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North Carolina Agricultural and Technical State University

North Carolina Central University

North Carolina State University at Raleigh

University of North Carolina at Asheville

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GENERAL ADMINISTRATION

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MEMORANDUM

TO: Members, Committee on Educational Planning, Policies, and Programs

FROM: Alan Mabe

DATE: June 2, 2010

SUBJECT: Biennial Distance Education Report

Background: In 1998, when the General Assembly started funding distance education, it required that a biennial report on distance learning be provided by UNC. The reports have been provided every other year since, documenting changes and developments in distance learning, especially the growth of online distance education. This report makes a significant shift to incorporating more information about online degree offerings and the growing student response.

Jurisdictional Authority: Session Law 1998-212, Sec. 11.7 provided funding for distance education. The provision includes the following: "The Board shall provide a preliminary report to the General Assembly by May 1, 2000, and subsequent evaluations, including recommendations for changes, shall be made at least biennially to the Joint Legislative Education Oversight Committee."

Issues Involved: We have had two reports by State entities in recent years each of which has turned out quite positive. The State Office of Budget and Management did a study in 2006 and found that our cost of developing courses and programs was higher for online than for face-to-face on-campus courses and programs; in addition, they did not find any duplication in online degree offerings. More recently the Legislative Office of Evaluation has just completed a study that reached the same conclusion regarding the cost of online course and program development. The report had no recommendations but was very positively inclined to the benefits of online education for providing access. The biennial report has made those points over the years as well.

As the report documents, in FY 2009 UNC campuses produced 412,625 student credit hours in distance education (on the funding formula) understood as distance education at a site away from the campus and online student credit hours taken by students away from the campus. While there were over 56,000 unduplicated

students taking these courses, when converted to their estimated full-time equivalent number of students it would be over 19,000 FTE. This would place the size of the distance education student body between ASU, with a headcount of approximately 17,000 students and UNCG, with over 21,000 students, making the distance education number the sixth largest among the campuses. Of course, these students are counted in the headcount of the campus they are enrolled in, but this provides some perspective on the magnitude of this effort. Further, about 8,000 of the 19,000 FTE represent online students, which would rank the online at a distance student body eighth among the campuses.

As indicated, the size of the cohort of 19,000 FTE distance education students would place it between ASU and UNCG in size. Imagine if we had to build a campus to accommodate 19,000 FTE residential students. The estimated replacement value as of FY 2008 for the UNCG campus was \$960,000,000 and for the ASU campus was \$837,000,000.

If we limit estimated replacement value to State-appropriated buildings, for UNCG it would be \$409,000,000 and for ASU it would be \$482,000,000. Appropriated buildings more directly correspond with the academic enterprise on the campus. Appropriated buildings to accommodate 19,000 FTE residential students would cost the State an estimated \$450,000,000 or more. Another way to look at this is by not serving those students on campus, those appropriated buildings are not needed, thus saving the State the cost of more academic buildings.

Recommended Action: Recommend approval of the report by the BOG and transmittal to the Joint Legislative Education Oversight Committee.

DRAFT

REPORT ON EXPANDING ACCESS TO HIGHER EDUCATION THROUGH STATE-FUNDED DISTANCE EDUCATION PROGRAMS

Submitted in response to North Carolina Session Laws 1998, chapter 212, section 11.7 of the North Carolina General Assembly

June 2010

Board of Governors The University of North Carolina

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Executive Summary

The 1998 legislation providing enrollment funding for UNC distance education¹ requires submission of a biennial report that addresses the impact of these programs on access to higher education. As with the four preceding biennial reports, this provides substantial information that documents the growth of UNC distance education programs and their role in meeting the high priority education and economic development needs of the State.

