The Future of Higher Education:
Promoting Durable Skills to Give Carolina Graduates a Competitive Edge

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Introduction: Higher Education Today

The University of North Carolina has sought to enhance and improve the lives of North Carolinians since its inception. Its current stated mission is “…to discover, create, transmit, and apply knowledge to address the needs of individuals and society. ... In the fulfillment of this mission, the University shall seek an efficient use of available resources to ensure the highest quality in its service to the citizens of the State” (The University of North Carolina System, 2022). The early 21st century, however, has brought questions about the value of higher education for modern society.

Technological advances over the past twenty years have given individuals unprecedented access to information. Beyond learning facts or technical skills via websites and YouTube, however, online higher education has boomed over the past several years, seeing an all-time high of $20.8 billion in venture capital invested in edtech firms in 2021 (HolonIQ, 2022). Online program management companies like Coursera and 2U have reported expanding enrollments in degree programs they service at partner institutions, including The University of North Carolina system institutions. More than 70 master’s degrees can now be completed fully online through massive open online courses (MOOCs), at institutions like the University of Pennsylvania, University of Michigan, and Georgia institute of Technology (Ledwon & Ma, 2022). Coursera reported an enrollment growth from 76 million in 2019 to 189 million in 2021 (Coursera, 2022). 2U’s recent acquisition of edX will generate even more options for learners (LeBlanc, 2021). This enrollment growth goes beyond degree programs. Increased access and competition for learners has driven schools to offer more customized, narrowly tailored curriculums geared toward specific jobs and career pathways. Large technology firms are focusing their efforts on training individuals for careers without previous education: Google (Lohr, 2022), Amazon (Halverson, 2021), and Apple (McAuliffe, 2022) all boast programs that provide clear career pathways. Learners are questioning the necessity of a bachelor’s degree when certifications, bootcamps, and companies’ own internal learning infrastructures are providing the skills necessary to get a job, and often at a lower cost than a traditional four-year degree.

Total student loan debt in the United States is $1.76 trillion as of May 2022 (Student Loans Owned and Securitized, 2022). “Gen Z and millennial borrowers are more likely than Gen X and baby boomer borrowers to look back on how they financed their college education with regrets” (Bareham, 2022). College tuition, fees, and room rose 169% from 1980 to 2020 (Johnson Hess, 2021). The increased fees can be attributed to multiple factors including technology changes; state and federal subsidy decreases; fixed cost increases; facility enhancements; and accelerated efforts to recruit students, faculty, and staff in a progressively saturated market (McGurran & Hahn, 2022). Calls to cancel student debt have reached a fever pitch (Jackson, 2022). Given the economics of pursuing postsecondary education, online alternatives to four-year degrees are becoming more appealing.

The convergence of increased generational debt aversion and the introduction of technological alternatives has shifted the pervasive notion that higher education is the primary option for career advancement and financial security (Rosen, 2017). Although a majority to millennials and Gen Zers are still satisfied with their decision to pursue higher education despite lingering debt, a growing number regret not seeking more affordable options. Couple inflation with the exponential increase of alternatives to formal higher education, and the traditional bastions of instruction are having to respond to challenges of irrelevancy and inadequate returns-on-investment. This introspection has been accelerated by the COVID pandemic.
The National Student Clearinghouse Research center reported that year-over-year undergraduate enrollment shrank by 3.6% in fall 2020 and 3.1% in fall 2021. Students whose studies were interrupted are not returning. On top of that, the economic disruption of COVID is pushing more individuals to question the value of higher education. Skilled trades education enrollments are increasing as learners see four-year degrees as a path to debt (Marcus, 2021). The economy has been recovering from the pandemic, with unemployment down and wages increasing in response to a labor shortage. All this has resulted in nearly 1 million fewer college students than pre-COVID (Nadworny, 2022). It is evident, though, that students are entering the workforce for jobs, not long-term careers.

