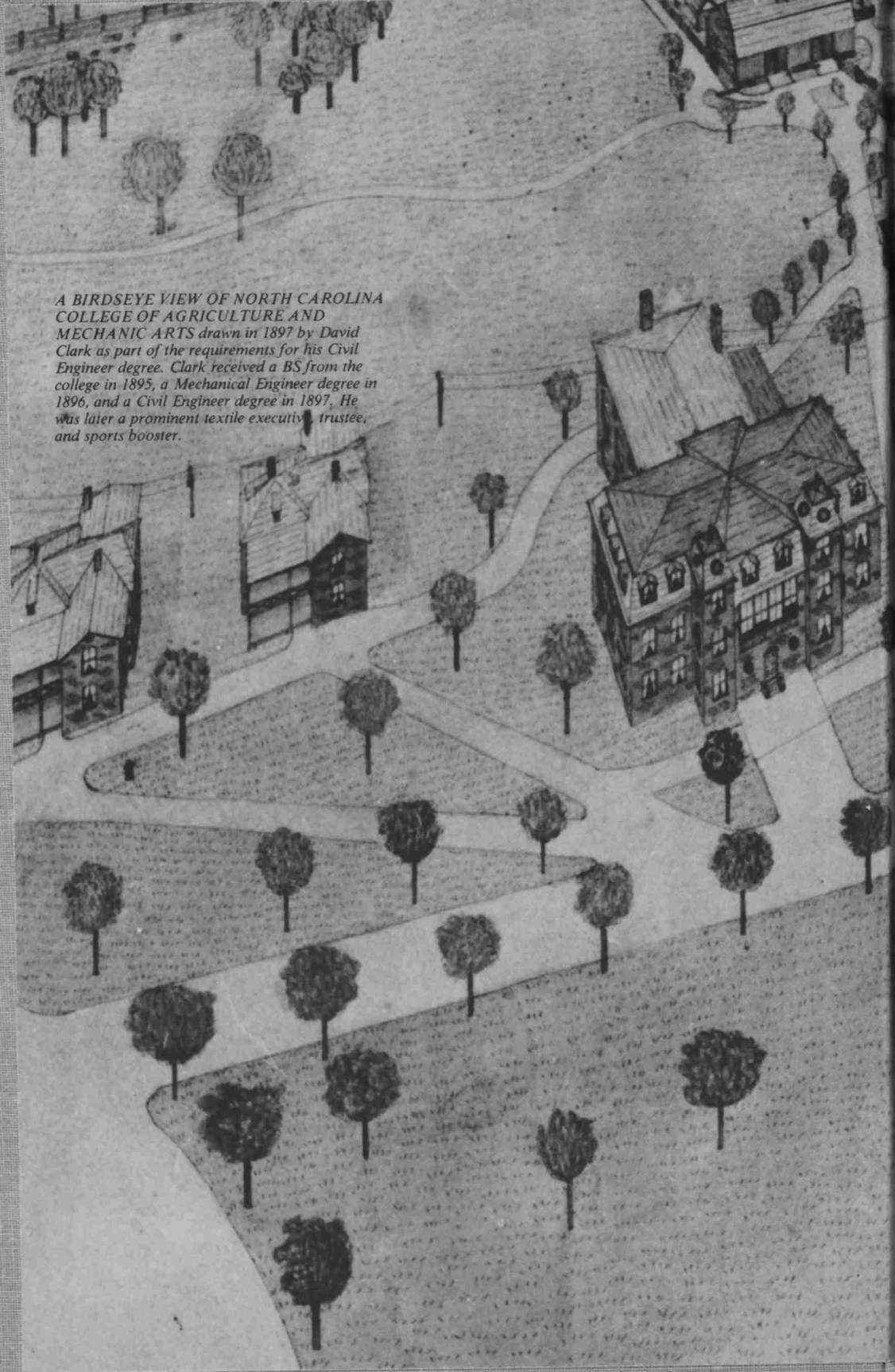
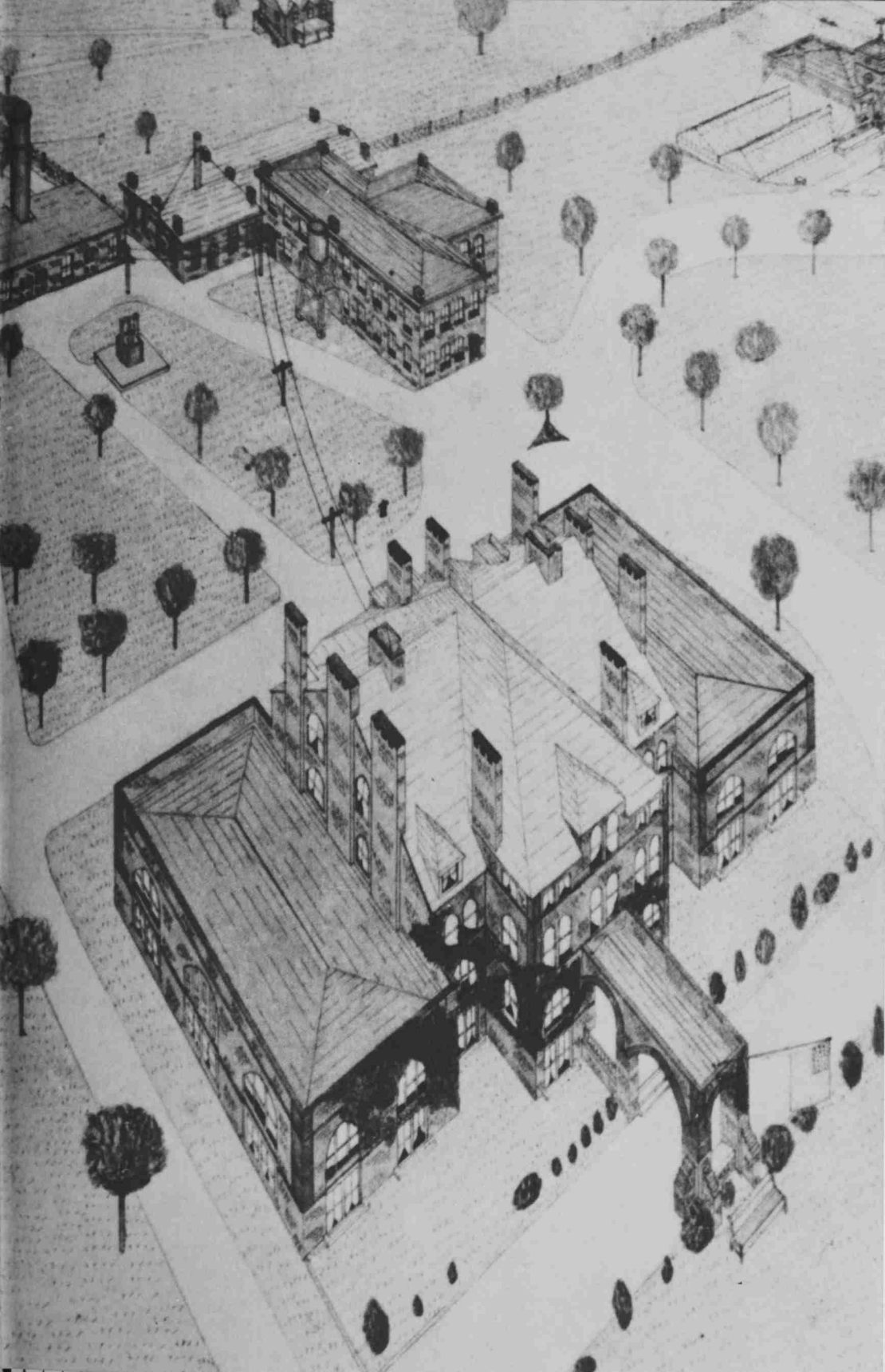
North Carolina State University: A Narrative History

By Alice Elizabeth Reagan



A BIRDSEYE VIEW OF NORTH CAROLINA COLLEGE OF AGRICULTURE AND MECHANIC ARTS drawn in 1897 by David Clark as part of the requirements for his Civil Engineer degree. Clark received a BS from the college in 1895, a Mechanical Engineer degree in 1896, and a Civil Engineer degree in 1897. He was later a prominent textile executive, trustee, and sports booster.



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Contents

Preface

This university history has a long history of its own. Along the way it has accumulated many debts to numerous groups and individuals. The North Carolina State University Foundation, Inc. and the North Carolina State University Alumni Association, Inc. provided financial support for the endeavor. John T. Kanipe, Jr., Secretary of the NCSU Foundation and Vice Chancellor for University Development, deserves special acknowledgement for his efforts to see this project to its conclusion. Bryce R. Younts, Executive Secretary of the NCSU Alumni Association and the Director of Alumni Relations, also must be thanked for his support.

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The North Carolina State University Archives, under the direction of University Archivist Maurice S. Toler, provided the author with invaluable assistance. In addition, the staffs at the North Carolina Division of Archives and History, Duke University's University Archives, and the University Archives at the University of North Carolina at Chapel Hill must also be thanked for their courteous help. The author would also like to acknowledge the numerous members of the university community who provided information and expressed interest in the project.

Finally, a few more personal thank yous. Teri Harris did an excellent job typing the manuscript. My dissertation director, George H. Callcott of the University of Maryland, provided his usual enthusiastic support. Last, but certainly not least, my mother Lois and brother Bill must be thanked for their patient encouragement.

Any errors are my own.

Allen E. Reagan

Chapter I

Before A & M

One day in late summer 1889, while plowing a field on a rocky, rented farm in the mountains near Asheville, Walter J. Mathews decided that he was tired of "hollering" at the family mule. One of ten children, he saw little future for himself if he remained on the farm. Earlier in the year he had heard stories of the founding of a new college for the sons of farmers, mechanics, and other common men. Young Mathews decided to investigate this opportunity; he boarded a train for Raleigh, the site of the new North Carolina College of Agriculture and Mechanic Arts. Upon his arrival on September 30, he discovered that the institution's one building was unfinished, its floors still covered with wood shavings. He was forced to seek food from a nearby resident. On October 3, Mathews and approximately twenty other young men enrolled at the institution; the plaster was barely dry on the walls.[1]

When he and eighteen classmates graduated four years later they were the product of a new departure in higher education in North Carolina. This theory called for the teaching of the useful and practical arts to the industrial classes, which, in the nineteenth century, included everyone not engaged in the learned professions—law, the clergy, or medicine, or who lived on invested capital. Before the establishment of the North Carolina College of Agriculture and Mechanic Arts, colleges in the state conformed to more traditional classical forms of education, despite a lengthy debate regarding the usefulness of such an education to the nineteenth-century common

man. The founding of the North Carolina College of Agriculture and Mechanic Arts in 1887 represented the outcome of this debate, which had raged for approximately fifty years both within and outside North Carolina.[2]

During the colonial and early national periods American colleges followed the model of the traditional English university. These institutions based their curriculum on the classics, emphasizing Greek and Latin studies, preparing men for careers in the learned professions—law and the ministry or, in some cases, just producing "an educated man." The purpose of such studies, as well as that of moral philosophy or rhetoric, was to teach the individual to think in a prescribed manner, not to prepare him for a specific career. Meanwhile, the sons of mechanics, farmers, and merchants learned their trades as they had for countless years, through apprenticeship training. The North Carolina constitution of 1776 directed the state legislature to create one or more universities where "all useful learning shall be encouraged." There was some discussion of the creation of an agricultural curriculum, but when the University at Chapel Hill opened in 1795 it was based on the classical model.[3]

The rise of science and technology during the first half of the nineteenth century soon led people to question the effectiveness of the American college. This era marked the emergence of chemistry as an experimental science, as well as the period when naturalist Louis Agassiz conducted much of his work. In addition, it was a period of rapid technological advances such as the rise of the railroad and the beginning of the factory system. In order to meet the challenges of these developments, many individuals urged American educators to include course work in science and the mechanic arts at their institutions. College administrators, committed to the classics, were reluctant to introduce the new disciplines. Instead, they were content to create a few electives in chemistry or other scientific fields. At the few institutions where a major in science was permitted, the students who chose this field were segregated from the regular students and treated as inferior scholars. They received a Bachelor of Philosophy instead of the traditional Bachelor of Arts. Despite the reluctance of academics to embrace these new fields, many Americans viewed science as a more utilitarian study than the classics, and they warned that if the colleges failed to implement these courses, the public would abandon them. These warnings were reinforced by the great changes in American life during the first part of the nineteenth century.[4]

During the 1820s and 1830s certain egalitarian forces generated by the expansion of the United States culminated in the political

phenomenon known as Jacksonian Democracy. With its emphasis on universal white manhood suffrage, the Jacksonian movement also attacked elitism and privilege in several aspects of American life. In education, the new forces questioned whether the classical colleges, —devised to train leaders—served all citizens of the republic. Specifically, did colleges created to train lawyers, ministers, and politicians have the best interests of the nation's agricultural majority in mind or, for that matter, serve any real purpose except to define and aid the elite? Many believed that a more practical, vocational curriculum was needed to prepare individuals for careers as mechanics, farmers, or merchants who could function in the increasingly complex, technological economy of the United States. First on the state level, and then on the national level, many reform-minded individuals advocated for democratic, practical, and technical education for the masses.[5]

In order to meet the demands of these educational reformers several new colleges and schools were established, and a number of institutions added course work in agricultural chemistry, geology, and engineering to their curricula. In Connecticut during the 1820s, early attempts by lyceum promoter Josiah Holbrook to found an agricultural and industrial school failed. In 1824, however, Stephen Van Rensselaer established the Rensselaer Polytechnic Institute at Troy, New York, to teach "the application of science to the common purposes of life." Jonathan Baldwin Turner of Illinois, in 1851, urged the creation in his state of an industrial university for the benefit of the industrial classes; the institution would be separate from the existing classical colleges. He believed that the established university designed to train lawyers and other professionals, would not do justice to technical education. His efforts eventually led to the creation of the University of Illinois. During the 1850s the states of Michigan, Maryland, and Pennsylvania all founded state-supported agricultural colleges, and in 1861 the Massachusetts Institute of Technology was established. These pre-land-grant efforts kept the idea for technical, democratic education alive through the first six decades of the nineteenth century.[6]

Although it failed, there was an effort during the 1820s to establish a technical, democratic college in North Carolina. In January 1827, Robert Potter introduced a bill into the House of Commons for the creation of a "practical college for the State of North Carolina," endowed by state government for the benefit of the less well-to-do segments of the population. No student would be admitted whose father's estate was worth more than $1,000. After enrollment a student would be under the complete charge of the college for six years,

the last three of which he would spend teaching in various parts of the state under the aegis of the faculty. Furthermore, the practical arts would be stressed at all times: students would be required to work on the college farm.[7]

In promoting his bill before Commons, Potter declared that the college would have an uplifting effect on the entire state, long considered the "Ireland of America" because of its impoverished, backward condition. Agriculture, he maintained, would be improved, and the militia rendered more effective because students would receive military training, and education strengthened by placing teachers across the state. By providing higher education for the sons of poor men, the distinctions of wealth, claimed Potter, would be less evident.[8]

Potter's proposal contained several points that ultimately became part of the land-grant plan. The emphasis on the practical arts, in particular agriculture, the inclusion of military studies, and the extension of education to all citizens throughout the state all parallel the later mission and operation of the land-grant colleges. Potter's bill, however, was tabled by the House of Commons. A similar bill in 1856 calling for a Polytechnic School in Fayetteville, modeled on British and French industrial schools, met with the same fate. The cause of practical, democratic education in North Carolina would have to wait for another day.[9]

Meanwhile, in 1852, at the University of North Carolina, some recognition of the need for applied studies came with the establishment of a "School for the Application of Science to the Arts." Designed to train engineers, chemists, miners, and physicians, the school emphasized theory, and offered limited practical work in laboratories. There students substituted studies in civil engineering or agricultural chemistry for languages or law. Benjamin Hedrick, a professor with anti-slavery sympathies, taught agricultural chemistry from 1854 to 1856, when he was dismissed for his political views. He was replaced by John Kimberly who taught until 1866. This program was North Carolina's only attempt at practical education in the days prior to land-grant legislation.[10]

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By the 1840s the friends of technical education throughout the nation decided to seek federal aid for their proposed institutions. In 1841, Alden Partridge, a graduate of West Point and founder of Norwich University, requested that Congress distribute proceeds from the sale of public lands to the states for the support of a national

system of education. His request was not revolutionary; Congress had granted land to the Ohio Company during the 1780s to support education. In addition, many states used the proceeds of sales of their public lands to support institutions of higher learning. Partridge's plan was different, however, because it requested aid for all of the states to support technical education. The states could use the money to revamp old colleges or create new ones. Although his attempt was unsuccessful, Partridge's ideas continued to gather support during the next twenty years.[11]

Despite southern opposition to the idea of federal aid for education, Thomas Green Clemson of South Carolina, the son-in-law of John C. Calhoun, was an important advocate of agricultural and industrial education. Serving as a diplomat in Europe during the 1840s, Clemson had the opportunity to observe continental agricultural innovations, especially in Germany. After his return to the United States he helped to establish the Maryland Agricultural College in 1856, and he also served as United States Superintendent of Agriculture. As superintendent he urged the founding of agricultural schools supported by the sale of public land. Although he left federal service at the outbreak of the Civil War, he continued to advocate technical education, and he left the bulk of his estate, including the Calhoun homestead, Fort Hill, to South Carolina for the creation of a scientific and technical college. In 1893, the state used his bequest to establish Clemson Agricultural College, a land-grant institution. Clemson's activities, like Partridge's, helped to increase the momentum for technical education.[12]

Despite the efforts of Partridge, Clemson, and others, it was Justin Smith Morrill, United States Congressman from Vermont, who finally succeeded in obtaining federal aid for democratic, technical education. His "land-grant" education bill was synthesis of several proposals, but it was his persistence that finally produced its success. The son of a blacksmith and farmer, Morrill received only brief schooling at local academies. A successful merchant, he served as a trustee for Partridge's Norwich University. One of the founders of Vermont's Republican party, he won election to Congress in 1855.[13]

After his arrival in Washington, Morrill worked assiduously for his "land-grant" education bill. Early in his first term he requested the House Committee on Agriculture to study the feasibility of a national college of agriculture and mechanic arts, patterned after the military academies. When this proposal received little support, he introduced, on December 14; 1857, the first land-grant bill in the House. According to the bill, each state would receive 20,000 acres

of public land for each of its members in Congress. The money obtained from the sale of this land, designated as "land scrip," would be used as an endowment for the establishment of at least one college in each state. The main objectives of the proposed institutions would be, "without excluding other scholarly and classical studies, to teach such branches of learning as are related to agriculture and the mechanic arts, . . . in order to promote liberal and practical education for the industrial classes." After the bill was adversely reported by the House chairman of the Committee of Public Lands, Morrill submitted a substitute measure. This piece of legislation passed both houses of Congress in early 1859, but it was vetoed by President James Buchanan, a Democrat, who considered it wasteful and unconstitutional.[14]

Despite this defeat, Morrill and his allies were determined to obtain federal support for land-grant education. They had to contend with the powerful opposition of most of the southern members of Congress who opposed the idea on constitutional grounds, arguing that federal land grants to education violated the strict construction of the constitution that they endorsed. Morrill and other Republican leaders believed that if the southern-dominated Democratic party lost control of the White House their bill would pass. Indeed, two presidential candidates in 1860, Abraham Lincoln and Stephen A. Douglas, both endorsed the land-grant concept. Lincoln, Morrill, and other Republicans supported the land-grant education idea because it taught the dignity of free labor, and provided a means for social mobility, two important tenets of pre-Civil War Republican ideology. Although Morrill's renewed efforts in the House in 1861 met with failure, Benjamin Wade of Ohio sponsored a successful bill in the Senate. Morrill introduced this bill into the House on June 17, 1862, and the bill, now providing for 30,000 acres per member of Congress and adding military science to the curriculum of the proposed colleges, with southern representatives out of Congress, passed the House by a wide margin. Part of a compromise that also included the Morrill Tarriff Act, which raised duties on imported goods, it was seen by Republican leaders as something to benefit the people. After President Lincoln signed the bill on July 2, 1862, higher education in the United States was no longer confined to its earlier classical, elitist beginnings.[15]

Although many of the northern states immediately claimed their land grants, North Carolina and the other Confederate states received no benefit until after the Civil War. The original law specified that each state must accept the scrip by legislative enactment within

two years, but Congress extended this provision on April 14, 1864, for another two years. Thus, in early 1866, President Andrew Johnson declared North Carolina and her sister states eligible to accept the land scrip provisions. In February 1866, at the urging of Governor Jonathan Worth, the North Carolina General Assembly passed a resolution accepting the Morrill Act. President David L. Swain of the University of North Carolina went to Washington to procure the scrip issue of 270,000 acres, but, because of the depressed land market, the state treasurer decided not to sell the scrip until economic conditions improved.[16]

Meanwhile, the University of North Carolina was in desperate financial need. During the war officials invested much of the University Fund in Confederate bonds which became worthless when the war ended. Debts mounted, the faculty went unpaid, and the University languished. When the state received the federal land scrip University officials saw a solution to their financial problems, provided they could secure the monies.[17]

When the legislature met in 1867, the University trustees requested and received the land scrip allotment. Desperate for money, and despite advice to the contrary, they agreed to sell the scrip for fifty cents an acre, (instead of the market price of $1.25 per acre), to Lewis, Fisher, Boothe, and Company of Detroit on August 22, 1867. When the trustees received the first funds from the agreement, they decided that since the university already provided buildings, the 10 percent originally designated for permanent improvements could be used to pay salaries and general expenses. Despite this financial relief, the University still remained in dire condition because many North Carolinians believed the curriculum outmoded, and disliked President Swain's policy that emphasized character over scholarship. In 1868 Raleigh lawyer Kemp Plummer Battle urged the trustees to reorganize the University; he proposed that the institution change to the elective system popular at some of the leading institutions in the northeast, and he discussed the creation of a college of agriculture and engineering. At this point, however, the University became involved in the politics of Reconstruction, and these plans were put aside. The Republicans, who controlled the state constitutional convention that year, chose to reorganize the University in their own fashion.[18]

Under the new constitution ratified in 1868, the University was controlled by the State Board of Education. The board chose Reverend Solomon Pool as President Swain's successor, and replaced the entire faculty. It also reorganized the institution, creating a college of agriculture and mechanic arts. Englishman George Dixon was

hired in 1869 as professor of agriculture. Dixon, however, remained only a short time. At the same time, the board tried to break the land scrip contract with Lewis, Fisher, Boothe, and Company on the grounds that the old trustees obtained too low a price for the scrip and because they intended to use the money for general operating expenses, not the educational objectives of the Morrill Act. The suit was unsuccessful; the board decided to invest the money obtained from the land scrip sale in railroad and state bonds. With the security market flooded and the political situation in the state volatile, the value of the bonds dropped considerably before most of them were repudiated by the legislature in October 1869. Thus, the University lost its original land scrip endowment, forcing it again to the brink of bankruptcy. Because of this failure, and its association with the unpopular Reconstruction administration of Republican governor William Woods Holden, enrollment fell and the institution was forced to close in 1871.[19]

After the turmoil of Reconstruction subsided in North Carolina, the friends of the University in 1875 prepared to reopen the institution and requested that the General Assembly restore the land scrip endowment. The act restoring the endowment passed on March 20, 1875, the University received $7,500—the interest on the original principal from the legislature. Confident of better financial conditions, the trustees reorganized the University, choosing Kemp Plummer Battle as president. Although the board created a College of Agriculture and a College of Engineering and Mechanic Arts on paper, only John Kimberly was employed to teach agricultural chemistry. He resigned in 1876 after receiving only $200 of the $1,500 he requested for his department. President Battle believed that practical training had no place in a university; he decided that the Morrill Act required teaching only the "branches of learning related to" agriculture and the mechanic arts such as botany, mineralogy, and chemistry, not the practical subjects themselves. His policy quickly came under scrutiny from the North Carolina Grange, which represented the agricultural interests of the state. As early as 1876 the Grange had demanded an inquiry into the use of the land scrip funds, but Battle managed to silence criticism for another ten years, insisting that "the University is doing more for the $7,500 than any other similar institution in the United States that has as little money."[20]

Battle's critics had good reason for concern because agriculture was one aspect of North Carolina and southern life that was seriously blighted by the Civil War. With livestock destroyed, land depreciated, and equipment irreplacable due to the lack of financial

resources, prices for farm products fell dramatically. During Reconstruction a succession of bad crops made matters worse, and property taxes increased tenfold. In addition, many former slaves now refused employment with their former masters, preferring instead to work for themselves whenever possible. After driving the Holden Republicans from power in 1870, North Carolina's Democratic leadership sought to rehabilitate the state. In 1875 they established the State Board of Immigration, Statistics, and Agriculture to encourage economic growth. Few new residents arrived, however, and the board members demonstrated little interest in finding solutions to agrarian concerns. Dissatisfied with the state's feeble efforts farm leaders urged a broader reform.[21]

Believing that they were entitled to a better fate than the one they saw awaiting them and that other sectors of the economy, especially the railroads and banks, were not suffering the same problems, southern farmers in the late 1860s began to organize to protest their hardships. Their first attempt at organization, the Patrons of Husbandry or the Grange, began in 1867 as a fraternal organization but quickly evolved into a political lobbying group that also promoted cooperative business ventures. In North Carolina the Grange, founded in 1873 under the direction of Colonel Leonidas L. Polk, led the movement for agricultural education, and the establishment of a state Department of Agriculture, which farmers hoped, would provide a remedy for their problems.[22]

Colonel Polk, born on April 24, 1837, in Anson County, North Carolina, was a long-time advocate of agrarian reform. Dismayed by the agricultural depression in his state, Polk urged his fellow landowners to attract immigrants who would work the land; he also encouraged the abandonment of the one crop, cotton-dominated, system of agriculture. As a newspaper editor and Granger, Polk pushed his fellow farmers to strive for better organization to combat their troubles. When the Board of Immigration, Statistics, and Agriculture failed to live up to its promises, Polk joined his fellow Grangers in supporting the formation of a Department of Agriculture for North Carolina.[23]

At the constitutional convention of 1875, called to revise the Republican constitution of 1868, the Grangers proposed that the General Assembly be required to create a state Department of Agriculture. The measure passed the convention easily, but the legislature failed to act on the matter for the next two years. In January 1877, responding to pressure from Governor Zebulon Baird Vance, the Grange, the North Carolina Agricultural Society, and the University

of North Carolina, the legislature considered the matter. University President Battle, State Geologist William Caruthers Kerr, Dr. Columbus Mills of the Grange, and Polk formed a committee to present a proposal to the General Assembly. At Polk's urging, the annual Grangers' convention at Goldsboro requested the establishment of the Department of Agriculture. Despite continued opposition from a number of individuals who resisted any change, the bill to establish the new department passed both houses by a wide margin; it created an organization to be administered by a Board of Agriculture under the direction of the Commissioner of Agriculture. The department was to; collect statistics; analyze fertilizer and soils; publish educational materials related to agriculture; foster new industry; restock the streams with fish; and encourage immigration. As a reward for his efforts, Polk became the first commissioner.[24]

The act that established the Department of Agriculture also created the North Carolina Agricultural Experiment Station, an agency to perform analysis on fertilizers, soils, marls, and water. The fertilizer analysis was especially important because the material sold to farmers was frequently worthless, and there was evidence of manufacturers' fraud. The station—the second in the United States after the Connecticut station which was established in 1875—was located in Smith Hall at the University. Dr. Albert R. LeDoux, the first director and a graduate of Columbia University and Goettingen, the outstanding German university where many American scholars went for graduate work, assumed his duties in 1877. LeDoux and his assistants performed the required fertilizer analysis for farmers, studied seed purity, and published the results of their work. They also conducted soil improvement experiments using legumes and answered correspondence on agricultural problems. From the beginning, LeDoux insisted the station be moved to Raleigh, closer to the headquarters of the Department of Agriculture. He resigned in 1880 to become the head of a large chemical laboratory in New York.[25]

LeDoux's successor, Charles W. Dabney, guided the station until 1887. Another Goettingen graduate, Dabney sought to expand the scope of the station's work. Soon after he assumed his post, the General Assembly authorized the station to move from Chapel Hill to the new agricultural building in downtown Raleigh. At first, Dabney was pleased with his new quarters, noting that he had more space and better equipment, but by 1881 he believed the station should expand beyond tasks such as fertilizer analysis by establishing an experimental farm. He continued to advocate such an expansion until December 1885, when the legislature authorized the creation of the station farm on thirty-five acres just west of Raleigh.[26]

The new farm allowed Dabney and his assistants to expand their work. Milton Whitney, the first farm superintendent, quickly began experiments to develop better forage by using wild grasses, while a weather bureau was established at the station in December 1886. Despite this success, Dabney encountered severe difficulty; the station received no direct appropriations from the General Assembly. For all of its income it relied on a fertilizer tax established in 1877 and collected from each fertilizer manufacturer that sold products in the state. This generated little money, and the station experienced financial difficulties. Dabney resigned in 1887, and was replaced by Kemp Plummer Battle's son, Herbert B. Battle.[27]

Upon assuming control of the station in September 1887, Battle discovered that the station's financial difficulties were quite serious. In fact, he was forced to dismiss much of his staff, including superintendent Whitney, and to discontinue all farm work until the following year. Battle was optimistic about the station's future, however, because Congress had passed the Hatch Act in February 1887 in an effort to encourage agricultural research. The bill provided federal funds to state experiment stations.[28]

Inspired by research efforts observed by American scholars in Europe, particularly the work of Germany's Justis Liebig, who applied chemistry to the problem of soil fertility, American agricultural scientists in the early 1870s began to discuss the need for federal support for agricultural research. In Chicago in 1871, a convention of agricultural educators endorsed the establishment of a federally supported system of state agricultural experiment stations. They hoped that the knowledge gained through such research would be passed on to the agricultural students at the nation's land-grant colleges. Throughout the country, leaders of land-grant institutions enthusiastically endorsed this proposal. In 1882, Seaman A. Knapp, president of Iowa State University and a future pioneer of agricultural extension work, wrote a bill that Cyrus C. Carpenter presented to Congress, authorizing federal support for the stations. Despite the support of other land-grant administrators and the United States Department of Agriculture, Knapp's early effort failed.[29]

Interest continued for federal support for the stations, however, and agitation by agricultural educators kept the issue alive. A bill introduced in the 1884 session was rejected by the land-grant educators because they believed it would place the stations under the control of the United States Department of Agriculture, not the colleges. In response to further pressure from college presidents, Representative William H. Hatch of Missouri sponsored a bill in 1886 to establish a national system of experiment stations, each supported

by $15,000 a year from the federal government. This bill was signed into law by President Grover Cleveland on March 2, 1887.[30]

When North Carolina finally received its Hatch Act funds in 1888, Battle quickly put them to good use. At last the station possessed the financial resources to expand beyond its fertilizer control work. Gerald McCarthy joined the station staff as first botanist; dairy work was begun as well. In July 1888, the station published its first bulletin. By December 1889, when the station was transferred to the new North Carolina College of Agriculture and Mechanic Arts, as required by the provisions of the Hatch Act, it was thriving as an agency to assist the people of North Carolina.[31]

In essence technical education in the United States was barely established by the mid-1880s; in North Carolina the movement was still in the theoretical stages, and existed only in the minds of a small group of agrarian reformers. During the previous decade North Carolina attempted to help its struggling people—especially her farmers—by improving their economic condition through the establishment of theoretical courses in agricultural chemistry at the University of North Carolina and by creating the Department of Agriculture. How effective these efforts were remained to be seen. Would Walter Mathews and his peers, who would soon reach college age, find educational opportunity available to them?