- State funding for UNC distance education degree-credit instruction, first provided in FY 1999, is achieving the intended legislative goal of expanding access to higher education opportunities for North Carolinians who otherwise would be unable to obtain an undergraduate degree, graduate degree, or licensure in a teaching specialty. High quality degree programs are being developed and offered throughout the state in subject areas that are responsive to the workforce and economic development needs of North Carolina; for example, almost a third of all distance education instruction is related to K-12 teacher education.
- The unduplicated number of individuals enrolled in UNC distance education courses (including students enrolled in regular term programs who choose to take a distance education course) increased by 709 percent from fiscal year 1999 to fiscal year 2009—from 6,929 individuals to 56,046. Distance education course offerings increased 717 percent from fall 1998 (the first year distance education enrollment funding was provided) to fall 2008—from 412 course sections to 3,368.
- Site based programs account for 298 of UNC's distance education programs, which are offered at 36 community colleges as well as at public school locations, military bases, health care settings, regional centers, and graduate centers. Although these programs are site-based (as requested by community colleges, military bases, hospitals, and public school systems), many of them use blended instruction with some online or two-way video components.
- As of May 2010, 234 online degree, certificate, and licensure programs were offered through The University of North Carolina Online. At that time there were 1,258 individual online courses listed for fall 2010. Online enrollments are increasing in their proportion of overall distance education student credit hours (SCH's) taught. In the two years from 2006-07 to 2008-09, online student credit hours taken by distance education students increased by 55%, from 152,854 to 236,889.
- In spring 2009, students who are 26 and older accounted for 72.3 percent of distance education enrollments compared to only 21.8 percent of regular term enrollments.

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¹ Distance education refers to formula-fundable instruction delivered off campus for credit (whether face-to-face, electronically mediated, or a combination of methodologies) whether a single course, a certificate program, or a degree program. Traditional regular term refers to formula-fundable instruction delivered on campus by any methods for credit.

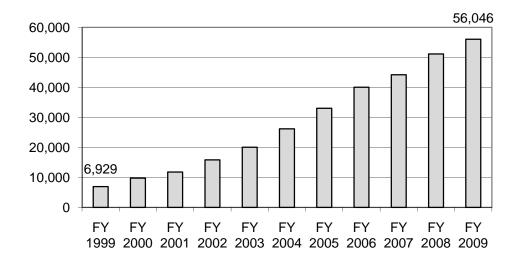
- This indicates that UNC distance education programs are reaching non-traditional higher education audiences who otherwise would not have access to these programs.
- A growing percentage of distance education enrollments are minority students; from spring 2004 to spring 2009, the percentage of African-American students taking only distance education courses increased from 15.4 percent to 17 percent.
- UNC-General Administration e-learning grants have supported faculty development, collaborative online courses and degree programs, and development of distance degree programs that are responsive to critical needs of the state. UNC-GA is coordinating a number of initiatives such as the UNC Online Project Team, the UNC Online Quality Council, the SuccessNC collaboration with the NC Community College System, and UNC Academic Services (inter-institutional course registration system and an exam proctoring system).
- A 2010 report by the General Assembly's Program Evaluation Division found that compared to on-campus courses, distance education courses cost more overall to develop but cost about the same to deliver. The increased cost is largely due to staff support needed to create distance courses or for converting on-campus course content for distance delivery. The report also noted that distance education increases access to education. Although distance education is not new, the method of delivery for course instruction has evolved extensively with advances in technology. The flexibility of participating in courses at off-campus locations or through online courses provides a unique opportunity for the workforce. Faculty and staff design distance programs to help students retool with new skills or sharpen skills to keep pace with dynamic workplace demands.
- Careful needs assessments are conducted before programs are developed, and programs authorized are those that would be most beneficial for the economic growth and vitality of North Carolina communities. Consultation with other state partners (e.g., the North Carolina Community College System, public school systems, AHEC, and professional associations) in planning and delivering quality distance education programs is a high priority. The current UNC Tomorrow initiative will have important implications for UNC distance education in the areas of priority setting and resource efficiency and will guide continued expansion of higher education access made available to North Carolina's citizens.

Expanding Access to Higher Education through UNC Distance Education Programs

Enrollment Growth

In response to the enrollment funding provided by the General Assembly for UNC distance education programs (both site-based and online), the number of students enrolled in these programs has increased steadily every year since this funding was first provided in FY 1999. Unduplicated headcount enrollments over the course of a full year (Fall, Spring, and Summer sessions) increased by more than 49,000 from Fiscal Year 1999 to Fiscal Year 2009—from 6,929 individuals to 56,046 (Figure 1).

