

Growing Them Early

Recruiting and Preparing Future Urban Teachers
Through an Early College Collaboration
Between a College of Education
and an Urban School District

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Abstract

While Grow Your Own (GYO) programs have sought for decades to remedy teacher shortages across the United States, myriad factors, including the demographic shifts in public school populations, have in recent years exacerbated the need to recruit and retain teachers of color and of bilingual backgrounds. Amid models of precollegiate and university-based GYO programs, a unique early college program, the Charlotte Teacher Early College (CTEC), was developed in partnership between a large urban school district and an urban college of education to intentionally

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attract and support students historically marginalized from the profession. This article describes the innovative elements of the program, such as the curriculum, workshops, and mentorships, designed to build from previous GYO successes and to capitalize on assets offered by this particular community. Because CTEC is only in its second year of implementation, the authors present challenges and opportunities for growth and research both for this particular program and for the broader GYO teacher preparation movement.

Introduction

At various points during the past half-century, the field of education has faced teacher shortages. Multiple factors, contextual and systemic, have contributed to this persistent problem. However, recently, a confluence of these factors has magnified the situation. Nearly one-third of the teaching force is at or over the age of 50 years (Taie & Goldring, 2017). The impending retirement of the baby boomer generation will not only remove a significant number of teachers from the field but alter the mean level of experience of those who remain—an important fact when considering the valuable mentorship role these teachers have served in helping acclimate new teachers to the responsibilities of the profession. Compounding those leaving the field for retirement is the high rate of teachers exiting the profession annually for other reasons, such as disagreeable working conditions, lack of preparation, and low compensation. The teacher attrition rate in the United States, 8% among the entire workforce and 17% among new teachers (Gray & Taie, 2015), is nearly double that of high-achieving nations, such as Finland and Singapore (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). Public perception and the related low status of the profession likely also contribute to this attrition. Finally, as the number of teachers declines, we are faced with the rising enrollment of children in America's schools, including demographic shifts, which include decreasing percentages of White students and increasing representation of Hispanic and Asian students (National Center for Education Statistics, 2017). This expanding racial, cultural, and linguistic diversification of the student population stands in stark contrast to the teaching force, which remains composed predominantly of White, middle-class females (Taie & Goldring, 2017).

Consequently, the combination of these factors means there are fewer teachers to meet the growing demand in schools across the nation. Declining enrollments in teacher preparation programs mean that the situation is unlikely to improve in the immediate future (see Figure 1).

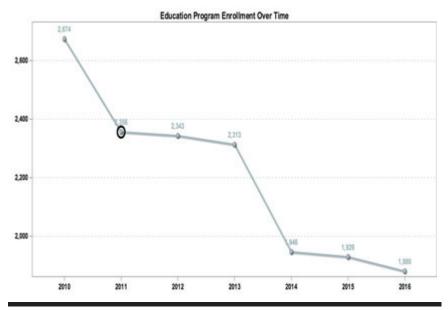
Vacancies in the field are likely to persist, particularly in certain content areas, such as math, science, special education, and English as a second language; in regions with lower tax bases and salaries; and in schools with high populations of students of color (Beeson & Strange, 2003; Darling-Hammond, 2010; Swanson, 2011). Thus colleges are searching for innovative ways to spur growth in these programs, and school districts are scrambling to find enough qualified teachers to fill

these hard-to-staff positions in Grades K–12. This mutual need has resulted in the opportunity to explore innovative and unique teacher preparation partnerships. In one form of partnership, school districts and colleges have begun to collaborate to develop programs that introduce secondary students to the profession of teaching.

The Grow Your Own (GYO) teacher preparation model dates back to the 1970s and grew out of community-organizing efforts to address educational inequity in public schools across the United States (Valenzuela, 2017). In efforts to bridge the cultural gap between low-income communities of color and the mostly White, middle-class teachers serving the students, community organizers collaborated with university faculty and stakeholders. By exploring the ways in which inequities perpetuate or are reproduced through institutions like public education, GYO seeks to prepare teachers to become change agents in the communities and schools in which they teach (Warren, 2011). GYO programs identify people with an interest in teaching and provide resources, course work, experience, and licensure options so that they can become teachers within their communities, in spaces with which they are familiar, and share a lived experience with those they will teach.