Chapter II

The Founding of the North Carolina College of Agriculture and Mechanic Arts

North Carolina, like other former Confederate states, faced a great deal of readjustment after the Civil War. Although some individuals clung to the "Old South" and sought to preserve as much of antebellum society as possible, others realized the region must change its ways to prosper. These individuals—a few Confederate veterans and a number of idealistic young journalists—formed the nucleus of the "New South" movement. This crusade called on southerners to forsake their tradition-bound, agrarian past and adopt the ways of industry and progress. Although Atlanta's Henry Woodfin Grady was the most famous prophet of the new order, North Carolina had its own New South proponents who advocated, among other reforms, the creation of a new college for agriculture and mechanic arts.[1]

Long before Grady took up his pen to begin his crusade, North Carolina's ex-Confederate General Daniel Harvey Hill issued the first volume of his journal, *The Land We Love*(1866), in which he called on his fellow North Carolinians to leave behind the pride and political ambition that blinded them to their state's economic peril. Hill believed that southerners must be educated in the ways of thrift, and learn the value of manual labor. Unlike the other great early prophet of the New South, J.D. DeBow, editor of *DeBow's Review,* Hill also demanded agricultural reform as well as industrial expansion. He urged that agriculture be studied as a science, and advocated useful and practical education for engineers and miners. Too much of southern education, Hill asserted, was devoted to politics—the ruin of

the South. Despite his disgust with Reconstruction which emphasized many of the same tenets, Hill continued to advocate practical education. During the 1870s and 1880s he served as president of Arkansas Industrial University, later the University of Arkansas. Following Hill's advice, a group of Confederate veterans in 1866 attempted to reorganize the Hillsboro Academy as a school for practical education, but little else was done during the 1860s and 1870s.[2]

The early ideas of Hill and others like him inspired North Carolina's next generation of New South reformers, led by Daniel Augustus Tompkins of the Charlotte *Observer* and Walter Hines Page of the Raleigh *State Chronicle*. Tompkins was a leading proponent of industrialism, while Page decried those in the state who resisted change, labelling them as "mummies." Unlike many other New South crusaders, Page, like Hill, believed that agrarian reform was necessary for southern regeneration. Ultimately Page considered himself defeated in efforts to bring a better society to his native state, but he remained in Raleigh long enough to join the progress-oriented Watauga Club. [3]

Founded on May 26, 1884, "in a bare room" on Wilmington Street, the Watauga Club was composed of progressive-minded young men, all under the age of thirty-six, who disliked the "slumbering," poverty-stricken condition of the Old North State. Too young to have served the state in the Civil War, Wataugans refused to dwell on the past or waste time in bitterness. The name Watauga recalled the pioneering, revolutionary spirit of the settlers of the Watauga region of western Carolina. The first president was William Joseph Peele, a Raleigh lawyer, who derided as "fossils" those who opposed the mission of the club. In addition to Page and Peele, other influential members included Charles W. Dabney, Josephus Daniels—Page's successor as editor of the *State Chronicle*—and two insurance men, John W. Thompson and William Stuart Primrose. One of the Wataugans' first projects was a campaign to establish an industrial school in the state. Using the *State Chronicle* as their journal, the club attempted to enlighten North Carolinians on the necessity of practical, technical education for the state. To assist them in their crusade, they enlisted two members of the state's General Assembly, Augustus Leazar of Iredell County and Henry E. Fries of Salem.[4]

In order to pursue its goal for an industrial school, the Watauga Club appointed a committee to report on the practicality of such an endeavor. Arthur Winslow, a graduate of the Massachusetts Institute of Technology who worked as a surveyor in eastern North Carolina, served as chairman of the committee. Winslow's report

persuaded the group to seek legislative support for the school, and proposed that the institution be located in Raleigh in conjunction with the state Department of Agriculture. Asserting that the professions of medicine, law, and politics were overstocked in North Carolina, the report urged the founding of a new practical school similar to M.I.T. and the European industrial schools. Although the Watauga Club emphasized instruction in the mechanic arts, its members recognized that the proposal would not pass "the d—n farmer legislature unless there was some agriculture in it somewhere," and so the proposed curriculum included practical agriculture.[5]

In the General Assembly Augustus Leazar, chairman of the House committee on Education and his colleagues in the House Henry Fries, and Thomas Dixon, Jr., sponsored the bill; in the Senate its supporters included Robert W. Winston, Sydenham B. Alexander, Willis R. Williams and John Gatling. Because of the "fossils" who "opposed everything" and the fears that the University of North Carolina would lose the land scrip fund, the bill faced stiff opposition. Ultimately, however, it passed both houses by wide margins. The new law instructed the state Commissioner of Agriculture to advertise for proposed sites for the institution, and provided $5,000 for maintenance of the school. Charlotte immediately offered $5,000 and a site, Kinston $10,000, and Raleigh $5,000, an acre of land, the Exposition Building at the State Fairgrounds, and twenty acres of land in the western part of the fairgrounds. The Board of Agriculture, which would make the final decision on the site, rejected all three offers. Many believed that the board was dominated by the University of North Carolina and the Battle family and therefore would decline any offer. In order to keep interest alive, the Watauga Club sponsored a public meeting in Raleigh on November 26, 1885. After the meeting the City of Raleigh increased its offer to $8,000 and, after considerable pressure from the Watauga Club, the Board of Agriculture accepted its proposal in July 1886. The city appointed a board of directors who purchased a site from Dr. Eugene Grissom near Saint Mary's School; but while negotiations for construction were underway, events occurred which transformed the proposed industrial school into a land-grant college.[6]

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Although the New South's proponents, including the Watauga Club, advocated progress in the region, their enthusiasm for industrial development often caused them to overlook the region's continuing agricultural problems. Despite the efforts of the Grange,

the creation of experiment stations, and departments of agriculture, southern agriculture made little progress during the 1870s and 1880s. It continued to be depressed and backward, dominated by a few staple crops, and lacking in new equipment or methodology. As agrarian problems continued, discontent grew. Beginning in Texas and spreading throughout the South and the lower Midwest, farmers began to organize associations called alliances which replaced the earlier Grangers. This movement eventually led to the formation in January 1887 of the National Farmers' Alliance and Cooperative Union of America, the latter being an organization that demanded national attention for agrarian problems. North Carolina provided one of the leaders of the movement: Leonidas L. Polk.[7]

Leonidas Polk a long-time advocate of agrarian reform, had served during the late 1870s as North Carolina's first Commissioner of Agriculture. In 1886, he founded the *Progressive Farmer*, a journal he used to promote the cause of agricultural reform, including the creation of a college of agriculture in North Carolina. In addition, Polk was instrumental in the formation of the local farmers' clubs that led to the founding of the North Carolina Farmers' Association in January 1887, which in 1888 merged with Southern Farmers' Alliance. From the beginning, the Farmers' Association demanded the establishment of a college of agriculture, supported by the federal land scrip fund then allocated to the University of North Carolina.[8]

Polk and his followers insisted that the University in Chapel Hill failed to use the land scrip fund for the benefit of the state's laboring classes. Although the University taught courses in agricultural chemistry and a few other land-grant subjects, few students enrolled in them. When the University *Catalogue* of 1886 announced the establishment of the "College of Agriculture and Mechanic Arts," Polk barely concealed his scorn. "A long, very long hatching period for such a little chicken," he derisively wrote in the *Progressive Farmer*. "It is a model of architectural beauty and admirably equipped in all its various departments. *"It is located on the 49th page of the Catalogue of our University."* He added that no farm boy ever availed himself of these courses. Insisting that he was not attacking the University as such, Polk contended that the farmers of the state, who long had been taxed to support the University without enjoying any practical returns, deserved "simple justice and fair play." The only way to get the money away from the University, Polk declared, was "BY ELECTING A LEGISLATURE THAT WILL GIVE IT TO US!"[9]

Although he sympathized with the Watauga Club's drive for an industrial school, Polk believed their approach was too narrow. He insisted that education must be for the many and not the few, and he called for the establishment of a "People's College." He was not really interested in the creation of an industrial institute similar to the one founded in Georgia (eventually the Georgia Institute of Technology) by the proponents of the New South.[10]

As a long-time foe of Polk's, President Kemp Plummer Battle was in a difficult position. Confronted by the demands of the farmers and the Wataugans, both he and the University trustees feared the loss of the land scrip fund. Since 1875, Battle, with the help of this money, managed to re-establish the University on a sound financial footing. Despite this success, opposition from the denominational colleges who competed for students, as well as the characteristic southern fiscal conservatism during the era, kept appropriations to the University low. The loss of the land scrip fund might undo all of Battle's hard work.[11]

In 1886, Polk and his supporters succeeded in electing many legislative candidates who supported their plans for a "farmers' college." Determined to achieve his goal now that the General Assembly was sympathetic, Polk called a mass meeting for January 19, 1887, to rally support for the school. In a move that the farmers believed was designed to split their forces, Governor Alfred M. Scales, a foe of the Wataugans who sided with the University, called another meeting on January 18, 1887, inviting the farmers to meet with the state Board of Agriculture. Despite Scales' intentions, Polk's allies captured control of the governor's meeting and demanded the creation of a separate college supported by the land scrip fund. After the gathering dispersed, Polk's forces prepared for their original convention.[12]

When Polk's assembly finally gathered in Raleigh on January 26, 1887, the delegates promptly formed the North Carolina Farmers' Association, and they demanded the establishment of the proposed agricultural college, as well as the reformation of the Department of Agriculture. Savings from the latter reform, as much as $20,000, they claimed would be used to support the college. While the convention was in session, the Raleigh Board of Aldermen proposed the combination of the already approved industrial school and the agricultural college. The board also indicated that Richard Stanhope Pullen had agreed to donate sixty acres of farm land three-quarters of a mile west of Raleigh to the new college. The farmers' meeting accepted the Board of Aldermen's proposal, and appointed a

committee to present a resolution to the General Assembly regarding the college.[13]

Working closely with Charles W. Dabney of the Watauga Club, Augustus Leazar of the State Board of Agriculture, and Sydenham B. Alexander, soon to be president of the North Carolina Farmers' Alliance, the committee produced a bill to be introduced into the House of Representatives. Written by Dabney and sponsored by Leazar, the bill survived several attempts at amendment and passed both houses of the legislature by a two-to-one margin, and became a law on March 7, 1887. The battle was over; Polk had his "farmers' college;" it was called the North Carolina College of Agriculture and Mechanic Arts. All of the new institution's partisans agreed that it was Polk's efforts to organize the farmers' militant support that carried the movement to success. The next step toward the fulfillment of the dream would be taken by the newly organized board of trustees.[14]

The new Board of Trustees, which included Fries, Primrose, and Leazar, consisted of fifteen members. The law required that both Republicans and Democrats be included on the board, and that ten be members of the Board of Agriculture. The other five members were appointed by the governor and confirmed by the North Carolina Senate. At their first meeting on April 22, 1887, the trustees thanked Pullen for his generous gift and asked the state penitentiary to make bricks for the first building. They also directed that the Pullen tract be improved; Pullen himself assisted in marking the boundary between Pullen Park and the campus, using a mule and a plow.[15]

Slowly the main building, later named for the first president, Alexander Quarles Holladay took shape. Designed by Charles L. Carson, it was constructed by labor from the nearby penitentiary. When the cornerstone was laid on August 22, 1888, William J. Peele, the principal speaker, declared that the new college was "a temple by North Carolinians in affection for North Carolina and by North Carolina in affection for her children." Just before the structure was finished a fire of unknown origin damaged the interior. Fortunately, the damage was covered by insurance. The building was erected on the site of an old family burial ground, and folklorists suggested that disturbed spirits were responsible for the blaze. When the building was finally ready for occupancy, it housed all aspects of college life.[16]

The trustees of the new college also had the task of selecting the president and faculty. For president they announced that they wanted "a man of thorough scientific education and practical experience, at a salary of $2,000." Their advertisement brought applicants

from North Carolina and several other states. On July 11, 1889, the trustees offered the position to former Governor Thomas J. Jarvis, although he had not applied for the presidency. Although a strong supporter of the new college, Jarvis declined the position. Hoping that he might reconsider, the board postponed the election of the president, and proceeded to select the five-member faculty and other administrative personnel. Finally, on August 30, in a special session, they elected Alexander Q. Holladay president, who had been an applicant for the professorship of English. Although surprised, Holladay accepted the offer.[17]

The trustees also established admission requirements, fee schedules, and other policies in preparation for the opening of the college. Applicants for admission should be fourteen years of age, of good moral character, and have a good knowledge of English, North Carolina history, and arithmetic through fractions. Tuition was fixed at twenty dollars a year, although each county was entitled to send as many free students as it had members in the General Assembly. Students — all male—won these scholarships based on their performance on the entrance examination prepared by the faculty and administered by county commissioners. In addition, board fees were established at eight dollars a month; ten dollars a year was charged for room rent. Although there was no mention in the catalogue, it was understood that neither blacks nor women would be admitted to the new college, unlike the coeducational, racially integrated land-grant institutions of the Midwest.[18]

Even before the college opened its doors to students, the institution experienced financial difficulty. The college received no direct financial support other than the $7,500 interest on the land scrip fund and a $10,000 appropriation from the state. The North Carolina Agricultural Experiment Station was not transferred to the college until December 1889; therefore, the institution received no benefit from the recently passed Hatch Act. At the same time, the Experiment Station lost its other source of funds when the United States District Court declared the fertilizer tax act unconstitutional. In 1891 a new law was passed to support the station yielding $.25 a ton on fertilizer sold in the state. Despite challenges by manufacturers, the tax remained in force until the 1930s.[19]

Soon after the college opened in 1890, the United States Congress passed the second Morrill Act, providing more aid for the states. The trustees hoped to obtain these funds, approximately $16,500, for North Carolina's land-grant college, but immediate payment was delayed because the State failed to meet a provision of

the act requiring technical education for blacks. In order to satisfy this requirement, the new administration made arrangement with Raleigh's Shaw University for certain members of the new school's faculty to give instruction in agricultural and technical subjects to Shaw students. When this proved unacceptable to authorities in Washington, the all-black North Carolina Agricultural and Technical College, later North Carolina A & T University, was established in 1891 in Greensboro to fulfill federal requirements. The arrangement with Shaw was discontinued immediately.[20]

As the North Carolina College of Agriculture and Mechanic Arts prepared to open its doors for its first semester in October 1889, its supporters reflected with satisfaction on the past two years. They had managed to establish their farmers' college despite the opposition of the University of North Carolina. Also, they had contended less successfully with the state's financial conservatism that precluded an adequate funding for the institution. In 1889, they waited to see if A & M would live up to their expectations and serve the needs of the state.

Chapter III

Getting Started, 1889-1899

When the North Carolina College of Agriculture and Mechanic Arts opened its doors to its first students in October 1889, the plaster on the walls was barely dry, and enrollee Walter J. Mathews noted that the single building and rocky grounds did not look much like a college. The faculty chosen to teach the fields of study outlined in the legislation that established the institution consisted of six men of varying degrees of experience and ability. The trustees directed them to develop the curriculum for the college and to prepare the entrance examination for the first class. The future of the institution, established after so much controversy, rested on the shoulders of these six faculty members. North Carolinians, both friends and critics, watched events just west of Raleigh with great interest. The faculty's success in establishing the new institution would determine the viability of practical, technical education for North Carolina.[1]

The trustees chose well when they appointed Alexander Quarles Holladay as president, instead of professor of English. Born in Cherry Grove, Spotsylvania County, Virginia, in 1839, he was the son of Alexander R. Holladay, a prominent lawyer and Congressman. Holladay studied at the University of Virginia and the University of Berlin, where a number of American students matriculated in the mid-nineteenth century. During the Civil War he served in the 19th Virginia Regiment, rising from second lieutenant to colonel. Paroled at Greensboro, North Carolina in 1865, he spent several years farming and practicing law, and served in the Virginia Senate for four

years. Like many former Confederate officers, Holladay entered the field of education, he served as the president of the Stonewall Jackson Institute and later the Florida Agricultural College. Although somewhat gruff with the students, the scholarly Holladay was well respected by his colleagues. [2]

In 1889 Holladay joined five colleagues who constituted North Carolina A & M's first faculty. Daniel Harvey Hill, Jr., professor of English and bookkeeping, was the son of North Carolina's prominent Confederate General Daniel Harvey Hill. At the time of his appointment, the younger Hill was professor of English at the Middle Georgia Agricultural and Military College, an institution with goals similar to A & M's. To teach the agricultural subjects, the trustees appointed Joseph R. Chamberlain of Cornell University as professor of agriculture and Wilbur Fisk Massey, of Virginia's Miller School, professor of horticulture, arboriculture, and botany. William Alphonso Withers, a graduate of Davidson College, became the professor of pure and agricultural chemistry, and John H. Kinealy of St. Louis was appointed as professor of mathematics and practical mechanics. In addition, the trustees appointed several assistants and administrative personnel.[3]

Many personnel changes occurred during the next ten years yet the faculty slowly grew. After a protest in 1892 by agricultural students who disliked his teaching methods, Joseph Chamberlain resigned, and Benjamin Irby replaced him. Kinealy also departed in 1892, and Wallace Carl Riddick took his place. Numerous assistant professors and instructors served for a brief time. In addition, a chair of physics and electrical engineering — filled by Richard Henderson — was established in 1894. In 1895 Riddick became the first professor of civil engineering and mathematics when the mechanical course separated into mechanical and civil engineering. These changes reflected the early diversification in the college curriculum.[4]

The college was established, as already emphasized, to do what other institutions of higher learning in North Carolina had failed to do—give theoretical and practical training in agriculture and the mechanic arts; yet other colleges in the state opposed the new institution. The University of North Carolina objected to its founding because of the loss of the land scrip fund, and the denominational colleges because of the competition for students that A & M posed. In order to allay suspicion President Holladay and his associates summarized the aims of the college in the first catalog, emphasizing that practical education was a separate, but beneficial sphere that ought to be in North Carolina. In order to emphasize the college's mission, the

president visited many North Carolina communities during summer vacation, lecturing on the benefits of practical education. The mechanic arts course proved more popular with the students; therefore, the derisive nickname "Cow College" used by the partisans of the state's other institutions of higher learning was misleading.[5]

Initially students enrolled in two general fields of instruction: agriculture and mechanics. The agricultural curriculum included general agriculture; horticulture; arboriculture; botany; chemistry; history; English; and bookkeeping. The mechanics curriculum embraced general mechanics; mathematics; chemistry; history; English; and bookkeeping, as well as the fundamentals of mechanical, civil, and architectural engineering. All students took the same course during their freshman year, with specialization delayed until the second year. During these years the agricultural course was especially difficult to teach because the faculty themselves were not entirely certain of the definition of agricultural education. Mechanic arts or engineering already possessed a set of principles that were defined during the 1850s and 1860s, when professional engineering began in the United States. Few textbooks on either agriculture or mechanics existed, and with the absence of laboratory equipment, faculty and students did the best they could with what was available. Those students who completed four years of study received either a Bachelor of Agriculture or a Bachelor of Engineering degree.[6]

Both the agricultural and mechanics curricula emphasized the manual labor principle, mainly because the faculty wanted to instill in the students a respect for work. Students in the mechanics course devoted as many as twelve hours a week to shop work, mainly in carpentry and blacksmithing, while the agricultural students spent about eight hours a week on the college farm. Until 1895 all freshmen performed farm labor. At first the faculty experienced difficulty in carrying out their plans for manual training because of the absence of farm and shop facilities. As the physical plant grew, however, students worked in the power plant, made furniture, and assisted with the construction of buildings. The students disliked manual labor, especially the farm work; therefore, the trustees established a medal for the student performing the most agricultural work, and likewise for the most horticultural work. Despite these incentives, the students still complained about the work, and they spent a great deal of time throwing clods of earth or potatoes at each other or laughing at city boys learning to milk cows.[7]

During Holladay's administration only one major curriculum was added to the undergraduate program. In 1893, applied

science became the third major field at A & M; it included electives in physics, chemistry, entomology, zoology, and botany. Thus the faculty at A & M recognized early in the institution's history the importance of the sciences in technical education, also demonstrating that the college would not restrict itself to agriculture and engineering. Many of the first graduates of this curriculum majored in chemistry, and gained employment at the Agricultural Experiment Station.[8]

The only other addition to the undergraduate program during the college's first ten years was the creation of the professorship of military science and tactics. At first the trustees experienced difficulties in fulfilling this requirement of the Morrill Act, because the pool of available men was exhausted. Finally, in 1894, Lieutenant Richard Henderson of the United States Navy was appointed to teach military science, as well as physics. All students, henceforth designated as cadets, were required to attend military drill three hours a week in addition to lectures on such topics as battle formation, cover tactics, firing, and camping. Students progressed from private to officer during their four years; taking on increased responsibilities. At first the student body was organized as an infantry battalion with two companies, but as the number of students increased, the organization expanded to three companies.[9]

The unfortunate condition of North Carolina's secondary schools in the late nineteenth century prompted the college faculty, like the land-grant faculties, to establish in 1893, a preparatory department. Students who were not qualified to enter the institution as freshmen were placed in a sub-freshman class where they could make up deficiencies in English, history or mathematics, while taking technical courses. In addition, provision was made for special students to enroll in one or two classes, rather than as full time students. Throughout the Holladay administration the preparatory department remained small, containing fewer than twenty students who were primarily Raleigh residents.[10]

At the other end of the academic spectrum, graduate studies developed slowly during A & M's first ten years. Post-baccalaureate work in technical fields—such as those offered at A & M—was not developed beyond the masters or professional level. Most advanced graduate work in the United States was offered only in the arts and sciences; many American scholars went abroad to study.[11]

Despite a lack of facilities and financial support, the North Carolina A & M faculty established the precedent for graduate studies early in the institution's history. During the college's second year of operation, Robert Turnbull Burnwell, a Ph.B. in chemistry from the University of North Carolina who worked at the experiment station,

enrolled as a graduate student for one year. After the college graduated its first undergraduate class in 1893, the trustees voted to establish a post-graduate department, with $250 to finance the program. It seemed that because the college was still in its infancy the trustees expressed serious doubts about the institution's ability to offer graduate work.[12]

The faculty was more optimistic, however, and thus established one-year programs leading to master of science degrees in chemistry, horticulture, and agriculture, as well as to the mechanical engineer degree, both requiring an original thesis. In order to supervise this work, the faculty appointed a committee on graduate studies which consisted of Professors Wilbur Massey, Wallace C. Riddick, and William A. Withers. During the first ten years civil and electrical engineer degrees were added, as was a master of science in physics. Under the sanction of the trustees, the faculty also established several teaching assistantships for graduate students, providing them with financial support and valuable teaching experience. Many of the early graduates of the college served as assistants while they pursued advanced studies. The first graduate degree awarded at A & M—a Master of Science in Chemistry—was received by Frank Theophilus Meacham of Caswell County in 1894.[13]

Located in the Main Building, the college library received its first books as donations from faculty and friends of the college; the trustees appropriated small sums to buy books and magazines during the formative years. As early as 1890 the library contained 1,500 volumes; however, the collection grew slowly for the next few years. By the end of Holladay's tenure in 1899, the library boasted about three thousands books and magazines. Several departments also maintained small reference collections. English professor Daniel Harvey Hill selected most of the books. He also supervised the student assistants who staffed the library in return for free board in the dining hall. No card catalog existed, and the student assistants only worried about keeping the books shelved.[14]

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During the early years at A & M the student body was a well-ordered community. The students, most of rural background, were governed by a demerit system administered by the faculty. Unlike later students, A & M's first graduates did not resent this regimentation, but accepted it as a necessary part of the education of a "gentleman" and a Christian. Like other nineteenth-century educators, college authorities stressed the development of character and citizenship. The students themselves exhorted each other to avoid

obscenity, laziness, and other character defects, while the college *Catalogue* stressed that "idle, vicious, or rowdy" behavior would not be countenanced.[15]

The YMCA, organized in the fall of 1889, reflected the college's aim to promote good moral character; it also served as the students' main source of entertainment. Many of the early students were faithful church members; morning chapel was required as was Sunday attendance at the church of the young man's denomination. Attendance was excellent at the YMCA for events such as bible study, singalongs, and guest speakers despite its cramped quarters in the basement of the Main Building. No permanent administrator served at the "Y" until after the turn of the century.[16]

Another part of the college—the military department—also promoted good character, while it taught the student poise and self-discipline. After the spring of 1894, when the department was established, the students were required to wear the gray college uniform, and were discouraged from bringing large extravagant wardrobes to campus. All students wore the uniform until 1897, when the preparatory students were forbidden to wear them; after 1905 graduate students were also banned from wearing the gray suits. At all times military discipline was strictly enforced by the administration, and demerits issued for offenses such as tardiness; misbehavior at drill, chapel, or in the dining hall; or absence from campus without leave. Students were not allowed to go to Raleigh without permission, although seniors were permitted to visit town one night a week. The military department contributed much to early campus life: among other things, it was the source of the college's first band, "a tin horn trumpet and a drum or two." By 1898 the regiment featured a drum and bugle corps complete with a drum major. Until the advent of student government after World War I, the battalion served as the basis of student organization; high rank was highly prized; and competition for these positions was intense. The military atmosphere that pervaded the campus also encouraged the sense of honor and decorum that were part of being a gentleman.[17]

Despite the strict regulations that governed them, the students managed to organize their own social activities. The first clubs on campus were the Pullen and Leazar Literary Societies, named for A & M benefactors Augustus Leazar and Richard Stanhope Pullen. Both of these organizations were formed during the fall of 1889. The societies promoted reading, held debates on the important issues of the day, and boasted that they controlled campus politics. Their activities offered a liberalizing influence to the college. Similar organ-

izations at the other land-grant colleges were popular during this period. These activities supplemented the required courses in history and English, and gave the members an outlet which also cultivated poise and self-confidence. Fierce rivalries existed between the societies that actively recruited freshmen in the fall. When the social fraternities first appeared on campus in 1895 with the chartering of Beta Tau chapter of Sigma Nu, the powerful literary societies convinced the Holladay administration to ban the greeks. Therefore, until the early 1900s fraternities existed *subrosa*, and were frowned on by the administration, as they were at other land-grant colleges, because of their reputation for elitism.[18]

Other early student organizations reflected the college's educational objectives. These were often cyclical, short-lived groups that existed only as long as their founders remained at A & M. They included the Agricultural Club, founded in 1890 by agricultural students; the Mechanical Club, established by students in the mechanic arts; and the Berzeluis Chemical Society organized later by the applied science students. These clubs helped promote professionalism and fellowship among the students in the different disciplines. As noted A & M's students organized themselves along departmental lines, which they continued to do throughout the college's history. In addition, county clubs organized to promote fellowship away from home, flourished during this early period.[19]

A & M's student body rapidly established athletics. As a committee of the whole in 1893, the students organized the College Athletic Association and received a $50 appropriation from the trustees. During the previous year the A & M football team played its first game against the Raleigh Academy, and in 1893 it played its first match against the University of North Carolina scrubs. The administration frowned on these early efforts to establish athletics at A & M; officials provided little financial support and prohibited: first, out-of-state contests; and then, all inter-collegiate games. This ban was lifted in 1897. The end of administrative disapproval changed little; most early athletic activities were restricted to intramural contests between undergraduate classes. When organized, A & M's football team was poorly equipped, and frequently it was coached by a friendly faculty member or a Raleigh resident. The first field was marked with a plow; a ditch served as goal line. Even with these early difficulties, the Athletic Association contributed to A & M's heritage when, in 1895, it changed the college colors, originally pink and blue chosen by the literary societies, to the now familiar red and white. Early athletic teams were known as the "Farmers and Mechanics," the "Aggies," or

the "Techs," and the name "Wolfpack" did not become popular until the early 1920s.[20]

During the early years, dormitory life did much to promote a sense of community on the isolated campus. At first, students lived in the upper stories of the Main Building and obtained water from a nearby well. Unpartitioned for the first year, Main's living area resembled a barracks. First, Second, and Third dorms, built between 1892 and 1893 when the Main Building became overcrowded, consisted of eight to ten rooms, designed to provide students with a cozy, home-like atmosphere. Fourth Dorm, constructed in 1894, was somewhat larger. Until the construction of Watauga Hall in 1895, students used an outhouse located behind the Main Building. After two young women attending a summer teacher's institute died of typhoid, the public outcry forced authorities to obtain funds for showers and toilets in the basement of Watauga, as well as water spigots in the other buildings. The outhouse — "Old No. 7"— remained where it was however, until 1899 when it was burned by some students celebrating a tie with the University of North Carolina football team. Watauga also housed the dining hall, with a one storied kitchen in the rear. Constant overcrowding caused some students to room off campus in faculty-approved housing, but students under twenty-one were required to live on campus. The rooms were lighted with kerosene lamps and heated with small, cast-iron wood stoves until the power plant was built in 1895. Until 1896 the boys slept on corn husk mattresses with no springs. The dormitories even housed fraternities; so, nearly all students shared the common experience of dorm life.[21]

Food service, the perennial complaint of the college student, came under fire early at A & M. Under the supervision of matron Susan Colwell Carroll and steward Benjamin F. Skinner, the dining hall experienced financial problems because students had formed five off-campus eating clubs. By the mid-1890s, more than one-half of the students ate off campus because they disliked the fare served by Mr. Skinner. By dining off campus at a club, students discovered they could reduce their board expenses from $8.00 to $6.00 a month. The students were so disgusted by the college food that once, as a prank, they displayed some of the dining hall's stew at the State Fair. In order to overcome student resistance, the trustees decided to turn the dining hall operations over to a board of students to operate as an on-campus eating club. This arrangement lasted only two months: students quickly forced the dining hall into debt. Students also caused the faculty many headaches when, in pursuit of midnight

snacks, they stole Mrs. Holladay's chickens and milked the college cows. Typical meals served in the dining hall during this period included: butcher's meat three times a week; seasonal dishes such as turkey, and oysters in the fall; and fish and eggs in the morning.[22]

Between 1889 and 1899 the student body grew from seventy-two to two hundred and fifty. Isolated from Raleigh until 1891, when the streetcar reached campus, the college was a close, fraternal community. Of the seventy-two who enrolled during the first year, only thirty-eight remained at years's end, and only nineteen graduated in 1893, including Walter Mathews, the first student to register at A & M. Undoubtedly many students were forced to withdraw because of the economic hardships that followed the panic of 1892, while others disliked the emphasis on manual labor. The next class consisted of only eight members. Although the student body increased to two hundred and fifty by 1899, graduating classes remained relatively small well into the twentieth century, a typical pattern among land-grant colleges. So as "to keep alive a fellow-feeling among graduates of the institution," the first three graduating classes in 1895 formed the A & M Alumni Association.[23]

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During the college's first year, the Main Building served as the only building. The kitchen, dining hall, and gymnasium were in the basement, while classrooms, the library, and faculty offices occupied the first floor. Even during that first year of operation, conditions became overcrowded; therefore, according to an approved plan, the trustees authorized the construction of the Mechanical building on the site of what is now Peele Hall. This building housed all the shops and the forge for the rapidly expanding mechanical courses. The agricultural course was not forgotten by the trustees. It received a model barn in 1892, on the site of present day Leazar Hall. In 1895, the Horticulture building, later Primrose Hall, was completed. With a few minor additions, including the infirmary constructed in 1897, the campus changed little until after the turn of the century.[24]

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One part of the college—the Agricultural Experiment Station—created controversy throughout the period from 1889 to 1899. When the station was transferred to the college on December 9, 1889, the trustees directed the North Carolina Department of Agriculture to turn the Hatch Act funds over to the institution's administration. At the same time, however, they directed that the college farm

remain separate and the station offices continue at the state Agricultural building in downtown Raleigh. These actions by the trustees began a squabble that lasted until the late 1930s, because the state Department of Agriculture, already entrenched in the station, refused to relinquish its power. The North Carolina General Assembly compounded the problem by failing to define clearly the powers and duties of the college, the station, and Department of Agriculture. In addition, the legislature failed to appropriate any money for research, the Board of Agriculture frequently with little notice transferred station workers from one department to another, and quarrels flared between division directors over who controlled the land and livestock. Although the trustees attempted to encourage the full integration of research and teaching functions from the onset, many of the station workers failed to teach at the college and, therefore, any knowledge gained at the station did not reach the students as was intended by the authors of the Hatch Act.[25]

Despite these problems, the station expanded its operations under Herbert B. Battle, the director until 1897. When the station joined the college, work, supported mainly by Hatch Act funds, was underway in the Chemical, Agricultural, Botanical, Horticultural, and Entomological divisions; in addition, the station provided weather information to the public. During the next few years the station: began to publish bulletins containing agricultural information; established a veterinary division in 1893; and instituted poultry work in 1895. During 1895, cooperative work with the German Kali Works at Southern Pines began under the direction of horticulturalist Gerald S. McCarthy. Over the next few years, McCarthy conducted valuable research with fertilizers on fruits and vegetables until the project was discontinued in 1898. These were advances; however, the work at the station remained unsettled because of the lack of delineation of authority, and also because of frequent financial difficulties.[26]

Born from the temporary union of the New South and the farmers' movements of the nineteenth century, A & M College in its early years represented the conflict between these two main currents of late-nineteenth century southern thought. As with other elements of the New South movement, the college promised much to the farmers, but failed in fulfillment. Although it was the pressure from the supporters of the "farmers' college" that secured passage of the bill which created the institution, A & M College graduated few agricultural students during its first decade. Lack of financial support left the college farm in poor repair, much to the distress of A & M officials. It

was not surprising then, that the college became the target of the reform efforts of the Republican-Populist Fusion ticket that in 1894 captured control of the North Carolina General Assembly.[27]

The Populist Party grew out of the vigorous farmers' protest movement of the early 1890s. Populism in North Carolina, however, suffered a serious blow in June 1892 with the death of L.L. Polk. Marion Butler, Polk's former opponent, assumed leadership of the North Carolina movement, and in 1894 helped the Populists into an alliance with the state Republican party, led by Congressman Thomas Settle. In that same year these Fusion forces gained control of the North Carolina General Assembly. Once in power, this coalition passed laws to protect civil liberties, such as the right to vote, and repealed a law restricting cooperative efforts, a key element in the Populist reform program. Although the legislature placed the college under the control of the Board of Agriculture in 1895, few changes were made in the institution during the first two years of Fusionist control.[28]

The election of 1896 produced change: more Fusionists, including some black candidates, won state elections and a Republican became governor; several changes occurred at A & M as well. A new board of trustees was established chaired by Republican J.C.L. Harris. Although the new trustees made few really drastic changes, the Democrats remembered the turmoil of Reconstruction, and feared the worst; they viewed any action of the Fusionist board unfavorably. Thus, when popular professors Robert Edward Lee Yates, Benjamin Irby, and station director Herbert B. Battle were removed, the opposition regarded the dismissals as a political maneuver, though Irby lacked technical training and experience. Battle was dismissed after he terminated McCarthy's research project at the German Kali works; the board believed he had no right to take such action. Furthermore, as the son of University President Kemp Plummer Battle, he was considered by many individuals to be part of a family "ring" that controlled North Carolina. Professor Yates was later rehired by the same board.[29]

The new trustees moved quickly to bring the work of the experiment station and college closer together. William Alphonso Withers, A & M's professor of chemistry, without his knowledge, was appointed station director. A station council was created to oversee research, and the professors at the college became heads of the various divisions. A Fertilizer Control Division, created mainly for the purpose of testing fertilizer, was established at the station, and all admi-

nistrative offices were ordered to transfer to the college. Apparently, this was not done. The board also discontinued the station's meteorology division in 1898.[30]

Problems continued for the station when a quarrel over land allotments at the station farm developed on the station council between Wilbur F. Massey, the horticulturalist, and Frank Emery, the agriculturalist. The conflict hampered the college's efforts to coordinate research and teaching, as did the constant fear of political dismissal of faculty and staff that pervaded both the college and station at this time. After the Democrats won the election of 1898 and regained control of the state, officials at A & M hoped that better times lay ahead.[31]

The trustees appointed by the new Democratic legislature were alarmed by the stories circulating about A & M. They immediately launched an investigation of the college, with a possibility of reorganization. A committee of seven was appointed in May 1899 to make a study and report to the board in June. Much of the testimony heard by the committee involved problems at the station. Professors Massey and Withers both contended that more research work should be undertaken. Furthermore, they said, to comply with the terms of the Hatch Act, the station had to be controlled completely by the college, with no interference from the state Department of Agriculture. Massey was especially vehement on this point, describing the existing situation as a "double-headed monstrosity." The committee recommended that the chair of agriculture be declared vacant, the station council abolished to reduce discord, and several Populist appointees to the faculty removed. The board accepted part of their recommendations by removing Frank Emery and rehiring Benjamin Irby. In addition, the president of the college was designated station director, and all station offices again ordered to remove to the college. At the same time, the board began a search for a president, because Holladay, apparently exhausted by the recent controversy and concerned about his wife's poor health, announced his retirement.[32]

Holladay's resignation and the reorganization of the college marked the close of the first decade at A & M. Under the first president, the college facilities expanded to accommodate about three hundred students. Although few new positions were established, a number of assistant professors and instructors joined the faculty to teach the growing student body. Although much of the controversy was exaggerated the college weathered the political storm of the 1890s. In many ways the institution's experiences, from its difficulties with the curriculum to the institutions of student life, represented the

land-grant experience itself. By 1899, despite its relatively small size, A & M College had demonstrated its ability to produce men with a technical education. By virtue of this success its supporters looked forward to a more important role for the institution in twentieth century North Carolina.

Chapter IV

From A & M to A & E, 1899-1923

During the first two decades of the twentieth century the college experienced numerous changes as its student body grew and its curriculum became more diversified. Between 1899 and 1922 "State College," as its partisans came to call the institution by the late 1910s, had three presidents, while its faculty increased and its physical plant improved. At the same time, the college's importance to the state increased, and the college itself came under the influence of the forces of progressivism. By the end of the 1910s, A & M had outgrown both its name and its administrative set-up; it was clear to all involved that changes were necessary at the college.