Technology has increased the education opportunities for learners who are more skeptical of the value of a four-year degree. Employers, meanwhile, report that while they are finding workers with the requisite technical skills, college graduates are lacking in the areas that drive careers. A Society for Human Resource Management report that employers found it very or somewhat difficult to find qualified applicants who had critical thinking (64% of employers), listening (55%), interpersonal skills (55%), or communication skills (54%) (Wilkie, 2019). These are the same skills respondents cited as being critical to career success. A similar report from Wiley.edu saw employers listing critical thinking (36%), communication (36%), and creativity (34%) as the hardest skill to fill (Volzer, Burgess, & Magda, 2021). Finally, the Association of Public & Land-Grant Universities looked at skill gap perceptions between employers, students, faculty, and alumni. Employers placed the highest emphasis on understanding roles in the workplace, recognizing and dealing constructively with conflict, and accepting and applying critique and direction in the workplace as the top three skills for success (Crawford & Fink, 2020).

Employers want workers who will drive their firms and industries forward. These skills, which we categorize along with others as “Durable Skills,” cannot be effectively taught online or learned passively through an online course. They require engagement in a manner that only institutions of higher education are situated to provide.

The Current Student Experience

As we progressed through our research, we found it necessary to focus our solutions on a single population. Because graduate and professional programs prepare their students for long-term careers in a specific field, we homed in on the undergraduate experience in the College of Arts and Sciences at UNC Chapel Hill. This would allow us to have the greatest impact without needing to consider the special circumstances of multiple colleges, schools, and programs.

The literature review revealed a general cultural awareness of the importance of Durable Skills. This was acutely demonstrated through a survey and follow-up conversations with current undergraduate students. Forty undergraduate students in an upper-level Sport Administration course (which resides in the College of Arts & Sciences and the Department of Exercise & Sport Science) were asked to complete a survey to describe their experiences and/or perceptions of the Durable Skills and professional development support that exists to undergraduate students at UNC to prepare them for success in their post-graduate plans. The students conveyed an awareness that there are many resources available at UNC to provide Durable Skills and prepare them for post-graduate plans. Some of the identified opportunities they self-reported include jobs, volunteering, field work and internships throughout campus and off-campus. They self-reported the value in learning real-world skills:
“Many career opportunities are presented to me in my EXSS courses. Some of which come through guest speakers who present opportunities during class. Some come from faculty advisors that I form relationships with and are willing to direct me towards such opportunities. Class requirements also give me the opportunity to volunteer with various sporting events on and off campus, which allow me to learn about event operations and the opportunities available to us in sport.”

“Throughout my sports admin classes I have written a resume, learned how to send professional emails and [thank you notes], setup a LinkedIn profile, and had preparation for interviews. I have attended career development fairs that actually landed me with an internship! All of the classes I have taken within the department have taught me so many other skills that will help me throughout the rest of my time here, and I definitely feel like I have a leg up on other students going into the workplace.”

Some of the roadblocks they perceived were having to go “the extra mile to find [resources].” Many classes offer and require hands-on, experiential opportunities, but these are usually unavailable to students until later in their college career. By then it is often too late to fully develop those skills.

Faculty and Staff Perceptions
Multiple conversations took place with UNC’s Assistant Vice Chancellor for Special Projects and Executive Director of University Career Services - Tierney Bates; Elon University’s Assistant Director of Career Services for Student-Athletes in the Student Professional Development Center - Paul Hvozdovic; and Assistant Professor of Political Science & History in the Division of Humanities and Social Sciences at Guilford Technical Community College Dr. Seth Bartee, Ph.D. amongst other higher education leaders. These conversations revealed a consensus that strategic and systematic efforts to provide, promote and leverage programs supporting the development of Durable Skills was a high priority for continued success in preparing undergraduate students for post graduate success. They all agreed that a one-size fits all Durable Skills program did not exist and was not realistic, given the different resources, cultures and systems that exist at each institution. They also agreed that to successfully develop durable skills, an entire organizational commitment was required.