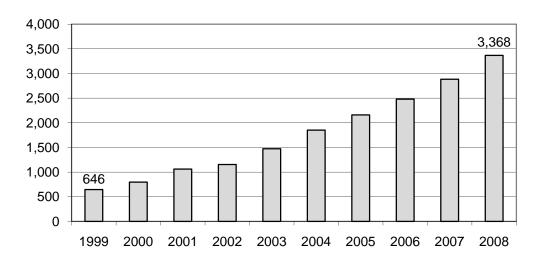
Figure 1. Growth in Unduplicated Headcount Enrollment in UNC Distance Education Programs, Fiscal Years 1999 – 2009



[Note: Unless otherwise noted, data will be presented for distance education instruction funded by the UNC enrollment funding model because this is the focus of the legislation mandating this report. UNC distance programs also enroll a number of individuals (9,854 unduplicated headcount in FY 2009) for whom UNC does not receive distance education enrollment funding. Typically these are either non-NC residents receiving distance instruction out of state (including foreign countries), or they are students enrolled in specially funded contract or customized distance programs that do not receive enrollment funding.]

Annual growth in distance education can also be measured by the number of distance courses offered each semester. As Figure 2 illustrates, Fall Semester distance education courses increased from 412 in fall 1998 to 3,368 in fall 2008.

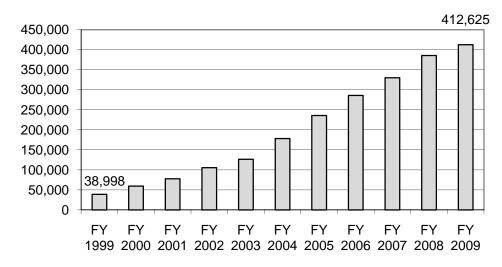
Figure 2. Growth in Distance Education Course Sections: Fall 1998—Fall 2008



Average distance education class sections are getting larger, meaning that there is greater efficiency in delivering this instruction. In fall 2004, for instance, distance education courses averaged 41.0 student credit hours (SCHs) per section. By fall 2008 this average of SCHs per course section had increased to 42.9.

Another indication of growth in UNC distance education activity is the increase in student credit hours (SCHs) taught in each fiscal year. These SCHs increased from 38,998 in FY1999 to 412,625 in FY2009 (Figure 3).

Figure 3. Total UNC Funding Model Distance Education Student Credit Hours: FY 1999—FY 2009



Production of these distance education SCHs varies by UNC constituent institution, with some institutions more active in offering distance education programs than others. SCH production by UNC constituent institution for Fiscal Years 2004 and 2009 is presented in Figure 4.

Figure 4. Funding Model Distance Education Student Credit Hours (SCHs)
Produced by UNC Institutions: FY 2004 & FY 2009

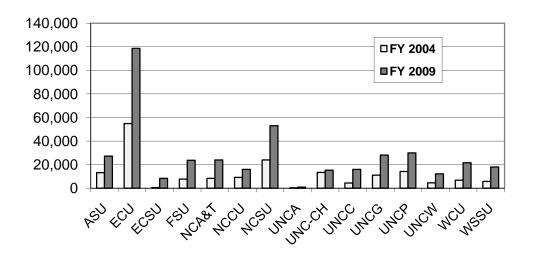


Figure 5. Percentage by Institution of Total UNC On-Campus and Distance Education Headcount Enrollments: Spring 2009

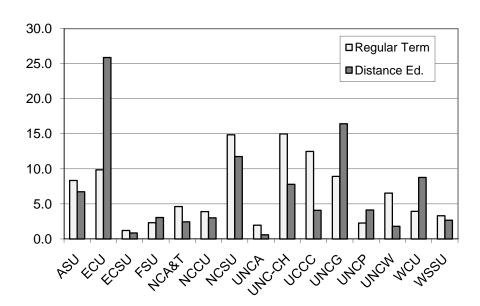
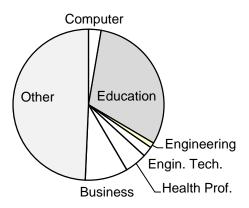


Figure 5 on the previous page compares the percentage share of overall UNC enrollments each campus has for its on-campus and distance education enrollments.