Alexander Q. Holladay's successor was George Tayloe Winston, another classical scholar. From a family of North Carolina educators, A & M's second president was born at Windsor, Bertie County, on October 12, 1852. After attending the well-known Horner School at Oxford, he entered the University of North Carolina at age thirteen. He attended the United States Naval Academy, where he ranked first in his class, and then matriculated at Cornell University. There he received the Latin Scholarship Medal. After this distinguished undergraduate career, he served as professor of Latin, and later as president of the University of North Carolina, as well as the first president of the University of Texas. An outstanding speaker and brilliant scholar noted for his ability to promote higher education, Winston served as A & M's president from 1899 to 1908, when he retired while on leave in England where he accepted an annuity for life from the Carnegie Foundation for his service to southern education.[1]

His successor, Daniel Harvey Hill, Jr., was the first insider to be chosen to head the institution; from 1889 to his election in 1908, he served as A & M's first professor of English. Born on January 15, 1859, at Davidson College, where his maternal grandfather, Dr. R. H. Morrison, was president, Hill attended the North Carolina Military Academy at Charlotte, the Horner and Graves Academy at Hillsboro, and was graduated with a Bachelor of Arts from Davidson College in 1880. Hill then taught at a Georgia college, where his father was president, until his appointment to the A & M faculty in 1889. In addition to his work as professor of English, he served the college as bookkeeper, faculty secretary, bursar, and, under Winston after 1905, as vice president. He also authored several textbooks, including *Agriculture for Beginners*(1903) and the *Hill Readers*, as well as a number of books on North Carolina's Civil War regiments. It was his interest in the Civil War that finally drew him away from A & M; in 1916 the State Confederate Veterans Association requested that he write a history of North Carolina's participation in the conflict. Despite a great reluctance to leave the college, Hill resigned on July 1, 1916.[2]

Wallace Carl Riddick, another long time A & M faculty member, replaced Hill. Born in Wake County on August 15, 1864, Riddick briefly attended Wake Forest College, before receiving his A.B. degree from the University of North Carolina in 1885; in 1890 he obtained a Civil Engineer degree from Lehigh University. Before joining the college faculty in 1892 as professor of mechanics and applied mathematics, he worked briefly as a civil engineer. Later, in 1895, he became the first professor of civil engineering. In addition to his teaching duties at A & M, Riddick also continued professional practice, including work on rebuilding the Raleigh water system. On campus he was also an enthusiastic supporter of the college's athletic program. Riddick field, created in 1907 for football and baseball, was named in his honor. When D.H. Hill became president in 1908, Riddick succeeded him as vice president, later as president when Hill retired. During the Riddick administration numerous problems that had accumulated during the earlier part of the century reached a crisis point, leading to the reorganization of the college.[3]

Progressivism, a sweeping movement for social, political, and economic reform, with an emphasis on professionalism and efficiency, significantly affected North Carolina A & M during the early twentieth century. The movement attempted to overcome the problems caused by the rapid economic expansion and change in the United States during the latter half of the nineteenth century. In

colleges throughout the nation the committment to progressive reform changed curricula, and promoted more study of economic and social problems; it encouraged the colleges to broaden their service to the community through extension; and it changed the relationship between students and faculty, as professors abandoned the enforcement of petty regulations and encouraged the students to take more responsibility for their own governance. In addition, the movement promoted professionalism among professors and encouraged the expansion of teacher training as part of a larger effort to improve public schools. At A & M many of these types of reform became a reality as the college evolved during the early twentieth century.[4]

During the college's second and third decades, a number of revisions in the existing curricula were made; in agriculture this led to a greater diversity and an emphasis on specialization. At first, however, the agricultural curriculum suffered as it had from the beginning, from a lack of students and equipment. The continuing debate over the experiment station between the college and state Department of Agriculture only complicated the problem. After two years as A & M's president, Winston decided that Benjamin Irby, professor of agriculture, failed to measure up to professional standards, and he was dismissed. At this point one half of the credits necessary for a four-year degree were still devoted to field work. In 1901, when many state agricultural leaders expressed dissatisfaction with the lack of course work the Board of Trustees were dissolved and replaced by the State Board of Agriculture.[5]

The new board was determined to improve the agricultural curriculum at A & M, and took several important steps to reform the program. First, they approved 120 scholarships for agricultural students. After Wilbur F. Massey resigned as professor of horticulture to devote full time to the experiment station, the board selected Charles W. Burkett as professor of agriculture. Under Burkett's guidance, the scientific and technical content of the agricultural courses was increased, and the amount of field work was reduced to one-third of the total curriculum; the number of agricultural students rose from seventeen in 1900 to ninety-two by 1902. Burkett's reforms reflected activities in the national land-grant movement, as agricultural educators abandoned the emphasis on manual training and increased the scientific and technical content of the curriculum. In addition, the agricultural program received another boost when the Board of Agriculture authorized the construction of a new building, now Patterson Hall, specifically for the program. With the new building, completed in 1905, and more students, the department added: an

animal husbandry man; a veterinarian; an entomologist; and a biologist; all of whom were also part-time station employees. Burkett bolstered the morale among the agricultural students by assisting them with the organization of a chapter of Alpha Zeta, the agricultural honorary society, in addition to the publication of a journal, *Agricultural Education*. As the number of students continued to grow, Burkett and his agricultural colleagues requested permission to organize as a faculty with Burkett as dean, but because of faculty politics, the trustees refused. Burkett resigned on May 30, 1906.[6]

His resignation triggered another decline in the agricultural department. His successor, Charles M. Connor, remained only until November 1907. The number of students dropped rapidly, and those remaining complained that the professors "were not proficient to carry on the work." Another tumultuous period at the experiment station also hurt the program at A & M. Finally, in March 1908, Clifford Lewis Newman was chosen professor of agriculture. Under his leadership the program was stablized and expanded.[7]

During Newman's tenure the number of departments increased, as the program became more specialized. Like the agricultural curricula at other land-grant colleges, many courses were required, leaving little room for electives. Most of the course work emphasized better production methods; until World War I little attention was paid to the economic and social problems of agriculture. Agriculture developed into agronomy and soils in 1910, while other professorships in subjects such as animal husbandry, poultry, and entomology were filled by full-time people for the first time. Upon the request of the North Carolina Farmers' Union—a group promoting better marketing and cooperative warehousing—the chair of rural economics was created in 1914 and assigned to William R. Camp. This signaled the beginnings of a new emphasis in the study of agriculture, as students began to look less at production and more at other problems, such as marketing and distribution. It was also indicative of the impact of progressivism on the study of agriculture.[8]

By 1916, 442 agricultural students were enrolled in the agricultural curriculum. Most of the manual instruction was abolished and replaced by laboratories as the emphasis on science increased in the curriculum. New barns constructed in 1909 on the site of Reynolds Coliseum provided better training facilities for the students. Agricultural students took the same fundamental courses during their first two years, then elected a field of specialization. By the end of Newman's tenure in 1917, these majors included: poultry; agronomy; horticulture; animal husbandry; agricultural chemistry;

and biology. Prospective teachers of agriculture took a general agricultural curriculum. In addition, the college offered a number of short courses — ranging from one day to three months—for farmers unable to attend college.[9]

In 1917, after many years of agitation, the first dean of agriculture was officially elected. He was Charles Burgess Williams, an early graduate of A & M. Williams continued the practice of requiring all students to take the same courses during their first two years. During his tenure the faculty continued to grow, from seventeen in 1916 to twenty-five by 1920. New fields of study were also added. Course work in farm mechanics was added in 1920 with D. C. Carter as the first professor; the new course became the forerunner of agricultural engineering. The next year the Department of Agricultural Economics and Business was added, and Carl Cleveland Taylor became its first head. Between 1910 and 1923 the agricultural student body increased 182 percent, while state financial support increased by 450 percent, perhaps the rewards of better organization of agricultural education during the college's second and third decade.[10]

In engineering, which had expanded during the Holladay administration from the mechanic arts course, an increase in enrollment and an expansion of the curriculum also occurred. Despite the attention given the agricultural curriculum by the trustees, faculty, and public, engineering remained the more popular subject. Afraid to tamper with success, the faculty made few changes in the course of study; thus, the emphasis on shop work remained strong throughout this period. The only major change occurred shortly after Winston became president, when the curriculum in applied science was changed to chemical engineering in an effort to align it more solidly within A & M's educational mission. Little else was done for the engineering program during Winston's tenure. As the number of students increased, however, it was necessary to separate mathematics from civil engineering to serve everyone equally. Therefore, in 1906, mathematics became an independent department under the direction of Robert Edward Lee Yates. Civil, mechanical, and electrical engineering remained housed in the Mechanical building, although civil moved to the Horticulture building after that department moved into the new Agricultural building.[11]

By the end of Winston's administration quarters became very cramped for the engineers. When Winston requested the funds for a new engineering building, however, the legislature refused, authorizing instead the construction of the Animal Husbandry Build-

ing on the site of present-day Mann Hall. The president was upset because he had no room for over 400 engineering students. Finally, after Winston retired, the legislature authorized a new building for civil, electrical, and chemical engineering. The building was completed in 1910, and named for Winston. During the Hill administration the old Mechanical building was partially replaced when the new shops were finished in 1913. This new building burned during Christmas vacation in 1919, and was restored early in the Brooks administration.[12]

The early years of the twentieth century marked the arrival of a number of the professors who would teach the college's engineering students for many years. The first, William Hand Brown of electrical engineering, was appointed in 1908; Carroll Lamb Mann, an A & M graduate, became professor of civil engineering in 1916, and in 1920 Lillian Lee Vaughan was appointed professor of mechanical engineering. Ross Shervis Shumaker arrived in 1919 as associate professor of architecture in the department of civil engineering. In 1921, in order to meet the growing demand for architects in North Carolina, architectural engineering became a separate curriculum under Shumaker's direction. Although the curriculum in architecture included courses in the history of the profession and a number of design-oriented courses, much of it centered on engineering. Charles M. Heck, appointed professor of physics during the Hill administration, became the head of that department in 1917 when it separated from electrical engineering to become a service department similar to mathematics. About the same time Harry Tucker of the civil engineering department developed a curriculum in highway engineering to meet the needs of the state's burgeoning highway system. As in agriculture, specialization increased in engineering, and students found less time for electives. Much of the content of the curriculum remained highly technical and shop-oriented until World War II; it was designed to teach a given field of technology and to give students a basic set of technical skills.[13]

The preparatory department and graduate curriculum also underwent alteration in the early twentieth century. One of Winston's first acts upon assuming the presidency in 1899 was to abolish the preparatory, or sub-freshman, class. He took this step because most of the boys in this department were poor students—mainly Raleigh residents—who failed to do well in the city's schools. Few had the ability to pursue a college career, and despite the administration's intentions, most of the sub-freshmen never enrolled in the institution's

technical courses. After 1899, students with deficiencies in one or two subjects were allowed to enroll on the condition they correet these weaknesses before graduation.[14]

Graduate work, on the other hand, was expanded to a two year program. In addition, a program leading to the degree of Chemical Engineer was introduced, and the Master of Science changed to a Master of Agriculture to reflect the institution's goals. Later, after the textile department was established, the degree of Textile Engineer was added, as was a Master of Science in Chemistry and Dyeing. During the Hill administration the engineering program changed to a three year professional program. Beyond these alterations, graduate education at State College changed little in the early twentieth century.[15]

Textile Industry was the most important new curriculum introduced at A & M during this period. The southern textile industry had expanded during the latter quarter of the nineteenth century, and a number of industry spokesmen requested colleges to train their mill workers and managers. In North Carolina, Daniel Augustus Tompkins, an A & M trustee since 1893 and a leading proponent of Tarheel industrial development, led the drive to establish a textile school in the state. He enlisted the help of several prominent individuals in Charlotte, including Judge Heriot Clarkson, and he also attempted to gain the support of the local mill owners. Clarkson introduced a bill in the General Assembly in 1899 that would establish a textile school at Charlotte, but this bill was defeated because of the state's financial difficulties, not to mention the lobbying efforts by A & M College partisans who wanted the proposed school to be located at their institution.[16]

In Raleigh, efforts to establish the new school were under way as early as 1899. Since its organization in 1895 the A & M Alumni Association had devoted much of its time to the project. A committee of Charles B. Williams, C. D. Francks, and Charles Pearson wrote letters to rally support and also enlisted the aid of the Raleigh *News and Observer* in their cause. At the same time, the long dormant Watauga Club, ever interested in the cause of technical education, was reorganized and it, too, joined forces with the Alumni Association. In 1897, William Joseph Peele authored an unsuccessful bill that called for establishing the school at A & M. Two years later, when it appeared Charlotte would be the site of the new school, the Wataugans and the alumni used their influence to prevent such action.[17]

In order to outmanuever the competition, the A & M trustees in March 1899 appointed a committee on textile education, and hired George F. Ivey as an instructor in textile industry. Ivey, a

Trinity College graduate with no technical background, taught mathematics as well as the textile courses. The first eight students in textiles enrolled in the fall of 1899; they received only theoretical training because little equipment was available in the new department. Ivey left after one year, and he was replaced by Henry M. Wilson who managed to obtain $10,000 in equipment from several mill owners. Space remained at a premium in the department's cramped quarters in the Main Building, however, and thus little practical instruction was possible because the machinery, housed in the basement, proved inoperative.[18]

Finally, in 1901, the legislature passed a bill authorizing the creation of the textile department at A & M. Despite a clause in the law appropriating $20,000 for a building and equipment, the state was still suffering financial difficulties; the trustees were forced to borrow $20,000 to construct the structure designed by Daniel A. Tompkins. In addition, they obtained over $25,000 worth of machinery as a gift from several mill owners. After the building—named for Tompkins—was completed in 1902, the textile students installed the equipment under the direction of men sent from the mills. Englishman Thomas Nelson of the Lowell Textile School and William R. Morehouse were hired to assist Henry Wilson with instruction. Tompkins provided advice to the faculty in the development of the early curriculum. Students performed practical work on the machines, and attended lectures on machinery; weaving and spinning; yarn manufacture; and dyeing. The curriculum was quickly expanded to include a major in textile chemistry and dyeing.[19]

During the early years, the textile department's main problem was the lack of sufficient electrical power. Machinery frequently was inoperative because of the weakness of the college electrical plant. The problem was corrected when a second power plant was completed in 1907. Between 1901 and 1914 the textile department grew slowly, graduating approximately forty-five students during the period. Wilson departed in 1906 and Nelson was promoted to his position; a number of other instructors also served before 1922.[20]

On March 25, 1914, the textile department suffered a disastrous blow when the building and most of its contents, including valuable mill equipment, were destroyed by fire. Only one wing of the building was spared because the fire burned through a rope that usually held open a heavy metal door dividing the structure. At first, there was some question as to whether the building would be rebuilt; many mill owners were reluctant to give the college more equipment, especially after they discovered that the insurance did not cover the

damages. At Nelson's urging, however, the industrialists finally agreed to donate new equipment, and A & M obtained additional machinery when another Tompkins project, the Mississippi Textile School, closed. By 1915 the building was restored and enrollment increased from 56 that year to 169 by 1920. Over the years the trustees obtained more equipment for the department, often as gifts from friends of the college. By 1923, the textile department had established itself at the college, and was winning many supporters in the textile industry.[21]

Education, or teacher training, an outgrowth of summer school, was also established during the early twentieth century, as it was at many other land-grant colleges. It was part of the progressive effort to improve the public schools, as well as to encourage professionalism among primary and secondary teachers. In North Carolina, the efforts to improve public education received additional encouragement from the administration of Charles B. Aycock, who used education as a political issue in 1900 to win the gubernatorial race. In the beginning, education was offered only as a summer Teacher's Institute, usually held in May. The men and women who attended were often rural teachers and principals, although some instruction for city teachers was offered. Until adequate dormitory facilities existed, many of the women in these courses roomed at the Baptist Female University—now Meredith College. These summer students took courses such as science, music, agriculture, and nature study; a special course for Sunday School teachers was also offered. President Winston, a one-time president of the State Teachers' Assembly, repeatedly urged the creation of a permanent department of Education at A & M. He argued correctly that well-trained teachers were desperately needed in North Carolina's struggling public schools.[22]

Despite Winston's early efforts, teacher education was confined to summer school from 1903 until 1914, when the college began to offer a four-year general agriculture curriculum designed especially for teachers in rural high schools. A department of education was not established, however, until Congress passed the Smith-Hughes Act in 1917, and State College received a combined total of $6,000 in federal and state funds to support the instruction of teachers of vocational education. Thomas Everette Browne, a former Corn Club worker, became professor of vocational education. Although uncertainties existed about continued funding, Browne and Associate Professor Leon Emory Cook, managed to establish the beginnings of teacher training by 1923.[23]

Although State College's early emphasis was, as it would remain, on technical education, efforts were made from the beginning to introduce the students to the subjects usually termed the "liberal arts." At the same time, however, the administration was always careful to avoid any action that might cause some in North Carolina to believe that the college was intruding on the University at Chapel Hill's educational turf. Students continued to take four years of English, Winston taught civics and political economy, and Hill taught English history. Nevertheless, many other courses in the humanities and social sciences were avoided.[24]

Gradually, however, humanities subjects were added, although usually with a specific land-grant justification for their inclusion in the curriculum. Before the turn of the century, foreign languages, an essential part of a modern liberal education, were taught for one year by Captain John C. Gresham, the professor of military science and tactics. These classes in French, German, and Latin were discontinued when Captain Gresham reported for active duty during the Spanish American War. President Winston, however, believed that instruction in foreign languages was necessary; despite criticism from some quarters, he hired Abraham Rudy in 1907 to teach modern languages at A & M. Somewhat eccentric with his flying machine and Esperanto language Rudy remained until 1915, teaching Spanish, German, and French. Gradually his effectiveness as a teacher declined and his classes became disorganized. After his departure Lawrence E. Hinckle replaced him and managed to restore some of the department's respectability by 1922. At State College, in order to avoid charges of duplication with Chapel Hill, the emphasis was always on *modern* languages.[25]

Economics, another important part of modern liberal education, began as a subject in the agricultural curriculum. Agricultural economics, usually a senior elective, was taught as early as 1897. Instruction in pure economics began in 1909, taught by Professor George Summey of the English Department, who conducted the course until 1913. After that, William R. Camp, as professor of rural economics, taught all economics courses at the college until 1919. This course of study was expanded in 1920, with the arrival of Carl Cleveland Taylor, Carle C. Zimmerman, and Benjamin F. Brown. Originally supported in part by the United States Department of Agriculture, Brown, a marketing specialist, and Zimmerman, a specialist in rural organization, joined Taylor in April 1921 in the new department of Agricultural Administration. In addition to instruc-

tion in agricultural economics, the department also taught rural sociology and economic history. At a May 30, 1922 meeting, the trustees thanked the faculty for liberalizing the curriculum with these subjects, but a number of individuals questioned if this was not a step beyond the college's mission.[26]

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As the college curriculum expanded during the early twentieth century, the administration gradually increased its entrance requirements. As previously noted, students during Holladay's tenure were admitted after they had passed entrance examinations in arithmetic, English and American history. The only change in entrance requirements during the Holladay era came in 1897, when the trustees raised the minimum age for admission from fourteen to fifteen. Upon the arrival of George T. Winston in 1899, however, the requirement was changed to sixteen years and an examination in algebra was added.[27]

Gradually, as the state's high schools improved, certificates of preparation from local school authorities replaced the entrance examination at State College, and at other institutions in the state. The certificate became a printed form in 1912, while units of credit were required for the first time. From 1912 to 1917 eight units were required: including one and one half for algebra, two for English, and one for United States history. After 1917 requirements were increased to 11 units, including three for English, two for history, one for science, and two and one-half for mathematics. Total units were raised to fourteen in 1920 and fifteen in 1921. This trend reflected the improvement in North Carolina's high schools, as well as the need to control the great influx of students after World War I.[28]

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Another significant improvement of the institution during these years was the library. Until 1899 there was no library method to classify the institution's holdings. In order to correct this deficiency, Winston brought Benjamin Wyche, University of Texas librarian, to Raleigh to catalog the library's books. Wyche instituted the Dewey Decimal system for books, as well as a card loan system. After this project was completed, Winston appointed Edwin Bentley Owen as librarian, thus replacing the student assistants of the Holladay years. Owen remained in this position for three years, followed by Marshall Delancey Haywood who served one year, citing low salary as the reason for his departure. After Haywood three women—Caroline

Sherman, Elsie Stockard and Charlotte Williamson—held the position for various lengths of time.[29]

The college library also received new quarters. In 1903 it moved from the Main Building to the first floor of the new Pullen Hall. Throughout the early part of the century, most of the books were selected by D. H. Hill, chairman of the library committee. Because of the tenuous financial condition of the college, the budget for acquisitions was very low during the period, never totaling more than $1,000 a year. It was not until 1911 that the library collection reached 5,000 volumes, and the 10,000 volume mark was not reached until well into the 1920s. By 1922, however, the library had outgrown its quarters in Pullen Hall, and college authorities and the Alumni Association requested money from the legislature for construction of a new building, insisting that the existing facilities were "literally a disgrace to an institution of our proportions." The 1923 General Assembly responded to the request by appropriating funds for a new library building.[30]

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Student life during the early twentieth century continued to develop its own traditions. Many of the earlier county and academic clubs continued sporadically, dependant on the whims of their members, while the literary societies remained a vital part of college life. Fraternities, traditionally discouraged by the administration, were formally recognized in 1904 after a lengthy debate on the matter. The literary societies supported by Captain Frederick Phelps, professor of military science and tactics, continued to oppose the greeks, but the Winston administration decided to allow them after a great deal of pressure from students and partisan faculty. After 1904 fraternities were permitted with the stipulation they abide by the college's rules and conform to its military discipline. With this sanction they grew rapidly in popularity: by 1910 there were enough greeks to organize a Pan-Hellenic Council that formulated rush rules and promoted fellowship among the fraternities. Between 1904 and 1922 the number of national organizations rose from three to nine. Many local societies also existed. Throughout the period all fraternities lived on campus, with their headquarters in the dormitories.[31]

Discipline was always strict at A & M, but with the arrival of President Winston in 1899 the trustees adopted a more stringent military code. The cadets marched to and from chapel every morning, and to all meals. Uniforms were worn at all times, and the student officer of the day performed daily room inspections and bed check.

As in the 1890s, students were not allowed to go to downtown Raleigh without permission, although seniors could visit the city one night per week. Demerits were assessed for tardiness to class, disorderly conduct, and stealing from the college farm while smoking, drinking, and card playing were prohibited. Serious breeches of the code brought expulsion or reduction in military rank. This strict code was designed to "inculcate studious and economical habits, with punctuality, system, and order in performance of all duties." "Tendencies to idleness, vice, and rowdyism" were suppressed and extravagance was discouraged. Seniors were expected to enforce discipline among the underclassmen and, in return were given a few privileges. Unlike students during the Holladay administration, the students of Winston's era quickly demonstrated that they would not abide by the more stringent aspects of the code.[32]

The first incident concerning the code involved the class of 1900. When Winston threatened to withdraw the seniors' visiting privileges in Raleigh, they resigned their commissions and refused to enforce discipline among the underclassmen. Faced with this defiance, Winston relented and allowed senior privileges to remain.[33]

The first instance of serious student unrest occurred in the fall of 1904, and was precipitated by President Winston. The disturbance began when he convinced the trustees at their summer meeting to revoke senior privileges. Upon returning to campus to find their liberties abolished, the senior class at first delayed registration, and then protested to the president who declared the matter closed. When the seniors persisted in their protests. Winston dispersed several class meetings, calling the protestors "Thugs," and threatening to dismiss class leaders from school. The class of 1905 viewed the president's actions as a serious breach of campus etiquette; class meetings were considered sacred, closed to outsiders except by invitation. Winston had experienced a similar revolt during his tenure at the University of North Carolina, and refused to compromise with the seniors. The class of 1905 immediately went on strike, with 32 of the 45 members returning to their homes. Confronted by the loss of the majority of the graduating class, the president relented and retored the privileges; he even increased the night visits allowed in Raleigh to two a week. With this victory the seniors returned to campus. They took a parting shot at Winston in a cartoon in the 1905 *Agromeck*, caricaturing him imprisoned in the tight-fitting college uniform. Colleges and universities in the United States had begun to abandon the old disciplinary theory of education that forced faculty to spend most of their time enforcing petty regulations. Appropriately, President Winston's efforts to enforce the old-fashioned discipline were a decided failure.[34]

During the remainder of the Winston administration, discipline became less strict. Disturbed by the Thug revolt, trustees David Clark, Charles W. Gold, and William S. Primrose urged Winston to relax the emphasis on military matters. In 1906 Captain Frederick Phelps, the commandant during the Thug revolt, was replaced by Lieutenant John S. E. Young, who allowed the students more liberties. Seniors were excused from drill if they elected instead to take foreign languages or civics. These students organize as Company Q, dressing in costumes to parody the battalion. According to the student journal *The Red and White* in 1906, affairs at the college were "much more harmonious since the petty regulations have been done away with." Uniforms were no longer worn except for drill; this change was reflected in the 1907 *Agromeck*: students posed in civilian dress for the first time since the inception of the annual. The atmosphere that critics had likened to a "reform school" was ended; henceforth studious habits, not discipline, were stressed. The students, supported by the trustees, demonstrated that although they endorsed the inclusion of military science at A & M, they would not allow the college to become a military school like Clemson Agricultural College. Nor would they permit the administration to enforce outmoded disciplinary codes.[35]

Despite the military de-emphasis, the battalion continued to be an important part of student life. Intense competition for student military offices continued, and Raleigh's citizens were often treated to dress parades. Companies under the command of student captains competed for honors within the battalion. By 1914 the student body had increased to a size that allowed the cadets to organize as a regiment with two battalions. By the outbreak of World War I, A & M's military department produced a number of graduates who served with distinction during that conflict.[36]

The college band, initially directed by a student drum major, then by a director, continued to be closely associated with the military department. Several directors served briefly before Percy "Daddy" Price arrived in 1917; he ordered a complete set of instruments and began to establish State College's fine musical tradition. Until Price's arrival other musical efforts, including the glee club and an orchestra, were unsuccessful activities, dependent on student interest.[37]

If military discipline decreased during these years, students' efforts at self-discipline increased. Hazing, at first accepted by all freshmen as part of college life, became a statewide scandal by 1907. President Wilson urged the class of 1908 to suppress the annual autumnal outbreak of hairclipping and face blacking during the

school year 1907-1908. During the fall semester Winston denounced the hazing done by the sophomore class as cowardly, and he organized a fight between the sophomores and freshmen to discourage hazing. After this incident the class of 1911 temporarily abolished hazing when they became sophomores. Hazing, however, was revived after 1911 and continued for many years; until the 1920s freshmen were still subjected to the annual freshman bath and hairclipping sprees. In addition, they were forced to howl at the sophomore numeral on the water tower behind Patterson Hall.[38]

The influence of progressivism on higher education was reflected in another aspect of student life during this period: the honor code. The juniors of 1911 developed the honor system that would remain in force for the next two decades. The code controlled all aspects of student life, both in and out of the classroom. Cheating was prohibited, and students were encouraged to behave in an orderly manner. This code relieved the faculty of the burden of monitoring student behavior and was a common reform at American colleges during this period.[39]

During the early twentieth century the YMCA continued as an important part of student social life. In addition to conducting bible study classes, the Y greeted new students and helped the needy find employment. According to students, the organization also "promoted all that is noble and highest in the life of a young man." In order to encourage this program, the trustees in 1905 voted to appropriate funds for the first full-time Y secretary. E.R. Walton served in the position for two years; he was replaced in 1908 by John W. Bergthold. Under Bergthold's direction in 1910 the organization published *The Intercollegian*, a monthly paper, and moved to the recently vacated Primrose Hall. In addition, Bergthold directed the drive to raise funds to construct a YMCA building on campus. After some negotiation, John D. Rockefeller donated $20,000 for the building, the state contributed $10,000 to the cause and students and alumni gave an additional $10,000 to finish the structure. Dedicated on January 31, 1913, the building served as the center for student activities until the organization of the Union during the early 1950s. In addition to reading rooms and several club offices, it also contained a swimming pool and gymnasium. Basketball, a prominent part of State College's heritage, began in the fall of 1910 under the sponsorship of the Y. Early basketball teams were known as the Red Terrors, and their mascot was a bull terrier named Togo. For a while the Y program received all of its support from voluntary contributions, but in 1917 the student body approved a $2.00 per student fee to fund the organi-

zation's activities. Bergthold's successors, John J. King and Edward S. King, provided able assistance to the student committee that organized the Y programs.[40]

During the early 1900s student publications made their appearance at A & M. Just before the turn of the century, *The Red and White*, a literary and news magazine, began as a semi-monthly publication sponsored by the Athletic Association. Student editors, despite difficulties in obtaining articles, expanded the magazine to a monthly after 1904. The literary societies assumed responsibility for the journal after student dissatisfaction with the Athletic Association's administration of the publication peaked in 1911. The next year, the Athletic Association organized the *Wau Gau Rac*, a weekly paper, as competition for the *The Red and White,* but in 1915 it was forced to combine with the older publication. After 1915 only *The Red and White* remained, once again a semi-monthly publication. It continued to present news articles, essays, short stories, and poems until it ceased publication during World War I. Throughout the period *The Red and White's* student editors avoided controversy; their editorials usually reflected opinions in agreement with those of the administration.[41]

The other major student publication of this period, the college yearbook, the *Agromeck* made its debut in 1903. During its early years the college annual demonstrated the feeling of class unity that existed at A & M. In addition to pictures of the students, the yearbook included class histories, pictures of the female sponsors of the battalion's companies and major clubs, and other memorabilia that fostered school and class spirit long after graduation. The first volume was dedicated to President Winston, and each subsequent issue honored a prominent faculty member. Frequently, the end of the book featured humorous materials; class prophesies; satires of college officials; and elaborate advertisements. The annual's founders, the class of 1903, chose the name *Agromeck*—a combination of the words agricultural and mechanical—from a long list of suggestions that included the "Winstonian;" " The Bee Hive;" "The Revilie;" "The Carolinian;" and "The Battalion." Each successive class added new elements to the *Agromeck* tradition.[42]

Of the academic groups, only the agricultural students published a journal during this period. Their first attempt, a quarterly entitled *Agricultural Education*, began in 1904 under the supervision of Professor Charles W. Burkett, the advisor of the Rural Science Club. After Burkett departed in 1906, the publication was dormant for about two years, but then was revived by the Rural Science Club

as the *North Carolina Student Farmer*, a monthly publication. Both of these early journals contained general interest articles that appealed to North Carolina's farmers as well as to A & M's students. The *Student Farmer* continued for several years until it was discontinued due to financial difficulties.[43]

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Until the early twentieth century all students at A & M were male, although by 1900 fewer came from farm backgrounds and more were the sons of merchants and professional men. In 1899 however, the trustees began to debate the emotional issue of admitting women. They did this because the college offered technical education unavailable to women elsewhere in North Carolina. In addition, trustee Daniel A. Tompkins, the leading proponent of textile education, favored the admission of women, since many mill employees were women and he believed they would benefit from this opportunity. On July 5, 1899, the trustees voted to allow women to enroll in all curricula at the college. At the next meeting, however, they expressed second thoughts and rescinded this action. In deference to Tompkins the recently approved course in textile industry remained open to women while others were closed except to female special students who enrolled in only one or two courses. Until 1901, when Margaret Burke enrolled in a physics course, no women took advantage of A & M's limited offerings to them. Indeed, until the 1920s few women took courses during the regular school year.[44]

Summer school, which featured the Teachers' Institute and summer short course for demonstration workers was a different matter. During May, June, and July women in these programs were often the majority on campus. The administration provided dormitory space for them after the 1911 Dormitory was constructed in 1909, and appointed several women to act as part-time advisors to the female students.[45]

In 1921, the boys of State College were joined by the first regular coed, Lucille Thomson, who transferred from Women's College in Greensboro to enroll in electrical engineering. Although no official action was taken by the trustees or faculty, the student body welcomed her as their "sister." She reached junior standing but was not allowed to return for her senior year. State College would have to wait several more years for its first woman graduate.[46]

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Dormitory life continued to be a vital part of the college experience. The Winston administration required all students under twenty-one to live on campus and eat in the dining hall. The perennially cramped conditions in the dormitories worsened in 1901 when Watauga Hall burned. Residents lost most of their possessions in the fire, but escaped injury and managed to save the nearby infirmary from damage during the blaze. After this disaster the dining hall moved back into the basement of the Main Building, and professors rented rooms to displaced students. The trustees made arrangements to borrow $20,000 to rebuild Watauga because the insurance only covered $6,000 of the damage. In addition, they authorized the construction of a separate building—later named Pullen Hall—to serve as a dining hall, library, and auditorium. When completed, the second Watauga relieved the housing shortage for approximately one year, but by 1904 Winston complained that he had no room for half of the college's students, thus forcing the administration to triple students in dormitory rooms and to rent private homes near campus to serve as student housing.[47]

For a time, a Raleigh resident expressed interest in constructing apartment buildings to rent to A & M students, but this plan failed and the college's housing remained insufficient. Dormitory conditions did not improve until 1909, when the 1911 Dormitory, named for the class of that year, was completed. Later, two wings were added, nearly doubling the building's capacity to 240. In order to accommodate the rapidly growing student body, a new dining hall, later named for Augustus Leazar, was also completed in 1912, providing seating for 750 students. The old dining room in Pullen Hall was closed, and the area remodeled for other uses. This relief was only temporary, however, because in 1913 the college was forced to erect ten wooden shacks south of Fourth Dormitory. They served as predominantly freshman housing until they were removed in 1917. Each shack was supervised by a senior. In 1915 the north wing of South Hall, present day Syme Hall, was erected, which relieved the situation again for a time.[48]

From the turn of the century to the outbreak of World War I enrollment at State rose from approximately 300 to 742 students, the same rate of growth as during the first ten years. Student life became more complex and varied as students established many traditional campus activities and sought to govern their own affairs. The administration discovered that students were usually amenable to college policies, but resisted hidebound discipline. The students developed

not-so-subtle ways of expressing their opinion of college rules; in one quite spectacular instance, to avoid attending chapel they put a bear from Pullen Park into the auditorium in Pullen Hall.[49]

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Although the college provided education in agricultural subjects, by its very nature it was unable to reach all of North Carolina's farmers. Farm leaders, college professors, and state officials quickly recognized that many farmers resisted "book larning," and preferred a "show me" or demonstration method. In an effort to insure that the institution fulfill its service to all the people of North Carolina, college officials endorsed these activities. Part of the progressive effort to correct longstanding social and economic ills, the extension program demonstrated better ways to farm and maintain homes and thus assisted farm families to help themselves. These early efforts in North Carolina coincided with the development of similar programs on the national level that culminated in the establishment of the Cooperative Agricultural Extension Service.[50]

Early efforts to assist farmers using the demonstration method which were sponsored by the North Carolina Department of Agriculture, the farmer's institute, were held in North Carolina as early as 1890. With the encouragement of state officials and A & M professors, local farmers organized county meetings where they discussed farm improvement methods. In 1906 North Carolina became the first state to hold an institute for farm women. The institute work grew slowly, from eleven such assemblies in 1890 to 136 in 1906. In addition, during several summers the North Carolina Agricultural Experiment Station operated Corn specials—trains that carried station employees through eastern North Carolina—to encourage farmers to use better seed. At the institutes and whistle stops, demonstration workers began the work that would be carried on later by county and state extension agents.[51]

Nationally sponsored efforts, spurred by the boll weevil devastation in the South, soon complimented state programs. In order to combat the weevil, Congress appropriated $250,000 for the United States Department of Agriculture's Bureaus of Entomology and Plant Industry. While the entomologists eradicated the pests, plant industry specialists tried to encourage crop diversification and improved farm management. USDA officials in 1903 hired Seaman A. Knapp, the former president of Iowa State, to go to Texas to combat the weevils. Knapp established a demonstration farm at Tyrrell, Texas with the cooperation and financial aid of local resi-

dents; there he endeavored to teach the farmers new practices. This work proved successful, and the number of demonstration agents in the southwest grew rapidly. Although the federal funds used by Knapp were provided solely for those areas affected by the spread of the boll weevil, other farmers, including those in North Carolina, outside the infested areas soon requested similar programs for their problems. The General Education Board, endowed in 1902 by John D. Rockefeller to promote education in the United States, agreed in 1906 to support demonstration work outside boll weevil territory. Demonstration work performed by county agents quickly spread throughout the South.[52]

