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Closing the Skills Gap: The Importance of Educating a Diverse Workforce

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How can cities better reach immigrant communities to provide education and training opportunities?

What can schools do to prepare migrants and minorities for high-skill manufacturing jobs?

Are there German initiatives that could be implemented in the U.S.?

Workforce development should be a priority for every community in the United States. With the labor market currently at full or nearly full employment and hiring unable to keep pace with the highest level of job openings since July 2016,¹ labor market conditions are tightening. The widely-discussed skills mismatch continues to grow, especially in certain industries.

Anticipated demographic changes in the United States suggest that many communities—and their workforces—will be increasingly minority-based, with Hispanic population growth outpacing other minority groups. Young minorities across the country will be seeking employment in a variety of fields, including in technical fields that require solid knowledge in science, technology, engineering, and math (STEM). AICGS' project on integrating young minorities into the workforce has focused on the evaluation of education and training systems that exist in the United States, especially regarding the challenges of expanding education and training opportunities to a minority-based workforce. Drawing on comparisons with programs in Germany, AICGS brought a group of workforce, migration, and education experts from the United States and Germany to the Charlotte, North Carolina, region to evaluate the situation on the ground. The project also looked at workforce development examples in the Washington, DC, area, which is home to large international and minority communities.

Over the past twenty years, Charlotte has undergone sweeping demographic change, not unlike many major cities in the United States. Not only has the population boomed (from 315,000 in 1980 to 809,000 in 2014), but the previously nonexistent demographics (Hispanic and Asian) have grown and now comprise over 19 percent of the population. The City of Charlotte has embraced its identity as a city of immigrants, joining Welcoming America's "Welcoming Cities and Counties" program and reaching out to the international business community through its economic development committee.

Charlotte's public sector is not the only group committed to this work, and collaboration within and between sectors was a central theme of our site visits. The city government, educational entities, businesses, and nonprofits frequently work together to better understand the needs and capabilities of immigrants and the wider community. Either officially or through informal channels, Charlotteans have met success in endeavors through collaboration.

Still, Charlotte has a great deal to overcome. In the fall of 2016, the city erupted in protests after the fatal police shooting of Keith Lamont Scott, an African American man. Recent Immigration and Customs Enforcement (ICE) raids in Charlotte have led to unease in much of the city's immigrant community. Both instances have only added to tensions existing between residents and law enforcement. The charged political climate and increased amount of misinformation surrounding issues such as immigration and refugee resettlement have made perceptions of Charlotte's immigrant community different from the reality, and these differences are difficult to surmount.

Nevertheless, despite the immigration issue being new to Charlotte, officials and professionals have worked to integrate new Charlotteans into the workforce and community in an innovative and proactive way. Challenges, such as the 2016 protests, have become learning opportunities to plan and communicate rather than just react to complaints. Charlotte is home to a booming economy that has a need for workers across the occupational spectrum. One-third of small businesses in the Charlotte metro area are immigrant-owned, and 16 percent of all businesses are owned by immigrants. All sectors, in workplaces immigrant-owned or not, are in need of a skilled and educated workforce. Charlotte has been working to ensure that its residents, no matter their backgrounds, have the resources to become part of this workforce.

Many different agencies and institutions, often in collaboration with each other, play a part in developing the workforce and in integrating different communities into the workforce and society. This Issue Brief highlights a sample of initiatives, by no means an exhaustive list, that are in place in certain regions of the United States. We hope to demonstrate that tremendous efforts exist, some of which can serve as models to emulate.

Public Partnerships: Welcoming Cities

Welcoming Cities and Counties, an initiative from Welcoming America,² seeks to use partnerships to create more welcoming communities where immigrants can better integrate with the community. The Welcoming America network spans the United States and includes both nonprofits and city governments whose goal is to create a network of cities who intentionally work to make their communities safe, prosperous, and inclusive. Charlotte became a member of the Welcoming Cities network in 2013.

