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CarolinaGO



Drivers of Change in Higher Education

CONNECT

Enhancing Financial Literacy
to Address Student Debt and
Long-Term Success



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ENCOURAGE

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Drivers of Change in Higher Education

Enhancing Financial Literacy to Address Student Debt and Long-Term Success

Cassandra J. Barnhart, Dan Comeskey, Diane E. Marian, Kelly S. Parsons, and Janae Simons

Introduction

As part of the topic “Drivers of Change in Higher Education”, our ULEAD team was tasked with considering the challenges that higher education will face over the next decade and how our institutions can evolve to stay in front of these trends. Ultimately, our group decided to focus on initiatives to enhance the financial literacy of our students to mitigate the long-term effects of the rapidly increasing cost of higher education, mounting student loan debt, and insufficient financial skills among young adults. The combination of these trends means that college graduates are often saddled with large amounts of debt and in some cases make poor financial choices in college that affect their financial well-being over the course of their entire life. In a recent news conference at the annual Federal Student Aid Training Conference in Atlanta, U.S. Secretary of Education Betsy DeVos stated that “We have a crisis in higher education.”¹ DeVos also went on to point out that 43 percent of the current \$1.5 trillion in outstanding federal student loans are considered “at risk”.¹

Our team was personally motivated to address these issues as several of our members grew up in low income households and were first generation college graduates. It is not uncommon for children from low income households to be discouraged from even applying to college. This can be related to a lack of understanding of potential resources available to fund their education or even due to the fact that the child is already playing an economic role in their family. In such cases, families are often fearful of what they will be expected to contribute financially towards their child’s education or they may fear losing the income their child is generating to support the household. For those fortunate enough to arrive on campus, many do not have the basic knowledge, that most of take for granted, needed to manage their student debt and living expenses. Something as simple as understanding the difference between a subsidized loan and an unsubsidized loan can have a tremendous impact on a student’s ability to attend graduate school, pursue community-based jobs with lower salaries, or simply use their college degree to better their lives and the lives of their families.

As a result of the factors outlined above, universities around the country, including The University of North Carolina at Chapel Hill (UNC) peer institutions and several UNC System schools, are becoming increasingly involved in providing financial literacy education to their students. At UNC there are existing programs aimed at keeping higher education affordable and providing students with information about finances, but we strongly believe that UNC could play a much bigger role in equipping our students for a strong financial future. As we will discuss in detail below, UNC has several existing resources to enhance

the financial well-being of our students, but these resources are currently decentralized and are not adequately marketed or supported. Our team has discovered that UNC has the immediate potential to become a strong partner in the long-term financial success of students to the extent that we can provide a streamlined system to market the already existing resources and to provide these resources in a format that is both accessible and engaging to the modern student. Our proposal is to utilize the currently available CarolinaGO mobile app to provide a centralized location for marketing and providing up-to-date information about all financial aid and financial literacy resources on campus, as well as information regarding external resources that can be utilized by our students. We also believe that the mobile app can be further developed over time to provide personalized and tailored learning opportunities for students at “teachable moments” during their college experience.

Increasing Tuition and Student Debt

As illustrated in Figure 1, the cost of earning a college degree in the U.S. has risen dramatically over the past fifty years.² At four-year public institutions, within the past 15 years costs have doubled, within the past 20 years costs have tripled, and within the past 25 years costs have quadrupled. From 2007-08 to 2017-18, the average annual tuition went from \$6,190 to \$9,980, an increase of 61%. Similar trends are seen among two-year public institutions (a 55% increase, from \$2,290 to \$3,560) and four-year private institutions (a 48% increase, from \$23,420 to \$34,700) (Supplemental Table 1).

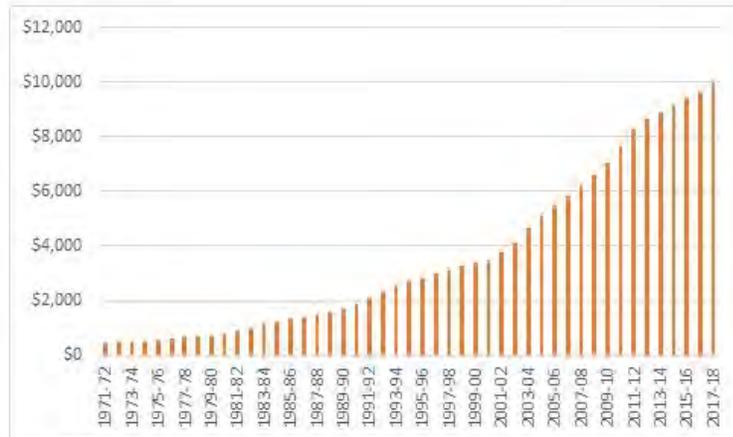


Figure 1. Average Tuition & Required Fees for 4-Year Public Institutions for In-State Undergraduates

North Carolinians are fortunate that the current UNC System average tuition* remains far lower than the national average amongst public institutions.³ Over the last decade, UNC average tuition has remained between 60% and 70% of the national average for in-state undergraduates. This is, rightfully so, a point of pride for North Carolina. Even so, we are not immune to the national trends. Resident undergraduate tuition and fees have steadily increased over the years (Figure 2). During the same ten-year time period described above the UNC average increased from \$3,952 to \$6,867.

* UNC Average Tuition is calculated by averaging the tuition across the 16 constituent institutions. Supplemental Table 2 shows resident undergraduate tuition and required fees by UNC System institution.

