

Those Boots Need More Support: The Boot Camp Model Lacks What Many Students Need

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Abstract: This essay explores the boot camp model as a disruptor to higher education and its applicability to industries beyond technology. We examine the bootcamp model applied to the healthcare field. An estimated 30 million jobs paying at least \$55,000 annually without a bachelor's degree exist in the US—yet middle-skilled industries, including healthcare, have trouble finding enough trained workers. At the same time, educators and critics of higher education look for ways to streamline education, to reduce costs, and to create efficient pathways for students to acquire the skills needed to fill critical workforce vacancies. Career-Technical Education (CTE) has long offered accelerated programs aligned with industry needs. Further, a CTE model based on a genuine commitment to student outcomes offers valuable insights regarding how to effectively implement boot camp-type programs while providing the student services many of today's students need to achieve academic success.

Keywords: workforce development, career education, technical education, coding boot camp, technology boot camp, healthcare education, higher education disruptor

It is 8:30 on Tuesday morning, and “Natasha” is in a lab with a group of eight other students gathered around a hospital bed. The bed has an adult male mannequin in it; the students and instructor refer to him reverentially as “Mr. Smith.” Today, they are learning how to transfer a patient from his bed to his chair.

Natasha and her classmates are enrolled in a nursing assistant program at Clearwater Healthcare Education Center (CHEC) in Clearwater, Florida, an accredited, non-profit Career-Technical Education (CTE) provider that has offered specialized training in entry-level healthcare positions for 25 years. Most students complete the lab and classroom portions of this program within six weeks before completing a 45-hour externship, which gives them experience working in both long-term care and hospital settings. During the program, students are required to learn and perform the 20 skills they will need to pass their certified nursing assistant licensure exam after they graduate.

The class, mostly composed of women ranging in age from 18 to 35, is active, if not lively, while practicing new skills. Most students in the class possess one or more of the characteristics used to define nontraditional students, including being over 24, having a GED, being a single parent, having delayed college entry by at least one year after high school, and being a first-generation student (Cooper, 2008). As such, most of the women have jobs that they work after class ends at 12:30 pm, as well as family responsibilities.

For Natasha, like many of the students in her class, going to college after high school was not assumed. Natasha graduated from high school and went to work in a retail job for nearly four years. Academic success did not come easy for her. Even though she knew she needed to attain

additional training to start a career, she was reluctant to do so for several reasons, including a lack of success in her K-12 educational experience, financial concerns, uncertainty about the return on her investment, and lack of support at home. No one in her family had ever been to college, and she was unsure if she was “college material.”

Selecting a career training school like CHEC was an attractive option for Natasha for several reasons. First, and perhaps most important, CHEC’s programs are short and have a clear path to a career in healthcare, an in-demand and growing field. Additionally, her access to CHEC would not be hampered by her need for academic support, and she would not be required to take noncredit, remedial coursework. If she needed to catch up academically after taking time off from her education, she would do so during her program.

For Natasha, deciding to go back to school was a big first step in her efforts to start a career. Although she may have felt reluctant to return to school, she was reassured by the short length of the program and the high demand for nursing assistants in her area, which she learned about from family members. Hopefully, if she works hard, Natasha will secure a position as a nursing assistant soon after she graduates.

Natasha’s story is not unique. Rather, her experiences represent many students’ experiences at CHEC and in higher education overall. Since 2006, postsecondary populations have changed significantly as the percentage of non-traditional students grows faster than that of traditional students year-on-year (Anderson, 2016). Non-traditional students account for more than 71 percent of the higher education population, with the number of non-traditional student enrollments expected to continue to grow (MacDonald, 2018). The reality is that the majority of today’s higher education students do not follow the traditional and direct education-to-career path (i.e., high school, college, career, continuing education).