Durable Skills
Our prompt posed the following challenge: “How should the university evolve to ensure its graduates a competitive edge in employability?” Our early conversations revolved around asking: “What would set Carolina graduates apart in the marketplace?,” “What are the key factors that inform hiring decisions?,” and “Who can we talk to about our questions?” Through conversations with a variety of informants representing both higher education and workforce sectors as well as a review of the current literature on career readiness, our team chose to focus on the promotion of Durable Skills. According to America Succeeds, a nonprofit committed to improving equity, access, and opportunity in education, “Durable Skills include a combination of how you use what you know – skills like critical thinking, communication, collaboration, and creativity – as well as character skills like fortitude, growth mindset, and leadership” (Cole, Short, Cowart, & Muller, 2021). These types of skills are referred to by many names including soft skills, transferable skills, translatable skills, 21st century skills, and so on. These are the skills that employers are consistently reporting as necessary for career success. We found Durable Skills to be the most compelling label.
Dr. Tracy Mancini, President of Carteret Community College, first introduced us to the term Durable Skills when we interviewed her about career services and supports for students at her school and the school’s approach to industry relations. Dr. Mancini described how they provide professional development for their faculty to support incorporation of Durable Skills into the curriculum, going as far as to provide a performance bonus to faculty who participate. Dr. Mancini is willing to pay faculty extra to think about and incorporate Durable Skills because they are in high demand by employers, especially the local employers that she communicates with regularly about the preparedness and performance of their graduates. As a community college preparing the community’s workforce, they are highly sensitive to local market demands. This community and these employers are not alone. According to the Society for Human Resource Management, nearly 3 in 4 employers say they have a challenging time finding graduates with the soft skills their companies need. The burden is on educational institutions to support students as they develop these essential skills.

In a 2021 blog post for Guild Education, Matthew Daniel provides a helpful visualization of Durable Skills (see Figure 1). We agree with Daniel that viewing skills along this continuum provides more nuance than the commonly used binary of “hard” and “soft” skills. Daniel explains that in this framework Durable Skills are described as dispositions, semi-Durable Skills are likened to industry knowledge, and perishable skills are considered specialized abilities. A skill that is durable will serve a person and their employer(s) well for many years, whereas a skill that is perishable may become obsolete within just a few years. It is important to note that Durable Skills are necessary but not sufficient—academic and technical skills still matter—but through our research we have come to believe that Durable Skills will give Carolina graduates a competitive edge in the workforce.

**Figure 1.**

Skills aren’t “hard” or “soft.” They’re durable or perishable.

- **DURABLE**
  - Half Life = >7 years
  - Teachable and measurable mindsets and dispositions that are highly transferable
  - Affect development & implementation of frameworks and tech

- **SEMI-DURABLE**
  - Half Life = 2.5-7.5 years
  - Industry-related frameworks from which tools, processes, and technologies arise
  - Likely to be replaced as the field grows and evolves

- **PERISHABLE**
  - Half Life = <2.5 years
  - Specialized & related to specific vendors, platforms, coding languages, & org policy and process
  - Dependent on fluid tools and organizational structures

Figure 2 is a graphic from the 2021 America Succeeds report titled “The high demand for Durable Skills.” It offers many examples that illustrate what we mean when we say Durable Skills. Leveraging labor market insights from more than 82 million job postings, this report identified one hundred of the most in-demand 21st-century skills and then categorized these skills into ten major competencies such as leadership, character, collaboration, and communication. It is important to note that the data collected for this report demonstrated workforce demand for Durable Skills across industries, occupations, and geographies. The bottom line—Durable Skills matter.

Our belief that the promotion of Durable Skills will give Carolina graduates a competitive edge is well aligned with the University of North Carolina at Chapel Hill’s new undergraduate curriculum—IDEAs in Action. Beginning in Fall 2022, this curriculum which is designed to “develop the habits of mind and skills that will prepare you to contribute in a fast-changing world as a citizen, scholar, community member and leader” (https://ideasinaction.unc.edu/) will set new expectations for teaching and learning outcomes on campus.
Figure 2.

A focus on Durable Skills aligns well with the mission of UNC Chapel Hill: "... we invest our knowledge and resources to enhance access to learning and to foster the success and prosperity of each rising generation." Baked into the very fiber of the University mission statement is a commitment to strategically invest resources to ensure optimal learning outcomes and create success for each new generation. The University cannot prepare “each rising generation” to be productive professionals in the workforce if it is not committed to arming them with what employers want.