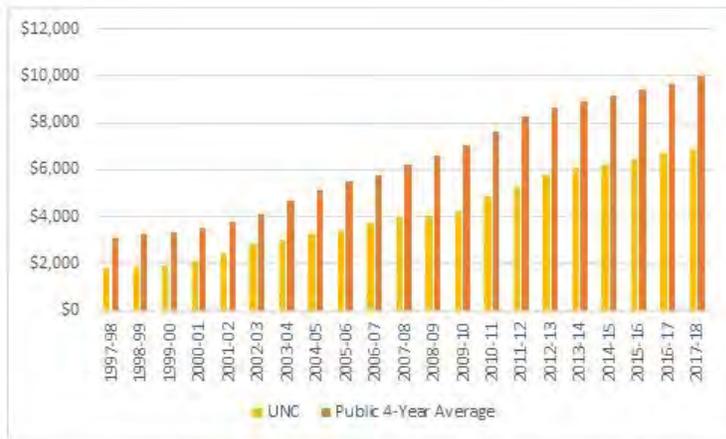


Figure 2. Tuition & Required Fees for In-State Undergraduates, Average of 4-Year Public Institutions vs UNC System

A natural consequence of increasing tuition is the rise of student loan debt, which has more than doubled over the last ten years (Figure 3). Total student loan debt in this country reached \$1.5 trillion dollars earlier this year; that debt is owed by more than 44 million borrowers.⁴ Student debt has now surpassed credit card debt (\$977 billion) and auto loan debt (\$1.1 trillion) placing it second only to mortgage debt in types of consumer debt. On

average, \$2,854 of additional student loans are borrowed every second.⁵ That equates to more than \$5 million every thirty minutes. During the 2017-18 academic year, in-state undergraduates in the UNC System borrowed more than \$750 million in student loans.⁶ This means that for one academic year, resident undergraduates who took out loans were borrowing an average of \$8,468 to finance their educations.

Another way of calculating how student debt has changed over time is to look at certain debt thresholds. In 2003-04, only 13% of bachelor's degree recipients at public four-year institutions owed more than \$20,000 (in 2012 dollars), but in 2012-12, 40% owed more than \$20,000!⁷

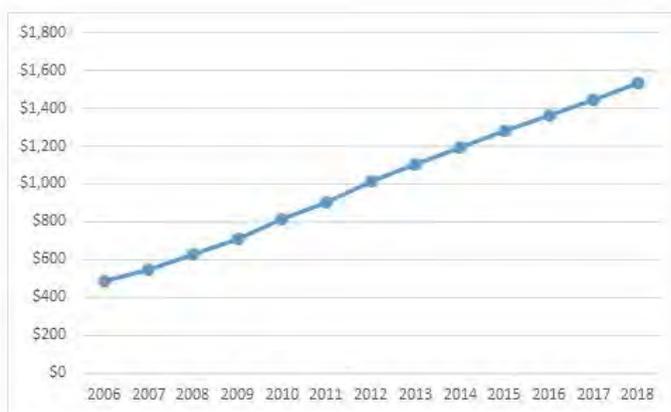


Figure 3. Total U.S. Student Loan Debt (in billions)

A more meaningful way of thinking about student debt is the average amount an individual can expect to owe when they graduate. Of students graduating with bachelor's degrees in 2016-17, 59% had student loans. The average cumulative debt of these graduates was \$28,500.⁷ That is a relatively conservative estimate with some placing it closer to \$40,000. When the analysis is limited to graduates from public four-year institutions, the average debt is \$26,900. Although student

debt seems to have leveled off during the past few years, it has still increased 25% among public institution graduates in the past 15 years (Figure 4).

Again, UNC System graduates fare better than most. Across the System, 63% of 2016-17 bachelor's degree recipients took out student loans during their time at UNC System schools, and they had an average of \$22,061 in student loan debt, 18% less than the public averages cited above.⁶ These cumulative debt averages vary across UNC System schools, as is expected given the diversity of tuition rates, student populations, and university resources within the System (Supplemental Table 3). Similar to nation-wide trends, the average cumulative student debt of UNC System graduates has increased over time. Over the past decade it has increased 46% (Figure 5).

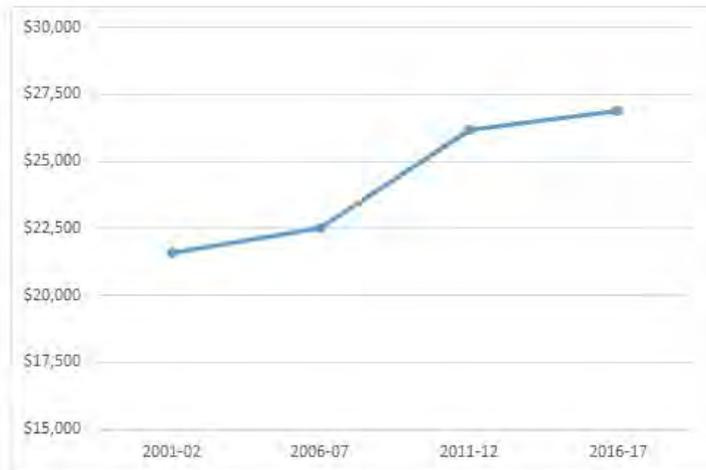


Figure 4. Average Cumulative Debt of Bachelor's Degree Recipients at 4-Year Public Universities

As tuition has increased since these recent graduates first enrolled in college, current UNC students will likely face even higher balances upon graduation. To put these figures in perspective, in 2016 the median household income in North Carolina was \$48,256.⁸ Focusing on recent college graduates, 2015 bachelor's degree graduates from North Carolina public universities were earning average annual wages of \$25,543 one year after graduation and \$33,631 two years after graduation.

⁹ Although wages vary a great deal based on area of study, field of employment, and institution, having student loan debt nearly as high as one's annual salary is daunting.