The City of Charlotte established the Immigrant Integration Task Force in tandem with joining the Welcoming Cities network. The twenty-nine-member task force, wanting to bridge the disconnect between the City and the immigrant community, embarked on the process of listening to Charlotte immigrants. Their listening sessions and surveys yielded 2,000 responses, from which the task force compiled twenty-seven recommendations.³

Economic growth was a central guiding principle for the task force, and six of the twenty-seven recommendations are related exclusively to supporting immigrant entrepreneurship and economic

development. This included government grants for economic development in neighborhoods with large immigrant populations, holding workshops with information on how to start and run a business, and connecting underserved populations with municipal resources and professional networks. Adult education was a very small component of the task force's recommendations, despite only 46 percent of respondents (of the 70.3 percent who are employed) saying that their job is in line with their training and education.

Since the task force published its recommendations, city officials have moved into a new phase of implementation.⁴ They organized the recommended strategies into three categories: city-led efforts, which align with current programs; city-led intensive efforts, which require broader discussions related to formal actions or policy decisions; and partner-oriented efforts, which require collaboration with outside organizations. The team evaluated current programs and leveraged partnerships in order to follow through with recommendations and create a more welcoming city and more prosperous residents. What's more, they made sure that their methods were included in their publications so that other cities in the Welcoming Cities network would have a replicable and scalable model with which to evaluate their own community's needs.

The task force report was not just a way for the city to reach out to the immigrant community and inform them of programs that already existed; it was also an opportunity to inform Charlotte's citizens about the diverse communities in their city. It promotes public awareness of the availability of existing programs and services facilitating immigrant integration and seeks opportunities to better educate the Charlotte community on how embracing immigrant communities will help move the city forward.⁵ It found that promoting cultural inclusivity across neighborhoods through businesses, houses of worship, parks, schools, and other resources encourages cross-cultural interaction between newcomers and longtime residents.

While Charlotteans have an overall positive view of the task force and its mandate to create a more welcoming city, these efforts do not come without challenges. Immigration law, settlement patterns, populations, and needs are always in flux, and government actors lack a fluid way to react to changes. Politics, perceptions, and misinformation complicate an already charged environment, swaying public opinion or dissuading minorities from interacting with government. However, by including representatives from local businesses, schools, healthcare, and others in the task force, the communities had a vested interest in the success of the group. Interest became real investment, ensuring that the welcoming city mandate is encouraged across Charlotte.

Initiatives in the Education System

THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM: CENTRAL PIEDMONT COMMUNITY COLLEGE

Throughout the United States, public schools and community colleges work with businesses, local and state governments, and

communities to prepare students for their entry into work and career. The North Carolina Community College System was created in the early 1960s with the purpose of advancing economic development in the region in close cooperation with local businesses. It has emerged as one of the largest community college systems in the country.

Founded in 1965, Central Piedmont Community College (CPCC) in Charlotte is one of the state's fifty-three community colleges. The school has six campuses and currently serves 70,000 students. Twenty percent of its students are in the College and Career Readiness Program, which offers a variety of programs to prepare a diverse community of learners for their working careers.⁶ Among those seeking to enhance their employability are young adults whose native language is not English and who require literacy support.

CPCC offers training and education in seven industries with a large presence in the region. Among them are finance and healthcare, two industries that are well-represented in Charlotte. With Charlotte as an inland port, logistics and transportation and advanced manufacturing have seen tremendous growth in the area, as have hospitality and tourism, with CLT a major air hub.⁷ All of these industries require qualified workers to fill a burgeoning job market.

One approach to educating the workforce is CPCC's philosophy of building talent pipelines. Apprenticeship programs, which combine academic learning with hands-on training and result in certification and high skill levels for graduating apprentices, are an essential element of CPCC's mission. The school participates in national apprenticeship initiatives, such as National Apprenticeship Week, established by President Obama to help increase the number of apprenticeships in the country in an effort fill the skills gap, and Apprenticeship 2000, an employer consortium that begins with high school students. A four-year program that guarantees a job at the end, it is a rigid format that emulates the German vocational education and training (VET) system and is primarily used by German companies located in Charlotte.

School leaders also meet regularly with businesses to determine their specific workforce needs. The school then creates unique programs tailored to the companies' needs, both locally and internationally.