The GYO model described in this article is a precollegiate program that identifies potential teachers as eighth graders and cultivates their interest, engagement, and pedagogical and content knowledge in a high school setting located within the Cato College of Education. Addressing calls for diversification of the teacher force (i.e.,

Figure I
Enrollment data from the UNCC Cato College of Education teacher preparation programs from 2010 to 2016



Sleeter & Milner, 2011), Charlotte Teacher Early College (CTEC) seeks to alleviate teacher shortages in a large, urban school district with a curriculum and pedagogy that acknowledges the academic, social, and personal benefits for students of color when taught by teachers from their own racial and ethnic groups (Dee, 2004; Eddy & Easton-Brooks, 2011; Gershenson, Hart, Lindsay, & Papageorge, 2017; Gist, 2018). In this article, we describe how the school was planned intentionally to encourage this career path to students of color often marginalized from the profession. This particular group of students will enter the profession and teach in the communities where they grew up, many of which are high-poverty neighborhoods.

CTEC developed out of a collaboration between Charlotte–Mecklenburg Schools, one of the largest urban school districts in the United States, and a teacher preparation program in the Cato College of Education at the University of North Carolina at Charlotte (UNCC), a large, public research 2 (R2) university with the Southern Association of Colleges and Schools (SAC) accreditation in the southeastern United States. We describe the related research on the GYO movement that has roots in communities in need of a diverse teaching force and provide background on the contextual factors present in Charlotte that contribute to this growing need for both teachers of color and those who are bilingual. Finally, we describe the specific programmatic elements that compose CTEC and discuss the potential for this GYO program to have an impact on the Charlotte region for years to come. The first CTEC cohort of students has just completed its first year, which means we have not yet had the opportunity to analyze data related to the program; however, in this article, we include plans for future research to determine the effectiveness of the CTEC model in meeting the very specific needs of the Charlotte–Mecklenburg School district (CMS).

Literature Review

In response to challenges and the need to strengthen the teaching force with well-prepared, effective educators, particularly those with diverse backgrounds, initiatives of "homegrown" teacher development surfaced across the nation. GYO programs attempt to capitalize on research that has suggested that graduates tend to remain local, often returning to their hometowns to teach (Hansen, 2009; Johnson, 1999; Swanson, 2011). Often tailored to meet the unique needs of a particular community and utilize existing resources, partnerships, and talent to attract and develop candidates for the field, the GYO movement includes two broad types of programs: specialized or adapted university programs seeking to provide pathways to teaching for paraprofessionals, community leaders, military veterans, and transitioning professionals and precollegiate programs aiming to support aspiring high school students' interest in and ability to obtain a degree in education. The following sections provide a review of the literature pertinent to these respective GYO initiatives, emphasizing the latter, with its relevance to the CTEC program described in this article. Of note, however, is the unique nature of CTEC's structure as an early col-

lege as well as its specific collaboration with local community leaders and school district. These programmatic elements are detailed following the literature review.

Community-Based Partnerships With Universities

Recognizing the inadequacies of current teacher preparation programs in meeting the needs of an increasingly diverse student body, leading educators and researchers in the field have called for the transformation of traditional university-based programs and innovative recruitment strategies to diversify the teaching force (Kretchmar & Zeichner, 2016; Milner & Howard, 2013; Valenzuela, 2017; Villegas & Irvine, 2010; Zeichner, 2016). Citing the extensive influence of out-of-school factors on student achievement, these advocates recommend a focus on improving teachers' understanding of students' home lives and cultures, which arguably is omitted in many of the emerging fast-track nonuniversity teaching programs (Kretchmar & Zeichner, 2016; Milner & Howard, 2013). In contrast to such popular programs aiming to attract "the best and the brightest," the equity-based GYO movement values the lived experiences and cultural capital of community members in urban, high-poverty areas, seeking to create pathways for those who can effectively connect with students in hard-to-staff schools. According to research conducted by Milner and Howard (2013), those students who are most dedicated to and invested in low-income schools and neighborhoods with higher percentages of people of color "are those who attend local state universities, have middle of the road GPA's, and are products of those same communities that they will serve" (p. 545). Such evidence prompts the need for alternative approaches to teacher education recruitment and programming, as with GYO initiatives.

Examples of such innovative, homegrown teacher education programs have emerged in urban centers across the country. In Chicago, a parent volunteer program and a teacher shortage prompted the unique partnership between a local community organization, the Logan Square Neighborhood Association, and the Bilingual Education Program at Chicago State University, leading to Project Nueva Generación and the placement of 120 GYO teachers in 88 local public schools (Skinner, 2010; Valenzuela, 2017). The community-based teacher education program, which began in 2000 and included financial support, mentorship, and academic counseling, was designed to remove previous barriers to obtaining college degrees for neighborhood residents and institutionalized to serve as the model for the statewide Grow Your Own Illinois (Madda, Skinner, & Schultz, 2012; Skinner, 2010; Valenzuela, 2017). Lamentably, the budget impasse beginning in 2015 has since hindered the continuation of the teacher education program in neighborhood schools, with the exception of one Chicago location.