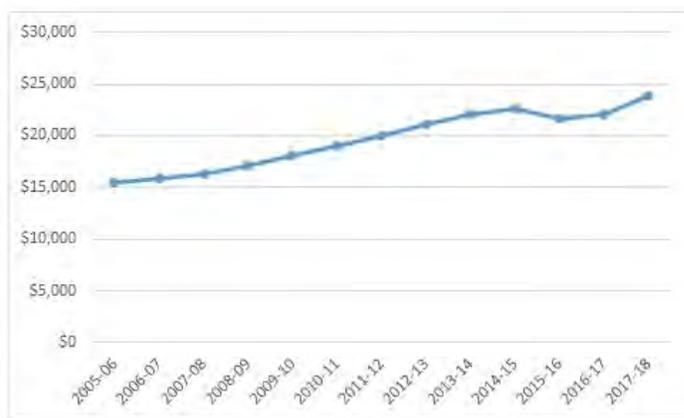


Figure 5. Average Cumulative Debt of In-State Bachelor's Degree Recipients in the UNC System

Compounding the student loan issue is a lack of understanding surrounding the debt students are incurring. Some students borrow more money than is necessary to finance their education. They often don't realize how much they will end up owing, with interest, or what their monthly payments will be following graduation. Furthermore, these high levels of student debt are having long-term and far-reaching consequences on the financial situations of college

graduates. One study found that an increase in student debt has led to a decrease in home ownership¹⁰,

while another study predicted that recent college graduates would be forced to delay retirement until age 75 due to their student debt burden.¹¹

Financial Literacy of the Modern Student

While increasing tuition and student loan debt is a significant burden for our graduates, it is important to recognize that a student's overall financial literacy is critical to their ability to make smart decisions about how to finance their education and how to turn their degrees into economic prosperity for themselves, their families, and their communities. In 2008, financial literacy was defined by The President's Advisory Council on Financial Literacy as "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being."¹² As is suggested, financial literacy includes a large range of skills that come into play at different times in an individual's life such as budgeting, saving, investing, managing debt, retirement planning, mortgages, and car loans, just to name a few.

According to the Consumer Financial Protection Bureau's (CFPB) 2015 Report on Financial Well-Being: "A growing consensus is emerging that the ultimate measure of success for financial literacy efforts should be individual financial well-being."¹³ The CFPB's research team interviewed numerous individuals around the country and asked what financial well-being meant to them personally. From these interviews, the CFPB concluded that: "Consumers can experience financial well-being—or a lack of it—regardless of income. It's a highly personal state, not fully described by objective financial measures. Instead, well-being is defined as having financial security and financial freedom of choice, in the present and in the future."¹³

While a vast number of theories and opinions exist around how to optimally manage financial issues and attain financial well-being, there is little debate around the dire need for improving the financial skills of Americans. An international survey was conducted in 2014 by the Organization for Economic Co-operation and Development. The Programme for International Student Assessment (PISA) tested high school students from eighteen countries and found that American students were merely average in their financial knowledge as compared to students from other countries. Eighteen percent of U.S. students could not even answer what were deemed to be extremely basic financial questions such as how to balance a checkbook or calculate interest. Not surprisingly, students from lower income households tended to perform the worst on this test.^{14,15,16} In addition, data from the 2015 National Financial Capability Study pointed to a disturbing disconnect between Millennials' confidence in their financial knowledge and their actual ability to manage their money.¹⁷ Educational debt is a growing and overwhelming piece of this painful disconnect. The modern student is facing mounting student debt, compounded by a lack of basic skills needed to manage their finances.

The obvious question becomes what can be done to improve the financial literacy and preparedness of our students, their families, and our communities. When polled, parents tend to believe it is their responsibility to teach their children financial skills. Ironically, when these same parents were polled on their own financial knowledge, they expressed little confidence in their ability to handle financial matters.¹⁶ In addition, American culture still promotes a stigma around discussing money. Most find it rude or inappropriate to discuss or ask about salaries, student debt, consumer debt, mortgages, and the like. Therefore, many American children grow up thinking that discussing money is taboo which cripples their ability to learn critical money management skills and sets them up to repeat the financial mistakes of the generation before them. This also hinders a student's ability to consider and prepare for educational and career goals relative to their anticipated salary and educational expenses. In addition, helping individuals expand dialogue around salaries will make strides towards closing the gender wage gap and curtailing salary discrimination.

Financial Literacy Education

Financial education and outcomes is a rapidly growing area of research. Much debate exists over the effectiveness of financial education. Research is demonstrating that financial education programs do have significant impact on the financial decisions of young adults, but that those impacts are highly dependent upon the content and design of the programs.¹⁸ A 2015 study by the Consumer Financial Protection Bureau titled, "Financial well-being: The goal of financial education", singled out experiential learning as a "far more powerful way to gain functional skills" than traditional classroom settings.¹³ A meta-analysis of 126 financial education studies conducted by the German Institute for Economic Research demonstrated a dramatic impact of financial education programs on both financial literacy and financial behavior. However, they state: "intervention success depends crucially on increasing education intensity and offering financial education at a 'teachable moment'."¹⁹

Some states have mandated that classes in personal finance be included in public high school curriculums. A study was conducted to determine whether these programs affect the credit behaviors of young adults. Georgia, Idaho, and Texas implemented the mandate for these courses in 2007. Panels of credit report data from periods before and after the implementation of this mandate were compared to identify the credit scores and delinquency rates between these two groups. Individuals who took part in this financial education did demonstrate higher relative credit scores and lower relative delinquency rates.²⁰ The North Carolina Department of Public Instruction (NCDPI), in partnership with Capitol Broadcasting has launched a new campaign to bring to light the importance of understanding matters of personal finance both at school and at home. NCDPI states that it believes that teaching youth how to make sound financial decisions should be an integral part of character development and citizenship education, as personal choices may also have profound consequences for the larger community.²¹

Fortunately, universities have finally started to acknowledge their responsibility in preparing students for their financial futures. Following this trend, for the last two years LendEdu has ranked its “Top 50 Financial Literacy Programs in Higher Education”, including both public and private institutions.²² The LendEdu rankings are based upon the following criteria: 1) number of workshops and resources available to students; 2) access to one-on-one financial consultation; and 3) incentivizing programs available.

Financial literacy curriculums are currently found in a number of different formats across various institutions. Topics such as budgeting, working with creditors, financial aid options, student loan repayment strategies, and investment basics are commonly addressed. Most of the LendEdu ranked schools provide an optional service as part of their student affairs offices, but some institutions such as Syracuse, Montana, and Pittsburgh require students to take either an online course or a financial literacy session at least once. UCLA provides separate courses for incoming students versus returning students in order to better tailor the program to their changing needs. A majority of the highly ranked institutions provide peer financial counseling options in addition to counseling conducted by staff or faculty.