Two examples:

— CPCC and Cummins Inc., a global manufacturer, distributor, and service provider of diesel and natural gas engines and related technologies, have partnered to train students in the company's Technician Apprentice Program (TAP). Fifteen Cummins apprentices take classes at CPCC in five-week blocks over the course of a four-year program. While spending two of the four years at CPCC, the apprentices learn how to build and maintain Cummins diesel engines. They also earn an Associate's degree in Diesel and Heavy Equipment Technology and become certified in engine

and/or power generation. The apprentices are full-time Cummins employees and on the path to well-paying jobs and potential for career advancement within the company. The program is registered with NCWorks Apprenticeship and certified by the U.S. Department of Commerce.⁸

— In 2011, the German company Siemens USA, together with CPCC, developed a mechatronics apprenticeship program to operate a new gas turbine factory in Charlotte. Initial job applicants lacked the skills in math, reading, and applied technology to fill the jobs at the plant. By introducing the German apprenticeship model to the U.S., Siemens has been able to train its Charlotte workforce successfully. The three-and-a-half-year program pays its students while they are working and going to school part-time. The company has demonstrated a commitment to a systematic approach of developing the workforce and, at the same time, filling the skills gap in STEM professions in the United States. It has taken the approach to other regions in the country, with programs in Alabama, Atlanta, and Sacramento. Siemens believes that the investment it makes in building a manufacturing talent pipeline benefits the long-term success of the company and the country.⁹

As these examples show, CPCC has been at the forefront of promoting apprenticeships in the region. In 2012, CPCC launched Apprenticeship Charlotte, an effort to advocate for apprenticeship programs in the Charlotte area with companies who have not traditionally taken apprentices. The three-year program is more flexible and customizable to a company's needs than Apprenticeship 2000, and it considers other populations, such as high school students, veterans, and the under and unemployed.

Today, Advanced Manufacturing is the main industry that offers apprenticeships in the United States. A staff exchange within Advanced Technology has been in place with the Chamber of Industry and Commerce in Karlsruhe, Germany, and reinforces the value of and emphasis on apprenticeship programs. CPCC's Advanced Manufacturing unit has labs where students receive hands-on training on machinery used by CPCC's manufacturing partners. CPCC's Mechatronics Engineering Technology programs are business-driven and aim to fill the need for skilled labor in advanced manufacturing. Each program graduate is guaranteed employment.¹⁰ In addition, efforts are underway at CPCC to expand apprenticeship offerings to other industries, like Information Technology and Insurance. Overall, CPCC has graduated 150 apprentices who are employed at companies such as Ameritech, Blum, Chiron, Daetwyler, Pfaff, and Siemens.¹¹

The student body in these high-tech programs does not yet mirror the city's or county's diverse population. CPCC is working to correct this by partnering with local high schools and offering dual enrollment programs that provide training and career opportunities to Mecklenburg County's high school students. It is especially relevant today, with one in four children in schools in Charlotte, a designated refugee city, speaking a language other than English.

Indeed, Charlotte has become a new immigrant destination in the

twenty-first century: The U.S. Census Bureau estimates that starting in 2013, 14 percent of its population will be foreign-born.¹² CPCC, in recognition of this increasing diversity, has created programs that meet the needs of new immigrants and English language learners. One example is the federally-funded “Working in America” program, which provides English language instruction and occupational training. The career-infused sixteen-week program provides soft-skill training for immigrant adults, English for the work environment, digital literacy training, internships or job shadowing, and an eight-week training segment in a variety of occupations, like plumbing, hospitality, or culinary. Classes are small and each student is mentored by both the teacher and the program coordinator during the duration of the program. Several of the students we spoke to during our visit expressed the desire to become entrepreneurs and open their own businesses, combining their unique talents with their home countries’ traditions and cultures. Others, who had careers in their home countries, are trying to determine what their options are in a new system and a new language.¹³ However, not many students go from ESL Working in America to STEM courses. Most of the Working in America students were drawn to service industries such as hospitality and childcare because there is demand for workers—especially bilingual ones. CPCC is working to link these programs and getting Working in America students interested in STEM fields and apprenticeship programs.