In Sacramento, the Multilingual/Multicultural Preparation Center (M/M Center) fuses similar goals of social justice in diversifying the teaching force and making college education more accessible to nontraditional or first-generation students. Since

its inception in the 1970s, the program has actively recruited students of color and bilingual teachers in an attempt to increase multicultural representation in education (Valenzuela, 2017). In addition to preparing teachers to create "optimal learning environments for students marginalized by the system because of their primary language, race/ethnicity, social class, culture, gender, and ability," the program also helps them develop "informed and sophisticated advocacy skills to challenge and resist processes and systems designed to limit students' educational opportunities" (Wong et al., 2007, pp. 10–11). Researchers credit the M/M Center's practices of changing admission policies, offering mentoring and advising resources, maximizing theory—practice integration throughout course work and clinical experiences, and providing peer support through cohort structure among some of its effective methods for recruiting and retaining diverse teaching candidates (Wong et al., 2007).

While additional teacher preparation programs have made great strides in utilizing community-based approaches, these two equity-based GYO models are exemplary in their intentions to recruit candidates from the local community and create accessible pathways for nontraditional university students to pursue careers in education. Another set of GYO initiatives seeks to target students at an even younger age, focusing on developing interest in the profession during the high school years. These programs are explored in detail in the following section.

Precollegiate Pathways to Teaching

Scattered throughout the country are local programs aimed at reducing the teacher shortage by creating a pipeline as early as middle and high school into the profession. Varying greatly in structure and scope, some of these programs, such as the Teacher Cadet program in South Carolina, have existed for decades, growing from district-university partnerships to statewide initiatives, and have even been adopted by neighboring states in the region. From dual-credit courses and workshops to paid internships and financial aid for additional degrees, precollegiate GYO programs create awareness of teaching as a possible career choice and pave a direct path to obtaining certification in the field. In rural and suburban areas, precollegiate GYO programs provide incentives for students to remain in their hometowns, because some cannot match the salaries and benefits offered by larger metropolitan areas with higher tax bases (Swanson, 2011). For urban areas with constant vacancies at hard-to-staff schools, these GYO programs likewise present teaching as a viable career choice to those who might otherwise overlook the profession, and district partnerships offer opportunities leading to future employment in the local areas in which candidates were raised and educated themselves (Hunter-Boykin, 1992; Valenzuela, 2017).

Though lacking thorough and systematic examination of these programs, several studies have offered insight into the design, impact, and effectiveness of the precollegiate GYO movement. While inconsistent funding, leadership, and legislative support sometimes hinder the continuation of certain programs, published research

has offered a glimpse into the common threads of successful GYO initiatives. Beginning in 1988, the Teaching Professions Program at Coolidge High School in Washington, D.C., was designed to introduce African American students as early as ninth grade to topics, skills, and issues related to the teaching profession and incorporates both a mentoring program and a semester-long practicum experience to provide high school students with an up-close look at the realities of life in the field (Hunter-Boykin, 1992).

Similarly, the Socratic Institute teacher training magnet program at Riverside High School in El Paso, Texas, aims to fuel early motivations of Latinx students to teach, using a smaller school-within-a-school structure to nurture students' development by highly qualified staff from both the district and the local university (Oliva & Staudt, 2003). Courses offered in the initial years of various GYO programs help deepen knowledge about the profession and the work entailed, and often curricular frameworks employing critical pedagogy, critical race theory, and service opportunities engage students in becoming active agents of change in their communities through education (Bianco, Leech, & Mitchell, 2011; Oliva & Staudt, 2003). In western New York, Puerto Rican teachers experienced daylong workshops and seminars delving into important issues in education as well as paid internships and hands-on experiences in classrooms through a GYO have proven to be highly influential in strengthening students' motivation to pursue careers in teaching (Quiñones, 2016).

Recognizing the numerous educational inequities experienced by students of color throughout their academic careers, some precollegiate GYO programs aim to repair the "leaky pipeline" by supporting youth throughout the transition from high school into higher education. Partnerships with local universities play an integral part in exposing students to college and university life during the early years of high school through both course work and on-campus experiences (Bianco et al., 2011; Oliva & Staudt, 2003). In the Pathways2Teaching program, for example, courses are co-taught by school staff and university professors from the University of Colorado, Denver, and students can earn college credit with their completion (Bianco et al., 2011; Valenzuela, 2017). Graduate teacher candidates as well as university faculty serve as mentors for high schoolers interested in the profession, offering insight and support throughout their journey into education (Bianco et al., 2011). The access to such knowledgeable professionals, who evoke high expectations for participants and can help with the college search process, writing applications and résumés, and applying for financial aid, is an integral component for successfully transitioning students into higher education (Quiñones, 2016).