Of the sixteen UNC System institutions, thirteen had one or more peer institutions appearing on the LendEdu list (Supplemental Table 4). Of the UNC System-defined peer group for UNC, four of our fifteen peer institutions were ranked in the top 50 in 2018. These peer institutions include: 1) University of California, Los Angeles (ranked #23), 2) University of Wisconsin - Madison (ranked #24), 3) University of Pittsburgh (ranked #26), and 4) Duke University (ranked #36). Additional UNC peers, such as University of Michigan – Ann Arbor and the University of Maryland – College Park also made this list in 2017, but fell outside of the top 50 in 2018.²²

UNC’s highest ranked peer, The University of California, Los Angeles, came in at number 23 with its UCLA Financial Wellness Program. Per UCLA’s website: “The mission of UCLA’s Financial Wellness Program is to empower all Bruins to confidently navigate their finances in a way that supports their overall well-being. This program fosters financial literacy skills through workshops, coaching, and online educational efforts. Additionally, we aim to encourage students to know who, when, and why to ask for help. Overall, the program centralizes and advocates for student economic support services on campus.”²³ Notably, this program offers plentiful opportunities to make “Financial Wellness Appointments” with their staff which meet at locations throughout campus that are convenient for students.

The University of Wisconsin-Madison, ranked 24th, has a dedicated office called the Center for Financial Security.²⁴ This center clearly has a wide and powerful footprint on their state by providing several pillars of focus around financial security. First of all, the center has a strong focus on financial research including research on how financial matters affect the long term physical and mental health of their

citizens and research related to determining optimal tools for providing financial education and coaching with maximum long-term impact. In addition to workshops, webinars, courses, newsletters, and personal financial coaching, the center also provides consulting services to outside organizations to implement their own financial education programs.

UNC's closest peer, Duke University, ranked 49th, has a program called Personal Finance @ Duke which is a "program designed to empower Duke Students and Alumni to make informed financial decisions by providing them with financial management knowledge and skills necessary to navigate life events that affect everyday financial decisions, discuss issues surrounding personal finances, and plan for the future".²⁵ This program facilitates workshops such as "Your Spending Plan," "Saving and Investing in your Future," and "Salary Negotiations and Benefits" and provides for one-on-one counseling sessions. The program's website is extremely well-designed offering specific links to resources for topics such as budgeting, savings, credit, taxes, privacy & security, and banking. The program also has a very active Facebook page which promotes campus events and highlights important finance articles and learning opportunities.²⁶ This is done in part via a partnership with an online financial program called iGrad which provides interactive learning modules, news articles, and other related resources. According to the program's website, it is targeted for 18-28-year olds and specifically lists "decreasing student loan borrowing and defaults" as one of the program's main objectives.²⁵

Affordability Initiatives in North Carolina

It is not accidental that North Carolinians have lower tuition and less debt than graduates of public universities in other states. Rather, it is due to North Carolina recognizing the importance of higher education and continually prioritizing its affordability. The State Constitution requires that public higher education in the state "as far as practicable, be extended to the people of the State free of expense."²⁷

That goal of making higher education as affordable as possible persists today in the passing of NC General Assembly legislation and UNC System policies. A few examples of recent and current initiatives aimed at keeping the cost of education low within the UNC System include:

- **Fixed Tuition** Beginning in Fall 2016, tuition for in-state undergraduate students remains the same as the term a student initially enrolled through four years of consecutive enrollment. This benefit, ensuring that tuition doesn't increase for students during their time in college, is prorated for transfer students.²⁸
- **NC Promise Tuition** The state significantly reduced student tuition costs at three UNC System institutions - Elizabeth City State University, University of North Carolina at Pembroke, and Western Carolina University - to \$500 tuition per semester for in-state undergraduate students and \$2,500 for out-of-state undergraduates. This program, enacted in Fall 2018, resulted in increased enrollments at the affected institutions.²⁹

- **Tuition Guidance** Each year the Finance Division of the UNC System Office provides guidance to the constituent institutions for establishing tuition and fee rates that are subject to approval by the Board of Governors. This guidance includes the requirement that tuition and fees of UNC institutions remain in the bottom quartile of their public peers.

In addition to system-wide initiatives, individual institutions within the System have developed programs to make higher education as accessible and affordable as possible. Two examples of such programs at UNC include:

- **The Carolina Covenant** This program was established in 2004 and serves approximately 10% of undergraduates. It's available to students from families at or below 200% of the federal poverty level. The program is designed to allow students to graduate from college debt-free by financing education through a mix of grants, scholarships, and work-study. In addition to financial aid, the program provides programming and support aimed at student success.³⁰
- **Blue Sky Scholars** At the 2018 University Day, Carolina announced the Blue Sky Scholars program, a \$20 million scholarship initiative aimed at supporting middle-income students. These scholarships will allow more students to graduate with less student debt. Scholars will be awarded \$10,000 per year in a combination of scholarships and work-study employment. The estimate is that Scholars will accumulate less than \$10,000 of debt.³¹

While these system-wide policies and institutional programs are helpful 'top-down' approaches, we believe a 'bottom-up' approach of educating students about personal finance could also be a way to limit rising student debt and maximize the impact of their college degrees. Financial literacy education would be beneficial to the long-term success of our students and our state.

Existing UNC System Schools' Financial Literacy Programs

During our research and interviews, we identified a wide range of existing financial literacy resources at schools in the UNC System. Each university and community college has developed its own set of financial education options. Similar to schools outside the UNC System, these resources range from workshops and seminars to financial aid counseling and cover topics such as budgeting, investing, and loan repayment.

North Carolina State University (NCSU) launched Dollars and Sense to promote financially healthy students through workshops, guest speakers, and campus events designed to improve financial literacy on campus.³² Similarly, UNC Greensboro (UNCG) developed a financial literacy program named Spartan \$ense. At UNCG, students from disadvantaged backgrounds are required to complete two hours of Spartan \$ense coursework within two weeks of new student orientation.³³

Several universities including NCSU, Appalachian State University, and NC Central University (NCCU) offer optional personal finance courses and seminars. Appalachian State tailors their seminar offerings to the changing needs of students as they progress through their degree programs.^{34,35} At these institutions, the personal finance courses are not a required part of the curriculum. NCCU's School of Law sponsored a workshop for students that focused on the importance of credit scores.³⁶ In addition to the law school, Student Success Services at NCCU also offers financial literacy workshops as a part of the federally funded TRiO Program³⁷, which provides services and outreach to students from disadvantaged backgrounds.