In North Carolina, demonstration work sponsored by the General Education Board began in 1907 when Cassius Rex Hudson arrived in Raleigh to organize the program. Hudson, North Carolina's first state agent, found the North Carolina Department of Agriculture uncooperative, however, which prompted him to relocate his headquarters at Statesville in Iredell County. Although authorities at A & M expressed interest in Hudson's project, they lacked the necessary funds to support the work.[53]

In order to organize locally, Hudson held a meeting on November 18, 1907 in Iredell County. The participants selected James A. Butler as North Carolina's first county agent. Butler arranged with Iredell farmer J. F. Eagles to use his farm for a demonstration of a better method to grow cotton and corn. By 1909, twenty counties acquired farm demonstration agents, some supported by the General Education Board and others by funds collected from local farmers. During the next year, the state was divided into demonstration districts for the first time, as the number of counties involved in the program increased to 43. Meanwhile, after lengthy discussions with A & M College officials who sympathized with his program, Hudson agreed to return to Raleigh, where he established his office in Patterson Hall. This success for A & M was the culmination of an arrangement established in the spring of 1909 when college officials signed the first memorandum of understanding for cooperative demonstration work with the USDA.[54]

The agreement, effective on July 1, 1909, specifically provided for the college and the USDA to support the development of Farmers' Boys' Clubs or Corn Clubs, a part of the demonstration program. This development was the forerunner of 4-H, the name adopted for this program in 1911 but not popularized until the 1920s. Ira Obed Schaub of A & M's class of 1900, was appointed club agent, the first in the South to work under the cooperative agreement. Before

Schaub's appointment, Hudson had attempted to develop boys' poultry club work. T. B. Parker was hired in 1907 by the North Carolina Department of Agriculture to start similar corn clubs. Schaub and Parker agreed to cooperate, and working through county school superintendents, they managed to organize clubs for 4,000 boys in the first year. The first club was established in Hertford County with the assistance of Thomas Everette Browne, the superintendent of schools and a part-time county agent. The club workers wanted to teach the boys better farming practices and, through the youngsters, carry their message to the parents. At first club work in North Carolina was confined to corn clubs and was primarily for boys. In 1911, however, Schaub received word from Washington that funds were available to support girls' club work; he quickly appointed Jane S. McKimmon, a Farmers' Institute worker, to develop such a program.[55]

Girls' Clubs, like the boys' Corn Clubs, attempted to teach North Carolina's youth to improve their livelihood through better practices, and, ostensibly, to pass this information to their parents. Unlike the boys' groups which quickly expanded in 1914 to poultry and pig clubs, the girls' clubs concentrated on tomato canning and gardening. During this period, little ready cash was available to most farm homes; therefore the clubs helped the girls by teaching better home economics and by providing cash through the sale of canned tomatoes. During the first year, McKimmon organized fourteen counties, with a total membership of 230; and by 1914 thirty-two counties with 1,500 members participated. Girls' Clubs promoted the establishment of a Home Demonstration program in 1912, because the girls' mothers quickly decided they also wanted to learn better methods. McKimmon was able to obtain support for home demonstration agents in the counties; by 1914 there were thirty-seven such agents. Her efforts in promoting the clubs' activities, and the girls' achievements placed the Girls' Clubs program ahead of the Boys' Clubs for many years.[56]

Schaub, Hudson, McKimmon and their assistants received additional support for their program in 1911 when the state legislature authorized county commissioners to pay the demonstration agents; this support enabled them to keep pace with the demand for more extension work. All club work conducted by the State Department of Agriculture was transferred to A & M in 1912, when that agency elected to concentrate on other aspects of extension. Schaub, who received his salary from the General Education Board, served as extension professor at A & M until his resignation in 1913. Following his departure, Thomas E. Browne became director of Boy's Club

work. In 1915, Negro Boys Farm Clubs were initiated under the supervision of John D. Wray, with the cooperation of the A & T College at Greensboro. In 1910 Negro Farm demonstration work began in Guilford, Randolph, and Rockingham Counties, where Neil Alexander Bailey served as North Carolina's first black county agent. White demonstration work also expanded, employing sixty-six farm agents and thirty-two home demonstration agents by 1914. A & M's President Daniel Harvey Hill considered this extension program a vital off-campus addition to the college's mission to "minister" to the people of North Carolina.[57]

The success of demonstration work led the way for federal funding for all extension work. Land-grant administrators, farmers and commercial interests lobbied Congress for support for their program. The first federal extension legislation introduced in 1909 failed to pass because those already in demonstration work feared the bill would destroy their program. In 1913, however, a bill introduced simultaneously by Senator Hoke Smith of Georgia and Representative Asbury Francis Lever of South Carolina, passed both houses and was signed in 1914 by President Woodrow Wilson. The Smith-Lever Act provided for the establishment of a system of federal, state, and county cooperation to support the further expansion of demonstration work for both men and women. It authorized land-grant college administrators to sign memoranda of understanding with the USDA to supervise the program. When President Hill signed the memorandum of agreement in 1914, A & M, as North Carolina's land-grant college, became the headquarters for extension in the state.[58]

Although extension was affiliated with the college, it also was under the jurisdiction of the Joint Committee on Agriculture. This committee, established in 1912 after negotiations between the college and the State Department of Agriculture consisted of the president of the college, the Commissioner of Agriculture, and members of the trustees and Department of Agriculture. The committee supervised the agricultural extension work, disbursed the Smith-Lever Funds, and treated the extension service as part of the experiment station's program. In 1914, under this arrangement, Benjamin Wesley Kilgore, station director, became the first director of extension in North Carolina. Although this arrangement lasted twelve years, problems arose because Kilgore kept his office downtown and extension workers had no real headquarters. Funds sent from Washington to the college were given to the Joint Committee, an arrangement that some individuals believed was a violation of the Smith-Lever Act. Between 1912 and 1923—the lifetime of the Joint

Committee—college supporters also protested that the North Carolina Department of Agriculture received all the credit for extension work and State College received none. This growing problem added to the other difficulties the Riddick administration faced in the early 1920s.[59]

Despite these problems extension expanded rapidly in North Carolina after passage of the Smith-Lever Act. By 1915, seventy-one farm and thirty-seven home demonstration agents operated in the state while the *Extension Farm News* began publication on February 13, 1915 under the editorship of Frank H. Jeter. Through this publication and his other efforts in agricultural information, Jeter became a powerful figure in North Carolina, often overshadowing other State College officials. Animal husbandry programs in dairy, beef, pig, and poultry were added to farm demonstration during this period; in 1916, Boys Club work expanded to include crop rotation clubs, as well as potato and cotton groups. Club boys and girls, as well as demonstration agents, began to hold summer short courses at the college—a tradition that continues today. In 1915, 4-H Club Week began. Farm agents served ninety-two counties in 1916, as agricultural extension prepared to assist the United States war effort.[60]

During World War I the extension service had its first real opportunity to prove its worth to North Carolina. Boys' and Girls' Clubs members were urged to increase food production and to practice conservation. Extension agents also conducted two state-wide food and feed surveys; distributed nitrate to farmers; and sold Liberty Bonds. Federal emergency funds made the expansion of extension work possible; by 1918 there were 104 farm agents and 72 home demonstration agents. Sheep and swine specialists joined the program at the state level, as the counties were reorganized into five districts. Under extension supervision, North Carolina's farmers produced a record output, and began to experiment with new crops. Emergency war gardens, grown by many of North Carolina's 36,663 women's and youth club members, flourished throughout the state. In addition, the federal emergency funds enabled extension to establish home demonstration for black women during the war. When the influenza epidemic of 1918 began, home demonstration agents dropped their regular program to nurse the sick, set up emergency hospitals, and to organize soup kitchens. The home demonstration program was forced to discontinue programs in ten counties after emergency funds lapsed in 1919, yet extension had established itself as a useful program during the war.[61]

During the early 1920s, extension continued to grow, despite financial problems due to the curtailment of funds. Agents

encouraged the formation of the State Federation of Home Demonstration Bureaus in 1920, as well as local organizations of the Farm Bureau. Club work was turned over to the county agents, and the *Tar Heel Club News* began publication in May 1920. In addition to encouraging cooperative marketing, extension workers urged young Tarheels to attend State College. By 1922, agricultural extension was a vital part of State College's efforts to assist North Carolina's development. As a symbol of this importance, it received a permanent home on the college campus when Ricks Hall was completed in 1922. At the same time, however, the program's rapid expansion necessitated a new administrative organization as the Joint Committee of Agriculture became outmoded.[62]

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During the early twentieth century the Agricultural Experiment Station continued to be a source of contention. College officials, the North Carolina Department of Agriculture, the General Assembly, and representatives from the United States Department of Agriculture all attempted to settle the questions of authority which had interferred with the station's operation. On several occasions college and state officials announced that the station was to be transferred completely to A & M, yet this was never accomplished because of the power of the state Department of Agriculture. In 1899, the trustees designated college President George Winston as the station's director. Winston, however, soon decided that he did not have enough time to devote to the station and resigned as director. Benjamin Wesley Kilgore, state chemist, became the new director. He moved the station offices back to the Agricultural building in downtown Raleigh, and the quarrel over the station continued. During one period, between 1907 and 1912, two stations existed; one operated by the college and one by the state Department of Agriculture. Quarrels over money, personnel, and programs continued, and jealousy frequently flared. In order to resolve the difficulty a Joint Committee on Agriculture was established in 1911; it supervised the experiment station and agricultural extension. Federal authorities were unhappy with this arrangement, however, because the committee also controlled the Hatch and Smith-Lever funds that were supposed to go to State College.[63]

Despite these aggravations, the Agricultural Experiment Station conducted several projects that were beneficial to North Carolina's farm economy. Dr. Tait Butler devoted his research to the eradication of the Texas Cattle Tick, and hog cholera serum was introduced to the state in 1907. Charles B. Williams encouraged the

first soybean production in the state, and creameries and cheese factories, promoted by the station, were established. In 1917 the station dairy pasteurized the first milk in North Carolina for soldiers at Camp Polk on Hillsboro Road. In efforts to upgrade the state's livestock population, W.W. Shay was hired to encourage swine production, and John A. Arey developed Cooperative Bull Associations to promote better breeding practices for cattle. As before, much of the research focused on immediate problems, such as Granville Wilt in tobacco, but more long-term projects were possible after the passage of the Adams Act in 1906, which provided an additional $15,000 for agricultural research. In addition, the station began another long-term program in 1900: it rented a farm at Red Springs in Robeson County for soil and crop rotation experiments. When rental arrangements proved unsatisfactory, the station purchased in 1902 a farm at Kingsboro in Edgecombe County. This property became the first of a system of station farms located throughout the state. However, dissatisfaction and confusion continued at the station, and by 1922 it was clear that a reorganization was necessary.[64]

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State College was beginning to truly establish its place in North Carolina when Wallace Carl Riddick became its fourth president in July 1916. During the tenures of his predecessors' A & M College expanded academically as well as physically. In addition to new curricula, more faculty and students, and additional buildings, the college also acquired more land in west Raleigh: beginning in 1892 with the Harris tract adjoining the original Pullen gift; followed by the additional gift in 1898 by the North Carolina Agricultural Society; and the 288-acre Belvin tract secured in 1899. Between 1902 and 1905 William R. Rogers provided the college with approximately one hundred acres of land, including the former black community of Cook's hill, near the site of present day Patterson Hall. The site of the Chancellor's Residence was obtained from Rogers in 1912; while, in 1923, the Blalock tract south of the Belvin Tract was acquired, thus expanding the regular campus to its fullest extent until the 1980s.[65]

By 1917, A & M administrators and alumni believed that the institution was broad enough in scope to necessitate a change of name. Therefore, North Carolina College of Agriculture and Mechanic Arts became North Carolina State College of Agriculture and Engineering, a name symbolizing the maturation of the mechanic arts to engineering. It also provided the institution with a name more consistent with other land-grant colleges.[66]

State College in 1917 seemed destined to continue along its path of slow expansion; however, the outbreak of World War I changed the institution forever. As events in Europe drew the United States closer to war, students and faculty speculated about what they would do if and when the inevitable happened. Although only twenty students left the college in 1917 for duty with the National Guard in Mexico, administrators noted a feeling of unrest and excitement generated by events in Europe that they considered unfavorable to study. After an outbreak of hazing in the fall, students requested that the faculty modify the honor system; they replaced the student honor committee with an honor council consisting of four faculty and three student members. The seniors were enlisted to keep order in the mess hall, and those responsible for the hazing were dismissed from college. A general unrest, however, remained at State College. [67]

Probably the most important event that year at the college was the establishment of the Army Reserve Officers Training Corps. After the passage of the National Defense Act of June 3, 1916 established ROTC, the Riddick administration quickly requested organization of a unit at the college. The new program was designed to replace the old military system authorized by the Morrill Act, which suffered from a lack of a standard national program, and a shortage of funds and Army personnel available to teach military science at the land-grant colleges. Unlike the old system, ROTC provided financial support for upperclassmen who elected military science; in exchange the juniors and seniors signed a contract for service with the army and attended a six-week summer camp. As at other land-grant colleges, State College officials decided to make the first two years mandatory for all students.[68]

When the ROTC unit was formed in the fall of 1917 students at State College, flushed with patriotism after the United States' declaration of war on Germany, accepted the program with enthusiasm. Even before the infantry unit was officially activated, students volunteered to drill five days a week; they also requested permission to wear the new olive drab uniforms at all times. They also posed in their uniforms for the 1918 *Agromeck*.[69]

During the academic year 1917-1918—the first year of ROTC's operation—State College became more involved in the United States' war effort. Overall, a 23 percent decrease in enrollment occurred since one-half of the junior and senior classes had joined the service. Following another episode of hazing apparently caused by student anxiety over the future, the Riddick administration prohibited the practice. Student publications, except for the *Agromeck*,

ceased operation, and lax student customs were suspended in the face of the rigid military code.[70]

At the same time, State College joined 156 other institutions in arranging special training for army draftees the government sent through the National Army Training Detachment, authorized by Congress in April, 1918. Designed to provide vocational training for enlisted men, the eight-week course included such subjects as blacksmithing, carpentry, and electrical wiring, as well as a war aims course to improve morale. Between May and September 1918, the college trained two detachments of 160 men each, thereby joining the "battle against barbarism." Like ROTC, NATD was set aside during fall of 1918 for the Student Army Training Corps (SATC).[71]

During the fall of 1918, State College joined 600 other American colleges in the SATC program. Established by the federal government to keep students in college after the draft age was lowered to eighteen, SATC served as an officers' selection program. Students remained in college and received money from the government while being evaluated for officers' candidacy. The course included eleven hours of drill a week, plus forty-two hours of military and technical courses. At North Carolina State five army infantry battalions and one navy unit were established, containing 590 men. On October 1, 1918, all regularly enrolled students were allowed to voluntarily enlist in the army, becoming part of the SATC. When hazing occurred later in the fall, Riddick reminded the students that they were "privates in Uncle Sam's Army," subject to military discipline. Although several sophomores left college, distressed by the loss of their "privileges", most students accepted SATC after a brief period of confusion.[72]

The program was barely established, however, before the outbreak of Spanish influenza, a world wide epidemic, seriously disrupted its operation. More than 450 cases, thirteen of them fatal, were reported; the infirmary and YMCA quickly filled with the sick. Local women and college students risked infection to treat the sufferers; nurses Eliza Riddick, the president's daughter, and Lucy Page died after contracting the disease. Slowly, the students recovered, and the SATC managed to continue operation.[73]

The war-time military program, however, was dissolved with the armistice of November 11, 1918, and North Carolina State slowly returned to normal. After the program was demobilized on December 10, many students, who were attending college only as a chance to join the army, left school. ROTC was re-established, but when the students returned in January 1919, they discovered that the administration intended to continue the rigid discipline instituted

under the SATC program. The students protested the strict military program. Many of the students who enlisted early during the war returned at this time, older and more worldly, and thus were unwilling to abide by such a code of conduct. Mature and capable of conducting their own affairs, they disliked the administration's authoritarian policies. After about a week of student discontent, the administration decided to allow the restoration of student customs and privileges. When students requested the formal approval of a six-man Student Council, however, Riddick refused, and the students decided to take their grievances to the trustees. In addition to their anger about the veto of student government, they were also distressed by reports that Riddick intended to dismiss agricultural faculty members Clifford L. Newman, Daniel McClure,and G. A. Roberts, and to abolish certain agricultural subjects. The students circulated a petition, signed by 425 of the 450 agricultural students in attendance, requesting Riddick's resignation on the grounds that he was unfit to be president.[74]

The news of the student unrest reached the state's newspapers while Riddick was in Washington. Upon his return, the president informed the press that the students were mistaken about the agricultural program, but that he would investigate the matter. On April 16, the students presented Riddick with the petition requesting his resignation; the petition cited additional grievances, including the absence of any long range planning for the college, a lack of diplomacy in dealing with the students, and poor food in the dining hall. After assurances of a hearing before the trustees, the students withdrew their petition. Discontent also prevailed among the junior faculty, who believed that the Riddick administration was an inbred, self-satisfied oligarchy and had little desire to improve conditions at the college. When the trustees assembled in May 1919, they heard testimony from twelve students and several faculty members. Upon consideration the board decided there were no real grounds for the removal of Riddick, and the members indicated that they believed the students failed to appreciate the problems caused by the war.[75]

At the same time, however, the trustees took several steps to reduce unrest at the college. A committee of students and trustees, led by trustee Charles W. Gold, studied the issue of student government. During the next year, the students continued to agitate for their own government, protesting the interference in student matters of Riddick and ROTC commandant Colonel Charles N. Hulvey. They also criticized the administration for expecting students to accept all policy decisions without dissent. Finally, in the spring of 1921, students and trustees developed a plan acceptable to all parties. A

two-branch system was established, consisting of an executive Student Council and a representative Student House. The House consisted of one member of each class from each major, while the executive included seven seniors, four juniors, three sophomores, and one freshman. A Court of Customs, designed to control student behavior, was part of the executive branch. After student government was installed in the fall of 1921, the Court of Customs developed a freshman code requiring all first year men to wear freshman caps, something tried briefly by the class of 1919. Freshmen also were to learn all college songs, attend class meetings, and show deference to upperclassmen. For violations of the code, especially failure to wear the freshman cap, students were forced to run a gauntlet. Hazing, abolished by the class of 1922, after the class of 1923 resisted the "warm welcome," was outlawed by the code. With the establishment of student government, the literary societies lost their importance and ceased to function. At the same time, in an effort to improve relations between the student body and the administration, President Riddick appointed Edward Lamar Cloyd as Dean of Students in 1921; this action again took responsibility for student affairs out of the hands of the military.[76]

During this period State College students asserted themselves in other ways especially through the establishment of the *Technician*, the student newspaper. *The Red and White* was suspended during World War I, and after the war students showed little interest in reviving it. On February 1, 1920, the *Technician* made its debut, with an editorial comment that "college life without its journal is a blank." Unlike *The Red and White*, the new paper contained more news, including some outside events, and none of the literary pieces of old. Although many of the early editors expressed opinions in line with those of the administration, the *Technician* became a valuable organ for student opinion. At first a semi-monthly journal, the newspaper became a weekly publication in September 1922. Thus, a new student outlook, resulting from their exposure to different experiences, demanded more self-expression, which in turn gave rise to two enduring student activities—student government and the *Technician*.[77]

While the existing student body demanded more control over their own affairs, former students or alumni also became more active. Since the college's 25th anniversary in 1914, attempts had been made to formalize the Alumni Association. But, because of financial problems, it was difficult for the college to secure the services of a

permanent alumni secretary. In 1916 Buxton White, class of 1916, accepted the position only to be called into the Army during World War I. Edwin Bentley Owen, class of 1898, replaced White, and on November 1, 1917, he issued the first copy of the *Alumni News*. Owen's journal was designed to help overseas alumni keep in touch with each other during the war. When White returned in January 1919, he and Owen encouraged the development of local alumni clubs, and by 1920 thirty such groups existed in North Carolina. At the same time, the Executive Committee of the Alumni Association voted early in 1919 to erect a monument to honor the thirty-three State College men who died in military service during the war. After two fund-raising campaigns failed to yield sufficient funds for the projected monument, the committee voted in June 1921 to erect the first eighteen feet, and then finish the structure as funds permitted. This was done, and the first section of the Memorial Tower was completed by January 1922.[78]

During the early twenties the college also attempted to assist another type of student—the disabled veteran. Under the auspices of the Federal Board of Vocational Education, the institution accepted a number of partially disabled veterans and provided technical training for them. After most of the men were found to be sub-college material, a special course was developed. The program was designed to train these men for useful occupations. The first 160 rehabilitation students arrived in 1919; the number increased to 187 in 1920 and 262 in 1921. When the college became overcrowded with regular and rehabilitation students, college officials limited the rehabilitation students to agricultural subjects, relieving pressure on the overburdened engineering faculty. In 1922 Frank Capps arrived to administer the program, which continued until 1925, when funds lapsed.[79]

The influx of both rehabilitation and regular students continued to cause problems for the Riddick administration. Although student unrest faded with the institution of student government, sheer numbers overwhelmed the college facilities. Enrollment increased from 742 in 1916, the last normal year of operations before the war, to 1,324 in 1923. Living quarters were overcrowded, in spite of the addition of Fifth (Gold) and Sixth (Welch) Dormitories; classrooms were cramped in spite of the completion of the new mechanical building, later Page Hall. New facilities were necessary if State College was to be successful. Also, it became apparent to everyone associated with the college that the administrative organization no longer functioned properly. There were too many students, profes-

sors, and departments to be administered by one man. Difficulties at the experiment station and in the extension service seemed to make reorganization imperative.[80]

Wallace Riddick recognized the problems at the college. He requested the trustees' permission to have an outside authority recommend a plan for the restructuring of the institution. On September 21, 1922, he wrote to United States Commissioner of Education Dr. John J. Tigert, asking for a suitable person to study the matter. Tigert recommended George F. Zook, a specialist in higher education with the Bureau of Education. Zook arrived in Raleigh in March 1923; he interviewed college personnel and carefully studied the institution's administrative organization. When the trustees met in May 1923, Zook was ready with his recommendations.[81]

Although he praised the college faculty for their service to the state, Zook reported that he believed the institution failed to do all that it could for North Carolina. His findings showed: the credit load too heavy for the students; the teaching load too heavy for the faculty; salaries insufficient; the administration outmoded; and the operation of the experimental station and extension service inefficient. He recommended first that all extension and experiment work be placed under the control of the college, and that the Joint Committee on Agriculture be abolished. Next, he suggested the formation of four schools: engineering; agriculture; general science; and social science and business administration, each headed by a dean; in addition he suggested the formation of a council of deans to assist the president with administrative matters. Research, teaching, and extension were to be promoted and integrated within each school. To improve the students' educational experience, Zook urged the college to improve the library and to develop a department of physical education with adequate gymnasium facilities. In order to enable the college to reach more North Carolinians, Zook suggested the development of a general extension program, and more short courses. After the trustees received the report, Riddick tendered his resignation as president in order to allow a new man to supervise the reorganization of the college.[82]

In May 1923 State College reached a watershed in its existence. It was no longer an institution serving 600 men, as it had been before World War I. The college greatly expanded its role in the state during this period, serving the needs of North Carolina through textile education, teacher training, and extension. The increase in enrollment, coupled with other problems that evolved during the early twentieth century, necessitated changes in west Raleigh. In

order to serve the community, the college needed to outgrow its technical school status, but no one was sure which direction it should take. The reorganization would provide a golden opportunity for the institution to plot a fresh course that would align it with a new age of technology emerging in the 1920s.

Chapter V

State College in the 1920s

The 1920s proved to be a turbulent time at State College. Under the aegis of the Zook Report, the Brooks administration attempted to expand the institution's scope and capacity to serve North Carolina. In order to accomplish this objective, the faculty added new curricula in several technical areas; they also expanded graduate work and, for the first time, introduced majors in the liberal arts. In addition, to improve its ability to function, the college undertook a major administrative reorganization. Schools were created for the first time, with the mandate to integrate research, extension, and teaching. Faculty, concerned that many students came to college for social, not academic reasons, made a strong effort to tie extra-curricular activities closer to academic programs on campus. At the same time, the college increased its visibility in the state, drawing media attention both to academic programs and to individual professors. At the end of the decade, the institution had made great strides toward becoming a college, not just a technical institute. Still, it faced growing criticism, for many prominent North Carolinians believed it had abandoned its original land-grant mission.

Eugene Clyde Brooks, the man the trustees chose in June, 1923, to implement the Zook Report, was born on December 3, 1871, in Greene County, North Carolina. A graduate of Bethel Academy and Trinity College, Brooks was a long-time leader in the field of public education in North Carolina. The recipient of several honorary doctoral degrees which recognized his services, he was the founder of

the journal *North Carolina Education*(1906). From 1912 to 1913 he served as president of the State Teachers' Assembly, and after 1919 as state superintendent of public instruction. In the latter office Brooks spearheaded a crusade to upgrade public schools. In addition, during these years, he devoted a great deal of effort to the study of local government and the role of citizenship. Brooks had a reputation for political astuteness which he used to State College's advantage on numerous occasions, especially in his dealings with state government. A long-time proponent of liberal education, Brooks came to State College with very definite ideas about how to improve the institution.[1]

Brooks' first task was to decide how to implement the Zook Report. Although they accepted its recommendations in principle, the trustees left the actual reform process to Brooks and the State College faculty. Ten days after his election to the presidency Brooks submitted a tentative plan of organization, which called for the college to be reorganized into four divisions or schools, each headed by a dean. Going beyond the Zook Report, he also called for the establishment of a graduate school. A faculty council, consisting of the deans and a few professors, was established to advise the president and assist him with administrative matters. Brooks also recommended to the trustees the creation of a department of physical education. After another two-months' study, Brooks requested the expansion of teacher training at State College, and he promised to solve the continuing problems with the extension service and experiment station. In January 1924, the faculty altered Brooks' initial suggestions when they elected to create only three schools; Engineering; Agriculture; and Science and Business. The faculty recommended the merger of the president's proposed schools of Business Administration and Science and Literature. Finally, in May 1924, the trustees voted to accept all of these recommendations, and the reorganization was complete.[2]

The creation of schools signaled the rise of the dean on campus. Before 1923, only agriculture was organized with a dean, but he served more as a faculty chairman than anything else. These new officials had more clearly defined powers than the former dean of agriculture. For the School of Science and Business, Brooks chose Benjamin Franklin Brown, an economist who was dedicated to the idea of a liberal education. In engineering, Wallace Riddick—Brook's predecessor—became the new dean. Critics noted that Riddick, as dean, would escape the criticism he faced while president because he no longer was responsible for the whole campus. Benjamin Wesley Kilgore, long-time state chemist and experiment station director,

became Dean of Agriculture, replacing Charles B. Williams who became head of agronomy. Many hoped that Kilgore's presence would ease the forthcoming negotiations between the North Carolina Department of Agriculture and the college regarding the control of the experiment station and extension service.[3]

One of the Zook Report's major recommendations called for the integration of research, teaching, and extension at the college. This question was a long-term problem in North Carolina; from the college's creation its officials and those of the Department of Agriculture had quarreled over responsibility for the various aspects of the program. The conflict was not unique to North Carolina however, and federal officials historically complained about the operation of these federally funded programs. In 1917 the National Association of Commissioners of Agriculture sent a memorandum to land-grant college officials that outlined what it considered to be the duties of state departments of agriculture. These included regulatory functions, the collection of statistics, and the operation of state fairs. Despite these recommendations, the experiment station and extension service in North Carolina continued under the control of the Joint Committee of Agriculture. By 1923, when the college was reorganized, U.S. Secretary of Agriculture Henry Wallace demanded that all extension and research work be done by land-grant colleges.[4]

After some negotiations on the subject, President Brooks issued a pamphlet in October 1924, entitled "The Relation of North Carolina State College to the State Department of Agriculture," in which he outlined his proposals for reorganization. He maintained that the present practice allowed no long range planning for research, and also created serious difficulties between employees of the college and the department. The Joint Committee of Agriculture—a separate entity—had its own powers and controlled federal money, much to the distress of federal authorities; and the Dean of Agriculture reported to it, not to Brooks. The president added that the study of agriculture, including its research and extension phases, demanded greater emphasis on the study of social and economic problems, something the Joint Committee failed to appreciate. Brooks called for the complete transfer of authority for all research and extension activities to the college.[5]

Negotiation continued for some time, however, and it was not until July 1, 1926 that the reorganization was completed. In order to prevent duplication between college and state research programs, an Experiment Station Committee was created to coordinate these efforts. The state Department of Agriculture retained control of

several of the test farms, and continued their own research programs. Not until the late 1930s would the problem of duplication and institutional jealousy be finally resolved.[6]

The two other schools created by the mandate of the Zook Report—engineering and science and business—also sought to serve more than just those persons who had the time and money to attend college. In an effort to increase its usefulness to North Carolina industry, the School of Engineering created the Engineering Experiment Station in September 1923. This action was part of a nationwide movement by engineering educators to extend their expertise to America's industrial sector. At State College, agitation for such an institution began in 1917, and it continued until Howard Burton Shaw, who had developed a similar program at the University of Missouri, became the first director. Receiving its funding from the state, much of the early work of the station concerned highway construction and ceramic engineering, two important and growing industries in North Carolina during the 1920s. Throughout most of the decade, however, the program suffered from insufficient funding.[7]

At the same time, the School of Science and Business began to develop its own research program, centered in its Bureau of Economic and Social Research and headed by sociologist Carl C. Taylor. Much of the research conducted by this organization examined economic and social problems which had long range impact on the lives of North Carolinians. Researchers examined rural organization, economic problems among textile workers and tenant farmers, and other socio-economic questions. The Bureau received support from the State College trustees as well as federal funds from the Purnell Act of 1925, which provided $20,000 to each state for research in home economics, agricultural economics, and rural sociology. These disciplines were all new areas for State College, and the findings of some of the studies, which revealed the oppresive poverty among tenants and mill operatives, deeply angered the conservative elements in the state. The textile mill owners, led by David Clark of the *Southern Textile Bulletin*, considered director Taylor a communist, and they frequently called unsuccessfully for his ouster. Much of this program was transferred to the Agricultural Experiment Station in the late 1920s when agricultural economics and rural sociology moved to the School of Agriculture.[8]

The Brooks administration followed another recommendation of the Zook Report when it elected to develop general extension. This program was part of a nationwide movement by state universities to provide more service to the people of their localities. At State

College the program began in April 1924 when Frank Capps became director. President Brooks, a long-time advocate of adult education, gave the program his support. General extension was designed to offer correspondence courses in all fields of study, although at first the classes were limited to ceramics courses. After 1928 the classes could be applied to degree credit. The college also arranged to offer special night courses in various towns east of Raleigh. General Extension was designed not only to serve a broad base of North Carolinians, it also helped the college develop closer ties to industry and business.[9]

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At the same time that it undertook an internal reorganization, State College added new programs and expanded older ones to meet the needs of North Carolina that, like the rest of America, was increasingly influenced in the 1920s by industry and technology. In the Old North State, this meant the rise of the R.J. Reynolds Tobacco Company, a boom in textiles, and the growth of the furniture industry. North Carolina's political leaders altered their progressive programs to encourage these developments, and placed more emphasis on education, highway construction, and public services. By doing this, they hoped to create an environment favorable to industry. Under Governors Thomas Bickett, Cameron Morrison, and Angus W. McLean, "business progressivism" was so successful that it earned the state the reputation as the "Wisconsin of the South." At State College a new curriculum in sociology along with a greater emphasis on teacher training and highway engineering, produced persons who could assist in these developments. New programs in business and commerce and engineering subjects trained men for positions in the burgeoning business and industrial sectors. These changes enabled State College to expand its impact on the state during a period of economic growth.[10]

In the School of Agriculture, which served an economic sector that suffered throughout the twenties, it seemed as if all of Brooks' work to make peace with state officials would be destroyed by further discord. Although Benjamin W. Kilgore became Dean of Agriculture in 1923 for the main purpose of promoting harmony between the college and the Department of Agriculture, problems continued for several years. The state agricultural press, including *The Progressive Farmer*, and agricultural leaders, were distressed by this problem.[11]

A rift quickly developed between Kilgore and Brooks, and ultimately led to Kilgore's resignation in 1925. An outcry in the press

followed. Some sources alleged that Carl Taylor was the cause of the dissent because he wanted Kilgore's job. Others claimed that Brooks intended to use federal research money for improper purposes, and Kilgore refused to cooperate. Still others alleged that the problem lay with the new, highly specialized agricultural curriculum developed by entomologist Zeno Metcalf, without Kilgore's approval. The major reason, in the end, was that Kilgore, a long-time state employee, and Brooks, a strong-willed individual determined to carry out the reforms mandated by the Zook Report, clashed on issues of reorganization and authority. Kilgore believed several agriculture faculty members ignored his authority and reported directly to Brooks. On his part, the president disliked the fact that Kilgore continued to answer to state officials in downtown Raleigh. Once Kilgore had resigned, Brooks was able to conciliate other elements within the school. He appointed Rhett Y. Winters as director of the Experiment Station and made Ira Obed Schaub, the new dean. After these changes, the situation in the school returned to normal.[12]

During the remainder of the 1920s the school developed along lines similar to agricultural programs at other institutions. A slight increase in the study of economics and sociology occurred, in cooperation with the School of Science and Business. The agricultural curriculum provided for training in the basic sciences, a few cultural subjects, and intense specialization in one field. A major addition to the curriculum came in 1927 with the creation of a curriculum in landscape architecture. In an effort to encourage more research, faculty members received a lighter teaching load; they were expected to integrate their research with their classroom teaching.[13]

Agricultural Extension, now more closely tied financially to the college, continued to expand its program during the 1920s. Under the direction of Ira Obed Schaub after 1924, financial authority for all extension work was transferred gradually to the college by 1926, leaving only the marketing and regulatory work at the North Carolina Department of Agriculture. This reorganization enabled the program to function more efficiently; it came at a crucial time. North Carolina's farmers, like rural people throughout the South, suffered during the 1920s because of depressed farm prices and over production. Extension workers urged farm families to diversify production through a "live-at-home" program that emphasized self sufficiency. At the same time, plans were made to provide agents for all one hundred counties in the state, with funds provided by the Capper-Ketchum Act of 1928. Agricultural problems continued into 1929, Governor O. Max Gardner appointed a committee to study the

extension service and recommended ways to improve its program. He agreed with Director Schaub that extension must abandon it's image as merely "a talking program" and do more for the state. After the Gardner committee reorganized extension into four districts for better management, extension and farm people developed a long range plan for the program. They decided to continue the "live-at-home" program, and adopted a system that called for yearly planning. Extension people emphasized community input in an effort to serve the farmer better; they began to include the rural people in their programatic discussions for the first time. Likewise, extension workers throughout the South brought their programs closer to the people.[14]

Another change in the extension program during the late 1920s involved the youth groups it sponsored. Schaub appointed Lera R. Harrill, a longtime enthusiast of rural recreation, in 1926 as State Club Leader. Harrill held a masters degree in agronomy that made him attractive to the extension service that was becoming increasingly professional during the 1920s. Determined to develop North Carolina 4-H along the guide lines encouraged by the United States Department of Agriculture, Harrill selected a community in each county where he would create a model club. Gradually, in spite of the resistance of home demonstration agents led by Jane McKimmon, Harrill combined boys and girls clubs; by 1929 when a state wide organization was created, sixty-five counties operated under the new plan. He greatly increased the ceremonial aspects of the organization and also obtained better camping facilities for 4-H at White Lake and Swannonoa. During the 1920s 4-H emphasized the extension's "live-at-home" theme, and it provided much needed recreation for rural youth.[15]

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Although turmoil marked the progress of the School of Agriculture during much of the 1920s, the School of Engineering expanded its curriculum with a minimum of controversy. Engineering students continued to take a highly specialized course of study that trained them to deal with material problems, sometimes at the expense of human ones.