Repeatedly present in the literature of GYO programs is evidence of the close interaction between students and staff that supports learning, referred to as "personal contact and guidance" (Hunter-Boykin, 1992, p. 491), "relationships of care and significance" (Oliva & Staudt, 2003, p. 277), and "culturally responsive practices that included frequent communication, home visits, and bridging school and community through sponsored family sharing evenings" (Bianco et al., 2011,

p. 371). As with collegiate GYO programs, nonexclusionary admission practices at the high school level combined with multiple layers of support attract youth, often of diverse backgrounds or lower-income families, into paths for certification to teach (Bianco et al., 2011).

The state of South Carolina has a long history of involvement in GYO initiatives to address its teacher shortage, primarily in its need to place educators in its many rural areas. The Center for Educator Recruitment, Retention, and Advancement, housed at Winthrop University, encompasses a number of precollegiate, collegiate, and service programs aimed at strengthening the state's teaching workforce by attracting prospective candidates as early as middle school and offering support through their induction into the field. The Teacher Cadet program, which was piloted in the 1985–1986 school year, offers high school juniors and seniors a three-part curriculum, Experiencing Learning, Experiencing the Classroom, and Experiencing the Teaching Profession. The program includes a dual-credit course taught by a specialty certified instructor; field experiences; and standards and assessments for future educators that are aligned with the National Council for Accreditation of Teacher Education, the Association of Teacher Educators, the National Board for Professional Teaching Standards, and the Interstate Teacher Assessment and Support Consortium. However, because the admission standards in this program are rigorous, this program does not provide opportunity for underrepresented groups of students who may not have academic support prior to admission into the program. The Teacher Cadet program has been adopted by 38 states across the nation.

Impact of GYO Programs

Data have suggested that many of these GYO initiatives are succeeding in increasing the number of highly qualified teachers in the specific areas for which they are designed. Valenzuela (2017) reported that more than one-third of participants (39.4%) in the Teacher Cadet program in South Carolina ultimately pursued a career in education, and among those entering teacher preparation programs, a majority (74%) cited the program as a highly influential experience affecting their decision. Such pipeline programs are an integral component of efforts not only to recruit candidates to the field but also specifically to support students of color in pursuing a career in education in order to diversify the teaching force (Sleeter & Milner, 2011). Furthermore, surveys, interviews, and data collected from various other programs have suggested that the positive interactions and opportunities, particularly tutoring and mentoring younger elementary students, presented to high schoolers through the GYO initiatives are effective in sparking or sustaining their interest in teaching (Bianco et al., 2011; Oliva & Staudt, 2003).

Programs such as Pathways2Teaching, a precollegiate GYO program in Denver, Colorado, intentionally seeks and supports students of color to diversify the teaching force by race, ethnicity, culture, and gender, with participants much more

reflective of the demographics of students currently enrolled in America's schools (Bianco et al., 2011; Oliva & Staudt, 2003; Sleeter & Milner, 2011; Valenzuela, 2017). Engaging in school-based field experiences, developing college readiness skills, and examining historical and contemporary issues related to equity and social justice, 11- and 12-grade students explore teaching as a potential career choice. Although the Pathways2Teaching program is too new to determine any long-term outcomes, the theoretical framework includes the powerful elements of critical race theory, LatCrit theory, sociopolitical development, critical pedagogy, social justice pedagogy, and tribal critical race theory, all of which inform a clearer understanding of educational inequities (Bianco et al., 2011; Valenzuela, 2017). It would seem that graduates of this program would have multiple ways of and opportunities to develop a deeper understanding of how to meet the needs of a diverse student population.

As previously described, university-based GYO initiatives are also supplying additional teaching candidates of color, and increasingly graduates are assuming leadership positions so that administrators represent Hmong, Chicana, Mexican American, African American, and many other diverse groups constituting the student population today (Wong et al., 2007). Evaluation of placements of South Carolina's CREATE participants shows that the program sends twice as many teachers to higher poverty school districts than to lower poverty districts (Sutton et al., 2013).

Context: Charlotte

As mentioned earlier, the CTEC program was created in collaboration with UNCC primarily because of the specific context of the university to the largest urban school district in the state and the fact that it is consistently ranked as the Top 100 Best Education Schools by U.S. News and World Report. The Charlotte metropolitan region encompasses 16 counties bordering two states in the southeastern United States. Within the region is Mecklenburg County, home site for both UNCC, a large, public research university, and CMS, which is ranked as one of the largest (19th out of 100) districts in the nation (National Center for Education Statistics, 2015). This area has experienced a double-digit 5-year population growth rate of 12.44% (Charlotte Chamber, 2016a). Major economic initiatives include the high-growth sectors, such as finance, information technology, and biotechnology, and health sciences. This growth rate has fueled a large migration of young professionals into the Charlotte municipality (Charlotte Chamber, 2016b). While these high-growth areas have been the focus of regional economic development, they conversely have strained local governments' and school districts' ability to keep up with the required public services and education programs to support the increasing population.