Non-traditional students are enrolled in all types of postsecondary institutions, from traditional four-year universities to industry-aligned CTE programs (Niu & Tienda, 2013; U.S. Department of Education, 2015). However, enrollment statistics suggest that non-traditional students are most interested in programs that take two or fewer years to complete, have flexible course scheduling and modality, and focus on careers. Programs that are designed to allow students to enter a career quickly are the most popular (MacDonald, 2018). Non-traditional students seek short, flexible programs and coursework that enables them to continue working and caring for their families—in short, balancing a multitude of adult responsibilities (e.g., childcare, full-time employment, and finances) while upskilling and earning credentials that allow them access to specific career pathways (Ross-Gordon, 2011). Pursuing additional CTE training after entering their desired career path facilitates students’ career growth and stability. In effect, continuing education becomes a relative term when CTE *is* continuing education for those who seek to improve their circumstances by entering and progressing along a chosen career pathway while balancing school, family, and work responsibilities.

Employers Struggle to Fill Middle-Skilled Positions

Around the corner from Natasha’s home, “Angela,” who owns a small home health agency, has

a growing concern over the skilled worker shortages impacting her business. Consistent with national trends, which project the number of home health aide (HHA) jobs to increase 41 percent between 2016-2026 (U.S. Bureau of Labor Statistics, 2019), her community's demand for HHAs and certified nursing assistants (CNAs) has grown exponentially over the last several years and shows no signs of slowing. In just her area, Pinellas County, there are nearly 5,000 HHA job openings and more than 14,000 CNA job openings annually (Florida Department of Economic Opportunity Bureau of Labor Market Statistics, 2018).

Despite offering a relatively competitive wage in her industry, Angela has been unable to hire enough HHAs and CNAs to meet the demand for in-home care. She is unable to take on new patients, and her existing care providers are complaining of being overwhelmed by their schedules. Beyond needing to employ new caregivers, Angela also needs her current aides to gain additional skills that were not part of their CNA training to meet the needs of her clients, who expect her caregivers to provide an increasingly broad range of services. However, it is difficult enough to find CNAs to work for Angela's agency; it is even harder to find CNAs who are certified to manage therapies and oversee patients' administration of medication. Angela has begun to partner with a local CTE provider, CHEC, which, in addition to offering accelerated healthcare programs for new healthcare professionals, provides continuing medical education and certification training (e.g., Medication Technician) to help expand the range of services her HHAs and CNAs can provide.

Career Technical Education - The Quiet Disruptor

Boot camps and other similar programs have emerged in recent years in response to the urgent demand for highly skilled IT employees and the perceived lack of response from higher education to the industry's need (Price & Dunagan, 2019). The allure of boot camps and similar programs is their streamlined, accelerated, industry-aligned model that allows students to enter their fields of interest efficiently and cost-effectively. Similar to applications within industries like technology, boot camps offer promise for addressing staffing shortages within middle-skilled healthcare careers by creating more efficient pathways and the potential for reduced costs for students.

Nonetheless, when applied to traditional CTE student populations, the promise of boot camps and like programs is accompanied by unique challenges. These challenges stem from the fact that organizations like CHEC differ from technology boot camps in one crucial way: the demographics they have traditionally served.

Whereas a typical technology boot camp student already possesses a bachelor's degree or has demonstrated some other means of academic success (Eggleston, 2017), students who gravitate toward CTE are more racially and ethnically diverse and are more likely to come from low- and moderate-income households, be first-generation college students, require academic remediation, have a disability, and/or have been assessed as having low English language proficiency (Hinz et al., 2017). Given the confluence of students' personal, academic, and financial barriers, applying the technology industry's boot camp model to other industries—including healthcare, which serves students from diverse academic and

socioeconomic backgrounds—may be challenging. Nationally, nearly 70 percent of non-traditional students drop out of school before earning any type of credential (MacDonald, 2018).

By coupling accelerated, industry-aligned healthcare programs with a broad range of support services aimed at student needs throughout the student life cycle, CHEC has been able to demonstrate positive program completion results. In particular, completion is critical for CTE students because a degree or a certificate increases earnings (Orozco & Wheary, 2010) and lowers the likelihood of defaulting on one's student loans (College Board, 2016).

The Case for Student Supports

As Natasha waits for the class to begin, her instructor, “Mr. Durant,” greets her. She responds to him quietly, almost inaudibly, and does not make eye contact. He notes that Natasha appears distressed. Unbeknownst to Mr. Durant, last night Natasha and her brother with whom she lives had an argument; her brother needs her to move out and has given her a limited amount of time to do so. To complicate her housing needs, she is three months pregnant.