The key to CPCC’s success creating career opportunity for the county’s workforce is its commitment to serving the demand of local businesses and providing customized training, its outreach efforts to the different communities, and its recognition of and appreciation for an increasingly diverse population and student body.

THE ROLE OF PUBLIC SCHOOLS

Charlotte-Mecklenburg Schools (CMS), the area’s public school system, plays an important role in educating and integrating a diverse student population. It is designated a Welcoming School (an initiative connected to Welcoming America¹⁴) and enrollment of non-white students for 2016/2017 stands at about 70 percent (6.3% Asian, 23% Hispanic, 39% black).¹⁵

Beyond the regular academic curriculum, CMS provides Career and Technical Education (CTE) to its middle and high school students by engaging them in career-relevant learning. It gives students the opportunity to look beyond high school by combining traditional academic subjects with career and technical skills, by offering hands-on training in a variety of programs, and by offering internships and job shadowing. Its goal is to develop workplace competencies as well as college preparedness skills. CTE classes are offered in a variety of fields, including construction, welding, firefighting, nursing, cooking, mechanical engineering, and business and marketing. The goal is to provide the skills necessary for high-wage, high-skilled, and high-demand careers.¹⁶

In line with these goals, CMS participates in Apprenticeship 2000

and offers select students the opportunity to earn college credit while still in high school. A tuition-free opportunity is provided in cooperation with CPCC for students to receive a jump-start on a two- or four-year degree.¹⁷

Career and Technical Education programs are in place at public high schools across the country. The District of Columbia CTE programs are considered high-quality curricula that combine core academics with Career Academies that prepare Washington’s largely minority student body¹⁸ for the area’s high-wage, high-demand careers. The program includes industry-recognized certification exams and participation in work-based opportunities, like internships and job shadowing. Skill-based career offerings include Architecture and Design, Biomedical Sciences, Carpentry, Culinary Arts, Electro-mechanical Engineering, Entrepreneurship, Plumbing, Welding, and Finance.¹⁹

CARLOS ROSARIO INTERNATIONAL PUBLIC CHARTER SCHOOL: ADULT EDUCATION

A rather unique example of how schools help minorities enter the workforce is the Carlos Rosario International Public Charter School in Washington, DC. It is a nationally recognized accredited public charter school for immigrant adults that has served the needs of Washington’s immigrant community for over forty years. Its curriculum focuses on the holistic needs of immigrants, providing ESL instruction in combination with life and technology skills, health education, parenting skills, and workforce training. Carlos Rosario helps immigrants obtain high school diplomas and become U.S. citizens, and it offers them a career path that includes workforce certifications and college degrees. The school’s motto is “excellence in teaching” and learning is achieved in close partnership with the community. Classes include ESL, Computer Literacy, and Citizenship, and students can earn their GED in Spanish. In addition, career training courses are offered in three academies: Health, Culinary Arts, and Technology. All courses are geared toward English language learners.²⁰

The school serves 2,500 students that come from over ninety countries and speak forty-five languages. Carlos Rosario recognizes that immigrants face a variety of challenges that go beyond learning in the classroom and that need to be addressed for them to become self-sufficient and contributing members of their communities. The school employs a multi-lingual team that offers a variety of services in support of the students’ academic or training achievement goals. Those include personal counseling, job counseling and placement, life skills workshops, and job readiness, as well as college and vocational counseling or workshops. It even includes basics such as childcare and health referrals. It is this holistic approach that can make the integration of immigrants into society and the workforce so successful.²¹

Adult education and literacy programs are recognized as vital for the U.S. workforce. They exist across the country and many are federally funded. Designed for adults sixteen years and older, programs include adult basic education, adult secondary education,

and English as a second language. The goal is to prepare mostly, but not only, new Americans for the transition to postsecondary education and work. The U.S. Department of Education publishes information on adult programs in all fifty states and the District of Columbia.²²

Private Sector

Daimler Trucks North America, Distribution and Marking Services, Inc., and the Latin American Chamber of Commerce Charlotte are three private sector enterprises in North and South Carolina, each in a different industry with different needs for their workforce. The companies exhibited diverse hiring practices, some open to young migrants and others not. However, all three successfully used community outreach and collaboration to either recruit their workforce or provide resources to those who want to succeed in a chosen industry.