In North Carolina, financial literacy education isn't limited to four-year institutions. Several community colleges including Wake Tech, Durham Tech, and Pitt Community Colleges provide students with on-campus workshops and links on various school web pages to online personal finance educational resources. In May 2018, Durham Tech received a \$2,500 grant from the SunTrust Foundation to develop a financial literacy program.³⁸

Existing UNC Chapel Hill Financial Literacy Resources

We should take great pride in the affordability initiatives provided by UNC and the UNC System. However, we also must recognize that there is a large gap of students who come from households that do not qualify for the UNC Carolina Covenant and Blue Sky Scholars programs, but who also do not have the resources necessary to obtain a UNC degree debt fee. We must also consider that students coming to UNC as part of the Carolina Covenant and Blue Sky Scholars programs are the very students who have most likely not received appropriate training on how to manage debt and, just as importantly, how to manage wealth. It is also critically important to consider the financial demands that may be placed upon the modern college student. Scholarship and loan programs are designed to cover the tuition and cost of living solely for the student. However, the modern student may already have children to support or may be sending money home to help care for their families.

When our team began this project, we spent a lot of time contemplating how UNC could replicate some of the programs available at our ranked peer institutions. However, we were thrilled to discover that although UNC lacks a dedicated office focused on financial literacy it already has a lot of these resources in place.

The Office of the Dean of Students at UNC sponsors and coordinates a Financial Literacy Consortium, which is a partnership between UNC, Coastal Federal Credit Union, and Franklin Street Partners.³⁹ Upon request, the consortium offers workshops for students on topics such as budgeting, building and maintaining good credit, finding funding sources for graduate school, negotiating job offers, preparing for homeownership, and building wealth. Dawna Jones, the Assistant Dean of Students, helped develop

the consortium about three years ago. During our interview with Dawna, we learned that her office manages the Student Emergency Fund, and the fund was receiving a significant number of requests from students for money to help cover things like rent and food and other “non-emergency” items. In short, it was clear that these financial emergencies were not true emergencies, but rather were the result of poor financial management and budgeting. This trend led Dawna and her team to develop the workshops detailed above and their implementation have resulted in a sharp decrease in “non-emergency” requests for money from the Student Emergency Fund. There were approximately one thousand attendees who took advantage of the Financial Literacy Consortium workshops during the 2017 – 2018 school year however, this number is somewhat inflated by single individuals who attended multiple workshops. In addition to offering these financial literacy workshops in the evenings, some professors invite the consortium to present to their students as part of their classes. When asked about what would be needed to improve this program, we were informed that additional dedicated UNC staff and expanded marketing capabilities would be extremely beneficial.

The Office of Scholarships and Student Aid also offers various resources for students. When we spoke with this office, we discovered advisors that were extremely knowledgeable that financial aid and financial literacy are distinct and broad topics and were passionate about helping students navigate their entire financial experience while at UNC. However, it seems that a common perception is that this office is merely here to help students obtain student loans and scholarships. We feel that the depth of resources at The Office of Scholarships and Student Aid is much broader and that this needs to be more adequately communicated to our students. While the office is certainly there to assist with obtaining federal and state aid, they are also open to one-on-one counseling sessions to discuss the types of available aid, how to decide on which aid to utilize, how to budget for the upcoming academic year, etc. Their website has links to budgeting worksheets and external resources such as the College Foundation of North Carolina, FinAid.org, and U.S. Department of Veteran Affairs, just to name a few.⁴⁰ The office’s website also notes its Outreach Services under which the office will conduct presentations and panel discussions and will participate in multicultural and perspective student events. However, most of these resources were buried multiple pages deep on the office’s website. It was almost impossible to come across them unless you knew exactly what you were searching for on the site.

UNC also offers students personal finance courses through multiple departments.⁴¹ There is a personal finance course available through the Kenan–Flagler Business School which focuses more heavily on investing and requires other business courses as prerequisites. However, both Media & Journalism and City & Regional Planning offer semester long personal finance courses that are open to the general student body and do not have prerequisites.

Multiple universities, including UNC, have accounts with free online financial literacy programs like CashCourse.⁴² This is similar to the iGrad online program utilized by Duke. CashCourse offers self-paced

online financial literacy courses on topics such as budgeting, saving, and investing. Interestingly, UNC Student Wellness provides a link to CashCourse on the financial resources page of their website, but none of the staff on campus that we spoke with were even aware that this was a resource available to them and their students.⁴³ In addition to CashCourse’s self-study modules and personalized dashboards, tools, and articles, through an already existing account with UNC, faculty can actually assign CashCourse modules to their students as part of their curriculum. Even if these modules aren’t mandatory, faculty passionate about the financial well-being of their students could advertise these resources during their classes or could provide incentives through extra credit for completion of certain activities on the site. This site is also open to UNC faculty and staff and should be advertised as a resource to our employees and their families.

Proposed Solution: A Financial Literacy Extension to the Existing UNC Mobile App CarolinaGO

Given the wide array of resources listed above, one might ask if there is really a problem to solve. We believe there is a significant problem that needs to be addressed based on the following observations:

- 1) Even offices/individuals on campus specifically focused on addressing the financial needs of students were not aware of many of the resources on campus.
- 2) When asked what could be done to help their programs, each office specifically said that marketing for their programs was desperately needed.
- 3) The students we interfaced with as part of this project said they were unaware of these resources or did not discover them until late in their junior or senior year.



It is also important to note that while UNC does not have a dedicated financial wellness/literacy office, we believe that UNC is already conducting a number of programs similar to our LendEdu-ranked peer institutions that earned them a ranking within the top 50. This seems to reinforce the observation that UNC has a variety of wonderful resources available to its student body which need to be better promoted both internally and externally.