Today, Natasha is not sure that she will be able to concentrate in class, so she considers leaving the campus. Mr. Durant encourages Natasha to speak with “Marcus,” the learner services advisor on the campus. Marcus schedules an appointment with Natasha right after her class, reassures her that everything will be okay, and motivates her to set her worries aside for the time being so that she can focus on learning and accomplishing her goals.

After class, Natasha heads to the CHEC Learner Services office to meet Marcus, who asks her questions to gain more information about her situation, including how much time her brother has given her to vacate his property, whether she currently has income, and how far she is able to travel to the campus each day. Marcus offers a range of housing options and makes a few phone calls to collect information and advocate on Natasha's behalf. Together, Natasha and Marcus settle on “Jennifer's Home,” which is only two blocks from CHEC and specializes in helping young and expectant mothers by providing housing, counseling, and prenatal care. Next, Marcus shares information with Natasha about available community, state, and federal resources and reviews the documentation requirements with her, anticipating she may benefit from these services in the future.

Before she leaves, Natasha shares with Marcus her concerns about her ability to maintain her attendance and academic success, considering everything with which she is contending in her personal life. Marcus encourages her to think positively about the successes she has achieved so far in her program, reminding her that she has almost finished her on-campus coursework and will soon begin her externship—the final step in her program. Finally, he encourages her to speak with her instructor and even offers to facilitate the conversation. Natasha responds that she is feeling better, and she leaves to find Mr. Durant. Marcus enters general notes and recommended interventions into the student database to enable communication across the CHEC team and sets a reminder to follow up with her later in the week.

In his lab, Mr. Durant advises Natasha to attend the open lab he hosts each Friday, which allows students to address any skills gap they may have through supervised practice. The remediation Natasha receives is integrated into her courses and is essential to her academic success. National trends illustrate that 40-60 percent of first-year college students are underprepared for college-level coursework and require remediation. Fewer than 10 percent of students who are required to take remedial classes complete their degree or credential on time (Jimenez et al., 2016). Integrated remediation, which is proven to be an effective method of addressing students' academic needs (Radford et al., 2012), allows students to move directly into their career-focused coursework with academic support rather than requiring remedial courses upfront, which can disengage students before they even start their programs or earn college credit. In response to this research, CHEC has put in place robust academic supports, including differentiated instruction, tutoring, and open labs. The education team meets weekly to review a wide array of student data to identify students who are at-risk and may need additional support.

During the 45 minutes Natasha spent with Marcus, a small group of students has gathered outside his door, awaiting their turn to speak with him. On any given day, Marcus will visit or speak with as many as 20 students. His role on campus is to help students like Natasha navigate any personal challenges they may be experiencing. Typical issues students come to see Marcus about include childcare, transportation, housing, food needs, and legal assistance. Marcus helps connect these students with community resources and offers a kind and supportive ear.

In addition to his one-on-one visits with students, Marcus's position involves all aspects of student support, including building relationships with community organizations like the ones to which he referred Natasha. Additionally, Marcus oversees the process through which students who leave can return to CHEC, monitors attendance and outreach, coordinates honor student recognition, facilitates food pantry donations and diaper bank distributions, and coordinates financial literacy and wellness workshops for students and the community. These services play an integral role in helping to remove or lessen the impact of potential barriers to program completion for a large share of the campus' students.

Program Completion: Just the Beginning

Three weeks later, Natasha has completed her coursework and externship experience. She is excited about finding a job, which will allow her to move out of Jennifer's Home and into an apartment of her own. But first, Natasha will need to pass her CNA exam. She is nervous and unsure about how to register for the exam. Natasha meets with CHEC's certification specialist, whose job it is to assist her with her application and other documentation, schedule her exam, and provide her with information about flexibly scheduled certification preparation sessions. Certification preparation sessions are offered in the day and evening throughout the year, with the number of sessions determined based on student needs. Since CHEC is a certification testing center, Natasha will be able to take her test on-site in the space and with the equipment with which she was trained, which helps to reduce her anxiety about her exam.

Finally, her test date arrives, and, fewer than three weeks after completing her Nursing Assistant program, Natasha successfully passes Florida's Certified Nursing Assistant exam and becomes a

CNA. The exam takes the entirety of the morning. She is exhausted but proud and exhilarated.