Daimler Trucks AG, based in Cleveland, NC, is home to a state-of-the-art training center and moves employees through a four-step qualification program: get trained, work alone, improve, and become leader or trainer. The training center hosts events for the community, including those that target local high schools to get students interested in manufacturing careers. Daimler also does on-site training; it does not have apprenticeships targeting a diverse labor force from which it later hires. However, due to the skill set needed of its employees, the volatile market that informs hiring practices, and the demographics (predominately white) and location (fifty miles from Charlotte) of Cleveland, Daimler Trucks AG is primarily a black and white workforce and does not actively prioritize diversity in its hiring practices. Logistically, migrants in the more densely populated Charlotte area are unlikely to drive to another county for work, and Daimler already has a local population ready to work for it. Daimler's demand for workers fluctuates with demand for trucks, and it lays off newer workers when demand is low. When demand for trucks increases, Daimler frequently re-hires those same people, requiring very little re-training before going back to the assembly floor. In the end, Daimler's first concern is experience that can increase productivity, and this can usually be found within the Cleveland community.

Distribution and Marking Services, Inc. (DMSI) is a third-party logistics company that manages hiring for Ross Dress for Less distribution warehouses in Fort Mill, SC, and Rock Hill, SC. Work in the distribution center is low-wage, low-skill, and requires one day of on the job training. Workers can be hired quickly once they submit all required documentation. Ten years ago, DMSI partnered with HIAS, a refugee advocacy organization, and Catholic Charities in the Charlotte area, knowing that resettled refugees needed jobs quickly and to maintain employment to receive benefits. DMSI and Ross needed reliable, hardworking employees. Ross first hired refugees who could speak English, and those then trained other refugees in their own language and translated for the English-speaking staff. DMSI has maintained its partnership with these agencies who help refugees fill out required forms, submit appropriate documentation, and work out logistics such as how to get

transportation to and from work. Now, 80 percent of second shift workers at the Ross Fort Mill distribution center are of Bhutanese or Nepali descent. Of the three shifts at the distribution plant, the second is most popular for migrants because they have flexibility to attend language classes or community college during the day.

The **Latin American Chamber of Commerce Charlotte (LACCC)** began as a Latin American Business Council, part of the Charlotte Chamber of Commerce. After the 2000 census showed a huge growth in the Hispanic population, the LACCC became a separate chamber in 2001 and began connecting and engaging with the Latino and non-Latino business community in Charlotte. In 2014, LACCC had 450 members.

LACCC's first aim is to provide support for the Latin American business community in Charlotte, hosting classes and networking events for business owners. However, the Chamber understood that to set up members for success, it needed to connect with Charlotte as a whole. It began programming that would help Latino business owners not only succeed, but also acculturate and become part of the community. It also saw an opportunity to connect with other local businesses and help them connect to Latino consumers and draw employees from the Latino talent pool. It hosts events with the Black Chamber of Commerce, the LGBT Chamber of Commerce, the Asian-American Chamber of Commerce, and many others.

Each of these three enterprises use the networks they have available to meet their needs and goals. For Daimler, this means recruiting locally from an experienced talent pool and training at its facility. For DMSI, this means hiring diversely because it knows that the refugee populations can be hired and trained quickly while the refugees already employed there provide a support system and training for new employees. For LACCC, this means leveraging its network both among the Latino business community and in the larger Charlotte area to promote businesses, future Latino employees, and the buying power of Latino consumers.

Non-Governmental Organizations

Communities thrive and prosper when different groups and individuals work together. Just as it "takes a village" to raise a child, it takes the support of many organizations and entities to create a functioning workforce. One example is the Galilee Center in Charlotte, a refugee support center that operates on a collaborative model. It is a meeting place for the area's refugees and immigrants (as well as other residents) and offers a variety of classes that serve to ease the path of integration into society and the workforce. There are seven organizations that are part of the Galilee Center, giving clients access to a full range of services in one location: Loaves and Fishes, a food pantry; CPCC, which provides adult education; Catholic Charities; Refugee Support Services; Charlotte Community Kitchen; and Cross Cultural Counseling.