Further increasing the strain on the public school system is the gentrification of historically African American neighborhoods (Clasen-Kelly, 2017). Investors have purchased a significant amount of land in the north and west corridors of the city, space that has remained affordable for those living on fixed incomes. As the neighbor-

hoods surrounding uptown Charlotte have become favored by well-off homebuyers and Millennials, real-estate speculators and developers are increasingly targeting neighborhoods that for decades have been home to African Americans, immigrants, and the poor (Clasen-Kelly, 2017). This massive gentrification effort of neighborhoods closest to the city center has created a paucity of affordable housing.

The lack of affordable housing and a per capita income of \$27,600 (Charlotte Regional Partnership, 2017) create significant challenges for children and families living in poverty. In recent analysis, Charlotte ranked 50th out of the 50 largest U.S. cities and 97th of the 100 largest U.S. cities for economic mobility (Chetty, Hendren, Kline, & Saez, 2014). Specifically, Charlotte's poor are among the least likely residents in America's cities to escape the cycle of poverty. Mecklenburg County faces similar problems in terms of economic mobility, ranking 194th of 200 urban centers in the United States (Chetty et al., 2014).

Given this context, the current city—county Economic Opportunity Task Force (EOTF), a group of local volunteers addressing the region's economic immobility of the urban poor, has focused its attention on creating pathways for youths living in high-needs areas to move into professional careers that not only offer individual economic benefits but map opportunity for peers and the larger community. Education plays a significant role in this process; yet, those students who are at the greatest risk often attend urban schools that have severe staffing issues in comparison to suburban schools, including (a) fewer teachers with advanced degrees; (b) higher teacher vacancies and more long-term substitutes; (c) more lateral-entry (not yet licensed) teachers; (d) disproportionately fewer years of teacher experience; and (e) not being taught by teachers of one's own racial, ethnic, or cultural background. Similar to most large school districts around the country, most teachers in Charlotte—Mecklenburg schools are White (66%) and female (80%), while their students are majority African American (39%) and male (51%; see Table 1).

These school-specific factors exacerbate the conditions that already place students at risk. Given that research has shown that teachers demonstrate the highest

Table I
CMS Individual Teacher Characteristics

Teacher characteristic	Number	Percentage of teaching population
Male	1,884	20
Female	7,612	80
American Indian	25	0
Asian	142	1
African American/Black	2,584	27
Latinx	219	2
Multiethnic	217	2
Hawaiian/Pacific Islander	4	0
White	6,305	66

school-specific impact on achievement, this practice could prove detrimental to the region's pre-K-12 students, whose demographics do not match those of their teachers (see Table 2).

Unfortunately for those living in poverty in this city, growth and gentrification will continue. Thus CMS has sought to relieve the stress on these urban schools and students by searching for solutions to prepare a teaching force equipped to better understand the specific experiences of the city's urban youth population. All of this serves to provide a rationale for the need for specific, strategic efforts to develop a strong, diverse teaching force highly qualified to enter unique school settings.

Charlotte Teacher Early College: Growing Our Own Teachers

In response to recommendations from the EOTF and the local school districts' workforce needs and priorities, CMS partnered with UNCC's College of Education to develop and implement CTEC on the campus of UNCC. Working from the EOTF's recommendations for improving college and career readiness, CTEC was developed to provide a pathway for high school students with an interest in teaching to participate in a curriculum introducing them to the foundations of education and pedagogy. Through this 5-year academic program, CTEC provides support for potential first-generation college students, while helping meet the growing need for teachers in the school district. While open to all students from the district, there is a defined focus on the inclusion of students deemed at risk or seeking acceleration in their studies and of those who represent diverse ethnic, linguistic, and socioeconomic backgrounds. Given the opportunity these students will have upon their graduation from high school and university to obtain employment within CMS, this schooling experience increases the chances of achieving significant upward economic mobility and becoming well equipped to return to their communities as highly qualified teachers.