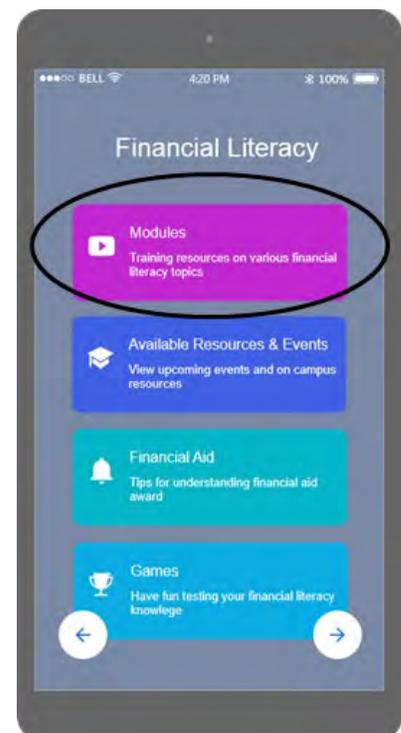
Our proposal to enhance the awareness and utilization of these resources is to provide a centralized location for financial wellness/literacy resources through a Financial Wellness/Literacy extension to the existing UNC mobile app called CarolinaGO.⁴⁴ CarolinaGO is UNC’s student-initiated official mobile app

that was originally launched in October 2014 via a collaboration between UNC's Information Technology Services (ITS) and a small student team.⁴⁵ Currently, the app is designed to help students, faculty, and staff access resources such as dining options, campus maps, campus events, and interfaces with Sakai and ConnectCarolina.

During discussions with ITS and the CarolinaGO student team, we have received enthusiastic buy-in from both ITS and the students. One of the students stated: "I think that's a really neat concept. Definitely something I would have liked to have access to while here." ITS and the student team are looking to increase use of the app across campus and we feel that we can expand the footprint of both the app and our financial wellness resources by way of this effort. Fortunately, the initial financial literacy extension can be completed under the existing funding and resources available through ITS for the app. In addition, the initial modules can likely be completed in the next semester. However, our limiting factor is obtaining buy-in from the various offices around campus to spend their time and energy helping us to coordinate these resources. Although all of the offices we spoke with understood the need, we understand that all of our staff are dealing with multiple demands on their time. Our team is currently working to coordinate with these offices to move the project forward with limited demands upon our Office of Student Affairs, Office of Scholarships & Student Aid, and upon the departments currently offering financial literacy courses. We also believe that the student team's input into the design and content of the app will be critical to arriving at a platform that is both attractive and useful to our student body. This will be an ongoing and evolving process as we continue to test ways of enhancing student engagement and continuing to pull in new resources as they become available to our students and campus community.

We envision that this CarolinaGO extension could be designed and utilized by way of the following components:

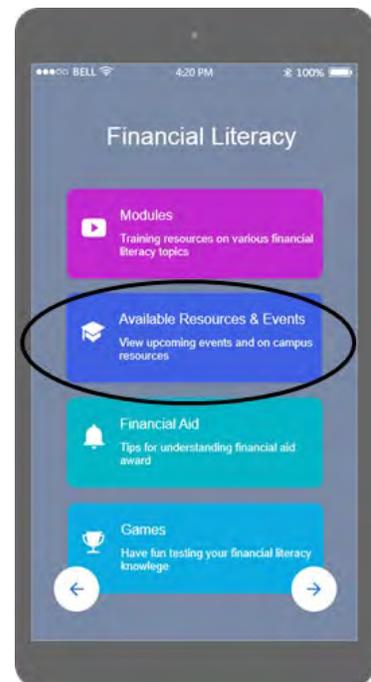
- 1) Modules. This section would include links to online resources. The information in these modules provide students the knowledge and skills needed to make sound financial decisions. Clicking on the Modules section will open the CashCourse website.⁴² If a student is new to CashCourse, they can create an account within the app. Once logged in, users can work their way through the course materials at their own pace. Students can also view a dashboard to track their progress. Some of the topics covered in CashCourse are paying for college, saving, budgeting, and investing. Professors can integrate CashCourse into the classroom by assigning specific modules as homework. Students can view and complete these assignments within CashCourse from the mobile app. In



addition to CashCourse, the modules section can include links to other approved online articles, ebooks, and videos.



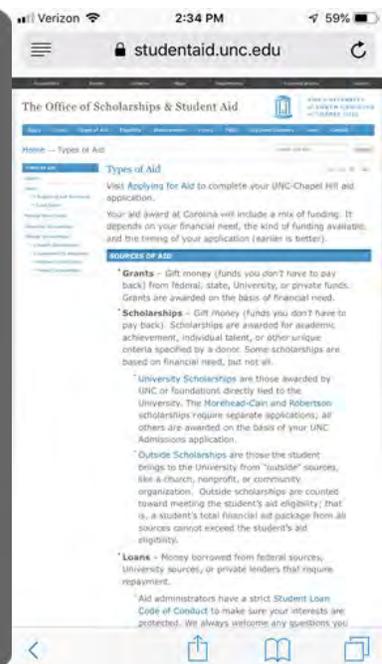
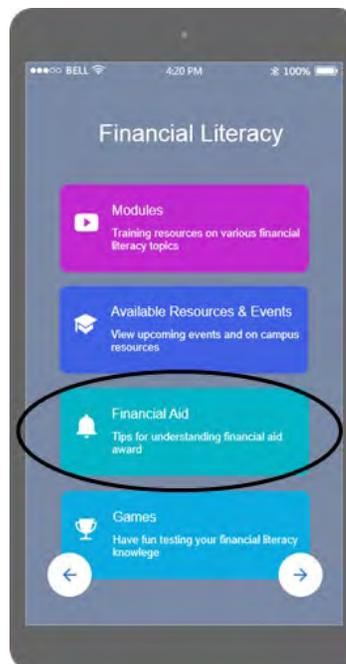
- 2) Available Resources & Events. The next section in the app will publicize existing financial literacy events on campus. Our hope is that advertising in the app will increase attendance and utilization of these resources. The Office of the Dean of Students sponsors the UNC Financial Literacy Consortium. The consortium offers financial literacy workshops to students during the school year. In an effort to promote these workshops, we will include a link to the workshop schedule in the events section of the app. From there, students can see a list of available workshops, like 'Ballin on a Budget'. Students can click on a workshop they are interested in to register for the event. They can also automatically add the event to their Apple, Google, Exchange, or other mobile calendars. Adding registration functionality will not only help the students, it will also help the workshop organizers get a head count, so they know how much pizza to order and how many handouts to print. From the app, students can also register for push notifications with alerts of new workshops and reminders of upcoming events.