Traditional academic programs, however, are rarely structured to train students on these Durable Skills. Specific assignments may touch on them. Majors or minors may place an emphasis on one durable skill or another. Programs that train for a specific career sometimes emphasize a path toward credentialing and future career advancement. For most students, though, their majors focus on the content and training toward academic pursuits. Faculty are rarely trained in their graduate programs to coach students in the development of Durable Skills; their concentration is on research and the creation of new knowledge. As a result, UNC Chapel Hill undergraduates can complete their degree with little idea of what the workplace holds for them, or even what career opportunities might be available. Fortunately, it is common at most institutions to have career services staff to support this part of the student experience. These professionals teach students how to prepare for professional life and cultivate relationships with employers to understand their needs. They work to bridge the gap between a student’s classroom education and career pursuits.

Recommendations

There are three key strategies and recommendations that the university should consider meeting for the goal of producing graduates who possess the professional skills needed to immediately succeed in their career.

1. Increase support for University Career Services (UCS) through financial resources and the adoption of a university wide policy related to career services.
2. Prioritize internship and experiential learning opportunities for students.
3. Prioritize faculty engagement to increase student participation in Durable Skills related professional development and increase connections between academic departments and UCS.

University Career Services provides “personalized and innovative career education to empower student success and transformation.” (“GRADUATE & PROFESSIONAL STUDENTS ARE YOU CAREER READY?”) They do this by offering services such as compiling resume books that are sent to potential employers, networking opportunities, and interviewing advice. UCS mission and the services they provide align with the goal of preparing graduates who can immediately succeed in their careers. As such, the university should provide University Career Services with the resources they need to succeed. While this is a broad recommendation and one that does not come with suggestions on how to shift resources to cover the cost, there are data points and anecdotes that support this recommendation.

First, UCS needs more student-serving staff. Through discussion with Elon University, we discovered that that their career services center has twenty-two staff that interact with a student population of fewer than 7,000. Through similar discussions with University Career Services on our own campus, Dr. Tierney Bates, Executive Director of University Career Services, estimated that he had fewer than fifteen student-facing staff for about 16,800 undergraduate students in the College of Arts and Sciences. (Office of Institutional Research & Assessment, 2020) Proportionally, this would increase the student-facing
staff to over 50 individuals. While we fall short of recommending hiring 35 professional staff, we need to ensure that we are serving our students.

Second, internships and experiential learning opportunities help grow Durable Skills in a way that is hard to replicate in a classroom. Students need to engage in these opportunities to help prepare for what work looks like. Career Services professionals hear regularly from employers that work experience is one of the best ways to be ready for their careers. University Career Services has several resources to connect students with jobs and internships but needs to be more integrated with academic departments to reach its full potential. Kenan-Flagler Business School’s Undergraduate Business Symposium is a keystone event that connects students with employers. UCS and the College of Arts & Sciences leadership should seek to collaborate on a similar venture, with faculty being invited to recommend employers and classes being suspended to encourage student participation. We recommend that each academic department consider making an internship or experiential learning course part of their major requirements. Teaching load reductions may be offered to incentivize faculty oversight of these programs, or teaching credit multipliers applied to these courses.

As we started building out ideas on how to enhance the student experience with Durable Skills training, we produced the idea to create an online tool for students to search job and internship postings and find information about career fairs happening around campus. As it turns out, that tool already exists. Handshake is a tool offered through UCS that students can use to browse posted jobs, internships, and opportunities for engagement with career services. All degree seeking students receive Handshake accounts prior to the start of classes.

Handshake provides a perfect example of how important student engagement is to the long-term success of Durable Skills and career training as a core component of the student experience. Dr. Bates shared with us that many students do not engage with the Handshake tool until late in their sophomore year or early in their junior year. Even then, not all students are taking advantage of this resource. His team is working to reach more students earlier on in their academic career, but their experience demonstrates that the university can offer students a top-of-the-line tool to prepare them for future success, but they are not guaranteed to take advantage of it without the university making student engagement a priority.