Equipped with her CNA certification, Natasha meets with her career services advisor, “Christina,” whose role it is to assist CHEC students through the process of finding a job in their field. Over the next few weeks, they will work together to identify jobs to which she is interested in applying, develop her resume, complete applications, and prepare for interviews. Natasha has never held a position outside of retail and is not sure what to expect. Over the next few weeks, her advisor will review opportunities close to Natasha’s residence and schedule and prepare her for interviews. Before her first interview, Natasha selects two interview outfits from a career closet containing gently used, donated professional clothing. Following each job interview, Christina reaches out to the hiring manager to inquire about Natasha and whether the agency plans to hire her. She uses feedback to coach Natasha and to strengthen her interview skills.

Over the next two weeks, Natasha goes on six interviews and is offered three positions. She meets with Christina to discuss the pros and cons of each position. Finally, Natasha makes her decision. Christina assists Natasha in completing the employment paperwork required by Angela’s home health agency.

Six weeks after being hired, Natasha returns to CHEC, along with a small group of other CNAs, to complete a certification training that will expand her scope of practice. Angela, Natasha’s employer, intends to cover the cost for all her CNAs to go through this training to expand the services her agency can provide to its clients.

Career Technical Education Finds Its Seat at the Table

Overall, the student population served by CHEC’s Clearwater campus is not unlike that of many other healthcare training schools. Healthcare CTE schools tend to serve a higher percentage of students who are female, black, low-income, disabled, and first-generation college students than traditional academic programs—demographics that are negatively associated with CTE program completion (Carnevale et al., 2018). These data suggest that CTE programs, particularly those delivered in an accelerated fashion (e.g., boot camps), should include a full range of student service supports that remove barriers to program completion and ease graduates’ transition through certification and into employment.

A longtime member of the educational community, CTE has struggled in recent decades to find its place in the higher education conversation. While high school students have been encouraged and coaxed into four-year programs and informed of the lifetime earning differential between bachelor’s and associate’s degree earners, millions of critical positions in various trades, including healthcare, have been left unfilled—positions that require more than a high school diploma and less than a bachelor’s degree (Carnevale et al., 2018).

Because of the level of credential awarded to many CTE students (i.e., more than a high school diploma and less than a bachelor’s degree), it has heretofore been easy to marginalize CTE institutions as being “less than” those offering bachelor’s and other advanced degrees. At the same time, accelerated, industry-aligned CTE programs are attractive to non-traditional students,

provide a viable solution for addressing critical healthcare staffing shortages, and allow individuals balancing work and family to engage in continuing education and career progression.

Fortunately, as decision-makers have begun to look more closely at the skills gap and critical staffing shortages that exist in most communities, the national dialogue around educational pathways has begun to shift. As CTE becomes a focal point within educational dialogue and funding priorities, new CTE providers will begin to emerge in response to community needs. Many states are responding to the Strengthening Career and Technical Education for the 21st Century Act, which reauthorizes the Perkins Act and provides grant funding while giving states more autonomy (i.e., less regulation) in the formulation of CTE programs (Passarella, 2018). Florida has made career education a priority; the state is challenging itself to jump from 24th in the nation to first in workforce preparation (Solochek, 2019). With funding available, it is anticipated that new CTE providers will emerge (Kreighbaum, 2019), including educational organizations that may be less equipped to respond to the needs of the traditional CTE student. The real focus, in the end, must remain on the needs of students—all students—to ensure they have the support they need to complete training programs and the talents and skills to fill workforce needs.

Bringing It All Together

As educators and critics of higher education seek to adopt elements of the boot camp model to expand the availability of efficient, cost-effective educational pathways that address critical workforce shortages in industries beyond technology, including healthcare, they should do so while recognizing that students like Natasha will likely require more than access to accelerated curricula. Without robust student service support, students with demographics typical of CTE schools may find keeping up with and completing their programs difficult, if not impossible.

While the “streamlined approach” to education offers opportunities to keep costs down for consumers and increase the availability of middle-skilled workers for employers, the boot camp model may need to be adapted as it looks to serve sectors outside of technology and students who have not previously earned an academic degree. In order to ensure program completion, CTE boot camp programs will need to incorporate rigorous student services and support.

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