In 2016, 795 refugees arrived in Charlotte from countries including Syria, Myanmar, Bhutan, and Congo. Charlotte is also the destina-

tion for secondary migrants, who come from other areas of the U.S. where they were originally settled. Refugee Support Services (RSS) at the Galilee Center provides essential support to these new immigrants by connecting them with American families and individuals to begin their integration process in the United States. In addition to connecting refugees to members of the community and life in America, RSS provides self-sufficiency skills so that they can navigate through American society and receive the education needed to achieve gainful employment. RSS also educates Americans about what it means to be a refugee, as businesses and potential employers are often unaware that refugees are eligible to work.

Catholic Charities Refugee Resettlement assists refugees with social services, including medical, safety, and housing issues, and guides them through the bureaucratic process of obtaining a Social Security number and work authorization. An employment competency assessment helps determine what type of classes refugees might need to be hired for a job. Several area employers, including Embassy Suites, allow their employees to receive education classes at their place of work to minimize the burden of traveling to other locations throughout the day.²³

Faith-based organizations throughout the United States perform the vital task of welcoming new refugees and immigrants and introducing them to a bureaucratic legal system that seems complex to any newcomer. Life lessons and language instructions form important elements for new immigrants on their path to integrating into society and the workforce. With funding from the U.S. Department of Health & Human Services' Office of Refugee Resettlement (ORR),²⁴ private agencies and NGOs make up the other side of these public-private partnerships and are essential for the successful integration of immigrants into the workforce as they contribute a significant amount of their own resources to the effort. The goal of the refugee resettlement program is social and economic self-sufficiency. The majority of refugees in fact gain employment quickly and within five to ten years of their arrival achieve economic parity compared to the U.S.-born population.²⁵

Conclusion

Across the United States, numerous programs and initiatives are in place that support the education and training of the next generation of working adults outside of the four-year college system. Programs receive federal and local funding and, as we saw in North Carolina, substantial support from the business community. Closing the widely discussed "skills gap" that permeates technical professions in the United States presents a priority for schools, educators, industries, and federal and local governments alike. The goal of filling the skills gap in industries that require knowledge in the fields of Science, Technology, Engineering, and Math (STEM) is evident at middle and high schools across the nation. The U.S. Department of Education's Committee on STEM Education has done its part to advance the quality of STEM educators and education.²⁶

In addition to emphasizing STEM education, the examples showcased in this Issue Brief indicate that schools should actively

promote alternatives to a four-year college degree and emphasize job training or shadowing, dual college and high school enrollment, and in some instances apprenticeships. Since many inner city public high schools have a diverse student body, these programs will also help build diversity in the workforce.

Schools that serve the country's immigrants, like the Carlos Rosario Public Charter School, uniquely and exclusively focus their efforts on integrating this segment of the population into society and the workforce by providing relevant instruction and training in specific industries.

Despite a plethora of opportunities, programs, and initiatives, the skills gap in the United States persists. During our site visits and in many conversations with experts and practitioners throughout this project, we have learned that many are convinced that a college education is necessary to succeed in life, professionally and socially. The biggest hurdle to overcome appears to be the perception many parents and students have of an alternative to the four-year college degree, be it in form of an apprenticeship program or an Associate's degree from a community college. This is striking especially because job-specific training combined with a community college education yields a quality outcome at a fraction of the cost and, in many cases, results in an immediate job offer with a salary that most college graduates can only dream of.

Germany, where trades and craftsmanship are well regarded, does not have a similar perception problem. Many young adults pursue an apprenticeship program after high school first, knowing that they can always add a university degree later, either in the same field or in a different one. Many former apprentices work part-time in their learned professions while attending university, earning money to support themselves while pursuing a degree. During the 2016 fiscal year, Germany recorded 520,331 new training and apprenticeship contracts²⁷ and 505,900 new university students matriculated.²⁸ Many high school students are required to complete a four-week "Praktikum" in a profession before graduation in order to give students a brief exposure to working in a trade. And while more and more high school graduates in Germany decide to pursue a university degree, taking the Vocational Education and Training (VET) route remains an attractive option.