UNC has 561 authorized distance education degree programs offered at these levels: 193 baccalaureate, 266 masters, 6 intermediate (post-master's) and 12 doctoral. The remaining 84 are a mix of various certificate and teacher licensure programs. Although programs are offered in 22 of the National Center for Educational Statistics' CIP (Classification of Instructional Programs) content areas, 6 of those 22 content areas account for more than half of UNC distance education activity (Computer and Information Sciences, Education, Engineering, Engineering Technologies, Health Professions, and Business and Management (Figure 6). This indicates that UNC distance education programs are addressing high priority workforce development and economic transformation needs of North Carolina. Of all credit hours taught via distance education in 2008-09, the subject areas with the largest number are: Education (31%), Business (9%), Nursing (7.5%), and Health Professions other than Nursing (4.7%).

Figure 6. Student Credit Hour Percentages by High Needs Content Areas



Site based programs account for 298 of UNC's distance education programs, which are offered at 36 community colleges as well as at public school locations, military bases, health care settings, regional centers, and graduate centers. Although these programs are site-based (as requested by community colleges, military bases, hospitals, and public school systems), many of them use blended instruction with some online or two-way video components. UNC off-campus degree programs are increasingly incorporating technological modes of instructional delivery, and almost all use some form of e-mail or web-based sites for information and communication. A majority of courses still conduct some instruction in the traditional or "face to face" manner, with faculty instructors traveling to the instructional site. In 2008-09 individuals in every county in North Carolina were enrolled in site-based or online distance programs offered by UNC campuses.

Online Education

The University of North Carolina Online

In July 2007, UNC launched The University of North Carolina Online (http://online.northcarolina.edu/), the official online site (Figure 8) providing organization and integration services and activities to assist UNC institutions in increasing access to high quality degree-credit online programs for North Carolina residents.



Figure 8. Home Page of The University of North Carolina Online

The site reflects the tradition of The University of North Carolina in enabling each campus to emphasize its unique strengths and distinguishing features while providing coordinated functions and services that are efficiently addressed at the system level. The University of North Carolina Online is part of a UNC strategy to increase educational attainment in North Carolina and prepare the state's workforce for highgrowth, knowledge-intensive occupations.

The site enables individuals to search for online offerings and establish ongoing communication with campuses and degree programs. Program-specific online and print brochures are sent to prospective students requesting information, and each UNC campus maintains a database of inquiries. Additional Web pages accessible from this site provide information to assist specific groups of learners such as teachers, community college students, military personnel and their dependents, and high school students.

As of May 2010, 234 online degree, certificate, and licensure programs were offered through The University of North Carolina Online. At that time there were 1,258 individual online courses listed for fall 2010. During a one week period in May 2010, there were 12,021 visits to the UNC Online website, a 27% increase in the number of visits from the same period a year earlier.

Assurance of quality in online offerings is a high priority, and each UNC campus chief academic officer has appointed a representative to serve on an Online Quality Council that meets periodically to discuss online quality standards, faculty development activities, student support services, and other relevant topics.

Although site-based distance education will continue to be an important way by which UNC serves the higher education needs of North Carolina, online enrollments are increasing in their proportion of overall distance education student credit hours (SCH's) taught. In the two years from 2006-07 to 2008-09, online student credit hours taken by distance education students increased by 55%, from 152,854 to 236,889 (Figure 9).