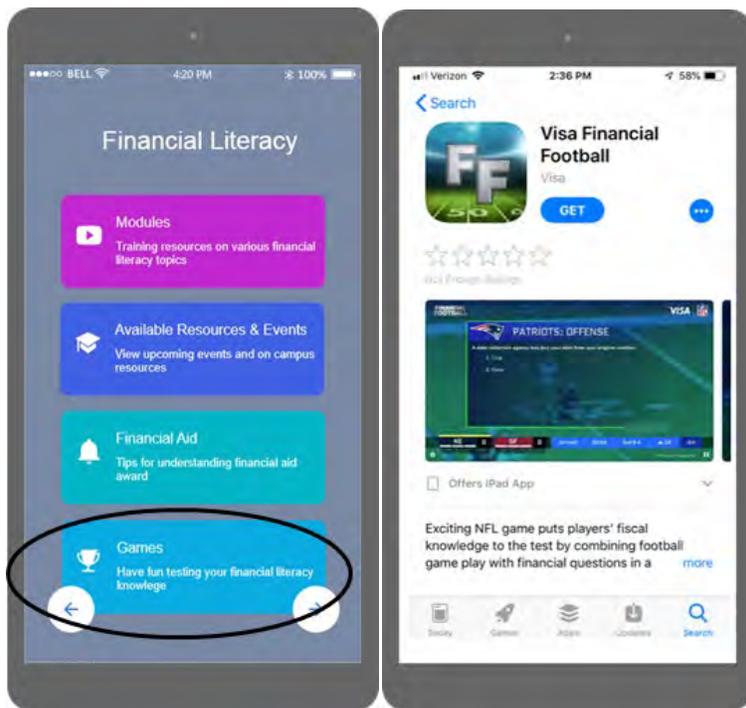
The available resources and events section do not have to be limited to on campus resources. It can also advertise external resources such as Mint.com, College Foundation of North Carolina (CFNC.org), and events at the local credit union.

- 3) Financial Aid. The app will also include a Financial Aid section. Our hope is that students who are accepted to UNC will open the app to get more clarification on their financial aid package. They can read through the information in the app to help them make a more informed decision about what aid they should accept. Within the app we will link to the UNC Office of Scholarships and Student Aid website. The site includes information about the different types of aid. We would also add functionality to the Financial Literacy app for scheduling an appointment with a Financial Aid counselor.



- 4) Games. While students are learning financial literacy, we want them to have fun and have an opportunity to put their skills to the test. The last section in the app will include links to financial literacy games and

quizzes. There are some free financial literacy games in the Apple app store like Financial Football. Sports fans can pick their favorite NFL team. When it's time to run a play, users have to answer a quiz question to gain yards. Answer the question correctly and you may get a first down or score a touchdown. Miss the question and you lose yardage. For those who aren't sports fans, there are other popular games like Mindblown Life, a social life simulation game for smartphones. In the game, players create an avatar, choose a career, decide where to live, and make other life choices. Players participate in mini games to earn money, skills, and reputation that they use to fund their decisions. The game doesn't have a set path, it all depends on the player's choices and budgeting skills.



In summary, we feel that the app is the appropriate solution to issues addressed herein due to the fact that it: 1) provides a centralized source of financial wellness/literacy information and resources, 2) greatly expands the ability of our offices to market existing resources and upcoming events and will likely improve attendance/utilization of these resources, 3) makes resources more accessible by providing information in a modernized platform that will be more engaging to the modern

student, 4) has the potential to be expanded to provide personalized information and experiential/targeted learning, and 5) can be used by engaged faculty on campus to facilitate adding financial wellness training into existing coursework.

Although faculty/staff were not the focus of this project, it is also important to note that many of these resources such as CashCourse and the Financial Literacy Consortium Workshops are available to faculty and staff and the app could also be utilized to expand UNC's support of the financial wellness of our employees.

Financial Literacy, UNC's Mission, and the Benefits of the Financially Literate Graduate

UNC's mission is "to enhance access to learning and to foster the success and prosperity of each rising generation" and "to enhance the quality of life for all people in the State."⁴⁶ During a period of time

where UNC has focused efforts on providing a valuable college education to all people of our state regardless of their background, we must be cognizant of the long-term needs of our future alumni and how this ties into the key aspects of UNC's "Mission and Values".⁴⁶ A bachelor's degree is of little value if student debt outweighs the benefits of their degree or if students are not empowered to turn their degrees into a better life for themselves, their families, and their communities. In UNC's Blueprint for Next⁴⁷, we recognize that the "New Graduate" may be "young, middle-aged, or older" and will need a modern, individualized, and experiential learning environment.

UNC has a rich opportunity to further enhance its standing as the "Best Value in Public Higher Education"⁴⁸ by combining an affordable bachelor's degree with the knowledge and skills necessary to maximize career success and wealth building. These empowered alumni will make a tremendous impact on the overall economy of our state and will be better positioned to support their alma mater down the road via financial support or through a desire to give back to the UNC community through volunteering or mentoring. In a time where the value of a college degree has come into question, we can spotlight the powerful long-term impact and benefit of a UNC education.