Table 2 CMS Individual Student Characteristics						
Student characteristic	Number	Percentage of student population				

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Male	74,694	51			
Female	72,463	49			
American Indian	627	0			
Asian	9,295	6			
African American/Black	57,407	39			
Latinx	33,878	26			
Multiethnic	3,854	0			
Hawaiian/Pacific Islander	Not available				
White	42,096	29			

School Model

A review of the literature in the field of the GYO programs for teacher preparation did not reveal any early colleges specifically designed to prepare high school students with an interest in teaching. CTEC is the only early college in the country to focus specifically on a high school curriculum in teacher preparation, while simultaneously providing the opportunity to earn a teaching assistant certificate and college credits. Originally funded by the Bill and Melinda Gates Foundation, the Early College High School Initiative enables students to earn a high school diploma and an associate's degree or college credit concurrently by taking college courses that replace the general high school curriculum. Students enrolled in early colleges attend school on a college campus and integrate into the student body. The high school courses offered at early colleges typically have either the honors or Advanced Placement designation, which indicates that the course work and pedagogy are more rigorous than what a typical high school offers.

Early colleges historically limit admission to students with high grade point averages, and the application includes essays and interviews. As developers of CTEC, we declined these rigorous admissions requirements and opted to encourage any student with an interest in entering the field of education to apply. As encouraged by previous researchers (Bianco et al., 2011; Milner & Howard, 2013), the goal of this school was not to attract only the students who were labeled "the best and the brightest"; instead, we seek the students who are passionate about teaching and have an interest in pursuing this dream. In our school district, we desperately need to prepare teachers by valuing what they can bring to the classroom by way of lived experiences and cultural capital. This means that any student in the district with an interest in a future teaching career has the opportunity to submit an application. Students are selected through a lottery process, and there are currently no efforts made by the district to restrict enrollment based on grade point average and/or academic skills. While students can choose to enroll up to their junior year (Year 11), the intent is for many of the students to enter CTEC as incoming freshmen to enable them to engage with the curriculum and participate in the direct opportunities to work in schools and classrooms that begin early in the program.

CTEC features innovative programming designed to support student growth and fill in any gaps they may have from attending low-performing schools. Specially designed weekly seminars support student success by emphasizing group cohesiveness, community engagement, personal/professional responsibility, and academic success. Previous studies have highlighted such seminars and workshops as effective settings for helping students develop confidence and capacity in the field (Quiñones, 2016). CTEC's workshops introduce potential first-generation college students to concepts of social, professional, and personal responsibility. Additionally, because mentoring has proven a crucial element to GYO programs (Bianco et al., 2011; Quiñones, 2016), students in Grades 9 and 10 are assigned

a high school mentor from the 11th and 12th grades, and 11th and 12th graders are assigned mentors who are undergraduates majoring in education. Mentors are carefully paired with students based on similar backgrounds and interests to facilitate strong, positive relationships. Other sources of mentors for these CTEC students include master's and doctoral candidates enrolled in education programs at UNCC. These experienced teachers provide an excellent resource for mentoring CTEC students through the research process.

CTEC Programming

As mentioned earlier, one of the foundational elements of the GYO model is to combine the pedagogical knowledge of university faculty with the expertise of community organizations in a manner that prepares students to understand power structures in order to dismantle oppressive systems by advocating for the underserved student populations they will one day teach. Such a firmly established theoretical framework combined with practical application strengthens students—future teachers—in their capacity to work for social justice (Bianco et al., 2011; Sleeter & Milner, 2011; Valenzuela, 2017). With this in mind, we made certain that students would have numerous opportunities to engage with university faculty and students early and consistently throughout the academic course work. While the majority of classes completed during the freshman and sophomore years are traditional high school classes (mathematics, science, English, and history), CTEC students attend seminars, workshops, and research presentations that expand their understanding of the multiple layers of inequities embedded in public schooling. The College of Education at UNCC is one of a handful of institutions of higher education across the country that offers both a master's and a doctoral degree in urban education. Faculty in the college are celebrated for their research and teaching around urban education, which includes a focus on critical pedagogy, critical race theory, cultural studies, globalization, reform, multicultural literacy, and a host of other topics.

Students attending CTEC not only have access to these faculty throughout their academic program but also participate in summer internships supported by these faculty members. Students learn about the importance of a culturally diverse literacy program through interning with the city's Children's Defense Fund Freedom School network and gain valuable insight into the ways in which community organizations support the needs of urban students outside of school time by engaging in service—learning partnerships with after-school tutoring and recreation facilities like the Salvation Army Boys and Girls Club.

All classes in the primary content areas are designed as honors courses. While this increases the rigor of the course work, the advanced knowledge of the content is necessary to help candidates prepare for the state's General Curriculum tests, which are required for teaching licensure.