During the decade a number of new departments were added to the School of Engineering, reflecting its goal to provide greater assistance to the North Carolina economy. The first such department, Ceramic Engineering, was created in September 1924, under the direction of A. F. Greaves-Walker. At that time it was only

the second department of its kind in the entire South. One of the most active departments in terms of research, ceramic engineering soon produced many leading educators in the field. It also provided valuable research work on silicates for North Carolina industry.[16]

In September 1924, the Department of Chemical Engineering was formed under the direction of Dr. E. E. Randolph. This development reflected the increasing importance of chemical research to the state. Although the study of chemical engineering was not new to State College, this was the first time a department was organized.[17]

Three years later the college made another major expansion in its engineering curriculum when it created the Department of Architectural Engineering. A part of the Civil Engineering Department since 1922, architectural engineering grew rapidly in size and prestige until a separate department was necessary. With the assistance of renowned architect Hobart Upjohn, President Brooks worked steadily to strengthen the program during the early part of his administration. Soon after the creation of the new department, the students received honorable mention in the annual competition of the nationally prominent Beaux Arts Institute. Only two years after its establishment, architectural department head Ross Shumaker urged the creation of a separate School of Design, but this action was postponed for two decades. By the end of the 1920s, however, the architectural program was already well established on the campus.[18]

The last new department created during this period was industrial engineering. Organized in 1930, this department met a critical need by training engineers to work on industry-related problems in North Carolina. Under the direction of Professor Howard B. Shaw of the Engineering Experiment Station, which also attempted to serve the state's industrial sector, the department provided a broad education in engineering to interested students.[19]

The established departments added major curricula that reflected the ever-increasing need for educated men in industry. In 1926 arrangements were made to offer sanitary engineering in the civil engineering department, and this program was expanded in 1929. Also, in 1929, in cooperation with the Curtis Flying Service of Raleigh, the Department of Mechanical Engineering developed a modest curriculum in aeronautical engineering. This new course, though primitive by later standards, proved very popular with the students; it grew rapidly as the aircraft industry expanded and flying became more popular with the general public. Finally, the relatively new ceramics engineering department added a course in mining engineering in 1928. All these new courses reflected the expansion in engineering education throughout the country.[20]

Unlike the Schools of Engineering and Agriculture, the third school created in 1924, Science and Business, which included the humanities and social sciences, represented a radically new field of endeavor for the college. Although the institution historically had service departments in English, mathematics, physics, and chemistry, it never offered majors in subjects viewed traditionally as the liberal arts. President Brooks, however, believed that the technical school's curricula, especially in agriculture, would be strengthened by a strong school for sciences and humanities. A long-time advocate of citizenship training, Brooks also believed that a school offering more course work in history and political science would encourage the development of good citizenship among the college's graduates. At the same time, however, Brooks was quite wary because he realized that the partisans of the University of North Carolina would jealously guard their institution's prerogatives regarding the liberal arts.[21]

State College's expansion into the fields of humanities and social science reflected the growth of the land-grant colleges as a whole. In the period after World War I many of these historically technical institutions began to branch into more traditional academic subjects; they realized the necessity of strong basic sciences in a technical education, and heard the mandate to serve their states' citizens to the fullest extent. The development of the School of Science and Business also reflected the growing need for graduates in business administration and accounting to meet the needs of the expanding North Carolina economy. In addition, the school reflected the growth of the general college or general education idea begun at Columbia University in 1919 that urged educators to retreat from the highly specialized curriculum of the pre-World War I era. However, as land-grant colleges developed their new programs in the humanities and social sciences during the 1920s, they tended to be as specialized as the technical fields. State College was no exception because President Brooks continuously emphasized that all majors at the college must have a specific vocational objective rather than just a liberal education.[22]

Although Brooks attempted to control the development of liberal arts, it often seemed to some North Carolinians that the School of Science and Business went beyond its mandate. At first, in 1923, the trustees authorized three majors in business, one in vocational education, and one in rural life. At the same time the school was directed to offer service courses in basic sciences, mathematics, and the humanities for the technical schools' students. Almost immediately, Science

and Business faculty expanded their offerings; first, with majors in biology, physics, and chemistry. In 1925, the faculty began to discuss the possibility of developing a degree program in history. At this point, members of the North Carolina General Assembly and some of the friends of the college, including Clarence Poe of *The Progressive Farmer* and Josephus Daniels of the Raleigh *News and Observer*, became concerned that Brooks planned to abandon State College's mission to provide technical education and thus develop it into an institution that would compete for resources with the University of North Carolina. Worried that the legislature would take things into its own hands, Brooks urged the faculty to revise and define more carefully their major fields in order to assure critics that State College would continue to fulfill its designated purpose. At the same time a committee of trustees from the University of North Carolina, the North Carolina College for Women, and North Carolina State College was established to study the question of duplication. After some research, this committee declared that little real duplication existed; however,it recommended that communications between the three institutions be kept open in the future to prevent such an occurrence.[23]

During the latter part of the 1920s the School of Science and Business continued to expand, but at times it struggled to define its purpose. It also faced strong criticism from some quarters because it allowed women to enroll, impinging on the state mandate of the North Carolina College for Women at Greensboro. The faculty continued to discuss new majors, including journalism, social science, history, and modern languages. Some discussion of creating a separate School of Business also surfaced. In an effort to silence critics, the Faculty Council in 1928 restricted majors in the School of Science and Business to business, science, public administration, rural sociology, and journalism, and it declared that cultural subjects such as history and modern languages had no vocational value and should be taught only to broaden the education of the technical student. At the same time, several departments left the school, as agricultural economics transferred to the School of Agriculture in order to draw economics closer to the rest of the agricultural curriculum; mathematics moved to the engineering school after difficulties developed between Dean Brown and the mathematics faculty. Finally, in 1930, after continued criticism and low enrollments, the Faculty Council abolished the school's majors in journalism, sociology, and public administration, leaving majors in only science and business. As the Great Depression deepened and the state faced financial difficulties, it was only a matter

of time before the School of Science and Business was abolished in the face of retrenchment and consolidation, thereby reducing its departments to a service function.[24]

During the 1920s State College also created three new schools—Graduate, Textiles, and Education—in an effort to meet the increasing demands for people in these fields. The first of these new schools—the Graduate School—was designed to offer advanced degrees in technological subjects, something rarely done in the South at that time. Most post-baccalaurate studies were conducted in the North, and many southern educators believed that most of the men who pursued their schooling outside the region never returned. Graduate education at the University of North Carolina was limited to arts and sciences. In order to meet this need in North Carolina a new graduate school was created at State College, and Carl C. Taylor became its dean. Taylor polled his fellow faculty members concerning their desire and qualifications to offer advanced programs. Many were wary of rapid expansion, citing lack of equipment or faculty with advanced degrees, but they expressed an interest in further planning. In order to support the expanded program, the trustees immediately provided numerous fellowships and assistantships for needy students.[25]

Despite the concern voiced by many faculty members, State College awarded its first doctorate in 1926 to Jesse Benton Mowry, who completed his work in rural sociology. Although this buoyed the spirits of Taylor and others, the graduate program soon experienced a rather hard setback when, in 1927, the majority of the candidates failed their preliminary examinations. This setback shocked Brooks and caused him to curb his optimism regarding the program. After this failure he was increasingly concerned that the college lacked adequate programs to offer the doctorate. After two doctorates were awarded in 1928 without the endorsement of the trustees, the doctoral program was discontinued by the faculty. They decided to redirect the program toward more technological subjects, and began long-range planning to develop these fields. First, most campus authorities agreed, the master's program needed revamping. At the same time, Brooks dismissed Taylor for personal reasons, and abolished the position of Dean of the Graduate School. The reduced program was directed by a faculty committee chaired by Frank Poole.[26]

The Textile School also became a separate entity during the 1920s. As the state's textile industry continued its expansion in the early decades of the twentieth century, many friends of industry expressed an interest in expanding the curriculum at State College.

The Zook Report of 1923 placed the textile faculty in the School of Engineering. Brooks, however, recognized the need for a larger program in textiles, and recommended in 1924 that the department become a school. This was done in June, 1925, with Thomas Nelson as dean; the trustees also provided for new equipment and an addition to the textile building. Many faculty members were concerned, however, that the curriculum was too specialized and too practical. The Faculty Council recommended in 1925 that more social science courses be added, but the textile curriculum remained one of the most specialized and technical in the college. Despite the urgings of the administration, the school also failed to establish an extensive research or extension program. The school's main purpose continued to be the education of skilled technicians for the state's expanding textile industry. As the knitting industry developed in North Carolina course work in that field was added. Nelson also altered the textile program to place more emphasis on color and design. Yet, many industrialists and alumni were dissatisfied with Nelson's trade-school emphasis. Their complaints forced Brooks to take action to improve the school.[27]

Trustee concern over the textile program led to the appointment in 1928 of a study committee for the textile school. In 1930, after an examination of practices elsewhere, the committee called for expansion of the curriculum, more research in connection with the mills, and the organization of evening classes for mill workers. Many members of the committee, including businessmen Sydenham B. Alexander and David Clark, favored a wide-scale reorganization of the school, and they urged Brooks to force Dean Nelson to retire. In 1931 an outside investigation confirmed many of the trustees' findings, citing the lack of sociology and economics courses in the curriculum, as well as the absence of student contact with industry; Brooks agreed to search for Nelson's successor. Nelson became dean emeritus in June 1932, but no new dean was appointed prior to Brooks retirement in 1934. Brooks' successor would decide Nelson's fate, and the textile school for a time remained as it was.[28]

At the same time that the Brooks administration attempted to expand textile education, it also developed plans to enlarge teacher training at State College. A crusader for better public education in North Carolina, Brooks believed that the college had a duty to train better teachers for the state's school systems especially in vocational subjects related to agriculture and industry. Before the Zook Report of 1923, which recommended that the institution improve its teacher training program, most of the work in this field was in vocational

agricultural education, supported by matching federal and state funds. In addition, many teachers and school administrators attended the annual summer school held at the college. In 1924, however, in an effort to expand the regular offerings, Edward W. Boshart joined the staff as a professor of industrial arts. At the same time, vocational education became part of the School of Science and Business, which offered degrees in agricultural education, industrial arts, science education, and physical education. During the next few years, Brooks and department head Thomas E. Browne developed plans to establish a School of Education. In January, 1927, the school was finally created, and courses in guidance, high school teaching, administration, and psychology were added to the existing vocational education offerings. Not until June 1931, however, was Thomas E. Browne formally named dean of the school. The new school attracted many students, including women, but as economic difficulties began in the late 1920s, concerned college officials and faculty wondered if the new school would survive.[29]

During the post-World War I era the forestry program at State College also expanded, although it did not generate a separate school at the time. Many people in forestry emphasized the need for a southern school of forestry to train specialists to solve the unique problems of the region. In 1898, the private efforts of the Vanderbilt family led to the establishment of the Biltmore Forestry School near Asheville, the first in the United States, under the direction of German forester Carl Alwin Schenck. This school continued until 1913, when Schenck returned to Germany, leaving North Carolina without a school that offered a degree in forestry. At State College, students in agriculture received some training in forestry as early as 1900, and extension forestry began in 1917 with funding from the federal Smith-Lever Act. In 1924, extension forestry received further support from the Clark-McNary Act for farming forestry. At the same time, the Brooks administration began an effort to create a degree program in the subject.[30]

At Brooks' insistence, the trustees authorized $3,500 in 1924 to begin the program, but several years lapsed before it developed. To head the program Brooks attracted F. H. Claridge of Yale but he remained only a brief time. Although the number of forestry courses increased, it was not until 1927, when the North Carolina Forestry Association urged the creation of a school of forestry at State College or Duke University, that the trustees appointed Brooks, Clarence Poe, and several other prominent North Carolinians to a committee to study the question. In the fall of 1928, the four-year degree program

was added to the curriculum of the School of Agriculture. In January, 1929, the trustees selected Dr. Julius V. Hofmann, the first American Ph.D. in forestry, to head the new department. Hofmann, formerly employed at the defunct Mount Alto School of Forestry in Pennsylvania, brought fifty students with him; this influx caused temporary confusion in the department. The program developed rapidly over the next few years, in spite of economic difficulties. In an effort to obtain land for teaching purposes, four trustees including Clarence Poe established in April 1929, the North Carolina Forestry Foundation. They quickly acquired the 75 acre Poole Woods near Raleigh, and in 1930, George Watts Hill donated 2,000 acres of land on the Quail Roost Farm in Durham County. In 1931, the department was upgraded to a division within the renamed School of Agriculture and Forestry. Unlike several of Brooks' other expansion efforts, the forestry program was an immediate and lasting success.[31]

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The Brooks years also saw the rapid growth of the physical plant. On the recommendation of the Alumni Association, the trustees provided for a new library building, named for Daniel H. Hill, Jr.; the building was completed in 1925. Following the recommendation of the Zook Report, all departmental libraries were abolished, and their holdings were placed in the Hill Library. James R. Gulledge, the first trained librarian, oversaw the move to the new library, and he instituted the Library of Congress system of classification after a fire destroyed much of the old card catalog. Gulledge only remained until late 1925, when Frank Capps became librarian. Although the library had grown to 25,000 volumes by 1928, it remained at the bottom of the ranking of land-grant college libraries because of Capps' weak credentials and the lack of adequate financial support that blocked the collection's development.[32]

Another new building, the Frank Thompson Gymnasium, named for college athletic hero Frank M. Thompson who died in combat during World War I, was also authorized by the trustees at the request of the Alumni Association. The alumni, concuring with the Zook Report, believed that physical education was a necessary part of a college education. Since military training, which now relied on classwork more than drill, was optional for juniors and seniors, many college officials believed that the students needed a new form of exercise. When completed, the new gym housed the recently established Department of Physical Education under Johnny Miller, in

addition to new facilities for intramural programs and the basketball and swimming teams that had formerly used the YMCA.[33]

Academic buildings were also added during the construction boom of the mid-1920s. Daniels Hall, named for long-time State College supporter Josephus Daniels, was erected for physics and electrical engineering, while Polk Hall, named for Leonidas L. Polk, was constructed for animal husbandry. Peele Hall, named for Wataugan William Joseph Peele, was completed for the liberal arts faculty. A new power plant, with the famous "State College" smoke stack, was erected, while the old one was remodeled as a laboratory for the ceramics engineering department. By the 1930s when the Great Depression forced the state to suspend appropriations for permanent improvements, the college also had erected Bagwell Dormitory and the President's Residence on Hillsboro Street. Other buildings were remodeled, and attention was given to landscaping, generally improving the campus' appearance.[34]

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During the 1920s student life was changed by several developments. One of the most important was the increased presence of women students on campus. After Lucille Thomson, State College's first regularly enrolled coed, left school without her degree in 1923, women continued to enroll as special students. President Brooks, however, believed that women should be allowed to receive degrees if they met the college's requirements. In June 1926, he recommended to the trustees' Executive Committee that women who had completed work for a degree be graduated. On November 24, 1926 the trustees unanimously approved the recommendation. Earlier in the fall, the Faculty Council voted to award, at the next commencement, a bachelors degree in business administration to home extension leader Jane S. McKimmon, although most of her work was completed at Peace Institute or through extension courses. Soon thereafter Charlotte Nelson, Dean Thomas Nelson's daughter and a student at Meredith College, enrolled as a regular student, and with her credits from Meredith, the State College summer school, and her year as a regular student, she accumulated enough hours to finish her degree the following spring. Mary E. Yarbrough, daughter of Louis T. Yarbrough of the class of 1893, enrolled earlier that fall as a special student, and she took graduate courses in chemistry. She also completed her work that spring, taking all of her work at State College. In June 1927, therefore, State College graduated its first women on both the undergraduate and graduate levels. Not until 1930 when Ada Spencer of Raleigh completed her degree in journalism, however, did

State College award an undergraduate degree to a woman who had completed all of her course work at the college.[35]

Despite the trustees' decision to award degrees to women, Brooks and the faculty remained uneasy on the subject. Although he approved of women on campus, the president worried that the same elements who opposed the development of the School of Science and Business would be distressed if they believed the college also intruded on the mandate of the North Carolina College for Women. Brooks, therefore, stressed to his faculty that women at State must have some vocational objective in pursuing their degrees. In order to provide the mechanism for this development he encouraged the expansion of teacher training. At the same time, the administration faced a serious problem, because there were no dormitories available for coeds. As a temporary expedient, the college only permitted the enrollment of local women who lived with their parents, mature women, or transfers who could live off campus. By the fall of 1928, the number of women had grown to twenty-one, by 1930 seventy-five were enrolled.[36]

Women students found themselves in a unique position on campus. Reaction was mixed to their presence, although college officials noted that the boys took more pains with their appearance as the number of women increased. Some professors doubted that women could succeed in the college's technical curriculum; a number of male students lampooned them, calling them "manhunters." At the same time, student leaders expressed dismay because many of the coeds refused to wear the freshman cap. Excused from ROTC and exempted from many aspects of the campus code, coeds developed their own separate organizations on campus, something fairly common throughout the country at that time. These early women formed the Pioneer Club, which acquired a seminar room in the library for a lounge. This group in October 1930, with the support of Dean of Students Edward L. Cloyd formed a constitution for a separate women's student government. The trustees approved the document, and Lorena Brinson became the first president of the women's student government. The Pioneer Club then reorganized as local social sorority Phi Epsilon, the first such women's organization at State. Although the male student government officers, who were fearful of a diminution of their influence, asked the trustees to reconsider their actions, coeds retained their own government. The prestige of women on campus improved to the point, in March 1932, when Maude Schaub and Elizabeth Gaither became the first women in the United States to be elected to Gamma Sigma Epsilon, the chemistry honorary society. Despite the economic difficulties of the early 1930s and an undercurrent of resistance to their presense, women continued to

enroll at State in ever-increasing numbers, demonstrating that they were attracted by the college's unique educational opportunities. State College's student body, however,retained its largely male character, growing from 1,049 in 1920 to 1,944 in 1930.[37]

During the 1920s college officials became increasingly concerned about extra-curricular activities and other aspects of student life. Many professors at State, like their counterparts throughout the country, feared that most students came to school only for social purposes, not to obtain an education. When a study by a masters student in sociology revealed that cheating was widespread at State College, and condoned by the majority of students, the worst fears of campus authorities seemed to be confirmed. A faculty commission, appointed to deal with the problem, recommended that the college act strongly to discourage cheating and also make a special effort to encourage the "better" element within the student body to play a larger role in student organizations. Like educators throughout the country, they hoped to tie student activities outside the classroom closer to the institution's academic purpose, making campus life more meaningful to the "whole" student.[38]

The faculty tried several ways to encourage the positive development of student life, beginning in 1923 with dormitory reforms. College officials found distressing student behavior in the dormitories. They created a system of room inspections and dorm proctors to discourage rowdy, destructive behavior, and encourage students to view the dorms like a home. When this failed to accomplish what campus authorities wanted, dormitory clubs were organized under the auspices of student government. These councils created quiet study hours, and made other efforts to improve dormitory life.[39]

At the same time the administration attempted to deal with other student related problems. Throughout the United States the 1920s was the age of the development of student personnel organizations, and Edward L. Cloyd, Dean of Students at State College, advocated the creation of such a program on campus. In an effort to help freshmen adjust to the somewhat bewildering world of college, freshman week, prior to the beginning of classes, was begun in 1925. During this week freshmen received vocational counseling, took psychological tests, and were introduced to student activities. Freshmen were also required throughout the year to attend weekly assemblies conducted by Cloyd. At the same time, the dean began counseling failing students at mid-terms, and he requested that the administration provide more assistants for the job.[40]

The system of student government and the honor code fell into a state of quietude for several years during the mid-1920s. When the *Technician, Wataugan*, and Golden Chain Honorary Society suggested in 1928 that student government be turned over to the faculty, however, a lively debate ensued. In a referendum in January 1929, the majority of the student body voted to retain student self-government, and the institution experienced a revival. In 1929, the student body also voted to abolish the gauntlet as a method for punishing those who violated the student code, and also to tighten regulations requiring the wearing of the freshman cap. The following fall, the student Court of Customs declared that a freshman football player must wear a dress for his violation of the freshman cap regulation. The decision precipitated a serious protest against the freshman headgear. A large portion of the freshman class attempted to burn the offending caps. In order to resolve the issue, student government leaders held a referendum on the matter. When the student body voted to retain the caps, however, the freshmen took their case to the trustees, who abolished the custom. Although no longer required to wear the caps after 1930, freshmen were still obligated to provide matches to upper classmen on request, and also run errands for them.[41]

During the 1920s student publications increased in number and prestige. In early 1923 the *North Carolina Student Agriculturalist* began publication, lasting until 1927 when it was discontinued because of lack of funds. It was revived in 1930 when agricultural students voted a special annual fee for it. In 1926 the *Wataugan*, a literary and humor magazine, made its debut. This publication, with its satirical cartoons of the college and its officials, as well as short stories such as "Confessions of a Coke Sniffer," was often controversial both on campus and among the alumni. In an effort to improve the quality of student publications, as well as insure their financial well-being, the trustees authorized in 1924 the creation of the Student Publications Association. The association contained student members from each publication, as well as a member of the English faculty and the college business manager. In 1926, the group changed its name to the Student Publication Board. Faculty continued to worry about the quality and fiscal responsibility of the publications; therefore, in 1931, Frank Jeter, editor of *The Extension News*, became chairman of the reorganized publications board and it had more faculty input than the older board. Despite this change, the State College publications continued to be valuable organs of student opinion.[42]

The 1920s were also the era of a great expansion in music at State. In 1924 a Department of Music was established in the School of Science and Business. In addition to the ROTC band and concert band, Director Percy W. Price encouraged the development of a glee club and orchestra. In 1924 he also founded Mu Beta Psi, a musical honorary fraternity, that developed into a national organization in 1928. By the end of the decade he also had created the College Band to march at football games, and the Concert Band that gave weekly concerts on Raleigh's WPTF radio station.[43]

Students during the 1920s continued to organize many of their activities around their academic majors. In many cases the 1920s saw the introduction of professional or honorary fraternities in various disciplines, capped by the installation in 1923 of a chapter of Phi Kappa Phi, a national society that recognized outstanding achievements in scholarship in all fields of study. The other societies ranged from Theta Tau in engineering to Delta Sigma Pi for commerce and business students. The students in agriculture and engineering followed the example of the textile students, creating student councils for each of their schools. These councils consisted of members from each department, and they sponsored annual events unique to each school. The Agricultural Club, organized in 1917, expanded on an idea begun in 1913 as the freshman corn show and in 1921 staged the first college Agricultural Fair. This annual event featured exhibits from each department and culminated with a Barn-warming Dance. Agricultural students also participated in annual regional and national livestock and crop judging contests, frequently placing well. The Engineers' Council, begun in 1925, sponsored the first Engineers' Fair in 1927, capped by the Engineers' Brawl. The older Tompkins Textile Society, beginning in 1927, conducted an annual Textile Exhibition, which included guest speakers from the industry, the annual Style Show conducted in cooperation with the home economics departments at the area women's colleges, and the Lint-Dodgers Ball. In 1926, students in architectural engineering became the sixth school in the South to join the Beaux Arts Society that conducted an annual national design contest. Faculty members, although concerned about the amount of time many students spent on these groups, supported them because they helped link the extra-curricular to the aims of the college.[44]

Social fraternities also continued to be a vital part of student life. After 1924 the fraternities were permitted to move off campus in an effort to relieve overcrowded dormitories. They grew in number, providing good fellowship for their members. At the same

time the members of these organizations looked to fraternity men on the faculty for assistance with greek life. At the request of the student members, a faculty committee was created to approve new chapters and to advise the Pan-Hellenic Council. Many times, however, the fraternities complained that the committee was dormant. After complaints from national fraternal organizations about low academic performance, Dean Cloyd assigned his assistant William N. Hicks to work with the fraternity men. He also requested unsuccessfully that the college construct a fraternity row near campus. In a further effort to redirect greek life, Cloyd assisted the fraternity leadership in 1931 with the formation of the Inter-Fraternity Council. This organization, which encouraged scholarship and financial responsibility as well as fellowship, was part of a larger movement by college officials to redirect college life into what they believed to be more positive channels.[45]

One of the institutions on campus that faced increasing student criticism during the 1920s was the YMCA. As professional societies grew, fraternities moved off campus, and athletics relocated in the new gym, students found that the Y became less important to them. Many declared they had been active as freshmen, because the Y sponsored a freshman friendship council and assisted with orientation, but in their later years they lost interest, believing their annual Y fee a waste. Faculty members expressed concern about the problem as well and tried to redirect the program. They encouraged the development of church denominational groups that replaced traditional Y activities. These groups included the Baptist Student Activities, the forerunner of today's Baptist Student Union, as well as groups for Catholic, Episcopal, and Methodist students. The development of this kind of campus pastorate was part of a nationwide movement, not just a local phenomenon.[46]

During the 1920s ROTC continued to be a vital part of student life. All physically able freshmen and sophomores were required to take the basic course. Juniors and seniors who elected to take the advanced classes continued to compete for rank and awards; in exchange they received financial support from the federal government. The ROTC regiment frequently entertained Raleigh citizens with dress parades, which promoted good will for the college in the community. At the same time, however, a number of professors, no doubt disillusioned with the military by the aftermath of World War I, questioned the program's place on the campus. A number of students also resented the mandatory course in ROTC and urged Brooks to make the basic program optional, as it was at Wisconsin.

For about five years, beginning in 1925, unrest grew on the issue. President Brooks attempted to forestall a confrontation by allowing the deans to excuse students from the program. When the deans appeared too lenient in the matter many parents flooded Brooks' desk with protests. Pamphlets against the program were distributed to freshmen in 1930, and students presented Brooks a petition on the subject with the support of several faculty members. Brooks was forced to take action. He declared that the program was not optional, and he promised to limit the number excused in the future. Despite the temporary controversy on the issue, long-term student opposition to the ROTC program was minimal.[47]

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During the postwar era alumni increased their involvement in State College affairs. They warmly supported the Zook Report, especially the sections that recommended a new library and gym. At the same time they continued their efforts to complete Memorial Tower, but financial difficulties postponed the project for two more decades. In 1925, alumni Alvin M. Fountain and Bonnie F. Norris, two members of the class of 1923, composed the State College alma mater. Frank E. Lowenstein, another graduate, established the Norris Cup in 1924 as an annual award for the most outstanding athlete. After his death, the award was replaced in 1930 with the Alumni Athletic Trophy. The Alumni Association continued to publish the *Alumni News*, and it also established the Alumni Loyalty Fund to provide the college with needed financial support. Although some alumni questioned some of the innovations in the 1920s, they still gave State their undivided loyalty.[48]

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As the college increased its importance in the state, its faculty became more visible to the public. On a number of occasions this public exposure spawned controversy, especially when the often progressive professors clashed with the more traditional elements in North Carolina.[49]

The first public controversy to involve State College professors began in 1922 when six members of the science faculty issued a reply to a lecture given by fundamentalist Jasper Massee at the Baptist Bible Conference in Raleigh. In his lecture Massee urged the state to discontinue support of institutions of higher learning where the theory of evolution was taught. This controversy raged in the South, and to some extent elsewhere, during the 1920s. It was part of

a wider discontent among traditionalists, primarily from rural areas and small towns, with the rapidly growing, technologically advanced nation. Fearing that science would destroy all that was important to them including their religion, many traditionalists, or fundamentalists in religion, demanded that the teaching of evolution be banned in public schools and colleges. In North Carolina, this movement found support among many conservative churchgoers, especially Baptists who disliked the evolutionary teachings of William L. Poteat, the president of Wake Forest College. The State College professors believed themselves to be true Christians, as well as scientists, however, and decided that they could not allow Massee's action to go unchallenged.[50]

After the professors, led by entomologist Zeno P. Metcalf and botanist Bertram W. Wells, issued their reply to Massee, William B. Riley, the leader of the Bible Conference, challenged them to a public debate. The question would be "Resolved that evolution is a demonstrated fact." The State professors chose Pullen Hall on campus as the site for the debate, and selected Robert L. McMillan of Pullen Memorial Baptist Church as moderator. On May 17, 1922, two thousand students, newspaper men, and curious citizens packed Pullen Hall to hear Professor Metcalf debate Riley. The debate lasted for an hour and a half; Metcalf read from a carefully prepared text, while Riley used his skill as an evangelist to persuade the audience. The event attracted widespread publicity and fueled the controversy in the state.[51]

Three years later, State College officials and faculty members again found themselves embroiled in the debate on evolution. In February, D. Scott Poole of Hoke County introduced a bill into the North Carolina legislature that required state supported institutions to cease the teaching of evolution. Representative Henry G. Conner, leader of the opposition to the bill, asked President Brooks to coordinate efforts against the Poole Bill. Brooks who previously had fought successfully the American Legion on the issue of "Americanism" in state high schools, and the passage of an amendment that required Bible study in public schools, refused to assist Conner. Concerned by mounting criticisms of several new programs on campus, Brooks wished to avoid further controversy that might lead to budget cuts. Therefore, he absented himself from Raleigh during the debate. He did not, however, forbid his faculty members from cooperating with Conner, President Poteat of Wake Forest, and President Harry Woodburn Chase of the University of North Carolina, who opposed the bill. Again, Zeno Metcalf and Bertram Wells stepped forward to

declare that their scientific theories were not in conflict with their religious beliefs. An unnamed State College student also testified that his Christianity was strengthened, not weakened, by evolution theories. The Poole bill was defeated, but the anti-evolution forces did not surrender.[52]

During the next two years the issue held the attention of the state. After William Jennings Bryan led a hollow victory for fundamentalists at the Scopes "Monkey" Trial in Tennessee in 1925, Brooks finally made his opposition to the anti-evolutionists public. He emphasized that free speech and academic freedom were the central issues in the controversy. Gradually, as evolution became a major issue in the state elections in 1926, State College officials joined with the Chase administration in Chapel Hill allowing the fundamentalists to expose their own weaknesses, as they had at the Scopes' Trial in Tennessee. When Poole introduced another anti-evolutionist bill in 1927, Brooks followed Chase's lead and refused to testify; he was confident that the opponents of the bill were strong enough without his presence. After this bill was defeated, the issue faded in the state.[53]

Other members of the college community attracted controversy during the decade. Edward S. King, YMCA Secretary, upset many people with his liberal racial views and pacifism. He sponsored black speakers at the YMCA and organized interracial meetings at the United Church of Christ on Hillsboro Road. King was one of several southern Y secretaries who sought to promote better racial harmony during the 1920s. He received no encouragement from Brooks, who recognized that any support he gave to King would be detrimental to the college. Therefore, the president enforced traditional southern mores toward race at the campus. As a pacifist, King was also outspoken in his opposition to mandatory ROTC, as were Carl Taylor and historian Hugh T. Lefler. King's activities caused considerable suspicion among more conservative faculty and alumni.[54]

Probably the most visible and controversial figure at State College during the post-World War I period was Dr. Carl C. Taylor. Taylor arrived at the campus in 1919 to develop courses in economics and sociology. He was a progressive, liberal-minded individual, who at first worked closely with President Brooks in his efforts to upgrade the college. In addition to his work on campus which led to his appointment as Dean of the Graduate School, Taylor associated with Kerr Scott, Clarence Poe, Frank Graham, Gertrude Weil, and others in efforts to promote economic and social reform in North Carolina.

Taylor's concern for the economic plight of textile mill workers alienated many of the state's more traditionally-minded citizens. His biggest opponent was David Clark, State College alumnus and trustee, and editor of *The Southern Textile Bulletin*. Clark charged that Taylor's proposed reforms were radical and contrary to southern mores and customs. Other groups opposed the outspoken sociologist, including the American Legion, which distrusted his pacifism, and conservative religious groups, which found his liberal religious beliefs unsettling. Some individuals believed he was a communist, especially after he sponsored a talk by well-known socialist Norman Thomas. When numerous individuals demanded that Brooks dismiss the controversial professor, the president at first refused to act.[55]

However, Taylor and Brooks soon began to quarrel, mainly because they were two almost entirely different personalities. Taylor was outgoing, rash, popular with students and farmers; whereas Brooks tended to be austere, very conscious of his own dignity and authority, as well as increasingly burdened by poor health. When some critics blamed Taylor for Kilgore's resignation as dean of the School of Agriculture, Brooks made no effort to correct the story, and a rift began to develop between the two men. The next clash occurred when Brooks became disenchanted with the college's doctoral program. Furthermore, Taylor supported student efforts to abolish mandatory ROTC, which did nothing to endear him to Brooks. Although individuals such as influential alumnus David Clark continued to urge the president to fire Taylor for his outspoken liberal ideas, it was the personal quarrel between the two men that led in 1931 to Taylor's dismissal. With the support of the trustees, Brooks declared that Taylor's position as Dean of the Graduate School was abolished for financial reasons. Tenure did not exist in those days; Taylor was out of a faculty job. Although one hundred members of the graduating class protested and local newspapers criticized the move, Brooks refused to reconsider. Taylor later went on to a distinguished career with the United States Department of Agriculture, and ironically, in 1959, he received an honorary doctoral degree from North Carolina State College.[56]

Although Taylor never returned to teach at the campus, his firing had an important consequence for the faculty at State College. A group of his friends requested that the American Association of University Professors—a defender of academic freedom—investigate his dismissal. After visiting campus, AAUP investigators Holland Thompson of the City College of New York and William LaPrade of

Duke University, reported that Brooks had dismissed Taylor for purely personal reasons, and thereby had violated his academic freedom. Although no penalties could be assessed, the AAUP established in 1933 a local chapter at the college for the purpose of monitoring further administrative actions against faculty members.[57]

With the approach of the 1930s a great deal of uncertainty and apprehension existed at State College. Many individuals questioned the direction of the expansion during the 1920s, and they waited for an opportunity to abrogate certain programs. Although the institution was greatly improved, joining the Southern Association of Colleges and Secondary Schools in 1929, its leaders and faculty—like Americans elsewhere—were threatened by the economic downturn that began with the stock market crash. How would the unfolding disaster affect the college, and how would the institution respond? These questions remained to be answered in the decade of the Great Depression.[58]

Chapter VI

Hard Times and Survival, 1929-1940

The economic depression of the 1930s brought many new problems to State College. To many, it soon seemed that much of the progress of the preceding decade was now in danger because state revenues were inadequate to support higher education. Although the Brooks administration fought valiantly to keep state appropriations at their previous levels, North Carolina political leaders had little choice but to reduce expenditures. At the same time, many state officials questioned the necessity of several of State College's newer programs. They began to discuss an old idea, the consolidation of higher education, with renewed interest. As the institution came under fire and the economic downturn continued, college officials and their co-workers in research and extension struggled to maintain their programs. The changes this battle engendered and consolidation process itself, enabled the college during the 1930s to alter and expand its relationship with the people of North Carolina.