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SUPPLEMENTAL INFORMATION

Supplemental Table 1
History of Tuition and Required Fees for In-State Undergraduates, by Sector

Academic Year	Private Four-Year	Public Two-Year	Public Four-Year	UNC Average
1989-90	\$8,660	\$840	\$1,700	\$1,011
1990-91	\$9,340	\$910	\$1,910	\$1,103
1991-92	\$9,810	\$1,170	\$2,110	\$1,212
1992-93	\$10,450	\$1,120	\$2,330	\$1,251
1993-94	\$11,010	\$1,250	\$2,540	\$1,394
1994-95	\$11,720	\$1,310	\$2,710	\$1,467
1995-96	\$12,220	\$1,330	\$2,810	\$1,597
1996-97	\$12,990	\$1,470	\$2,980	\$1,718
1997-98	\$13,790	\$1,570	\$3,110	\$1,789
1998-99	\$14,710	\$1,550	\$3,250	\$1,852
1999-00	\$15,520	\$1,650	\$3,360	\$1,945
2000-01	\$16,070	\$1,640	\$3,510	\$2,116
2001-02	\$17,380	\$1,610	\$3,770	\$2,411
2002-03	\$18,060	\$1,670	\$4,100	\$2,811

2003-04	\$18,950	\$1,910	\$4,650	\$2,989
2004-05	\$20,050	\$2,080	\$5,130	\$3,291
2005-06	\$20,980	\$2,180	\$5,490	\$3,373
2006-07	\$22,310	\$2,270	\$5,800	\$3,740
2007-08	\$23,420	\$2,290	\$6,190	\$3,952
2008-09	\$24,820	\$2,380	\$6,600	\$4,045
2009-10	\$25,740	\$2,570	\$7,070	\$4,210
2010-11	\$26,770	\$2,740	\$7,630	\$4,865
2011-12	\$27,880	\$2,970	\$8,280	\$5,265
2012-13	\$28,990	\$3,150	\$8,650	\$5,739
2013-14	\$30,130	\$3,240	\$8,890	\$6,096
2014-15	\$31,280	\$3,340	\$9,150	\$6,190
2015-16	\$32,340	\$3,400	\$9,430	\$6,449
2016-17	\$33,500	\$3,460	\$9,670	\$6,709
2017-18	\$34,700	\$3,560	\$9,980	\$6,867

Supplemental Table 2
Tuition and Required Fees for In-State Undergraduates, by UNC System Institution

	1992-93	1997-98	2002-03	2007-08	2012-13	2017-18
ASU	\$1,264	\$1,704	\$2,613	\$4,184	\$5,962	\$7,158
ECSU	\$1,184	\$1,522	\$2,162	\$2,897	\$4,150	\$4,985
ECU	\$1,246	\$1,832	\$2,909	\$3,961	\$5,663	\$6,972
FSU	\$1,138	\$1,460	\$2,051	\$3,020	\$4,299	\$5,183
NCA&T	\$1,270	\$1,622	\$2,564	\$3,429	\$4,952	\$6,419
NCCU	\$1,211	\$1,737	\$2,674	\$3,605	\$5,119	\$6,282
NCSU	\$1,286	\$2,232	\$3,748	\$5,002	\$7,644	\$8,864
UNCA	\$1,150	\$1,784	\$2,883	\$4,044	\$5,807	\$7,002
UNCC	\$1,189	\$1,783	\$2,943	\$4,091	\$5,777	\$6,832
UNC-CH	\$1,249	\$2,173	\$3,768	\$5,176	\$7,500	\$8,731
UNCG	\$1,540	\$2,019	\$2,993	\$3,978	\$6,085	\$7,137
UNCP	\$948	\$1,536	\$2,364	\$3,396	\$4,776	\$5,870
UNCSA	\$1,630	\$2,205	\$3,450	\$4,918	\$7,351	\$8,841
UNCW	\$1,344	\$1,782	\$3,023	\$4,312	\$6,122	\$7,000
WCU	\$1,271	\$1,723	\$2,603	\$3,950	\$5,772	\$6,748
WSSU	\$1,094	\$1,504	\$2,235	\$3,274	\$4,850	\$5,850

UNC Average	\$1,251	\$1,789	\$2,811	\$3,952	\$5,739	\$6,867
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Supplemental Table 3
2016-2017 In-State Bachelor's Degree Recipients, % Who Borrowed Student Loans and Average Amount Borrowed, by Institution

Institution	% Who Borrowed	Mean Amount Borrowed
ASU	58.8%	\$22,756
ECSU	83.0%	\$21,697
ECU	67.2%	\$22,967
FSU	70.6%	\$20,210
NCA&T	88.6%	\$25,696
NCCU	91.6%	\$30,119
NCSU	52.8%	\$20,420
UNC-CH	41.7%	\$18,351
UNCA	61.1%	\$17,728
UNCC	67.1%	\$21,313
UNCG	69.8%	\$21,590
UNCP	75.6%	\$21,221

UNCSA	68.9%	\$25,775
UNCW	59.9%	\$21,545
WCU	66.5%	\$23,620
WSSU	67.1%	\$22,299
UNC System Total	63.0%	\$22,061

**Supplemental Table 4
UNC System Peers Top 50**

UNC Institution	Peer Institutions Appearing on LEND EDU's List of the Top 50 College Financial Literacy Programs 2018
ASU	Bowling Green State University-Main Campus Sam Houston State University
ECSU	California State University-Bakersfield Ohio State University-Main Campus
ECU	Texas Tech University University at Buffalo University of South Carolina-Columbia
FSU	California State University-Bakersfield
NCA&T	University of Maine
NCCU	California State University-Bakersfield
NCSU	Iowa State University Michigan State University Ohio State University-Main Campus Pennsylvania State University-Main Campus University of Arizona University of Illinois at Urbana-Champaign University of Wisconsin-Madison
UNCA	no peers on LEND EDU 2018 list

UNCC	University of Colorado Denver
UNC-CH	Duke University University of California-Los Angeles University of Pittsburgh-Pittsburgh Campus University of Wisconsin-Madison
UNCG	Bowling Green State University-Main Campus University of Central Florida
UNCP	no peers on LEND EDU 2018 list
UNCSA	University of California-Los Angeles University of Cincinnati-Main Campus Yale University
UNCW	University of Maine University of Maryland-Baltimore County
WCU	Sam Houston State University
WSSU	no peers on LEND EDU 2018 list