attended by over 150 teachers about their role as leaders in educating local communities about COVID-19 and the vaccines. Assistant Professors Paula McAvoy and Christy Byrd hosted Dinner with Democracy, a virtual event where 75 participants engaged in discussions about contemporary issues facing the U.S. And, as part of the Noyce Mathematics Education Teaching Scholars, Interim Associate Dean for Research and Innovation Karen Hollebrands and Assistant Professor Erin Krupa created and implemented a semester-long professional development workshop that addressed topics related to equity and enacting equitable teaching practices. Across the college we

provided over 100,000 educators and caregivers in all 100 counties in North Carolina with educational resources related to COVID-19. The Friday Institute alone had over 75,000 educators engage with them in professional learning, and the Belk Center supported all 58 community colleges in the state through webinars and other resources. In addition, the Friday Institute worked with the N.C. Department of Public Instruction and PBS North Carolina to reach over 5.3 million households with lessons for preK-5 students that aired on public television as part of the At-Home Learning Initiative.

Another educational problem we are fervently addressing is the need for more highly qualified educators, especially more teachers of color and more culturally responsive educators. Research conducted by Associate Professor Anna Egalite has found that students of color are more academically successful when matched with a same-race teacher. In addition, research on e-mentoring conducted by Associate Professor Cameron Denson helped shape our Leadership Institute for Future Teachers (LIFT), which we designed to encourage more students of color and bilingual students to become teachers to help diversify the education workforce. After a five-day virtual residential program in Summer 2020, 28 high school seniors received mentoring from 15 STEM teachers of color and bilingual teachers throughout their senior year of high school using an app Denson developed. After the program ended, nearly all LIFT participants indicated they planned to pursue a career in education. Five LIFT participants accepted admission into our college as early-action students.

Helping Solve K-5 Remote Learning Gaps through the At-Home Learning Initiative

In partnership with the N.C. Department of Public Instruction and PBS North Carolina, the Friday Institute for Educational Innovation helped solve remote learning gaps for K-5 students across North Carolina amid COVID-19, especially for students who lacked access to a stable internet connection, through the At-Home Learning Initiative. The Friday Institute facilitated the creation and implementation of 192 literacy and math lessons for preK-5 students, with 144 of those lessons for preK-3 students airing on PBS North Carolina and reaching over 5.3 million households across the state. “We were delighted to help design an innovative approach to meeting the needs of North Carolina students who do not have access to the internet,” said Hiller Spires, executive director of the Friday Institute and associate dean with the College of Education.

4. Enhance organizational excellence by creating a culture of constant improvement

To fulfill our land-grant mission to improve the educational outcomes of all, we have raised our standards of excellence and realigned priorities to address North Carolina's most pressing educational problems. One example is our work to become an anti-racist college and the establishment of a task force to advance diversity, equity, and inclusion. This task force, chaired by Professor and Senior Advisor for Advancing Diversity, Equity, and Inclusion Joy Gaston Gayles, was tasked with reviewing policies and practices across the college, collecting data on the college's culture and climate, and identifying ways we can make the college community a welcoming and supportive environment for all.

We also hosted a number of thought leaders on issues related to diversity, equity, and inclusion that drew over 4,000 faculty, staff, students, alumni, and professional educators throughout 2020-2021. Notably, National Academy of Education President Gloria Ladson-Billings headlined the Don C. Locke Symposium for Multicultural and Social Justice, delivering a lecture entitled "This is Us! Educating Post Covid/Post Civic Unrest America—Tragedy or Opportunity?" She also led two sessions with faculty and with graduate students to engage in more intimate conversations.

We have also intensified our development activities, with a particular focus on prioritizing equity initiatives and increasing our endowment to support students. By focusing on these priorities, we received over \$14 million in new gifts and commitments in FY2021—our highest amount since records have been kept. These gifts include the \$7.25 million charitable grant from the Anonymous Trust to establish the Transformational Scholarships Program and \$20,000 from an anonymous couple to establish the Darla Buchanan Scholarship, an equity-focused scholarship named in honor of a Black teacher who lost her position due to an unintended consequence of the Brown vs. Board of Education decision.

In addition, on NC State's 2021 Day of Giving, our college received 487 gifts to our Excellence Fund—the most gifts made to any fund at NC State that day. With these investments, we established the Dean's Excellence Scholarships, which will provide \$40,000 over four years to two incoming students and \$5,000 over four years to five incoming students. They will also receive a \$1,000 study abroad stipend and \$2,000 in professional development. In addition, we named 13 incoming students as Transformative Leaders who will receive a \$1,000 study abroad stipend, a \$1,200 paid internship, and \$3,000 in professional development. Further, thanks to our donors, the value of our endowments that benefit

students has risen by 67% in the past three years, from \$7.1 million in FY18 to \$11.89 million in FY21, enabling us to increase support for our students. In FY21, we awarded 217 scholarships.

As we have focused on advancing diversity, equity, and inclusion, we've grown our reputation as a top-ranked college of education. We tied at #37 among all colleges of education in the nation and #25 among public colleges of education in the *U.S. News*' rankings released in March 2021. This is the second straight year—and only the second time ever—we ranked in the Top 40. Also for the second straight year, we had multiple programs ranked nationally in education speciality categories: Educational Administration tied at #17; Elementary Teacher Education tied at #23; Educational Psychology tied at #28; and Curriculum and Instruction tied at #29. Among online graduate education programs, *U.S. News* ranked the online Educational/Instructional Media Design program #13 in the nation and the college #12 for veterans and #42 for online graduate education programs in the nation.