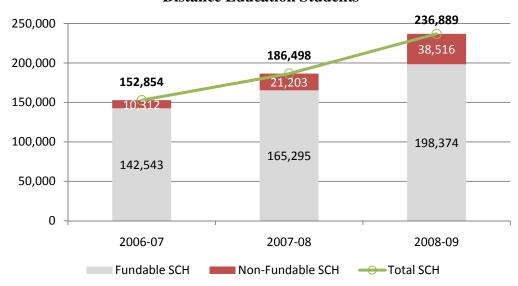


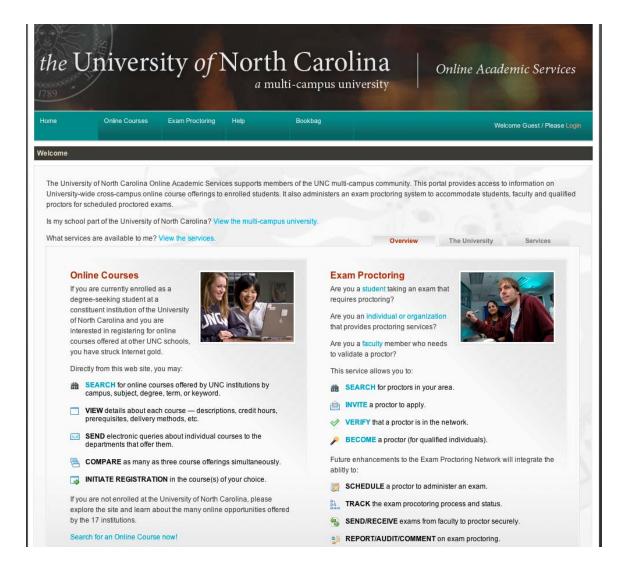
Figure 9. Online Student Credit Hours Taken by Distance Education Students

It should be noted that online courses taken by students on campus also increased steeply (35.5%) over the same two-year period, going from 149,636 to 202,739 student credit hours from 2006-07 to 2008-09. Overall, 74,006 individuals took a UNC online course in 2008-09, a 36.3% increase from 54,296 in 2006-07.

Online Academic Services

UNC-GA's Online Services has coordinated the development of two services for online and distance education students that are accessible through the Online Academic Services site, http://services.northcarolina.edu/. (Figure 10).

Figure 10. UNC Online Academic Services Site



The **inter-institutional course registration system**, which became operational in fall 2008, enables a student at one UNC institution to easily register for an online course offered by another UNC institution. This helps students obtain needed courses in order to graduate on time, it increases the resource efficiency of online courses with increased enrollments, and it helps institutions avoid duplication of online courses.

The most recent development is the expansion of a distance education **exam proctoring system** that will enable students to search for available exam proctors in their area. The system is an elaboration of a system first developed at East Carolina University, and UNC-GA has provided funding to ECU to hire an exam proctoring coordinator for the state. The site currently lists 315 exam proctors located around the USA, and more proctors will be nominated or volunteer, subject to verification by the system coordinator. Developments anticipated in coming months include the ability to schedule a proctor to administer an exam, tracking the status of the process, and sending and receiving exams from faculty. This site will be available to any student (including community college students) to search for an exam proctor when the student is at a distance from the campus.

UNC Online Project Team

In early 2010 Senior Vice President Mabe appointed a group of UNC campus representatives to review the current status of UNC Online and develop a plan for the next 12 and 36 months. The group was asked to articulate a clear mission statement, a branding statement, and a strategy for the near term and the longer term. The UNC Online Project Team met monthly during the spring semester and has discussed a range of issues including: student support systems, faculty development online modules, UNCG's iSchool, international offerings, aligning on-campus and distance education tuition systems, and shared online courses. At its most recent meeting in May 2010, the Team met with Frank Mayadas, a nationally respected authority on online learning. This was a follow-up visit by Dr. Mayadas after an initial visit to consult and offer recommendations about UNC Online in fall 2009.

SuccessNC Collaboration with the NC Community College System

During 2009-10 UNC-GA has been actively working with the NC Community College System office on an initiative called SuccessNC to increase the number of North Carolina citizens with college degrees. In addition to efforts addressing collaborative enrollment projections, academic remediation, and coordination of transfer student advising, the initiative also is developing a plan to designate several community college campuses as pilot sites where students will receive all academic services needed for them to complete a UNC Online degree at their local community college campus.

Evaluation Studies

Study by the Program Evaluation Division of the NC General Assembly

Session Law 2008-107, Section 9.10(a) directed the General Assembly's Program Evaluation Division to review the start-up and ongoing costs of distance education versus on-campus instruction in UNC. UNC-GA and UNC constituent institution personnel worked closely with the Program Evaluation Division to provide it with the data and information required for the study. The final report, presented to the Joint

Legislative Program Evaluation Oversight Committee in April 2010, concluded, among other things, that:

- Compared to on-campus courses, distance education courses cost more overall to develop but cost about the same to deliver. The increased cost is largely due to staff support needed to create distance courses or for converting on-campus course content for distance delivery.
- Distance education increases access to education. Although distance education is not new, the method of delivery for course instruction has evolved extensively with advances in technology. The flexibility of participating in courses at off-campus locations or through online courses provides a unique opportunity for the workforce. Faculty and staff design distance programs to help students retool with new skills or sharpen skills to keep pace with dynamic workplace demands.
- Technology has changed delivery of instruction in every setting. Many UNC campuses asserted there was no clear distinction between distance education and on-campus instruction in terms of instructional technology. The level of commitment by campus leadership is an important component because it affects how campuses deliver and dedicate resources to distance education.