Although low prices for its staples had earlier afflicted the agrarian South, conditions became worse after the stock market crash of 1929. Throughout North Carolina, as well as the rest of the country, banks closed, businesses went bankrupt, people lost their homes, crop prices dropped, and unemployment grew. In turn, state government faced reduced revenues when people could no longer pay their taxes. As the Depression deepened with no end in sight, a terrible malaise settled on the land. Many North Carolinians looked to the state's land-grant institution for assistance, especially with agricultural problems, but State College had many difficulties of its own.[1]

When the Depression first began, the college, for the most part, continued as usual. The 1929 General Assembly had already voted a generous appropriation, and student enrollment in 1930 rose as high school graduates elected to attend college to avoid unemployment. Although tuition and fees were only approximately $500 a year, many students required assistance to attend State because they could not support themselves nor could their hard-pressed families provide much assistance. The YMCA established a Self-Help Bureau that provided employment listings for the needy. The number of students the service assisted rose rapidly during its first two years; by September 1931, it provided job placement for 288 students. These jobs ranged from babysitting to more traditional kinds of campus employment, such as research assistants and examination graders. The Y program enabled many students to attend college instead of joining the ranks of the jobless.[2]

In the fall of 1931, however, a three-year period of declining enrollment began and State College suffered serious financial cutbacks. When state income fell, Budget Bureau officials were forced to slash appropriations. In July 1931, State College professors received a 10 percent reduction in salary, and a further 10 percent cut in January, 1932. Extension funds were slashed 30 pecent, and permanent improvements on the campus came to a standstill. President Brooks used a further reduction in the regular appropriation as an excuse to fire Carl Taylor from the faculty, but he also was forced to stop funds for minor sports such as track and wrestling. The financial cuts continued into 1933, when the legislature reduced the annual appropriation by 48 percent, and slashed faculty salaries another 25 percent. In addition, the lawmakers abolished all state-supported scholarships. Because of the state's financial problems, Brooks was also forced to deal with another situation that seemingly threatened the institution's very existence: the issue of the consolidation of the state's three major white public colleges.[3]

Consolidation was not a new idea in 1930 when Governor O. Max Gardner proposed it. As early as 1912 University of North Carolina President Francis P. Venable spoke of a "Greater University of North Carolina," and he urged the state's major institutions of higher learning to coordinate their efforts to improve educational opportunities in the Tarheel state. During the 1920s the subject received a great deal of attention, especially when a number of influential individuals such as Gardner, Clarence Poe, and Josephus Daniels began to worry about the appropriateness of certain programs created by the Brooks administration. These public leaders

were also concerned when authorities at the University of North Carolina developed an engineering program that seemed to duplicate efforts in Raleigh. In a state faced with limited resources and with a long-standing tradition of fiscal conservatism, such potential waste drew attention.[4]

Upon taking office in 1929, Governor Gardner retained the services of the Brookings Institution to study North Carolina's government and to recommend how it might operate more efficiently and economically. The report came to Gardner in December 1930: it recommended, among other things, the consolidation of the state's three major public institutions of higher learning—the University of North Carolina, the North Carolina College for Women, and the North Carolina State College of Agriculture and Engineering. After receiving the Brookings report, Gardner asked the General Assembly on January 9, 1931, to implement the consolidation proposal. Gardner declared that the endowments of the respective institutions would be respected, and that no immediate changes in presidents or internal programs were necessary. He recommended, at the behest of President Frank Porter Graham of the University of North Carolina, the appointment of a commission of disinterested educational experts to aid in the process of consolidation.[5]

In its study of the consolidation bill, the General Assembly heard from the presidents of the three institutions. President Graham of the University of North Carolina gave qualified support tothe idea, while President Julius Foust of the North Carolina College for Women strongly advocated the measure. President Brooks of State College, however, was critical of the idea because he feared that the Raleigh institution would lose several programs, especially those created during his administration; he sought legislative delay pending further study by experts. Although he failed to halt consolidation, Brooks successfully insisted that the words "Agriculture and Engineering" be retained as part of State College's name. In light of what was to follow, this success was a significant victory. As the bill was debated, the faculty of the three institutions adopted a "wait and see" attitude while the alumni generally followed the presidents of their respective schools. The Mecklenburg Alumni Chapter of the State College partisans, led by David Clark and Malcomb Hunter, was particularly wary of what might happen to their alma mater in the consolidation process.[6]

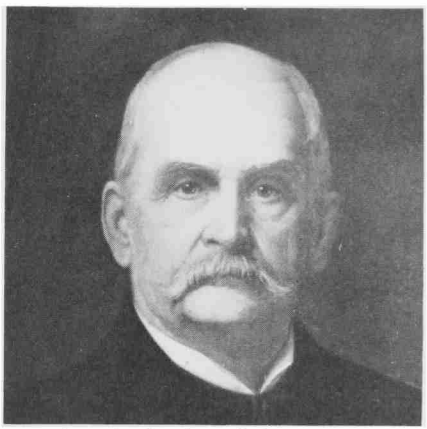
The consolidation bill passed on March 27, 1931, swept along with the rest of Gardner's reform program. The legislation specifically provided that State College would remain in Raleigh with

"of the University of North Carolina" added to its former name whereas the Greensboro institution would become the Women's College of the University of North Carolina. In addition, the act provided that the three boards of trustees would be replaced on July 1, 1932 by a new board for the Consolidated University. This board, selected by the legislature, included several members who had served on the three older boards. State College alumni feared that the board would be controlled by "Carolina men" to the deteriment of the Raleigh institution. To allay this concern, Governor Gardner went out of his way to assure alumni that State College would retain its historic mission of technological education for North Carolina.[7]

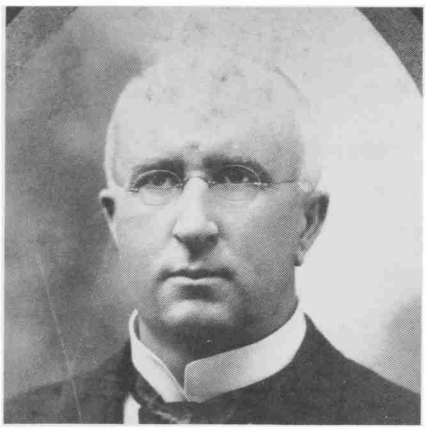
The 1931 act further required that the governor name a consolidation commission within two months to determine the specifics of the process. The commission consisted of faculty, trustees, and other prominent figures and was required to report to the new consolidated trustees by July 1, 1932. When it met for the first time in July 1931, the commission began the work of selecting a survey committee of disinterested experts to assist them in their deliberations. Through conferences with United States Commissioner of Education William J. Cooper and his assistant Fred J. Kelly, George A. Waters, Dean of Students and University Examiner at the University of Chicago, was selected to direct the survey. He, in turn, chose Dr. Frank L. McVey president of the University of Kentucky, and Dr. Guy S. Ford, Dean of the Graduate School and acting president of the University of Minnesota, to assist him. Waters also selected a number of experts in business education, women's education, engineering education, and teacher training to consult on the survey. Among these advisors was George Zook, the author of the 1923 Zook Report. The survey team also met with a number of the state's leading citizens and businessmen who had not been directly involved in higher education.[8]

When the survey team formally presented its report to the commission on June 13 and 14, 1932, State College partisans received quite a shock. The commission proposed that North Carolina State College become a junior college, and that all upper-level work be transferred to Chapel Hill. Governor Gardner and several other members of the commission declared that this proposal was unfeasible and it was dropped, but State College supporters remained concerned. Critics in Raleigh believed that the study committee, composed largely of Midwestern experts, failed to appreciate the historical development of education in North Carolina. [9]

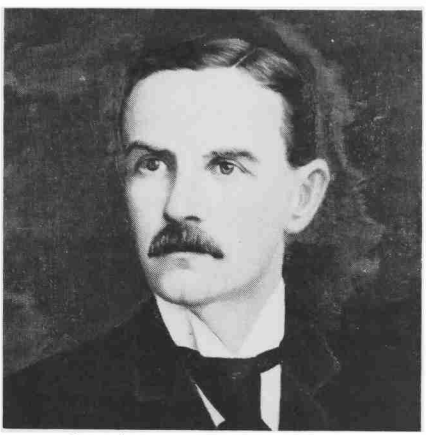
The findings and recommendations of the commission were otherwise largely those of the survey committee. They provided that



Alexander Quarles Holladay, 1889-1899



George Tayloe Winston, 1899-1908



Daniel Harvey Hill, Jr., 1908-1916

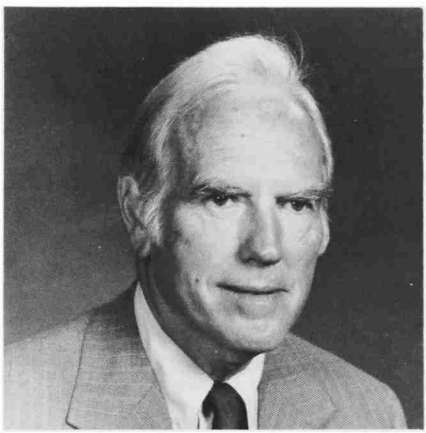
Wallace Carl Riddick, 1916-1923

Eugene Clyde Brooks, 1923-1934

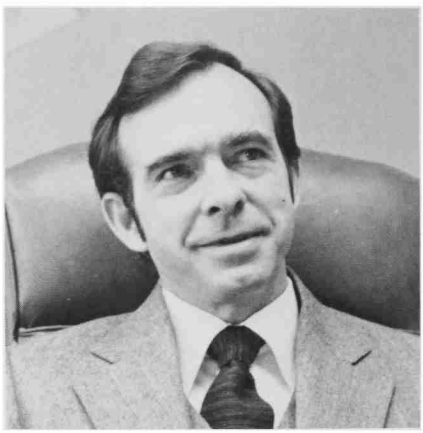
Until the creation of the Consolidated University of North Carolina in 1931, the administrative head of North Carolina State was known as the president. After consolidation Brooks served as Vice President of the Consolidated University until he retired in 1934.

John William Harrelson, 1934-1953

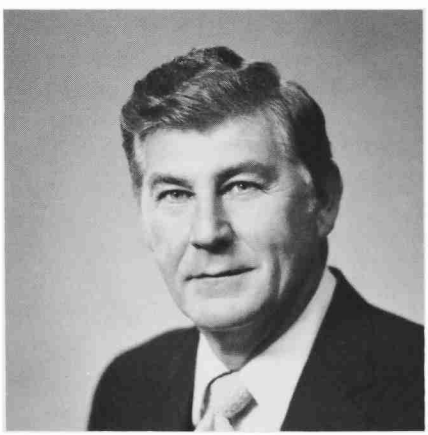
Carey Hoyt Bostian, 1953-1959



John Tyler Caldwell, 1959-1975



Joab Langston Thomas, 1976-1981



Bruce Robert Poulton, 1982-

After Brooks' retirement in 1934 the administrative head was called the Dean of Administration. In February 1945, the title was changed to Chancellor.

Frank Porter Graham, 1932-1949

Gordon Gray, 1950-1955

William Clyde Friday, 1956-1986

C. Dixon Spangler, 1986-

The Presidents of The University of North Carolina Since 1931

Jackson Ashcraft Rigney,
Acting Chancellor, 1975

Nash Nicks Winstead,
Acting Chancellor, 1981-1982

Fiftieth Anniversary Celebration of the establishment of the North Carolina Agricultural Experiment Station (Agricultural Research Service).

Bottom row, left to right: S.C. Clapp, H.C. Evans, Charles Dearing, Fred Miller, Asst. Director, W.A. Graham, H.B. Battle, R.Y. Winters, I.O. Schaub, B.W. Kilgore, C.B. Williams,

Second row: E.H. Hostetler, F.W. Sherwood, Robert Schmidt, R.E. Currin, S.G. Lehman, Frank Meacham, M.E. Gardner, *C.F. Williams,* A.F. Bowen, *unknown (head facing right);* R.F. Poole, Z.P. Metcalf, B.W. Wells, *E.G. Moss,* B.F. Kaupp,

Third row: T.B. Mitchell, *J.L. Rea, F.H. Smith, Jerre Moore, G.W. Forster,* W.A. Anderson, Carl Taylor,

Fourth row: W.F. Pate, Frank Jeter, *R.J. Saville, A.S. Cline, Roy Dearstyme, Herman Wilfong, S.J. Jackson,*

Top row: G.W. Randall, C.D. Matthews, J.O. Halverson, and L.G. Willis.

the three units of the consolidated university have: one president; one controller; one administrative council; one director of summer session; one director of general extension; and one director of graduate studies. The commission also declared that all schools of education should henceforth be departments of education. No new students should be admitted to the School of Science and Business at State College after 1933. This last loss to State was justified by allocating that area of study to the School of Liberal Arts and Commerce at Chapel Hill. These recommendations were all accepted in principle, but the trustees left implementation to university officials. The question of engineering education, a sensitive matter, remained unsettled pending further study.[10]

The engineering issue continued to excite comment throughout the state. On October 10, 1932, State College's alumni responded to the continuing uncertainty about the location of engineering education; a special meeting was held by the Greensboro and Charlotte alumni clubs. This meeting presented to the trustees a formal resolution demanding that the board reaffirm State College's position as the technological unit of the university. At a November 14, 1932 meeting, after electing Frank Porter Graham the president of the new Consolidated University, the trustees stated that they had no intention of reducing any college to the rank of junior college nor to abolish either of the engineering programs. Instead, they left the issue to President Graham.[11]

Graham, whose whole career was identified with Chapel Hill, was suspect to many at State College. The new president decided to deal with the problem of engineering education by naming a study committee which consisted of faculty from each institution and several leading engineering professionals. This committee was not limited by any prior decisions and thus received free reign to conduct its study. After holding a series of hearings in Durham, Asheville, and Raleigh, examining the report of the original survey committee, hearing briefs from its members, and engaging in a great deal of wrangling and a number of votes, a decision was reached. The committee, by a 6-5 vote, recommended that all technical education be conducted at the Raleigh unit of the University. It presented President Graham with both a majority and minority report. Graham then decided to settle the question himself.[12]

Between September 1934, and June 1935, Graham studied the matter carefully. The majority report emphasized the economy that would be achieved by locating all engineering education in Raleigh; Chapel Hill did not have the extra facilities necessary for

expansion. It also indicated that engineering was a major land-grant activity, and was not in keeping with Chapel Hill's long tradition in the liberal arts. The minority report denied that any wasteful duplication existed, and it stressed that Chapel Hill trained "professional" engineers while State College prepared "industrial" engineers.[13]

Graham's recommendations were presented to the trustees on June 11, 1935. They called for the closing of the engineering program at Chapel Hill, a motion that proved to be extremely controversial. The trustees, after some debate, approved this proposal by a vote of 58-11. A resolution by executive committee member John Sprunt Hill, calling for the continuation of the Chapel Hill program failed by a vote of 50-25. Despite the trustees' decision, this action was not the final word on the subject; Hill and his supporters vowed to fight for the Chapel Hill program.[14]

In early 1936 Hill published a pamphlet entitled "A Study of the New Plan of Operation of the Consolidated University of North Carolina," which outlined his opinion on the trustees' decision. In it he implied there was a conspiracy "to get the Engineering School away from Chapel Hill." After the appearence of the Hill pamphlet, the faculty at Chapel Hill voted in May 1936 by a 80-19 margin to ask the trustees to reconsider their action. This vote was followed on May 21, 1936 by a resolution from the State College faculty declaring that, though State had lost its School of Science and Business the faculty pledged its willingness to accept this and other decisions of the Graham administration. The State College alumni also called on all Carolina men to support Graham; they published revealing statistics which demonstrated that engineering education between 1930 and 1935 cost 55 percent more per student at Chapel Hill than at State.[15]

On May 30, 1936, Graham, after some maneuvers of his own, defended the consolidation of engineering education to the trustees. He further asked all partisans to look beyond their own concerns, special interests, and misunderstandings to the welfare of the Consolidated University and the people of North Carolina. After hearing a number of presentations on the subject the trustees voted 50-24 to reaffirm their approval of Graham's recommendations regarding engineering education. Though Graham's principle of allocation of functions within the Consolidated University would gradually erode during the ensuing thirty years, for the moment it was in place [16]

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From 1923 until the time of consolidation Eugene Clyde Brooks was the administrative head of State College. During the fight

over consolidation he defended the existence of the institution, using his political astuteness to protect the fortunes of the college. At the beginning of the consolidation process he became vice-president of the Consolidated University, under President Graham. Graham, with Brooks' assistance, took great pains to learn what he could about State College; he authorized exhaustive self-studies of all departments. From the beginning, he also made a major effort to become personally involved in all important decisions concerning the Raleigh campus. The choice of Graham as president of the university, proved to be fortuitous, both for the University and for State College. Graham also tried to work with State College officials, instead of dictating policy from Chapel Hill.[17]

Frank Porter Graham came from a family of distinguished North Carolina educators. Born the son of Alexander and Katherine Sloan Graham in Fayetteville on October 14, 1886, he received his A.B. degree from Chapel Hill in 1909. He taught briefly in the Raleigh public schools before receiving a masters degree in history in 1915 from Columbia University. He returned to his alma mater as a professor of history; in 1930, he became president of the University of North Carolina. Despite the opposition of some individuals who disliked his liberal views on social and economic issues, Graham was the trustees' only choice for the presidency of the new Consolidated University.[18]

Though it was natural for Brooks to continue as head of the Raleigh campus, significant problems soon surfaced. Although he had proceeded cautiously, Brooks was apprehensive about the decision concerning the School of Science and Business and the conflict over the location of the engineering program. The pressures of consolidation sapped the aging Brooks' somewhat limited physical reserves, and by late 1933 he was seriously ill. In November of that year, while attending a meeting of the Association of Land-Grant Colleges, he suffered an attack of arterial thrombosis that paralyzed the right side of his body. When he was finally able to return to his duties as vice president in February 1934, it was clear that the responsibilities of his office would be too great. Accordingly, Brooks retired, becoming president emeritus and Research Professor of Education. With Brooks gone, President Graham was able to construct his own administrative team. As the leader of North Carolina State College, with the new title of Dean of Administration, he selected long-time faculty member John W. Harrelson.[19]

John William Harrelson, the first alumnus to head the college, was born in Cleveland County on June 28, 1885. He graduated from the public schools of the county and in 1905 entered the

North Carolina College of Agriculture and Mechanic Arts. In 1909 he graduated as valedictorian of his class, with a Bachelor of Engineering degree. He immediately became an instructor in the Mathematics Department, by 1920 rising to the rank of professor. During World War I, Harrelson, a captain in the Raleigh National Guard, was on active duty, serving at Fort Caswell near the North Carolina coast and on the general staff in Washington. Emerging from the service as a major, Harrelson achieved the rank of colonel during the 1920s while in the army reserves. Throughout his tenure as State's chief administrator, Harrelson was known by his military rank, as "Colonel Harrelson" or simply "The Colonel." After a brief stint as Director of the state Department of Conservation and Development, Harrelson returned to the campus in 1932 to head the mathematics department. He soon became the Dean of Administration under Graham. Although he was not the unanimous choice of the State College community, he served Graham loyally. Determined to serve the college he loved to the best of his ability, Harrelson implemented many by Graham's plans to improve the institution.[20]

In addition to a new chief administrator, other leadership changes were made or contemplated during the reorganization of the college that followed consolidation. As previously discussed, President Brooks had for a long time considered replacing Dean Thomas Nelson of the Textiles School. Considerable pressure was exerted on Brooks by textile leaders in the state and school alumni to choose a new dean. Brooks wanted to delay any action on the issue, however, until the consolidation process was more complete. He allowed Nelson to function as acting dean, and permitted him to oversee several changes in the curriculum that brought it closer to the demands of industry. More science and economics courses were required of textile students, but much of the program remained shop-oriented. Enrollments skyrocketted with the new program, and by 1936 the school had the largest daytime enrollment among textile schools in the United States. After Brooks retired and the new curriculum proved popular, Graham and Harrelson reinstated Nelson as dean of the school.[21]

With consolidation, the School of Science and Business was abolished, its degree-granting functions allocated to Chapel Hill. In its place the "Basic Division" was organized with Dean Benjamin F. Brown as head. Originally this unit was called the General College, but the name was changed after the technical schools complained that such terminology created confusion. The division was modeled on the

"general college" idea popularized by programs such as those at the University of Chicago and at the University of Wisconsin; the concept was already in place at the Chapel Hill and Greensboro campuses. The resulting organization placed departments such as economics, English, ethics and religion, history and government, modern languages, physical education, and sociology in a non-degree granting service division. The science departments, which had been a part of the defunct School of Science and Business, were transferred to the technical schools—biology and chemistry to Agriculture and Forestry, and physics and geology to Engineering.[22]

The Basic Division, however, differed slightly from the predominant general college philosophy because, unlike other colleges with such a unit, students came to State with their majors already decided. It was not necessary, therefore, for the division to function as a career guidance unit, Instead, at State College, underclassmen registered in programs of "basic studies" designed to prepare them for their major field course work. In addition, the division was supposed to provide general guidance to underclassmen; however, the technical schools frowned on this function. Both the Schools of Agriculture and Forestry and Textiles had reservations about this "guidance," while the Engineering School vehemently opposed it. Furthermore, all of the technical schools disliked the curriculum changes suggested by the division that included more required courses in liberal arts. When they demanded that the Basic Division provide only the service courses they desired, and cease to interfere with the curriculum, serious friction developed, especially between Dean Brown and Dean Blake R. Van Leer of Engineering. When the Faculty Council voted to investigate the function of the Basic Division, President Frank Graham decided to intervene. Ultimately, the president ruled that lower level students should receive "guidance" from the Basic Division and advice from the technical schools, while the Basic Division faculty should serve on the curriculum committees of the other schools but only in an advisory capacity. This bit of semantical gymnastics effected a compromise that lasted until 1948, when Dean Brown retired.[23]

Changes also occurred in the technical schools. Under Graham's guidance, these organizations conducted a self-examination process that included faculty, students, and interested outsiders and resulted in several major reforms.[24]

Reforms were underway in the Engineering School even before the trustees finally settled in 1936, the matter of locating

engineering education in Raleigh. After a curriculum study was completed in 1934, a Department of Engineering Mechanics was established to provide all the basic engineering courses required of students in the school. When the trustees decided to place engineering instruction in Raleigh, Dean Wallace Riddick was seventy-two years old, and he had been a faculty member since 1892. Because his age prevented him from keeping pace with the new demands, Riddick resigned in 1937. The Graham administration was determined to seek a nationally prominent person who could develop the State College program into a leader in the field. After consultation with leading engineering educators, Graham hired Dr. Blake R. Van Leer, the Dean of the School of Engineering at Florida, as Riddick's successor.[25]

On his arrival Dean Van Leer found the prospects good for building an outstanding school at State College. Following consolidation with the Chapel Hill program the Raleigh school received $48,000 worth of valuable equipment from the defunct program. Soon after his arrival the program received another boost, when the Engineer's Council for Professional Development (ECPD) accredited the electrical, mechanical, civil, and ceramic engineering curricula. Some disappointment prevailed when the architectural and chemical engineering curricula failed to receive accreditation. The ECPD, however, judged the architectural program to be more architectural than engineering. Van Leer expressed less surprise on the fate of chemical engineering; he pointed out that it was seriously hampered by its lack of equipment and space. He stressed this shortcoming to President Graham when he reported that the engineering program failed to benefit from the buildings constructed with the help of the federal Public Works Administration funds. This exacerbated an already difficult situation in engineering where a 20 percent increase in enrollment placed a severe strain on the school's aging facilities. Van Leer also discovered that research facilities, even with the additions from Chapel Hill, were practically nil, thus prohibiting the development of graduate studies in engineering.[26]

Despite these problems, the faculty took several steps during the late 1930s to improve the school. Several new curricula were designed and initiated to assist developing industries in North Carolina. These included: geological engineering, furniture manufacturing, and the five-year architecture course. Vigorous efforts were made to encourage faculty to obtain advanced degrees. At the same time Van Leer struggled to obtain research equipment. He was highly successful in one area—aeronautical engineering. The faculty also developed a degree program in general engineering that allowed the school to enroll more students while lessening the burden on the specialized

curricula. Van Leer stressed the need to offer professional engineering education, and he often complained to Graham that he feared that the Chapel Hill campus and the School of Agriculture and Forestry at State College received preferential treatment.[27]

Dean Van Leer had reason for his suspicions because Graham chose the School of Agriculture and Forestry as his first target for improvement at State College. As agriculture was the predominant occupation in both North Carolina and the South, and because President Franklin Roosevelt depicted the South as the nation's greatest economic problem, Graham's priorities were not altogether inappropriate. After conferences with faculty and leading agricultural figures in North Carolina, Graham began a long-range plan to upgrade the school.[28]

Even as Graham reached this decision, the School of Agriculture and Forestry began to change its direction. In the classroom, courses were reorganized following the self-study mandated by the trustees. More emphasis was placed on fundamental science; students received more cultural education and specialization was reduced. There was also greater emphasis than ever before on instruction in economics, marketing, and management. In the departments dealing with agricultural production, the scientific approach became more prevalent, with emphasis on plant pathology, entomology, and plant breeding. Agricultural engineering received a new lease on life, and a new curriculum in wildlife conservation management was introduced. Increased interest in rural sociology—inspired in part by New Deal efforts in this field —demonstrated a new concern for improving the lives of North Carolina's rural families many of whom were tenant farmers. The new areas of study reflected a shift from the historical " how" of production, to a more scientific concern with the "why."[29]

In the Forestry division, the program continued to expand rapidly and the number of students grew quickly. In order to develop the course of study properly, the 83,000 acre Hofmann Forest in Onslow and Jones Counties was acquired in 1934. This acquisition enabled the faculty to offer a summer camp where all practical instruction was centered; the camp was a crucial part of forestry education. The division, however, suffered a serious setback in 1936, when the Society of American Foresters placed it on the unapproved list because of its lack of autonomy within the School of Agriculture and Forestry. After this development, the division began long-range efforts to obtain separate school status.[30]

The Agricultural Experiment Station, where the main thrust to upgrade research was centered, continued to face a persistant problem: its relationship with the North Carolina Department of

Agriculture. Many North Carolinians, including Graham, Harrelson, and Dean Schaub of the School of Agriculture and Forestry, believed that no long-term improvements could be made until this situation was rectified. Consequently, they made a vigorous effort to establish State College's complete control of the station. After Rhett Y. Winters, director of the station, resigned in 1937 to work for the United States Department of Agriculture, Graham and State College officials became even more determined to settle the question. Graham refused to select Winters' successor until the problem was solved: he insisted that he could not attract an outstanding research administrator to head the station until the college controlled the station outright. In the meantime, Dean Schaub added acting director of the station to his duties as Dean of Agriculture and Forestry and Director of Extension.[31]

Through ongoing negotiations with Secretaries of Agriculture William A. Graham and Kerr Scott, President Graham and Harrelson worked out an agreement on the management and use of the state's sixteen experiment station farms. This arrangement gave the college complete responsibility for the administration of the station and the employment of its director. It also provided that the college would carry out all research on the farms while the North Carolina Department of Agriculture would operate the farms, performing "housekeeping" functions. This understanding also eliminated Department of Agriculture funds for research. With this money no longer available, the General Assembly in 1939 assumed responsibility for the first time for direct support for agricultural research. This augmented the federal funds that had historically been the primary source of support for the Experiment Station.[32]

The settlement of the long-standing dispute over the station was the first step toward improving the agricultural work at State College. Facilitating this progress was the fact that the station now received additional support under the Bankhead-Jones Act. This act specifically supported new research by providing salaries for federal researchers associated with the program; it helped to initiate the improvement process. After prevailing on the State College staff to wait for a top flight director, Graham obtained additional support from the General Education Board, one of the Rockefeller family's philanthropic efforts to aid southern education, to help him attract several prominent agricultural researchers. Armed with $50,000 from the GEB, Graham also obtained matching funds from State College alumnus Richard J. Reynolds, Jr. Graham then asked the United States Department of Agriculture for a list of leading agricultural

researchers and research administrators to approach concerning the station. Quickly discovering that many of the names on the list failed to measure up to his expectations, he demanded a new list. Apparently he was told that he would not be able to convince any of the leading men to come to North Carolina. Graham persisted with the declaration that he would handle the problem of getting one to come to State College.[33]

Ultimately, Graham persuaded Dr. Robert M. Salter, Director of the Ohio State Experiment Station, to become the new director in North Carolina. Salter took the position with the stipulation that he could bring two colleagues with him. He and his associates also received a committment to improve the graduate program to begin offering the doctorate in agriculture. Salter brought Leonard Baver as Assistant Director of the Experiment Station and Head of the Department of Agronomy, and Albert O. Shaw as Head of Animal Husbandry. Horace Hamilton also joined the staff as the head of the new Department of Rural Sociology. In 1941, Salter departed to join the USDA, but Baver succeeded him as station director. Under Baver's direction, the quality of faculty members and research workers, many drawn from leading programs at Cornell, Ohio State, and Missouri, continued to improve. The Departments of Agronomy and Animal Husbandry led the way in the development of doctoral programs at State.[34]

President Graham later obtained an additional grant of $125,000 from Richard J. Reynolds, which he used to support another major improvement in the agricultural program—the development of agricultural statistics. Convinced by the U.S. Department of Agriculture's Frank Parker that this discipline was fundamental to the future of agricultural research, Graham sought an established statistician to provide leadership in this area. When Ralph Snedecor of Iowa State, one of the leading agricultural statisticians in the United States, was approached by search committee chairman Garnet W. Forster, he declined. However, he recommended one of his students, Gertrude Cox, as the best choice provided State would accept a woman. Graham had no qualms about gender, and Ms. Cox came to Raleigh in late 1940 to head the new Department of Experimental Statistics. She was State's first female department head as well as the first female full professor. In order to induce other departments to use the statistical information that was increasingly necessary to fundamental research, Baver assessed each department a fee for statistical work regardless of whether they used the department's services. Ultimately the department was so successful that a Consoli-

dated University Institute of Statistics was established, headed by Cox. The highly successful institute represented a joint effort of the statistics departments at State and Chapel Hill.[35]

The period between 1939 and 1941 was a watershed in the history of the development of agricultural studies at State College. New people with different visions of research possibilities were hired, and new areas of studies were introduced. Fundamental to this change was Frank Graham's desire to make North Carolina State College a leader in southern agricultural research. To a considerable extent, this goal depended on his ability to obtain outside sources for the purpose of attracting and funding the work of top scientists. By 1941, State College was poised on the threshold of a new era of research and teaching that would only be temporarily interrupted by World War II. [36]

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In addition to its precipitation of the consolidation process, the Depression and the New Deal that followed it affected State College in a number of other ways. New Deal relief programs aided many students in their efforts to remain in school despite economic hardships. On the campus, New Deal programs provided funds for a number of buildings and other improvements. Furthermore, through several of its other agencies, the New Deal aided the college's efforts in research and extension to understand and deal with the problems of economic deprivation caused by long-standing agricultural maladies.