How can the perception in the United States be changed that an engineer or a graphic designer does not meet the right social and professional standards without having completed a four-year college degree? We believe that early exposure to alternatives is key:

— Graduates of apprenticeships and training programs as well as professionals from various fields with a community college education should be invited to speak to high school students and their parents about their experience and careers.

— Just as colleges and universities hold information sessions for juniors and seniors, companies and community colleges should do the same. This can happen in connection with the career academies

and CTE classes offered. It should happen consistently. A training fair should become as ubiquitous at high schools as a college fair.

— When U.S. companies shy away from the investment required for apprenticeship and training programs in cooperation with community colleges, the German side can offer advice. Companies like Siemens, Daimler, and Schaeffler AG,²⁹ which have plants and factories in the U.S., and offer apprenticeship programs in Germany and some in the U.S., can become part of a nationwide effort to inform other companies, especially in the manufacturing industry, about training and educating their workforce.

— Public high schools could incorporate two to four-week internships in a recognized profession into the curriculum to provide students with the opportunity to familiarize themselves with different career options. Professional internships could be combined with the community service hours required of most high school students in order to graduate. In Germany, student internships have been part of the education system for many years. Close cooperation with local companies is essential.

Exposure to opportunities is even more necessary among minority and immigrant populations. According to the U.S. Census Bureau, 70.8 percent of the STEM workforce is white, with only 6.4 percent black and 6.5 percent Hispanic or Latino, disproportionate to their makeup in the total workforce, which is 10.8 percent and 14.9 percent, respectively.³⁰ There are an estimated 300,000 manufacturing jobs open in the United States,³¹ and apprenticeships are an effective tool to recruit a diverse labor force for these positions.³²

For foreign-born populations, barriers to skilled manufacturing jobs are even higher than native-born minorities. Immigrants often first need language training, and tend to gravitate toward low-skill industries where they can immediately begin employment. In Charlotte, foreign-born populations tend to gravitate toward industries where their dual language skills, especially Spanish, are more leveragable, such as service and management. Even with increased availability of apprenticeship programs, accessibility to high-skill manufacturing professions for immigrants remains a challenge.

Former and current U.S. administrations have emphasized the need to fill the skills gap. Apprenticeship 2000 and other initiatives should be expanded and marketed more broadly. President Trump in his meeting with Chancellor Merkel in March 2017 was joined by company representatives from the U.S. and Germany and several young apprentices. This clearly shows that there is common ground and a common purpose to advance the alternative training options that exist to fill the skills gap and that offer a real opportunity for young people, with and without a migration background, to embark on a successful career path that will allow them to realize their potential and fulfill the American dream, which, after all, is very similar to the German one.