Office of State Budget and Management Study

The conclusions of the Program Evaluation Division are generally consistent with the April 2006 report of the Office of State Budget and Management (OSBM), as directed by Session Law 2005-276, Section 9.7, which reviewed UNC distance education to identify any duplication in course and program offerings and identify the cost of developing online courses. That study found little duplication among UNC online programs and substantial sharing of courses and other resources among any programs that were duplicated. OSBM's findings were consistent with previous UNC studies that indicate the greatest direct costs of traditional ("face-to-face") instruction, whether on- or off-campus, are in the instructional salary costs, primarily related to the delivery and administration of the course. Course development costs are a significant part of the costs for online courses. The additional costs of technical expertise (often in the form of instructional technology specialists), training, hardware and software required to adapt courses for technology-mediated delivery add to course development costs. This represents a new category of costs not present in traditionally-taught courses.

Characteristics of UNC Distance Education Students

Analysis of the characteristics of UNC distance education students confirms that many non-traditional higher education students are enrolling in distance education programs. In spring 2009, students in distance education courses had the following characteristics:

Gender: Due to work and family obligations, many women are likely to be unable to relocate to a UNC campus. UNC distance education programs are achieving their intended effect of reaching these non-traditional higher education students in their

home communities. Women are enrolling in UNC distance education programs at a higher rate than for regular term programs. Table 1 shows the gender distribution of UNC spring 2009 enrollments for students only enrolled in regular term courses, students only enrolled in distance education (DE) classes, and students in enrolled in both regular term and distance classes.

Table 1. Enrollment in Types of Courses by Gender, Spring 2009

| Gender | Taking Only Regular Term Courses | Taking Only DE Courses | Taking Both Regular Term & DE Courses |
|--------|-------------------------------------|---------------------------|--|
| Female | 55.65% | 68.54% | 65.59% |
| Male | 44.35% | 31.46% | 34.41% |

Note: Increasingly, students choose to take a mix of regular term and distance education courses. Tables 1 and 2 show that a higher percentage of females and some minority students choose to do this.

Race/ethnicity: It is important for UNC distance education to make higher education opportunities available for all racial and ethnic groups of North Carolina. Table 2 shows the racial and ethnic distribution of spring 2009 UNC enrollments for students enrolled only in regular term courses, only in distance education courses, and in both regular term and distance courses. For African American students, it is interesting to note that although the percentages of these students taking only distance education courses is lower than the percentages of these students enrolled only in regular term courses, the percentages of these students enrolled both in regular term and distance courses is substantially higher than their percentages for only regular term. The percentage of minority students participating only in distance education is also increasing; from spring 2004 to spring 2009 the percentage of African-American students increased from 15.4 percent to 17 percent.

Table 2. Enrollment in Types of Courses by Race/Ethnicity, Spring 2009

| Race/Ethnicity | Taking Only Regular Term Courses | Taking Only DE Courses | Taking Both Regular Term & DE Courses |
|--------------------|--|---------------------------|---|
| African American | 21.94% | 16.96% | 34.98% |
| American Indian | 0.94% | 1.26% | 2.74% |
| Asian | 3.33% | 1.69% | 2.12% |
| Hispanic | 2.79% | 2.12% | 2.11% |
| White | 63.90% | 69.43% | 53.55% |
| Non-Resident Alien | 3.21% | 2.56% | 1.25% |
| Unknown | 3.89% | 5.98% | 3.25% |

Age: Another important goal for UNC distance education is to reach older place-bound and working adults in North Carolina. While near half (48 percent) of regular term students is in the traditional college age range of 21 or younger, Figure 11 illustrates that UNC distance education programs are succeeding in reaching the non-traditional college-age population. Students who are 26 and older account for 72.3 percent of distance education enrollments compared to only 21.8 percent of regular term enrollments. US Census Bureau projections indicate that the older population in North Carolina will grow rapidly over the next decade; thus this trend regarding older distance education students is likely to continue.