Economic difficulties hindered many State College students' efforts to complete their education. On campus the Self-Help Bureau of the YMCA continued to help students earn at least part of their college expenses. The Self-Help Bureau also coordinated the work of the National Youth Administration (NYA), which was established as part of the New Deal's Works Progress Administration. The Bureau kept files on eligible students, jobs, and expenses on campus. Through this agency as many as 10 percent of the State students worked up to thirty hours per week at various jobs, including examination grading and laboratory work; they earned as much as $20 a month. The NYA supported students throughout the decade, often assisting as many as 200 at a time. In 1938 State College entered into a cooperative agreement with New Deal officials that resulted in locating a NYA center on the southern boundary of the campus. This center provided non-college students access to State College professors and facilities. Programs of the Federal Emergency Relief Administration, North Carolina Emergency Relief Administration, Civil

Works Administration, Public Works Administration, and Works Progress Administration also provided jobs to needy students.[37]

Although state funds for capital improvements were virtually non-existent and the maintenance budget slashed by 54 percent during the worst part of the Depression, the physical plant of the college benefitted enormously from several New Deal programs. Through a loan of $40,000 from the Reconstruction Finance Corporation (a Hoover program) as well as a grant of $4,000 from the Public Works Administration, Riddick Stadium was improved. The loan was later repaid by the alumni under the leadership of David Clark. Emergency Relief funds were also expended on the stadium project. From 1936 to 1939 money from the Public Works Administration facilitated the construction of several new dormitories to house the influx of students; the dorms included Becton, Berry, Clark, Alexander, and Turlington Halls. The federal program provided 45 percent of the funds, and the state contributed the remaining 55 percent. Withers Hall for chemistry and Nelson Hall for textiles were also constructed with the help of federal funds; Tompkins and Patterson Halls were renovated, and dairy barns were constructed near the fairgrounds under the auspices of the PWA. A new laundry facility was constructed, and the present day David Clark Laboratory was built and leased to the Agricultural Adjustment Administration.[38]

During the 1930s financial difficulties greatly hindered Agricultural Experiment Station projects. Despite the shortage of money, the organization was able to redirect its programs and, in cooperation with the Tennessee Valley Authority, expand its work. Before the late 1930s the station had never received a direct appropriation for research; the state Department of Agriculture provided it with an income from the fertilizer and grain tax that it administered. During the Depression this funding was greatly reduced, falling from a high of $96,000 in 1924 to a low of $28,000 in 1934. The decrease in this funding, coupled with a new interest in sociology and marketing engendered by the Depression, produced a re-evaluation of the station's research program in 1929 and 1930. As a result of this study, several areas of research were curtailed while others received new emphasis. The station elected to concentrate its work in three general areas—soil research, farm enterprises and marketing, and human factors in agriculture.[39]

With the advent of the New Deal's Tennessee Valley Authority, the North Carolina Agricultural Experiment Station joined the stations in Alabama, Georgia, Mississippi, Kentucky, Tennessee, and Virginia in a cooperative program conducted under the

aegis of the United States Department of Agriculture. The North Carolina program was concentrated in fifteen western counties in the TVA area. The studies focused on soil conditions, water problems, fertilizer usage, and farm management. The Experiment Station also operated a training camp at Statesville for engineers, foremen, and supervisors involved with the Civilian Conservation Corps. Support for the cooperative program also came from the Federal Emergency Relief Administration and the Agricultural Adjustment Administration for research in rural-urban migration patterns and the sociological impact of resettlement. In 1935, with the passage of the Bankhead-Jones Act, additional federal funds were available for research at the experiment station. As designated by Secretary of Agriculture Henry A. Wallace, this money was used for fundamental research conducted on a cooperative basis. This brought to the station a number of researchers who were jointly funded by the state and federal governments. The first direct appropriation for such projects by the North Carolina General Assembly was made in 1937 for apple research in the Brushy Mountains. As state officials recognized the value of the new research projects, state support for agricultural research during the ensuing decade grew tremendously.[40]

The Agricultural Extension Service, like the Experiment Station, experienced a shortage of funds during the Depression, and also like the station, was able to align itself with several New Deal programs. This strategy enabled it to survive as well as to enhance its value to North Carolina's rural population. In one respect, the association with the federal government was easy because of the philosophy of a number of New Deal programs. The Agricultural Adjustment Administration emphasized many of the same ideas that extension endeavored to encourage during the farm depression of the 1920s. The Extension Service during the earlier emergency preached, with little success the virtues of "live-at-home" farming and crop diversification. The more serious crisis of the late 1920s and early 1930s, however, caused many farmers to listen to extension's message, when the New Deal programs also endeavored to spread the same message.[41]

On the other hand, the decision of the extension workers to serve as the Agricultural Adjustment Administration's administrative arm was not made without some soul-searching. Some state directors feared that involvement in the AAA programs compromised the image of extension workers as agricultural educators. North Carolina's director Ira Obed Schaub, had no qualms about his workers' roles as agents of the AAA because he saw the program as a way to

strengthen, or in some cases preserve, his organization. The Depression caused many county commissioners, who funded the local agents, to withdraw support. Although there was a net loss of only one agent in the state, many agents faced deep salary cuts. Schaub believed that the Extension Service's survival depended on the use of federal funds provided by cooperation with the AAA. In the end, he believed correctly that county governments would see the wisdom of the program and restore finances.[42]

Schaub also believed the extension service's involvement with the AAA enhanced rather than compromised his agents' educational efforts. Like agents in other parts of the country, North Carolina's extension workers came into contact with many farmers whom they had failed previously to reach. This higher profile gave the agents a greater opportunity to spread the extension message. At the same time, agents stressed the need for the people themselves to play a greater role in the program, thus changing the emphasis from demonstration to discussion.[43]

Even before the inception of the AAA, the extension service emphasized the need for a balanced agricultural economy. After 1929 the service experienced some success in its efforts to reduce wheat and tobacco production. Extension workers recognized that the greatest agricultural problems were related to marketing; as a result they assisted in an educational campaign to establish a tobacco cooperative project in eastern North Carolina. These efforts were only partially successful at first, but received considerable impetus from the AAA programs.[44]

From the spring of 1933 through the latter part of the decade, much of Extension's time was devoted to educational efforts promoting the AAA and its successor, the Soil Conservation Service. The program began with efforts to encourage a cotton plowup and to urge tobacco farmers to withhold their crop from market until they signed contracts to limit future production in exchange for federal payments. The programs were successful, and increased farm income by as much as three times, as production adjusted to consumption. Although the gains were not as great after the initial period, this trend continued for the remainder of the decade and was one reason why North Carolina faired better than most states during the latter part of the Depression.[45]

Although most extension agents' time was devoted to the implementation of the New Deal programs, some attention went to more traditional extension activities. In more than one half of the state's counties home demonstration agents encouraged home gardens

and canning activities, which enabled farmers to produce and preserve an increased amount of their own food. Rural housing, farm management, and rural electrification surveys were conducted, extension agents also assisted farmers in efforts to retain their land and improve it. Marketing cooperatives continued to be developed; especially noteworthy was the chartering of the FCX or Farmers Cooperative Exchange in 1933. The rural electrification survey conducted by State College's agricultural engineer David S. Weaver, and the promotional work done in conjunction with it, served as a model for similar national efforts. Beginning in 1935, extension also conducted a daily farm radio program on Raleigh's WPTF that was syndicated to other stations in manuscript form. In February 1937, when Dare County hired an extension agent, all one hundred counties had an agent for the first time. By the end of the decade extension, in the words of *Extension News* editor Frank Jeter, "proved that it has the power to organize, conduct and complete any reasonable effort with a maximum of results." Its value to the people of the state had grown tremendously during the Great Depression.[46]

The Agricultural Extension Service, like the Experiment Station, was involved in the TVA in western North Carolina. In the TVA area extension agents conducted educational programs in soil conservation, land use, and fertilizer utilization. In the latter instance, extension personnel also acted as disbursing agents by distributing phosphates for government fertilizer programs.[47]

The 1930s saw the growth, despite economic difficulties, of extension youth groups centered on the 4-H clubs. Continuing a process known as the "Greening of 4-H" that began during the 1920s, State Leader Lera R. Harrill had expanded 4-H by 1939 to all one hundred counties. Stressing leadership and its developmment among both 4-H personnel and young club members, Harrill was able to justify through unstinted work his eventual title of "Mr. 4-H." Much of the program centered on the development and completion of individual projects. The 4-H experience also was enriched by the annual 4-H short course at State College, the exhibits and judging activities at the State Fair, and camping programs at Swannanoa, White Lake, and other sites. Success in these efforts meant recognition for both 4-H and individual members, many of whom attended the National 4-H Congress or won scholarships that Harrill obtained from supporters. In addition, some of the activities, especially the 4-H short course, served as a recruiting ground for State College.[48]

A number of new programs added to 4-H during the 1930s demonstrated the organization's willingness to relate to general agricultural reform efforts. Among these were reforestation projects in

1934, rural electrification programs in 1935 and 1936, and wildlife conservation activities. 4-H camps, especially Swannanoa, were the beneficiaries of New Deal funds; the WPA provided aid to improve landscaping, plumbing, and buildings.[49]

The 4-H youth programs, like more general extension efforts, succeeded in their purposes during the 1930s, emerging from the decade with a sense of accomplishment and a strong recognition of their valuable contribution to rural life in North Carolina. This success, during a relatively bleak period, could only improve the image of State College among the many North Carolinians who still lived and worked in rural communities.[50]

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Student life at N.C. State in the 1930s underwent many changes as faculty and students worked to improve campus tradition. In their efforts to promote a better academic atmosphere and encourage what they believed to be proper behavior, the administration took several steps to alter several major agencies of student government. Their actions reflected trends begun during the 1920s to unite academic with extra-curricular activities.[51]

At State, the adjustment of freshmen to campus life continued to be an important concern of college officials. The Harrelson administration continued the freshmen week activities begun during the Brooks' years, as well as the practice of holding a weekly freshman assembly. Beginning in 1934, the administration also created the freshman quadrangle, consisting of Fourth, Fifth, Sixth and South Dormitories, where all freshmen, unless they lived with their parents, were required to live. Juniors and seniors acted as dormitory counselors to help freshmen adjust to college life. Later, with the completion of Becton, Berry, and Clark dormitories, the freshman quadrangle was moved south of the railroad tracks. The quadrangle system continued until the advent of World War II.[52]

At the same time faculty members became more concerned with the prospects of fraternity life, although students insisted that they only paid attention to the greeks when trouble occurred. A faculty committee, created in 1934 to study the fraternity system, expressed dismay over chapter finances, conduct within the houses, including pledge practices, and the poor academic standing of fraternity men. Many faculty members also expressed concern over housing conditions, and they again urged the construction of a fraternity row. Gradually, with the help of Charles Lefort, Dean Cloyd's assistant, the greeks took steps to improve their reputation. In May 1937, the Interfraternity Council agreed to require a "C" average of all

pledges; it also prohibited intramural participation and house dances for all chapters below the student body grade-point average. When fraternities continued to experience many of the same problems, an outside committee of experts on fraternity life conducted a study of the situation in 1938. The study panel cited the poor housing conditions of many chapters as one of the greatest problems experienced by the greeks. The most serious problem, however, was the lack of self-government among the fraternities. They blamed the paternalism of the Harrelson administration, indifference of the faculty, and student irresponsibility for the problem. For the moment, however, the committee's recommendations were not implemented.[53]

The fraternity situation was only part of a larger problem in student government. Sensitive to outside criticism, and determined that he knew what was good for the students even when they did not, Harrelson promoted policies at the college that many students compared to high school or military regulations. In 1935 the student-controlled honor system was abolished on the recommendation of the administration, and it was replaced by a proctor system. At the same time, a much stricter classroom absense policy, allowing only sixty missed classes in four years, was enacted. Students complained about the situation to each other, but they avoided a confrontation with the administration because they believed that those who complained were immediately labelled as troublemakers. Throughout the 1930s there was an undercurrent of student discontent on campus.[54]

The situation reached a crisis in the spring of 1938, when the Faculty Council, on the advice of Dean Cloyd, cancelled the Finals Dance because it was scheduled for a Monday night and might disturb the neighbors of the fraternity chapter houses. They made this decision in February, but failed to announce it to the students until late April. Upset because they had no time to plan another dance, 400 students staged a protest, marching to Capitol Square where they burned in effigy Dean Cloyd and the Faculty Council. At the next freshman assembly when Harrelson rebuked the students for the incident, he was loudly hissed. Other issues came to the surface as students began to discuss their grievances, including their resentment of the absence policy and their distress about the lack of self-government. Student leaders called a mass meeting for Pullen Hall. At the meeting, attended by 800 students, student leaders proposed the creation of a faculty-student committee on student welfare. They presented this proposal to the Faculty Council, and also demanded that the Finals Dance be held as scheduled. Impressed by the students' seriousness of purpose, the council voted to allow the dance. In

addition, the next fall President Graham appointed the faculty-student committee as students requested. Gradually, under the guidance of this committee, who in 1939 authorized a dean's list, relations between the administration and students improved.[55]

During the 1930s student organizations continued to grow and expand their activities. The Forestry Club, established in 1929, grew rapidly during the Depression era; it sponsored its first annual Rolleo in 1932 and Loggers' Ball in 1936. Beginning in 1934, the organization published the *Pinetum*, the annual school journal. In 1933, the Engineers' Council launched the *Southern Engineer*, their school's publication. In recognition of the growth of student publications, First Dormitory in 1934 became the student publications building, and was renamed Owen Hall. The building provided a home for campus publications until the 1950s.[56]

Women rapidly increased their numbers during the late 1920s and early 1930s, but suffered a brief setback in 1935 when the Graham administration prohibited their enrollment in State College's freshman and sophomore classes. Graham's purpose in making this decision was to encourage girls to attend Women's College in Greensboro. This restriction lasted only until 1940, however, because the Consolidated University administration was quickly reminded of the unique programs that State offered to women—programs not available at Greensboro. The number of coeds remained so low that coed government was discontinued in 1937, but a few still enrolled in State College's textile and vocational education programs during this period. Not until World War II would the number of women increase significantly.[57]

State College survived the difficult 1930s by assuming new roles and expanding others. As part of the new Consolidated University of North Carolina, the institution took numerous steps to improve its programs, thus offering its students a more well-rounded professional education. Under the Graham administration, which was fully committed to the college's development, the institution achieved accreditation for several engineering programs. It also obtained significant outside private support for the first time, laying the basis for the development of a doctoral program in agriculture. By the time World War II interrupted campus life, State College had recovered from the ordeal of the Depression and was on the brink of a new stage of development, one that would make it a leading research institution.

Chapter VII

World War II

World War II interrupted the progress of the late 1930s, as the college became a training ground for war personnel. This occurred because State College administrators believed that as part of the land-grant system and of the University of North Carolina, the institution had a duty to serve state and country in the battle with the Axis powers. Many of the college's programs were well-fitted to provide wartime training to both military and civilian personnel. In addition, the institution's redirected extension activities enabled it to reach many North Carolina farmers and industrial workers, drawing them into homefront efforts to support the military. Student life was seriously disrupted as civilian enrollment plummeted and the majority of student organizations ceased to function. Although some members of the faculty disliked the degree to which the campus became involved in military matters, most saw it as an exciting opportunity to serve both state and country.

The second World War, a much wider-scale conflict than World War I, required a more complete mobilization of both military personnel and civilians. The great advances in military technology that had occurred since the previous war required greater industrial output. Although a vocal minority disillusioned by the results of World War I had insisted that the United States assume an isolationist position, the great majority of Americans, after December 7, 1941, supported the war efforts of the Roosevelt administration. Remembering the service of colleges during the first World War, American

leaders looked to them again for assistance in this new battle for democracy. Some college authorities recalled the hectic days of the Student Army Training Corps and cautioned their fellow educators to avoid repeating such an experience. American land-grant colleges, however, were uniquely fitted to assist in the battle against the Axis powers. The engineering programs of these institutions provided training for the soldiers of the increasingly technological armed forces, and offered the research potential to develop new and better weapons and equipment. In agriculture, extension agents provided a vast civilian army to encourage farmers to increase production. The land-grant colleges' varied programs also provided educational opportunities for workers employed by war-related industries. Even before Pearl Harbor State College joined with the Association of Land-Grant Colleges and Universities in offering its facilities to the war effort.[1]

State College also defined its participation in light of its role in the Consolidated University of North Carolina. As early as June 7, 1940, University of North Carolina trustees, upon the recommendation of President Graham, committed the institution to the total war effort. A university-wide aeronautics program was developed with units at Chapel Hill and in Raleigh in State's aeronautical engineering curriculum. State's ROTC program was expanded, and the legislature was requested to provide money for an armory for the program. Although the steel girders were erected early during the war, the structure, originally proposed by David Clark as a meeting place for farmers, was not completed until 1949. Instead it became famous as the home of Everett Case's Wolfpack basketball team, not as the home of ROTC. In August and September 1940, Graham proposed and the trustees approved a five-point program that emphasized State College's potential for wartime service because of its technological programs. At the same time, however, Graham insisted that the university continue to operate as a university.[2]

Colonel Harrelson moved rapidly to fulfill the trustees' mandate, naming Dean Blake Van Leer of Engineering as the chairman of the campus committee for national defense. This committee worked diligently to adapt the college's program to the war effort. All aspects of the institution's program were included. The Basic Division courses were revised to place more emphasis on citizenship and to strengthen moral fiber. In the degree-granting schools, several federal programs were initiated to assist defense efforts.[3]

State's earliest program for defense began in March 1939, when the Mechanical Engineering Department's aeronautical curric-

ulum, with the help of Josephus Daniels, became part of the nationwide Civil Aeronautics Administration (CAA) pilot training program. One of thirteen colleges to participate in this early civilian program, the institution received federal aid from the NYA for support. An advanced program that provided students with financial aid was inaugurated in January 1940. Both courses included ground school and limited flight training for students. In October 1940, aeronautical engineering became a separate department, and efforts were made to improve research facilities. The program was part of a university-wide effort after 1940, and student pilots received their flight training at Chapel Hill's airport. Some college authorities disliked the program because the CAA constantly changed the rules. Many were relieved when the program was transferred to the military in summer, 1943.[4]

Another early effort, also assisted by federal funds, began in July 1940, and consisted of vocational extension courses designed to train industrial workers for war production. Sponsored by the Office of Education, the course Vocational Training for National Defense lasted ten weeks, and provided work in drafting, welding, and mechanics. The program lasted only until July 1941, and trained 479 men.[5]

The School of Engineering and College Extension offered another early war preparation program—Engineering Defense Training. This program began in January 1941, under the auspices of the Office of Education. The program offered short courses to scientists, engineers, and production supervisors. It was replaced in July 1941, by the Engineering, Science, and Management War Training Program. The new program allowed some of its students to attend college on a full time basis. One of the more popular offerings in this program was a course in industrial safety. Dean Van Leer of Engineering served as the regional director of the program, which trained more than 10,000 individuals on the campus and at industrial locations throughout North Carolina, including shipyards, textile mills, and aircraft plants.[6]

In 1941, the Electrical Engineering Department became one of forty such college units conducting courses in radio communications for Army and Navy personnel. This course was designed to train men to use new ultra high-frequency radio equipment. State College's program was one of the largest in the United States.[7]

The Textile School also joined in the defense effort. It conducted a twelve-week fabric inspection and testing course for war industry personnel. In addition, it conducted courses in mill safety

that won high praise from Secretary of Labor Frances Perkins. The North Carolina textile industry, with stimulus from State College, produced more fabric for the allied war effort than any other state.[8]

The Engineering and Textile Schools also conducted several research programs to aid the war effort. In the Textile School faculty searched for a substitute for silk, which was critically needed in parachutes. At the same time, the Ceramic Engineering Department, under the auspices of the War Production Board, conducted one of the nation's largest research programs concerning insulation for radar, radio, X-rays, and medical equipment. Professor Robert Stone, acting department head, wrote a pamphlet on the subject that was used world-wide by the allies. Furthermore, the college's aeronautical engineering labs, completed early during the war, conducted valuable research.[9]

Although many of its academic activities were curtailed during the war, the School of Agriculture and Forestry made significant contributions to America's war efforts through its research and extension programs. Research activities included studies aimed at increased production of vital foodstuffs—vegetables and wheat. Station workers also conducted soil surveys for the Department of War, and fertilizer experiments with potatoes. In efforts to encourage better production, they also performed genetics research on food crops, and general studies of disease and pest control. The work in genetics, studies of hybrid corn, was the beginning of a long-term program that produced many significant results during the following decades. Many of the results of this work were transmitted to the farmer in the usual manner by the Extension Service.[10]

Extension agents conducted several significant wartime programs. The service's youth group—4-H—emphasized citizenship training, and it also urged young people to conduct scrap drives and to grow Victory Gardens. The youth group also conducted a yearly "Feed a Fighter" productivity competition, and in an effort to raise morale, sponsored a contest to name Liberty Ships constructed at Wilmington, North Carolina. The adult-oriented programs stressed increased farm production and resource conservation. Farm women were urged to participate in the "Food for Freedom" program and, after 1943, enrolled in the Women's Land Army to perform farm work. Much of extension's effort was successful because agricultural production in North Carolina doubled during the war years.[11]

In 1943 the college's defense program was significantly altered by the introduction of several military programs. When the United States government decided to draft college men in late 1942,

American colleges faced a problem similar to that during World War I. When students went into the armed services, revenues plummeted. At State College civilian enrollment peaked in the fall of 1942, but dropped rapidly after this time. ROTC, recently expanded in 1942 to include a signal corps unit, was greatly reduced. In an effort to encourage college men to complete their education while obtaining valuable technical training needed by the armed services, the federal government created numerous programs funded with federal money and administered by the colleges. State College, the technological unit of the University of North Carolina, participated in these programs, enabling it to remain open during the war.[12]

When it became evident that the government planned to create these military programs, the Graham and Harrelson administration eagerly prepared State College to participate. Harrelson appointed a War Training Board, headed by Professor Hilbert A. Fisher of mathematics, who served as armed services coordinator. He and Graham also began negotiation with officials in Washington to secure the new programs.[13]

The first group of military trainees to arrive on campus was the 59th College Training Detachment of the Army Air Force. On February 17, 1943, eight hundred men of this detachment arrived on campus where they received an intensive five-month pre-flight training program. These soldier-students took college level courses in mathematics, physics, chemistry, history, English, and geography. They also received flight instruction. The program continued until May 1, 1944, when it became the 2196th AAF Base Unit, which was transferred from the college at the end of June. Over 4,000 Air Corps Cadets received their pre-flight training in this program at State College.[14]

The college also participated in the Army Specialized Training Program (ASTP), which had several divisions. Designed to provide college level training for army personnel, it consisted of the Specialized Training Assignment and Reclassification (STAR) unit, the regular ASTP course, an advanced course for engineering students, and a reserve program (ASTRP) for high school graduates below draft age. State College participated in all four ASTP programs.

The first program, beginning in April, 1943, was a STAR unit. The purpose of the program was to evaluate draftees and assign them to duty or to a technical college. The STAR program was somewhat disorganized and confused because the government provided poor guidelines. Despite this problem, professors in English,

mathematics, modern languages, physics, chemistry, and psychology assisted in the classification of army trainees. The STAR program brought one definite improvement to the campus: Army inspectors condemned the Carroll Infirmary, and the federal government provided the funds to convert Clark Dormitory to an infirmary. Generally, however, campus officials considered the program a nuisance because of the guidelines, and they were happy when it ceased in August 1943, after classifying 3,700 men.[15]

The STAR program was replaced by a regular ASTP unit of 1,450 men, including 450 advanced engineering students. The State College unit was the largest in the 4th Service Command, and only one of three included in the advanced program. The advanced students, already college men when they were drafted, took course work in either electrical, mechanical, civil, or chemical engineering for twelve weeks. After completing the course many of them were sent to work on the atomic bomb project at Oak Ridge, Tennessee. The basic ASTP course consisted of three, twelve-week sessions, in which students took work in mathematics, physics, chemistry, mechanical drawing, English, history, and geography. At the end of the basic course they were sent either to advanced training centers, to officers' candidate school, or returned to military service. The reserve program—ASTRP—for college boys under 18 began in July 1943, and allowed volunteers to remain in school until they reached draft age, whereupon they were placed on active dury. State's ASTP was the longest running in the South; it closed on October 31, 1945, after training 4,598 men.[16]

One of State College's most significant contributions to the American war effort, however, was its Navy diesel program conducted by the mechanical engineering department. Directed by Professor Robert Rice, this program began initially in January 1941, as a ten-week extension course for civilians. The first 40 Navy officers arrived on March 31, 1941, for sixteen weeks, as part of the Engineering Defense Training program sponsored by the Office of Education. The course remained under the Office of Education until May 1943, when the Navy expressed an interest in expanding it. The Bureau of Naval Personnel agreed to provide the college with equipment and men to conduct the enlarged program. In order to provide housing for the equipment, valued at $1,000,000, the college constructed a diesel laboratory building, now part of Broughton Hall, with emergency funds provided by Governor J. Melville Broughton and the Council of State. It featured a fountain, set on the site of the Burlington Engineering Laboratories, which was used to cool the equipment.

This building was completed in 1944 and dedicated in an elaborate ceremony. In an enlarged nineteen-week program the college trained as many as 240 men at one time. Before it ended in December 1945, 1,550 men received specialized training in diesel engines at State, one of only two such centers in the United States.[17]

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Many aspects of student life came to a standstill during World War II. At first college authorities urged students to remain in school to complete their valuable technological education, but regular enrollments dropped from 2,500 in fall of 1942 to 700 by 1945. In an effort to reduce the length of time required for a degree to thirty-six months, the college in January 1942, went on a full four-quarter system. The campus swarmed with recruiting officers for the several branches of the service that critically needed technologists; at the same time, draft registration was conducted at the YMCA. Student organizations ceased to function, and most of the student publications, including the recently established *Textile Forum*(1942), suspended operations. Only the *Technician* and the *Agromeck* continued to publish. Dances and parties were few, and many fraternities become inactive. The intercollegiate athletics program was greatly reduced, and many minor sports cancelled. The football, baseball, and basketball teams played abbreviated schedules, often against teams from military bases. As regular enrollments fell, dormitories were turned over to the military programs to be used as barracks, and civilians were limited to Gold, Welch, Fourth, and Watauga. The college assumed a "military atmosphere" that few aspects of student life escaped.[18]

Before Pearl Harbor, student opinion at State College about American involvement in the conflict was mixed. A significant minority of the students, influenced by the "America first" ideas and encouraged by several Basic Division faculty members and Y Secretary Edward S. King, questioned in 1939-1940 the necessity of American involvement in what they viewed as a foreign affair. They insisted that American security should come first, and the United States had no compelling national reason to challenge Hitler in Europe. The *Technician* featured editorials with such titles as "Why Must We Die?," and promoted the "America First" idea. State College officials, such as Harrelson, were distressed by the campus newspaper's stand, but insisted to outraged alumni that the students were entitled to freedom of expression. After December 7, 1941, however, the vast majority of students enthusiastically supported the allied war effort.

Although campus officials noted a restlessness among the students similar to that occurring during World War I, students accepted the accelerated programs with few complaints. Student leaders promoted a campus scrap drive in October 1942 that generated three carloads of scrap iron, a vital but scarce war material. There was some rivalry between the civilian and military students, but few incidents occurred. Through their willingness to forego traditional campus activities, as well as to cooperate with college authorities, State College students demonstrated their support of American war efforts.[19]

The coming of the war also promoted a change in the makeup of the student body; the number of coeds again began to increase. In an effort to obtain employment in traditionally male-dominated professions now facing labor shortages because of the war, women enrolled at State in ever-increasing numbers after 1942. In 1943 the college became the only institution in the South to offer Pratt-Whitney Fellowships to women. These fellowships enabled female liberal-arts college graduates to obtain valuable engineering training that fitted them for employment as engineering aides at the company's Hartford, Connecticut plant. The first fellows, fifteen in all, arrived for the 48-week course in June 1943, under the directorship of William G. Van Note, succeeded by Robert B. Rice. The company offered a second series of fellowships in 1944, and a third in 1945. After the war the number of women at State College dropped, before beginning a steady climb in the late 1950s.[20]

The life of the soldier-student at State College was vastly different from his civilian counterpart. Students in the military programs were segregated from regular students both in the classroom and in the dormitories. The military authorities attempted to isolate their students, with the Army Air Corps turning the relatively remote Alexander and Turlington Halls into a barrack area, complete with sentry post, a canteen, and a recreation room provided by the YMCA. The the Navy Deisel students occupied Becton Hall while Berry, Bagwell, and Syme dormitories were reserved for the ASTP. The Air Corps students also published their own newspaper, *The DoDo*. These students marched in formation to and from classes, mess hall, and drill. Suspending its peacetime program, the YMCA helped the trainees locate housing for their families, and it also promoted concerts and movies in Pullen Hall. College officials also sponsored dances for the soldier-students, and invited students from the nearby women's colleges. Much of these students' experience at State College, however, was transitory since they were quickly shipped out after completing their programs.[21]

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In a variety of ways the college's administration and faculty were affected by the war. Harrelson, a colonel in the reserves since the 1920s, was called to active duty twice during the conflict. The first time in November 1941—he served for several weeks as state Director of Manuevers for the First Army. Military authorities avoided keeping him on active duty, however, because of his position at a war-essential institution. Finally, in March 1943, he was appointed as Deputy Chief for the Army Specialized Training Program in the Fourth Service Command, where he supervised curricular and institutional standards for the program. The first head of a major southern college to go on active duty, he served sixteen months, returning to Raleigh in August 1944. In his absence, the Faculty Council, chaired by Professor Hilbert A. Fisher, supervised affairs at State College.[22]

Harrelson was not the only major figure to serve in the army. Engineering Dean Blake Van Leer reported for duty with the Army in May 1942, where he served in the development of a number of army training programs. Van Leer never returned to State College; he elected instead to accept the presidency of the Georgia Institute of Technology in 1943. In his absence, Lillian Lee Vaughn served as acting dean.[23]

As soon as they discovered that Van Leer would not return to campus, President Graham and supporters of engineering education began a search for his successor. With the assistance of former Governor O. Max Gardner and Thomas Morgan, John H. Lampe, Dean of Engineering at the University of Connecticut, was persuaded to come to Raleigh. Lampe, who arrived in Raleigh in April 1945, was a disciple of the Wickenden Report, the major force in engineering education after World War II, and he also had extensive connections with industry, and experience with engineering extension work.[24]

Lampe was not the only new dean appointed during the war. Since the 1920s industrial leaders and textile alumni urged college authorities to replace Dean Thomas Nelson who had served on the faculty since 1902, but had managed to continue in the position despite persistent criticism. The biggest complaint against the aging dean was his failure to develop extensive research or extension programs in the school. Another complaint was that he had failed to promote the textile program above the trade school level. Many critics believed that his presence inhibited the college's ability to obtain much-needed equipment and a higher caliber faculty. It was also charged that he discouraged the growth of private support for the school. When Nelson finally retired in 1943, Malcolm "Sandy" Campbell, the research manager of the Textile Research Institute in

New York, replaced him as dean. A graduate of Clemson, Campbell, like Lampe, favored the development of research programs and extensive ties with industry.[25]

Changes also occurred on the faculty during the war. More than fifty faculty members took leave to serve in the armed forces. All faculty members were required to take a loyalty oath, and they also received a hefty war bonus which later became permanent. Because many faculty members were absent from campus, the college experienced severe difficulties in its efforts to maintain an adequate staff to operate the technical courses required by the military. In order to alleviate the problem, several older faculty members past retirement age remained on the staff while local high school teachers were also enlisted to assist the State College faculty. In addition, faculty members in several nonessential departments taught mathematics, physics, geography, and other courses to the soldier-students. Through various expedients, college officials were able to meet the teaching demands of war time.[26]

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The war years also witnessed the revival of alumni activity and the beginnings of significant private foundation support for the college. For many years during the 1930s the Alumni Association struggled because of financial difficulties. No secretary was employed for any extended period because the salary was too low, and few county clubs existed. Only with the assistance of federal Public Works Administration was the Memorial Tower completed in 1937. Beginning in the late 1930s, however, when Dan Paul became secretary, the association foresaw better times. They developed a program to organize local clubs and increase membership. Efforts were made to obtain state support for badly needed permanent improvements at State College. It was Paul's successor, Herman Ward "Pop" Taylor, however, who saw most of these plans to their fruition. Assuming the secretaryship in 1942, Taylor had organized all of the one hundred counties by 1945. The alumni chapters were encouraged to lobby their legislative representatives for more state support for the college. The alumni's most important contribution during the period, however, was the establishment of several private foundations.[27]

As early as 1934 John W. Harrelson and others discussed the establishment of an alumni foundation to provide financial support that would supplement the appropriations provided by the North Carolina General Assembly. Many friends of State College believed that state funding failed to provide adequate salaries to

attract top-flight professors, or to maintain the buildings and equipment desperately needed by the institution's technical programs. In order to make State College the research and teaching center envisioned by the Graham administration, other financial resources were necessary. Throughout much of the 1930s the creation of an organization to accomplish this purpose remained in the planning stages. Finally, in December 1942, when Harrelson and Taylor realized that they had no legal way to accept gifts offered by the friends of the college, the North Carolina State College Foundation was created. The College Foundation's early activities included the construction of Owen and Tucker Dormitories, and plans for the Alumni Memorial Building. Originally, Harrelson and Taylor intended the College Foundation to be the only organization to administer gifts to the campus, but other State College supporters decided to pursue separate paths in their desire to assist the various schools.[28]

Several such efforts began shortly after the creation of the College Foundation. Earlier plans during the 1920s led to establishment of the Forestry Foundation, but it served mainly as a legal means to hold title to the school's forests. The Textile School had a long history of relying on outside gifts of machinery to update its teaching abilities. During the 1930s, however, a campaign was launched to supplement faculty salaries in order to attract high caliber people. As early as 1936, David Clark raised over $1,000 for this purpose. During the war further efforts by Nick Carter and O. Max Gardner resulted in the establishment in December 1942, of the Textile Foundation. Early efforts by this organization enabled the college to secure Malcolm Campbell as dean, and to upgrade the school's equipment. By May 1945, the Textile Foundation had raised over $700,000.[29]

Despite North Carolinians' preoccupation with the war, in 1944 three more foundations were established. In September the North Carolina Engineering Foundation was created to provide salary supplements and better equipment for research. Under the leadership of Governor J. Melville Broughton, the foundation donated funds to secure John H. Lampe as dean as well as new heads for the departments of electrical and chemical engineering. In December the Agricultural Foundation, inspired by the earlier gifts of the Reynolds family, was organized to perform a similar service for the School of Agriculture and Forestry. Under the leadership of Thomas Pearsall, L. Y. Ballentine, and Clarence Poe, the organization provided salary supplements to allow the school to retain the services of top-flight researchers such as William E. Colwell and

Edward W. Glazener. The Dairy Foundation, also established in December 1944, largely through the efforts of Lexie L. Ray, devised a unique fund-raising method; during June (Dairy Month) money was deducted from each farmer's milk check and matched by a donation from the processors. During these early years of foundation development the college made several attempts to hire a man to direct all of the programs, but none served for any great length of time until Robert D. "Red" Beam became director of foundations in September 1945.[30]

When the war ended in 1945 State College looked back on many achievements. The institution trained a total of 23,628 men and women for the war effort. It also contributed 5,000 alumni to the cause, and 206 of its graduates died in battle. About one-half, or 2,500, served as commissioned officers, including one vice-admiral and six generals. At the same time, the state of North Carolina increased the college's annual appropriation by 92 percent, enabling it to emerge from the conflict in sound financial condition. The same could not be said of the campus' buildings and grounds or laboratory equipment. The landscape resembled one large parade ground; many buildings were gutted when military authorities left, taking the furnishings with them. Laboratory facilities, though never adequate, were worn out, and obsolete. Although proud of the institution's accomplishments, campus leaders wondered where they would find the resources to deal with the influx of veterans who would soon engulf the campus. They also wondered how they could reconstruct a peace time college that would be a leader in technological education and serve the expanded needs of North Carolinians.[31]

Chapter VIII

Confronting the New World, 1945-1953

When World War II ended State College faced many new challenges, along with some of the same problems that it had experienced after World War I. The institution was overrun with returning veterans, this time supported by the G.I. Bill. At the same time, the war years revealed numerous weaknesses in the institution's educational programs, particularly in the areas concerning the basic sciences and research. New faciltities were badly needed at the campus, and many friends of the college doubted that the General Assembly would provide the necessary financial support for them. As the number of students and faculty grew rapidly in the post-war years, the Harrelson administration faced a crisis similar to Wallace Riddick's in the early 1920s; the college simply outgrew its campus and its administration.