- ¹ News Release of the Bureau of Labor Statistics on 11 April 2017: Job Openings and Labor Turnover - February 2017, <https://www.bls.gov/news.release/pdf/jolts.pdf>
- ² For an introduction to how Welcoming Cities affect refugee and immigrant integration see Susan Downs-Karkos, "A Transatlantic Perspective: Welcoming Cities and the Policy and Practice of Refugee and Immigrant Integration," AICGS Issue Brief 54 (June 2016), <http://www.aicgs.org/site/wp-content/uploads/2016/07/IB-54-ERP-T-A-Dialogue.pdf>
- ³ The report of the Immigrant Integration Task Force was presented to the City Council of Charlotte in March 2015, <http://charlottenc.gov/international-relations/inltcommunity/Documents/ITF%20Report%20with%20Appendices.pdf>
- ⁴ The Charlotte Immigrant Integration Task Force presented its implementation plan on 25 January 2016, <http://charlottenc.gov/international-relations/inltcommunity/Documents/Immigrant%20Integration%20Implementation%20%201.25.16.pdf>
- ⁵ Details regarding Charlotte's efforts to becoming a welcoming community for its new arrivals are outlined by the international relations department, <http://charlottenc.gov/international-relations/inltcommunity/Pages/Welcoming-Partnership.aspx>
- ⁶ The College and Career Readiness Department has been part of CPCC for more than fifty years, <https://www.cpcc.edu/ccr/about>
- ⁷ Meeting with Richard Zollinger, Vice President for Learning and Workforce Development, CPCC, 7 March 2017.
- ⁸ CPCC news release regarding joint Cummins Inc./CPCC apprenticeship program of 4 March 2015: <http://www.cpcc.edu/news/cummins-cpcc-establish-apprenticeship-program?searchterm=Cummins>
- ⁹ "Siemens: An ApprenticeshipUSA Leader in STEM Fields," U.S. Department of Labor Blog, 19 May 2015, https://blog.dol.gov/2015/05/19/siemens-an-apprenticeshipusa-leader-in-stem-fields/?utm_source=rss&utm_medium=rss&utm_campaign=siemens-an-apprenticeshipusa-leader-in-stem-fields
- ¹⁰ Overview of CPCC's Mechatronics Engineering Technology curriculum for 2016/17, <http://www.cpcc.edu/et/academic-programs/mechatronics-engineering-technology-1>
- ¹¹ "The Work/Learn Collaborative, CPCC will host National Apprenticeship Week Breakfast," News release from 7 November 2016, <http://www.cpcc.edu/news/the-work-learn-collaborative-cpcc-will-host-national-apprenticeship-week-breakfast?searchterm=Cummins>
- ¹² "Immigrant Integration Task Force Report," Presented to Charlotte City Council, 23 March 2015, page 4, <http://charlottenc.gov/international-relations/inltcommunity/Documents/ITF%20Report%20with%20Appendices.pdf>
- ¹³ Observations and discussions during project participants' classroom visit at CPCC on 7 March 2017.
- ¹⁴ "Welcoming Schools" of Welcoming America 27 March 2013, <https://www.welcomingamerica.org/news/welcoming-schools>
- ¹⁵ Charlotte-Mecklenburg Schools Month 1, 2016-17 School Diversity Report, http://www.cms.k12.nc.us/cmsdepartments/StudentPlacement/PlanningServices/Documents/MR%20Month%2001bySchool_2016_Diversity-final.pdf
- ¹⁶ CMS Charlotte-Mecklenburg Schools Career and Technical Education Course Offerings, <http://www.cms.k12.nc.us/cmsdepartments/ci/cte/Pages/CourseOfferings.aspx>
- ¹⁷ "Career and College Promise," Charlotte-Mecklenburg Schools, <http://www.cms.k12.nc.us/cmsdepartments/ci/cte/Pages/CareerandCollegePromise.aspx>
- ¹⁸ In the 2015/2016 school year, 64 percent of students were black, 18 percent Hispanic, 4 percent other ethnicities, and 13 percent white. Eleven percent of all students were English language learners. See <https://dcps.dc.gov/page/dcps-glance-enrollment>
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The Southeast region of the United States has a strong manufacturing industry and a growing immigrant population. The region is also home to roughly 300 German companies that have brought their traditions of apprenticeship and training programs with them. Charlotte, North Carolina's largest city, has become an emerging immigrant gateway, with its foreign-born population having almost doubled between 2000 and 2010. In 2013, Charlotte became a "welcoming city" and it now has an Immigrant Integration Task Force. The city and region are at the forefront of education, training, and integrating its immigrant population.

This Issue Brief stems from site visits to the Charlotte region in March 2017. The visits brought together experts and practitioners from the United States and Germany to examine the challenges and opportunities of integrating migrants into the workforce and how these challenges and opportunities are handled in the public and private sectors. The site visits emphasized the work of local and regional actors in areas of major economic migration and industry. This project builds on the first year of AICGS' program on workforce education and an October 2016 conference in Washington, DC, "Integrating Migrants into the Workforce."



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Closing the Skills Gap: The Importance of Educating a Diverse Workforce

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