Beginning their sophomore year (Year 10) of high school, CTEC students

engage in the Teacher Cadet curriculum, which focuses on the foundations of teaching. This initial course includes 3 weeks of observation and assistance in actual elementary, middle, and high school classrooms (North Carolina Foundation for Public Schools, 2018). This course is followed by Teacher Cadet II, an experiential course that includes an internship at a local school for 3–4 days per week during the course class time, in addition to taking UCOL 1000, a university course designed to acclimate students to becoming a college student. Taught by an advisor from the College of Education, students gain general knowledge regarding university life; methods to maximize success in college, for example, study skills; and specific information regarding processes like registration. Students also enroll in a foreign language course taught by faculty in the Foreign Language department, which provides students the opportunity to choose from more than 10 languages, including Arabic, Chinese, German, and Spanish. In the second semester, students also complete their first course for general university credit; this liberal studies course focuses on arts and society with topics such as dance, film, music, theater, or visual arts.

By their third year, the junior class (11th grade) transitions to classes that satisfy general education requirements at the university and enroll in EDUC 1100, Introduction to Education and Diversity in Schools, which provides foundational educational concepts that enable the future educators to begin formulating their own philosophies within the broader context of education. EDUC 1100 facilitates students' understanding of the major issues, social trends, and influences in American education and introduces topics that include multiculturalism, critical pedagogy, culturally responsive pedagogy, and characteristics of the social and cultural contexts of education, including race, socioeconomic class, gender, sexuality, ability, ethnicity, and linguistic diversity.

Skinner and Schultz (2011) contended that GYO programs can foster antioppressive educational models by having preservice teachers view the possibilities of schooling through a lens of critical pedagogy. EDUC 1100, Introduction to Education, introduces preeducation majors to the potential of critical pedagogy and the critique of schooling practices based on social class, equity, and marginalization. Students gain a cursory understanding of how critical pedagogy is "grounded in the day-to-day lives of people, structures, and cultures and pays attention to the educational perspectives and politics that serve the interest of the dominant class and silence or dehumanize students according to race, class, ethnicity, sexual identity, and gender" (Skinner and Schultz, 2011, p. 10). Through the content and course work within EDUC 1100, students learn to problem-pose and engage in an inquiry project, which challenges them to think critically about diversity and the needs of K-12 students with special learning needs. CTEC students continue to participate in urban-school clinical placements focused on developing relationships with K-12 students who represent the wide array of experiences in CMS. These clinical observation visits also serve to recruit more students into CTEC.

In the second semester of their junior year, CTEC students take SPED 2100, Introduction to Students With Special Needs, which assists future teachers in understand-

ing the nature of disabilities and special gifts, their impact on learning and other life outcomes, and appropriate educational programming. Since an increasing number of learners with special needs are served in the general education classroom, all teachers have a responsibility to provide effective educational programming for all students.

Year 12 focuses on the completion of requirements for a high school diploma, while participating in more university course work. By this time, students enroll in an equal amount of high school and university courses and may elect to receive their high school diplomas at the end of the academic year.

Students who remain for Year 13 enroll exclusively in university course work, including First Year Writing, a social science course, and a general studies course on global and intercultural connections. Those who demonstrate an interest in teaching in elementary school complete a specific course focused on developing content knowledge in math. These students retain any college credits successfully completed and can potentially transfer these to another university should they elect to continue in their postsecondary education at another institution.

Notably, although students complete the general academic requirements, there is a greater emphasis on courses that are directly applicable to becoming a teacher. For example, one course is directed toward helping students develop their skills and competencies related to critical thinking and communication. In Year 13, CTEC students complete courses within a concentration of their choice, from among several that represent "high-needs" fields, including science, technology, engineering, and math (STEM) as well as youth and community engagement. The content and information learned with the course work are synthesized within a teaching internship completed in CMS. This immersive experience involves students in directly assisting a teacher in an urban classroom 4–6 hours per week for 12 weeks each semester.

In addition to their course work, students participate in service and cultural events, which include visiting local history museums, education conferences, and summer internship opportunities with education-focused camps hosted by the university and area organizations. By being exposed to cultural events and immersion experiences, CTEC students develop a greater understanding of the opportunities and resources that exist in the community to enrich the lives of their future students. Together, these experiences, CTEC's curriculum framework, and planned seminars and mentorship help our developing educators link their own identity to their teaching, an important dimension of their preparation for the profession (Sleeter & Milner, 2011).

CTEC Students: Year I

CTEC opened in fall 2017, with 49 ninth graders, and will expand to its maximum capacity of 500 students in Grades 9–13 within 8 years. The first academic class of CTEC included 34 females and 15 males, and students were representative of the greater CMS, at 49% African American, 26.5% Latinx, and 6% White (see Figure 2). Of the 49 ninth graders, approximately 40% are categorized as economically dis-

advantaged, and none are currently living in transition or are homeless. Furthermore, only four students are labeled academically or intellectually gifted, which in North Carolina means they may perform at substantially high levels of accomplishment when compared with others of their age, experience, or environment.