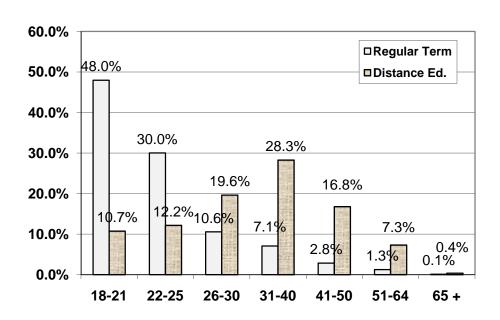


Figure 11. Age Distribution of UNC Students Enrolled in Regular Term and Distance Education Courses, Spring 2009

Residency: As with regular term degree programs, students enrolled in state-funded distance education programs are largely North Carolina residents. In spring 2009, 89.8 percent of UNC distance education students were North Carolina residents compared to 86 percent of the UNC regular term students. (Student credit hours produced by non-North Carolina residents taking UNC courses out-of-state are not counted for state enrollment funding and are not included in the data presented in this report. Non-North Carolina resident instruction taking place inside North Carolina does qualify for enrollment funding, but the non-residents must pay the regular out-of-state tuition that would be charged on campus.)

Degree level of student: Because many UNC distance education programs are designed to serve the higher education needs of working adults, many programs are offered at the graduate level for teachers, nurses, and others who wish to pursue advanced

degrees without leaving their home community. Thus, as Figure 12 illustrates, a majority of UNC distance education students are enrolled in master's degree programs. (UNC distance programs offer only the final two years of baccalaureate degree programs off campus—one reason for the lower percentage of distance undergraduate students.) UNC General Administration has provided incentive grants to encourage development of a number of baccalaureate degree programs in critical need areas such as teacher education, health professions, and technology.

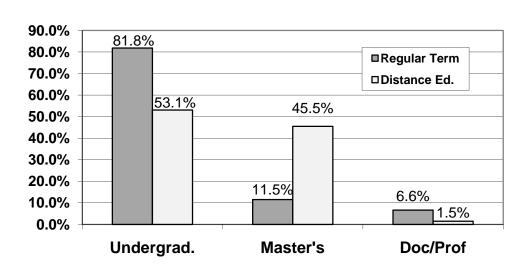


Figure 12. Distribution of UNC On-Campus and Distance Education Students by Degree Level, Spring 2009

Conclusion

As highlighted in the Executive Summary and documented throughout this report, state enrollment funding for UNC off-campus and distance education degree-credit instruction is achieving its intended effect of expanding access to higher education for North Carolina citizens unable to relocate or travel to a UNC campus and reducing the demand on limited on-campus enrollment capacity. Among other benefits, this funding enables distance education students to pay tuition rates at a level comparable to oncampus tuition rates, thus making higher education not only accessible but also affordable for these citizens.

Prior to the 1998 legislation referenced at the beginning of this report, North Carolina was the only state in the 16-state Southern Regional Education Board (SREB) region that did not provide distance education funding for its university system. The enrollment funding has enabled UNC campuses to make crucial investments in faculty training, staff support, and information technology that are needed to offer high-quality instruction in a rapidly evolving and expanding distance education environment.

Instructional quality is paramount in developing these distance education opportunities, and policies and assessment procedures are in place to assure this. Costs of

instruction are monitored carefully, and ongoing attention is being given to developing cost-effective programs through efficient use of information technology and collaboration and coordination among UNC campuses. UNC distance education programs are planned with the goal of raising the educational attainment level of North Carolinians and thus improving their economic and social well being. Careful needs assessments are conducted before programs are developed, and programs authorized are those that would be most beneficial for the economic growth and vitality of North Carolina communities. Consultation with other state partners (*e.g.*, the North Carolina Community College System, public school systems, Area Health Education Centers [AHEC], and professional associations) in planning and delivering quality distance education programs is a high priority. The outcomes of UNC Tomorrow initiative have had important implications for UNC distance education in the areas of priority setting and resource efficiency and will guide continued expansion of higher education access made available to North Carolina's citizens.