Similarly, the university should prioritize faculty and staff engagement. Faculty are a key component of our recommendations. They can help students see the connection between their classroom experiences and their career goals and understand the Durable Skills they are developing through their courses. They can recommend utilizing UCS to explore career opportunities in their field. Faculty and staff can and should play a crucial role in promoting Durable Skills training. Our team interviewed Dr. Doug James, Associate Director for Faculty Development in Teaching & Learning at the Center for Faculty Excellence and discovered the breadth of the services offered to faculty across campus. However, as with students, communication is key to supporting faculty engagement. Before faculty can utilize existing resources, they need to know about them. Ensuring that faculty are aware of opportunities such as the Course Design Institute, the Tar Heel Teaching and Learning Collaborative, or the Summer Institute on College Teaching is essential.

The Center for Faculty Excellence has a plan to address decentralization through their ‘spoke and wheel model’ and utilization of an Advisory Council to enhance information flow to and from schools and
departments. Clear and effective communication will be key to ensuring faculty feel well supported and subsequently, well prepared to help their students succeed.

The Center for Faculty Excellence is not the only resource available to faculty and staff on campus. Carolina Career Community (C3) is a professional network that aims to serve as a key resource to all faculty and staff who provide career advising to students or maintain employer relations. (“Carolina Career Community”) Due to the university’s decentralized structure, career advisors and employer relations staff that work within schools and departments are not always connected to the University’s infrastructure or professional resources like listservs, workshops, and conferences. C3 seeks to close that gap.

These learning opportunities will be especially valuable to faculty and staff as the university launches the IDEAs in Action curriculum this fall. According to the IDEAs in Action website, “the overall goal of the new curriculum is to form graduates who have the capacities, tendencies, and habits of mind to approach the world with inquiry, investigation, evidence, judgment, and creativity” (About Ideas in Action, 2022).

These resources exist, but just as with the tools available to students, we must prioritize engagement with faculty and staff to ensure that these opportunities are being accessed. Prioritizing engagement, providing the resources necessary for UCS to succeed, and creating a campus-wide policy related to career services will help the university produce graduates who possess the professional skills needed to immediately succeed in their career.

To coordinate and effectively implement these programs, University Career Services should partner with the Center for Faculty Excellence and the Office of Undergraduate Education in the College of Arts and Sciences to coordinate outreach efforts to students and faculty. This team of leaders would work together to determine how to dedicate resources that would allow for the creation and implementation of a specific plan of action that would include the following:

1) Increased support for University Career Services, the result being more students served and higher levels of employer engagement.

2) Equipping faculty and staff with the needed skills and information to incorporate and empower students in the attainment and utilization of Durable Skills. Faculty effectiveness and student satisfaction can be measured through course evaluations and UCS engagement numbers.

3) Increased knowledge of and access to quality tools already available here at UNC such as Handshake, ensuring we are supporting all our students with diversity and equity in mind.

This is an ideal time for the creation of this team with Provost Clemmons transition team in place and the new Ideas and Action curriculum being implemented this fall.

Conclusion

Expectations related to a four-year college degree among students, job seekers and employers are changing. Job seekers are prioritizing a life-work balance over all else and students have increasing concerns related to college debt. Employers, meanwhile, are finding it increasingly difficult to find the skills needed for transformational success at their firms, while the requisite technical skills to perform a given job can be attained outside of the university setting. The challenges of rising student loan debt,
adoption of virtual education options, and the perception of a college degree being less relevant are impacting higher education.

With dedicated resources and a university wide policy in place, our students would gain the valuable Durable Skills needed to excel in their academic career, professional career, and life. In addition, potential employers trust that graduates of Carolina are ready to enter the workforce not just with the necessary job-specific skills, but also the Durable Skills to make them a productive, resilient member of the organization. Faculty and staff learn new skills in promoting Durable Skills throughout their curriculum and feel greater investment in student success post-graduation. Finally, Carolina increases their reputation for producing graduates qualified in both job-specific and Durable Skills which in turn should increase employment rates.

“Education is the most powerful weapon which you can use to change the world.” Nelson Mandela
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