Tracking the Impact of CTEC

Adopting a long-term perspective, CTEC provides many potential advantages to attending students and their families based on a wealth of research about higher education outcomes:

College graduates make more money over their lifetimes.

Reading and language development of children improves dramatically with well-educated parents.

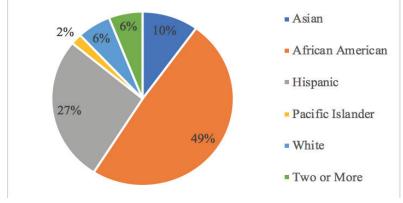
Higher educated parents are more likely to provide enrichment opportunities and experiences for their children.

Children of college graduates are more likely to graduate high school.

Children of college graduates are more likely to graduate college.

Perhaps more important than any of these listed benefits of the CTEC program is the opportunity to grow our own teachers for the greater Charlotte area. By envisioning this group of high school students as assets to the university community, instructors in the teacher preparation programs can utilize their funds of knowledge to develop curriculum for preservice teachers who plan to teach in urban schools. Furthermore, the College of Education can gain beneficial understanding of how to recruit students of color and English language learners attending lower performing middle schools

Figure 2
CTEC student demographics in Year 1 (2017–2018)



into the field of teaching. By providing the necessary supports to ensure the successful matriculation of each of these students, CTEC has the potential to move up to 50 teachers into the CMS each year upon graduation from the university program.

Multiple research studies (Irvine, 2003; Nieto, 1999; Siddle-Walker, 2000; Sleeter & Milner, 2011) have explored the importance of students of color having access to teachers of color to impact their success in schools. Similarly, research has demonstrated the potential success of GYO teacher education programs. However, Sleeter and Milner (2011) called for situated internal self-studies, where those who are close to the program, like project directors, school/university liaisons, and even a team of stakeholders, are engaged in the work of critiquing the program for longterm improvement on a large scale. Additionally, Sleeter and Milner (2011) suggested that contextualized external evaluations need to be conducted to learn more about where graduates from these programs are placed and how they navigate the terrain of the urban school. Are they more successful as a result of their curriculum and experiences, or do they continue to perpetuate a cycle of limiting education in a top-down structure? Eventually, we hope to attend to these types of studies as more students apply to CTEC and complete the program. Future longitudinal data collection and analysis will provide the opportunity to evaluate the success of CTEC and the teachers who blossom from this program.

As we move into the second year of CTEC, we plan to explore the following questions to provide more insight into the effectiveness of the programming:

What programmatic elements in Years 9 and 10 introduce CTEC students to the foundations of critical pedagogy in meaningful ways? How are these elements of critical pedagogy supported with experiences?

In what ways have CTEC students' perceptions of the profession of teaching been challenged by the programming of Teacher Cadet I and II and other experiences?

What are the assets these students identify as the strengths they will bring to the public school classroom? How might these experiences create a bridge into how their preparation and prior life experiences help them in their profession, particularly if they return to schools with high concentrations of poverty and students of color?

We also plan to conduct longitudinal studies to explore the ways in which the CTEC students engage in the field of education once they graduate from college and complete the teacher licensure process. Learning more about whether these students eventually return to their communities to teach and the level of success they experience within their first few years of teaching will have major implications for other urban school districts facing similar teacher shortages and lack of diversity among teachers.

Conclusion

According to our own College of Education models, school districts across North Carolina will soon be faced with the challenging predicament of filling teacher positions as veteran teachers retire and enrollment rates in teacher preparation programs continue to decline. Couple this phenomenon with the growing ethnic and linguistic diversity in our own public schools, and very soon, there will be a prevalence of underqualified teachers working with student populations with whom they have little in common. GYO teacher preparation programs, if developed thoughtfully and with intention, have the potential to recruit and effectively prepare middle and high school students to be successful teachers who will understand and appreciate the context-specific needs of their future students.

This unique program will directly impact future generations of youths and their families by (a) creating a teaching career pathway to college for students living in high-poverty areas and attending low-performing schools; (b) ensuring a college degree in a teacher education program in "high-needs" fields, such as STEM and special education; and (3) providing a cadre of teachers who appreciate the diversity of experience from which their students come and believe in the ability of all students to be successful in urban classrooms and beyond. The major goals for CTEC are to bring both competence and teacher stability to high-risk, urban schools by placing highly prepared teachers into classrooms. Such a commitment will provide a degree of teacher stability and access to people who share a cultural, socioeconomic, and/or linguistic background with their urban students, especially those from underrepresented groups, including first-generation college students. It might be a small-scale endeavor, but if done well, CTEC has the potential to produce long-term results for CMS.

Note

¹ See https://www.teachercadets.com/

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