Task Force Identifying Ways to Build Equitable Environments within College of Education

Following the murder of George Floyd and as overt racial injustices came into broad public view, Dean Mary Ann Danowitz issued a call to action for the College of Education to become an anti-racist college. Shortly thereafter, she appointed Professor Joy Gaston Gayles as senior advisor for advancing diversity, equity, and inclusion and as chair of a task force charged with identifying strategies and steps to build a more diverse, inclusive, and supportive community—both within our college and in the field of education. The task force—composed of 17 faculty, staff, and students—identified five key areas to focus on initially related to undergraduate curriculum, graduate curriculum, professional development, cultural climate, and recruitment and retention. Over 100 faculty, staff, students, and alumni signed up to participate in working groups built around these five areas to identify strengths and weaknesses and offer recommendations. The task force also created a website that includes resources and showcases how members of the college community are doing work in those areas. “Becoming an anti-racist college of education represents a never-ending commitment to disrupt and dismantle systemic oppression so that all human beings are reflected and protected within schools and communities,” Gayles said.

5. Enhance local and global engagement through focused strategic partnerships

Because of our strategic partnerships and community engagement, our reach is expansive. With projects, partnerships, and field placements in 92 counties, and alumni in all 100 counties, our work

touches nearly every learner and community in North Carolina. Our strong partnerships with public school districts enable us to enhance the effectiveness of teachers and school administrators and improve the educational outcomes of students. In the past year, we started a customized, non-degree cohort program to prepare 22 teachers with Chapel Hill-Carrboro City Schools to support students with special educational needs. We also began two new Master of School Administration cohorts totalling 44 students from Cumberland County and Eastern North Carolina. And Wolfpack WORKS (Ways to Optimize Reading/Writing for Kids Statewide) completed its third year of operation. Led by Assistant Professor Jill Grifenhagen and Associate Teaching Professor Ann Harrington, this literacy initiative has used 10 evidence-based literacy practices to support about 460 beginning K-2 teachers and 11,000 K-2 students in 15 high-needs districts since 2018. Based on an independent study, during the program's first year (2018-19), which is the only year data is available, nearly three-fourths of teachers demonstrated gains in self-efficacy in literacy instruction and students' reading proficiency improved, most significantly among Black, Hispanic, and English language learner students in kindergarten and first grade.

We also have strong partnerships with community colleges and a growing number of partnerships with businesses to help meet workforce development needs. Our Artificial Intelligence (AI) Academy, for example, expanded its industry partnerships, bringing on six new internationally-recognized companies to equip employees with AI skills. Our Belk Center for Community College Leadership and Research also received two grants totaling \$4.3 million to help North Carolina's community improve student success. One grant, from The John M. Belk Endowment, will allow the Belk Center, in partnership with the North Carolina Student Success Center and Achieving the Dream, to develop Teaching and Learning Hubs at community colleges to establish a statewide professional learning program. The Belk Center also received a grant from the Ascendium Education Group to launch a three-year institutional capacity building project to help improve student outcomes and advance racial equity at community colleges.

AI Academy Partners with 6 International Businesses to Grow Artificial Intelligence Expertise

Six organizations that represent the entertainment, healthcare, technology, manufacturing, and defense sectors have partnered with the Artificial Intelligence Academy to train their employees to meet a growing demand for talent in AI: The Walt Disney Company, Dr. Reddy's Laboratories, Honeywell, Lexmark, Diveplane, and Northrop Grumman. Each company will have the opportunity to include up to 30

participants in the AI Academy in each of the upcoming five cohorts of students over the next three years. Funded by a \$6 million grant from the U.S. Department of Labor, the AI Academy is a four-course, 40-hour apprenticeship program begun in March 2020 with a 12-month planning period that will upskill 5,000 individuals to enter the AI pipeline. “Participation in the program is an excellent opportunity for us to increase our skills and certification in the field of AI while supporting our goals of creating a collaborative and inclusive data science community, increasing data literacy, and sharing cross-functional, value-generating ideas,” said Dan Seevers, director of data science and analytics for Lexmark.

Looking toward the Future

The 2021-2022 academic year will be one of anticipation and planning for the College of Education. We will build out our new Transformational Scholarships Program. We will receive, consider, refine, and implement recommendations from our task force for advancing diversity, equity, and inclusion. We will open the new academic year with what is expected to be one of our largest and most diverse incoming groups of students in our college’s history. And we will continue to engage in research, scholarship, and activities that aim to improve the educational outcomes of all learners.

The year ahead will also be one of transition as Mary Ann Danowitz plans to step aside as dean in October 2021 after leading the college through nearly six years of unprecedented growth. During her tenure, the college experienced five straight years of growth in new student enrollment, and set new records in research and in development. In back-to-back years, the college received its highest dollar amount in new grants awarded from external sources; and in FY2021, the college received the most gifts, in dollar amount, since records have been kept. Under her leadership, the college’s reputation also skyrocketed, with the college hitting new highs in the *U.S. News* rankings.

Once Dean Danowitz returns to the faculty in the Department of Educational Leadership, Policy, and Human Development, Paola Sztajn will become interim dean. She is the interim associate vice provost for academic personnel and policy. She was the College of Education’s associate dean for research and innovation for three years before returning in 2020 to the faculty in the Department of Teacher Education and Learning Sciences and becoming the special assistant for faculty research and development with the university’s Office of the Provost and Office of Research and Innovation.