Events at State College during the period were part of larger developments in higher education. World War II accelerated many changes in American life that really had begun much earlier. The great demands during the war for military equipment and supplies encouraged the rapid expansion of industry, especially in the South. The new industry also accelerated the growth of urban areas, as rural people flocked to the city for better-paying industrial jobs. Despite the fears of many industrial and political leaders, the prosperity of the war years continued unabated; industry converted successfully to peacetime activities and agricultural prosperity continued. The good times encouraged many individuals to attend college, as did the federally funded G.I. Bill. Campuses throughout the land were engulfed by an

unprecedented wave of students; and they rapidly erected temporary structures to meet thee new demands. Educators also reevaluated their programs in light of the war experience, and they realized that changes were in order, especially in fields related to science and technology. State College, as part of the land-grant system, revised many of its programs in the late 1940s and early 1950s in order to meet this new challenge. At the same time, it dealt with record enrollments in the classrooms. [1]

The influx of veterans began even before the war ended, but it did not become critical until early 1946, when approximately one thousand new students enrolled. The majority of these students received assistance from Title II of the Service Man's Readjustment Act of 1944, otherwise known as the G.I. Bill of Rights. Although passed primarily to prevent unemployment problems similar to those experienced after World War I, the act enabled qualified student-veterans to pursue an education. The law provided $500 toward tuition and supplies per year for each recipient, with $50 a month for single veterans and $75 a month to married veterans for living expenses. Between 1946 and the early 1960s the student body averaged approximately 2,000 veterans per year, and the highest number—4,030 — enrolled in the fall of 1947. This high percentage of student-veterans continued throughout the 1950s because Public Law 550 (1952) extended educational benefits to Korean War veterans. This tremendous influx of students placed a heavy burden on facilities that were already badly outdated.[2]

The State College administration took several steps to meet the enrollment crisis. As a land-grant institution and a part of the state university, officials and faculty agreed that State College had a duty to educate as many veterans as possible, even if it meant using temporary structures and conducting classes on Saturdays. At the same time, however, many state leaders demanded that the college serve North Carolina's veterans first. The trustees responded by limiting out-of-state enrollment to 10 percent beginning in September 1947, but they raised the quota to 15 percent the following year. Meanwhile, campus officials struggled to find adequate classroom, laboratory, and housing facilities for veterans, since the 1945 North Carolina General Assembly made no provisions for new buildings.[3]

The classroom shortage was especially crucial during the immediate postwar period. Engineering, the most popular major, saw enrollments jump from 1,600 in 1941 to 3,100 by late 1946. The faculty worried about laboratory facilities for these men in their junior and senior years. An Engineering-General curriculum instituted in 1947, featured less lab work and eased some of this burden,

but the situation was still critical as overall enrollment reached a peak of 5,328 in the fall of 1947, almost double the highest prewar totals. In order to provide more classroom space, the administration obtained surplus barracks and quonset huts from federal agencies, erecting them in the Court of North Carolina and several other open areas. These facilities were used by the Basic Division, ROTC, and, ironically, the architecture faculty. The temporary buildings remained in place well into the 1950s.[4]

The Harrelson administration also endeavored to locate housing for the enlarged student body. Part of the burden was relieved when the North Carolina State College Foundation borrowed funds from the Wachovia Bank to erect Owen and Tucker Dormitories; the loan was repaid by the 1947 General Assembly. This action provided housing for single students, but many of the veterans were married and they required different living arrangements. The administration obtained pre-fabricated housing from the federal government, and it also established several trailer parks on campus. Trailwood, the first of these married students' communities, with space for 115 trailers, opened in May 1946, and was located on the west side of campus. In the fall, Vetville, containing pre-fab housing and a few barracks, was also opened for married students. By September 1947, 250 trailers and 360 pre-fab units dotted the west campus, including a number of units for faculty and graduate students, and twenty trailers for single veterans known as "Bachelors' Corner." In April 1948, a second trailer park called Westhaven, was opened near Western Boulevard. Trailwood closed in 1949, but Westhaven remained until August 1953. These areas operated as separate communities, electing their own mayors, sponsoring many community activities, operating a grocery store, and erecting the West Campus YMCA in 1948. The new make-shift communities made numerous demands on the college administration for better services; they also maintained a great deal of autonomy in their community affairs.[5]

The demands of the married veterans were part of a larger change in the outlook and attitudes of the student body. Veterans were usually older and more worldly because of their war experiences, and they had little use for many of State College's regulations. They especially abhorred the college's attendence policy. They also refused to endure the hazing activities usually associated with the freshman year, and indeed, their opposition contributed to the final disappearence of hazing from the campus during the postwar era. Many veterans also complained in the *Technician* and elsewhere about prices in the bookstore (labeled the "mop-up,") and the quality of

food in the cafeteria. In addition, they disliked the system of Campus Government that replaced the student government in 1945 because it allowed increased numbers of the faculty on student honor committees. Although it was established ostensibly to encourage students and faculty to cooperate, many students believed that it was ineffective and permitted too much faculty interference in student affairs. By the early 1950s many college officials found student morale dangerously low, and they believed that changes in both student activities and student government were in order.[6]

One way the college sought to upgrade student life in this period was through improvement in dormitory life. Campus officials encouraged students to view their dorms as a home away from home, and they furnished social rooms and lounges for each dormitory. Dormitory councils, which had existed sporadically since the 1920s, grew in popularity during this period. They increased their social programs and became the basis for intramural sports. The freshman quadrangle was discontinued in 1951, although freshmen were still required to live on campus. Many other aspects of student life remained less satisfactory during the postwar period because various elements were scattered among several administrative units on campus. Furthermore, the YMCA recreational facilties were badly outmoded by the late 1940s. Not until the completion of the College Union building in 1954 and the creation of the office of Dean of Student Affairs during the same period, were student activities uniformly planned and coordinated.[7]

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The period immediately after the war also saw many academic changes; new programs were added and several new schools created. Inspired by technological developments during the war, all schools placed a greater emphasis on fundamental science and research, and they revised their curricula to reflect this trend. At the same time, college officials sought closer ties to North Carolina industry by devoting more attention to extension and research. Despite the large number of students, the campus faculty built on many of their prewar gains to improve State College's reputation as a teaching and research institution.

In the School of Agriculture and Forestry many prewar trends were continued and reemphasized. Leonard Baver, who succeeded Ira O. Schaub as dean in 1945, struggled to attract leading agricultural educators and researchers. Under the leadership of Baver and his successor after 1948, James Harold Hilton, State College's

agricultural program adapted itself to the great changes in North Carolina agriculture caused by World War II. The war hastened the mechanization of southern agriculture, and siphoned away much of the surplus labor to industrial jobs. Subsistence farms with inadequate land and capital largely disappeared, replaced by larger, more commercial units. The war also encouraged a marked increase in farm production while it promoted more concern for genetics, pest control, and plant disease. During the war, however, American agricultural scientists discovered that they lacked much of the fundamental biological research needed as a foundation for these advanced studies. After the war, therefore, more emphasis was placed on basic biological sciences. At State College this effort resulted, in 1950, in the establishment of the Division of Biological Sciences. Under the direction of botanist Donald Benton Anderson, the division included the faculties in botany, zoology, entomology, and plant pathology. In addition, an increased interest in genetics occurred, and the college obtained $50,000 from the General Education Board to strengthen this area. In 1951 the genetics faculty was formed, joining the Division of Biological Sciences. Recognizing the need for stronger support in chemistry, the administration undertook steps to upgrade the Chemistry Department, placing Walter Peterson at its head. All of these efforts reflected the growing importance of basic science to the study of agriculture.[8]

As part of these changes, Baver directed in 1945 and 1946 a major curriculum revision. The number of specialized courses required for a major was reduced, while the number of courses in the humanities and social sciences increased. This change reflected another upsurge in the general college idea that lasted until the mid-1950s. Students who planned to pursue graduate study enrolled in a special curriculum that included more science, but most other students, except those in forestry, statistics, and agricultural engineering, took a general agricultural course. In addition, a survey course entitled "Introduction to Agriculture" and taught by the dean was introduced to familiarize freshmen with the school. These changes reflected general trends in agricultural education.[9]

Many of the postwar improvements in agriculture were made despite major difficulties. Salaries were pitifully low at State in comparison to other colleges and industry. Dean Baver left in 1948 after accepting a job with the Hawaiian Sugar Producers that paid more than twice what he received as dean. In an effort to reduce this brain drain, the college, with the support of the North Carolina Agricultural Foundation, offered salary supplements designed to

attract leading researchers whose efforts would pay handsome dividends in the future. With the financial assistance of William Neal Reynolds in 1950 the college established the William Neal Reynolds Distinguished Professorships in agriculture. The salary supplements and the distinguished professorships ultimately enabled the college to retain many important researchers and teachers.[10]

The agricultural program was also hampered in its efforts to develop its graduate programs due to road blocks created by the Consolidated University and ineffective organization in Raleigh. In 1941 the school became the first faculty in the South to offer work leading to the doctorate in agronomy, but this program was interrupted by the war. After 1945 Baver and his colleagues were optimistic about the future prospects for graduate study at N.C. State. They soon experienced frustration, however, because graduate school officials at the Consolidated University—most of them trained in more traditional fields of graduate study—had little faith in State College's ability to offer advanced degrees. To the dismay of many professors and State College supporters, Consolidated University officials decreed that all doctoral degrees, regardless of where they were earned, must be awarded at Chapel Hill's commencement. Furthermore, Zeno P. Metcalf, State College's Associate Dean of the Consolidated University Graduate School, developed few guidelines for graduate programs, and he continued to express serious doubts about his colleagues' ability to conduct graduate work. Baver, Fulton Lutz, and Ralph Cummings led a revolt against Metcalf's pessimism; they appealed to President Graham for redress. With Graham's assistance, Metcalf was replaced in 1950 by Donald B. Anderson. The Consolidated University graduate program was reorganized, giving more autonomy to the constituent campuses. Beginning in 1948, State College awarded doctoral degrees at its own commencement. In addition to agronomy, State soon developed doctoral programs in statistics, animal husbandry, and rural sociology-pioneering efforts in the South.[11]

Baver and Hilton directed other changes in State College's agricultural program. They specifically continued the long-standing effort to coordinate teaching, research, and extension. After his arrival in 1940, Baver made a vigorous effort to resolve the historic problems between the school and the experiment station. Under his direction, tensions eased as more long-range, cooperative, fundamental research began. This was very important because a strong, well-coordinated research program was a prerequisite in the establishment of any doctoral program. In order to emphasize the importance of

these research efforts to resident teaching, Baver and Hilton served as station directors during their tenures as dean. With the help of increased state support, and the salary supplements provided by the Agricultural Foundation, many excellent research scientists launched long-range projects that would have important consequences for North Carolina agriculture in the decades that followed. In another effort to increase the prestige of research, station employees were granted professional status for the first time in 1945. Further support for agricultural research was obtained in 1951, when the Agricultural Foundation created its Nickel-For-Know-How referendum program; approved by the voters, it gave the foundation five cents a ton on each purchase of feed and fertilizer. Although opposed by several manufacturers, this referendum is still in operation today. By the early 1950s the experiment station was no longer the political showcase that many farm leaders had called it in the 1920s and 1930s; instead it was a vital part of the School of Agriculture's total program.[12]

Agricultural Extension was less easily coordinated with the rest of the School of Agriculture's program. Although extension received increased funding during the war years, and emerged from the period with an excellent record, many believed that the program needed reorganization. Not until David S. Weaver replaced Ira Schaub as director in 1950 were School of Agriculture officials able to draw extension closer to the rest of the school's activities. After the war, extension personnel (like their counterparts at the experiment station, received professional status in 1945) continued their prewar emphasis on planning and cooperation with the rural people who they served. No longer a one-man or one-woman demonstration, extension now emphasized coordination between its departments, and with community activities. Although much of the old emphasis on production continued, farm and home management received much greater attention. As with other aspects of State College's agricultural program, extension adapted itself to postwar realities.[13]

Programs in the School of Engineering also underwent many changes in the years immediately after the war. World War II's technological advances shocked engineering educators, and revealed the inadequacy of their previous efforts. As early as 1940 William E. Wickenden of the Case School of Applied Science, in a report entitled "Aims and Scope of Engineering Education," (also known as the Wickenden Report) called for fundamental changes in American college engineering programs. He expressed the need for more basic science, more humanities, and less shop work in the curriculum. His

ideas were reiterated in Society for the Promotion of Engineering Education's "Report of the Committee on Engineering Education after the War" (1944), which emphasized the need for fundamental education at the undergraduate level. Most engineering educators also agreed that research and extension programs, connected with industrial needs, must be developed more fully. This new emphasis reflected a recognition of the continued growth of American industry, and it signaled the desire of engineering educators to be a part of the process. John Harold Lampe, the man selected in 1944 as State College's Dean of Engineering, was fully committed to all of these trends in engineering education. During the immediate postwar period he struggled, at times overwhelmed by the sheer numbers, to implement the new ideas at State College.[14]

Even before the war ended, Lampe and other supporters of engineering at State College began efforts to improve the program. They were aided in their task by Governor J. Melville Broughton, who was determined to encourage industrial development in North Carolina. He believed that State's engineering program had a vital role to play in the process. The governor and other supporters found the school's facilities totally inadequate for research and teaching, and they urged the state legislature to provide funds for the needed improvements. When the legislature failed to act in 1945, Broughton urged interested individuals to support the Engineering Foundation, which supplied badly needed funds for equipment.[15]

Lampe, with the assistance of the faculty, took decisive steps over the next two years to revise the engineering curriculum. After an extensive faculty study, all involved agreed that there was too much specialization and too much shop work in the various engineering majors. In September 1947, a new undergraduate curriculum for all engineering departments was implemented. This course stressed basic science and engineering fundamentals, and included a specially developed humanities-social science stem as recommended by the Wickenden Report. In order to teach this stem a special Department of Social Studies under the direction of George Gullette was established in the Basic Division. The Engineering School's new committment to the humanities reflected another surge in the general education idea that lasted until the mid-1950s. In this new curriculum most specialization was delayed until the fifth, or professional year, which Lampe encouraged engineering students to take. Because of industrial demands in 1949 the school added specialized curricula in construction, furniture manufacture, and heating and air conditioning.

Lampe and his faculty believed that their new curriculum, based as it was on the most recent trends in engineering education, would produce better engineers.[16]

Lampe was not content to revise the undergraduate curriculum, he also encouraged the establishment of doctoral programs in engineering at State College. In order to make the school one of the leaders in its field, especially in the South, he appointed a committee in 1948 to study the question of advanced degrees. Reporting in early 1949, the committee cited the need for Ph.D. training in the South in order to provide researchers for industry as well as engineering educators. The committee recommended the establishment of doctoral programs in ceramic, electrical, and chemical engineering. These programs were approved and implemented the same year. The first engineering doctoral degree at State College was awarded in 1953 in electrical engineering. In 1951, additional programs leading to doctoral degrees in nuclear engineering and engineering physics were established. These programs, like the new doctoral programs in agriculture, were pioneering efforts in southern education in their respective fields.[17]

In order to develop the doctoral programs, Lampe also increased the school's emphasis on research. During the postwar period he worked assiduously with leading North Carolina industrial interests to achieve this objective. His activities reflected larger efforts to increase research in engineering throughout the United States after World War II. Supported by many leading North Carolina political leaders and industrial figures, Lampe obtained funds for buildings, equipment, and faculty for an expanded research program. In early 1946 two new laboratories were established, one for metallurgy in Raleigh and the other for mineral research in Asheville. Several months later, the Engineering Experiment Station was renamed the Engineering Research Department and placed under the direction of William G. Van Note. This department included faculty members who devoted full time to research oriented to serve the state's industrial needs. After January 1948, the department published *Engineering Research*, a journal that disseminated the work of the faculty to the public. The research department was greatly assisted by private support in addition to significant increases in state funding.[18]

During the postwar period State College's engineering program assumed leadership in one important area of research—nuclear engineering and physics. In February 1948, Lampe appointed a faculty committee to recommend improvements in the school's physics department. This committee requested revision in the department's graduate courses, and a redirection towards nuclear studies. In

order to implement these new plans, Clifford K. Beck, a member of the Manhattan Atomic Bomb Project, came from Oak Ridge to head the physics department. Beck worked rapidly to upgrade his department; specifically, he developed a program in nuclear physics. Soon after his arrival, State College became a member of the prestigious Oak Ridge Institute of Nuclear Studies (ORINS). With Beck's presence, Lampe endeavored to obtain permission from the Atomic Energy Commission to construct a nuclear reactor at State College, the first one outside AEC operations. A curriculum in nuclear engineering began in September 1950, and Beck and Lampe immediately developed plans to build the reactor. The building for the facility was completed with financial help from Burlington Industries in 1953, and the AEC furnished the uranium-235 isotope necessary to fuel the reactor. In September 1953, the reactor was activated. It was a low-powered five kilowatt facility that violated no federal security regulations. It insured State College's leadership in the field of nuclear engineering for many years.[19]

Lampe's efforts to improve the engineering school paid early dividends. With the help of salary supplements, he obtained many promising new faculty members. Even before the Riddick Engineering Laboratories were completed in 1949, the engineering program received a great boost in morale when the ECPD renewed the accreditation of electrical, civil, mechanical, and ceramic engineering, and also accredited industrial and aeronautical engineering for the first time. Chemical engineering received a two-year provisional accreditation, which was changed to full status in 1950 after the Chemistry Department received accreditation for the first time. After this success, only Harvard and Massachusetts Institute of Technology had more accredited engineering programs.[20]

Lampe encouraged another important program during the early post-war years—engineering extension. Although extension coursework in engineering had been offered by State College as early as the 1920s, Lampe expanded these offerings as part of the school's efforts to serve North Carolina industry. Under his direction, and with the assistance of College Extension Director Edward W. Ruggles, the engineering extension program took two directions, one leading to the establishment of a pioneer technical institute and the other offering extension course work at several North Carolina industrial centers.[21]

Officials at State College became interested in the development of an off-campus technical institute when they faced the overcrowding of the late 1940s. Lampe, Ruggles, and Harrelson studied several locales before they decided on the location of the institute: the

former site of Camp Glenn at Morehead City. Morehead City Technical Institute opened in the fall of 1947, and it provided a one-year certificate program for men who were not interested in pursuing a four-year degree. Much of the course work was shop-oriented and vocational, something that State College's School of Engineering had abandoned. The first institute of its kind in the Southeast, the Morehead faciltiy was housed in a building donated by the state Department of Conservation and Development, and much of the laboratory equipment was army and navy surplus. Students, often as many as one hundred, lived in barracks and established a student council and basketball team. When the program in Morehead City failed to attract as many students as State College officials hoped, the institute was relocated in 1951 at Gastonia, where it became Gaston Technical Institute. The Gastonia location was closer to many North Carolina industries that had supported the program. This institution served as a forerunner to other North Carolina technical institutes.[22]

At the same time, Lampe expanded other aspects of the engineering extension program. Working closely with companies such as R.J. Reynolds, Western Electric, and Randolph Mills, members of the Industrial Engineering Department developed between 1948 and 1949 a program of extension classes for Raleigh, Winston-Salem, Greensboro, Charlotte, Cherry Point, Asheboro, Franklinton, and Beulaville. By 1952 the programs established at High Point and Greensboro awarded certificates in industrial engineering to students who completed the course. Although much of the program was in its infancy during this period, Lampe and his faculty laid the groundwork for significant future achievements.[23]

In State College's remaining older school, Textiles, efforts began during the latter part of the war to improve the program. Instrumental in these efforts were the activities of Malcolm Campbell, who became dean in 1943, with a mandate to improve the curriculum, increase research, and expand the school's ties to industry. During the next few years that followed, Campbell worked to implement these changes.

The new dean turned his attention first to curriculur reform. Industrial leaders demanded that students spend less time on manual skills and concentrate instead on managerial aspects of the textile industry. In the new curriculum labor relations, personnel problems, and merchandising and marketing received more attention. Campbell also insisted that more time be devoted to general education. In order to meet new industrial needs, a Knitting Department was established in 1945, which implemented a four-year program in knitting the

following year. Aided by the Textile Foundation, Campbell obtained new machinery and faculty to improve instruction, but was still not satisfied with the textile program. In 1947 the school conducted another curriculum revision, this time reducing the number of majors from seven to two. All students enrolled either in Textile Chemistry and Dyeing or in Textile Manufacturing. The latter course included six options to be elected in the senior year—management, yarn manufacturing, weaving and design, knitting, synthetics, and wool manufacture. The new curriculum, which abandoned even more of the shop work, went into operation in the fall of 1948. The program enabled the School of Textiles to maintain its position as the largest school of its kind in the United States.[24]

Campbell expanded the school's research efforts with the aid of the Textile Foundation. Between 1947 and 1949, $250,000 worth of equipment was installed in Nelson Hall, much of it related to new programs in synthetics and knitting. Although a director of research—Frederick T. Pierce—was appointed as early as 1945, a formal department for research was not established until 1948. Faculty began long-range projects related to machine design, knitting, fabric development, and synthetics. At the same time, George H. Dunlop was hired to serve as a consultant with the mill owners. In addition to improving public relations, Dunlop discussed technical problems with the textile people and, in turn, relayed their concerns to the faculty. By 1953, the School of Textiles had achieved considerable academic success, and its relations with industry had significantly improved.[25]

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The postwar period also marked the establishment of several new schools. As with the changes in the older schools, the creation of the new schools represented the institution's attempt to meet the new educational demands of North Carolina.

Education, the first new school, was an expansion of the Division of Education, which replaced the Department of Education in 1939. Until the postwar period, the division was limited to degree programs in agricultural education, industrial arts education, and industrial education. After the war, as more and more children—the product of the postwar baby boom—remained in school for longer periods of time and the state expanded its public schools, there was a greater demand for teachers in all fields. This permitted State College to expand its program beyond the limits placed on it at the time of the establishment of the Consolidated University. In the fall of 1947, a

new curriculum in industrial and rural recreation was added, for the purpose of training supervisors for the growing recreation field. At the same time, the Department of Occupational Information and Guidance was reactivated, and the Psychology Department created a Veteran's Guidance clinic. In addition, Thomas E. Browne, director since the 1920s, retired, and was replaced by J. Bryant Kirkland, who had a strong background in agricultural education. Shortly after Kirkland arrived in May 1948, the Division of Education was granted school status. The following year the trustees authorized the reestablishment of a curriculum for mathematics and science teachers that had been abolished at consolidation. The psychology department rapidly developed a new program for a masters in industrial psychology, and it received several grants for research. As the number of students grew, reflecting the increasing demand for teachers in North Carolina, Kirkland unsuccessfully requested more staff, a new building, and better equipment for his fledgling school.[26]

Planning for State's second new school—Design—began soon after the war ended. The National Architectural Accrediting Board informed Architectural Engineering Department Head Ross Shumaker that the program would be accredited only after the addition of more faculty, students, money, and the revision of the curriculum. The board also recommended an independent school status for the unit. Dean Lampe of Engineering supported many of these recommendations. Meanwhile, Dean Baver of Agriculture and Forestry expressed interest in an independent status for his school's program in landscape architecture. Although the trustees approved the creation of the School of Architecture and Landscape Design containing the two departments on July 4, 1946, the Graham administration was determined to appoint the best man for dean, and moved slowly to establish the new unit. Upset with Graham's delay, the North Carolina Chapter of the American Institute of Architects demanded that the program be transferred to Chapel Hill; they complained that State College's program contained too much engineering content. President Graham reminded the AIA leaders that, under the consolidation plan, architecture was allocated to State College, and he refused to move it to Chapel Hill. While Graham allayed the architects' concerns by promising the creation of a first-rate school at Raleigh, a committee of deans chaired by Malcolm Campbell of Textiles, interviewed prospective candidates for the deanship of the school. This panel recommended the appointment of Professor Henry L. Kamphoefner, of the Department of Architecture at Oklahoma. Kamphoefner accepted the position with the under-

standing that he could remove eleven of the fifteen faculty members and replace them with men of his own choosing. In addition, he was allowed to bring several excellent students with him from Oklahoma. Although some of the architecture faculty, led by Jehu Paulson, resisted reforms, Kamphoefner received the support of Graham and Harrelson. Upon his arrival, he hired several outstanding architects, including George Matsumoto, James Fitzgibbons, Matthew Nowicki, and Edward Waugh. At the same time he instituted the guest lecture program that brought many outstanding men in the field to campus as visiting professors. Early guest professors included Lewis Mumford, Frank Lloyd Wright, and Buckminster Fuller. In September 1948, the school was renamed the School of Design because many found the original name unwieldly.[27]

The new School of Design made a rapid impression on architecture in North Carolina. Eschewing traditional styles, including the popular southern colonial, the school endeavored to create a new, modern style for North Carolina and the South. Many North Carolinians expressed shock at the results, typified by Matthew Nowicki's Dorton Arena and the Erdahl-Cloyd College Union on the campus. In 1950 the Department of Architecture received accreditation. The following year Landscape Architecture was accredited. Ironically, much of the program was housed in surplus army barracks. At the same time many students began to win national design competitions, including the prestigious Paris Prize—the highest student honor in academic architecture. In addition, student work was included in exhibitions sponsored by the Museum of Modern Art and the AIA, and was recognized as one of the top six or seven schools in the country. By 1952 leaders in the field considered the School of Design "the most progressive southern school of architecture and allied arts."[28]

The third new school — Forestry — existed as a division in the School of Agriculture and Forestry before the war, but the forestry faculty wanted a separate status. Although the program received accreditation in 1938 from the American Society of Foresters, the curriculum focused primarily on forest management and was limited to undergraduate education. After World War II, American forestry educators urged the establishment of more graduate work; they also proposed new programs in wood science and technology. In addition, pulp and paper industry officials, interested in reforestation and research in wood science and technology, also encouraged the expansion of forestry education. The forestry program at State College was suspended during the war, but when it was

revived in the fall of 1945, it was quickly inundated with veterans. For a few years to overcome crowding, Director Hofmann and his staff sent the juniors to the Hofmann Forest for the spring quarter. Hofmann, however, was near retirement and State College officials realized they needed new leadership in their campaign to expand the program.[29]

After a careful search college officials replaced Hofmann in July 1948 with Dr. Richard Preston of Colorado State. Preston came with the understanding that the forestry division would soon become a separate school. He was also firmly committed to the establishment of a program in wood products and the expansion of forestry research. In addition, he promised to strengthen the existing curriculum in forest management.[30]

Preston's first activities as director dramatically expanded the division's program. Two new curricula were established, one in wood technology and the other in lumber products merchandising. The wood technology course was a highly technical forestry course while the lumber products major was essentially a business degree. The head of both new curricula, Professor R.M. Carter, also began the research program in wood products. With the help of manufacturers who donated needed equipment, a wood products laboratory was established in one of the old NYA buildings on Western Boulevard. At the same time, Preston and the faculty began discussions with the recently established Southern Regional Education Board; the result was a regional designation for the wood technology program. This permitted students from other southern states to escape the expense of out-of-state tuition when they enrolled in the wood technology curriculum at State College. The SREB, whose aim was to make the best use of the South's limited educational resources by encouraging the development of selective programs, achieved one of its early successes in its support of State College's wood technology program. In 1950, a pulp technology option was added to the wood technology major. In July of the same year, Preston's efforts were rewarded then the division became a school and received full accreditation for all of its programs. During the prosperous 1950s the school grew rapidly as the demand for foresters in North Carolina continued unabated.[31]

The final school to emerge during the postwar era was the Graduate School. It owed its rise to several forces. After consolidation an all-university graduate school was established, with the dean headquartered at Chapel Hill. All doctoral degrees were awarded at the University of North Carolina campus, regardless of where they

were earned, although State College was permitted to develop graduate work in the fields allocated to it by the trustees. Before the war President Graham took steps toward the creation of doctoral programs at State College. His plans, however, were interrupted by the war. In the meantime, long-time faculty member Zeno P. Metcalf became Director of Graduate Studies at State College in 1940 when Frank Poole left to become president of Clemson. When the university began to prepare for postwar expansion in 1944, Metcalf became associate dean of the Consolidated University's Graduate School. The war years revealed the need for graduate work and research in all academic fields.[32]

As State College revived and began to expand its graduate program after the war, several problems developed because the control of the Graduate School remained at Chapel Hill and Metcalf failed to formalize graduate policies for the State College program. All of the degree-granting schools conducted graduate studies by this period. These included an expanded masters program in education and a new masters program in forestry, as well as doctoral programs in agriculture and engineering. Many faculty members who conducted graduate work found it frustrating to work with Metcalf; he refused to formalize regulations, rarely called meetings of the graduate faculty, and expressed serious doubts about the viability of a graduate program at State College. They were distressed also by the attitude of Consolidated University officials who caused frequent delays in the development of State College graduate programs, and insisted that all degrees be awarded at Chapel Hill.[33]

Led by the agricultural faculty the State College faculty protested to President Graham. With the support of trustee Clarence Poe, the president agreed that the State College graduate program was now important enough to merit more autonomy. After meeting with the disgruntled graduate faculty at Raleigh, a policy committee of faculty from each of the degree-granting schools was appointed; Metcalf was gradually phased out as dean. This development did not solve all of the problems, however, because the faculty was still distressed by the attitude of the Consolidated University officials. They continued to quarrel with University of North Carolina Graduate Dean W. W. Pierson, and insisted that Chapel Hill controlled the all-university graduate school to the detriment of State College. After continued pressure from Raleigh, Pierson agreed to reorganize the system, allowing more State College faculty on the Consolidated University of North Carolina's Graduate School's executive committee. This eased tensions, but some faculty members still insisted that

State's program merited its own dean; action on the issue was delayed until the mid-1950s.[34]

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State College accomplished much of its expansion of the late 1940s with almost no additional permanent improvements. Construction of new buildings for engineering, desperately needed for further accreditation, were in the planning stages when World War II began. In addition, several new buildings for the agricultural program were projected. College officials also recognized the need for new dormitories, and additional facilities for student activities. Wartime activities further accelerated the deterioration of campus facilities. In 1945, alumni and friends of the college were dismayed when the North Carolina General Assembly failed to provide the funds for these improvements. Led by alumnus John W. Clark, a crusade began to obtain money from the next legislature. Although the 1947 General Assembly provided the funds for several desperately needed structures, construction was delayed until the end of the decade because of rising costs. The 1949 General Assembly, after pressure from Governor W. Kerr Scott, class of 1917, provided additional support for these buildings, thus bringing the total appropriation for capital improvements at State College to $15.3 million.[35]

Several schools benefitted from the liberal building program launched at the end of the 1940s. The Riddick Laboratory, named for Wallace Riddick, and Broughton Hall, named for J. Melville Broughton, were completed for the School of Engineering. With financial assistance from Burlington Industries, the Burlington Nuclear Laboratory was erected, housing the first non-AEC reactor. Poultry Science, housed along with its chickens in Ricks Hall, received Scott Hall, named for Robert W. Scott. Kilgore Hall, named for Benjamin Wesley Kilgore, was completed for horticulture and forestry. Money was also provided for the completion of a building for agronomy; this building was named Williams Hall, for Charles B. Williams. Gardner Hall, named for O. Max Gardner, was built for biological sciences. Two wings were added to Nelson Hall for Textiles, while several older structures were also renovated. A new building was completed for the D.H. Hill Library in an effort to improve a facility that had been long ranked among the worst in the entire country for a college as large as State. In addition, after much planning by Dean of Students Edward L. Cloyd and Gerald Erdahl, the Erdahl-Cloyd College Union was completed. This building replaced the YMCA as the home of student activities. Finally, after

materials shortages delayed construction during the war, the William Neal Reynolds Coliseum was completed in 1949 for ROTC and intercollegiate athletics. Despite all of this construction, campus authorities still longed to replace many depleted facilities, but money was not available.[36]

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State College's Alumni Association continued its many booster activities during the early postwar period. In 1947 college officials gave the association the old Carroll Infirmary when the Bureau of Mines moved to its new building on central campus. Alumni officials began long range plans to remodel the structure as a memorial to the World War II dead. Little actual work was done on the project until the mid-1950s. In 1949, the association finally dedicated the Memorial Tower after several fund-raising campaigns provided the money for purchase of the clock, numerals, carillon, and shire room. Throughout this period, alumni representatives led by Secretary Taylor, lobbied the state legislature for increased support for State College. In 1952, the association inaugurated an annual giving program; to do this legally, it became a non-profit corporation.[37]

One of the Alumni Association's more significant campaigns during this period contributed to a change in the title of State College's administrative head. Many individuals believed that the monicker Dean of Administration possessed little prestige, and Harrelson complained that he found it difficult to explain its meaning to his colleagues from other institutions. During the war, several trustees and alumni, including the influential Clarence Poe of the *Progressive Farmer*, discussed the idea of changing the title to president or chancellor. After some study of the question, in January 1945, the executive committee of the North Carolina State College Alumni Association requested the General Assembly to examine the problem. Some Consolidated University officials, including President Graham, viewed this as an effort by David Clark and other long-standing opponents of consolidation to destroy the university system. Graham rallied former Governor O. Max Gardner and several others to his support, and they prepared their own strategy to deal with the situation. After Clark and his supporters threatened to make the question a political issue by introducing a bill into the General Assembly that called for the creation of three presidents and one chancellor, Graham and Gardner appealed to the trustees. They insisted that the head of the Consolidated University should retain the title of president. At

Graham and Gardner's urging in February 1945, the trustees created three chancellors and one president. John W. Harrelson received the more dignified title as chancellor, Clark and the diehard deconsolidationists suffered another defeat, and the "Three Presidents Battle" was over. Although Clark and his fellows were dissatisfied, many alumni viewed this as a victory.[38]

Alumni and other friends of State College during the postwar period also increased their efforts to develop private foundations to support the institution. State College was recognized by Consolidated University officials as a leader in the area of private foundation development, and they urged alumni of the Chapel Hill and Greensboro campuses to follow State's example. Under the direction of Robert D. Beam, the existing foundations continued to provide valuable private funding for laboratory equipment and salary supplements in a period when legislative appropriations failed to meet the campus's needs. A number of named professorships in textiles, engineering, forestry, and agriculture were created during this period, and the chairs were filled by promising individuals. In the Textile School, foundation assistance enabled Dean Campbell and his staff to obtain valuable equipment for their new program in synthetics and knitting. In 1946 the Forestry Foundation enlarged its activities by accepting donations for salary supplements and equipment. Then, in 1949, the North Carolina Architectural Foundation was established by the North Carolina Chapter of the American Institute of Architects. The foundation soon provided money for salary supplements and the visiting lecturer program. Beam was succeeded in 1950 by Lexie L. Ray, one of the founders of the Dairy Foundation, as foundation support continued to grow. In 1951 State College's foundation officials resisted efforts by Consolidated University officials to administer all private endowments at the consolidated office in Chapel Hill. Instead, upon the recommendation of outside consultants Curtis Field and Paul Davis, a Development Council was established in 1952, consisting of the deans, several influential alumni, and foundation representatives. This council's purpose was to coordinate fund raising activities for the entire college. By 1952, the foundations had received contributions totaling more than $2,600,000.[39]

Despite the progress of the postwar era, serious problems existed at State College by the early 1950s. Overcrowding had been relieved somewhat as the number of veterans decreased, but college officials still believed that the institution needed more facilities, especially for research. Student activities were scattered among several different administrative units, which caused much confusion. At the

same time, the Consolidated University outgrew the personalized administrative style of President Graham; all three campuses expanded greatly during this period. Some State College supporters believed that the institution needed more autonomy, but others stated that the problem lay with the fact that the schools' deans possessed too much power and frequently bypassed Chancellor Harrelson and went directly to the Consolidated University offices. Once again, as after World War I, State College needed reorganization; this time it needed it internally and in its relationship to the Consolidated University.

Chapter IX

N.C. State Reorganizes Itself, 1953-1959

Much of the 1950s was a time of quiet change at N.C. State, as many of the academic programs begun shortly before or after World War II came to fruition. During this period the institution achieved a national reputation in disciplines such as agriculture, engineering, and design, while several schools began long-range programs that reached beyond the borders of the United States. Long term research efforts in all fields continued, some yielding significant results for the first time. On campus, students and the administration cooperated to improve the quality of student life, and to solve several long-term problems related to student activities. At the same time the faculty gained a much greater voice in college affairs. Before much of this occurred, however, the college underwent a major reorganization as Consolidated University authorities recognized that the 1930s structure created by consolidation was no longer adequate to meet the demands of the 1950s.

Much of the impetus for reorganization came from the new Consolidated University president, Gordon Gray. Selected by the trustees in early 1950 to succeed Graham who was appointed in March 1949, to fill an unexpired United States Senate term, Gray quickly realized that the three-campus institution had outgrown the structure established in the mid-1930s by Graham and the trustees. A native of North Carolina and graduate of the University of North Carolina and Yale Law School, as well as an heir to the Reynolds fortune, Gray had served as Secretary of the Army and as a special assistant to President Harry S. Truman before becoming the second

president of the Consolidated University. When he assumed office, Gray was appalled by the administrative jumble left by his predecessor who was an innovator rather than an administrator. Lines of authority were confused, offices of similar function were badly scattered and often duplicated each other, financial responsibilities were unclear, and State College and Women's College possessed little autonomy in matters such as graduate education. At the same time the search committee that Gray appointed to find a successor to the aging Chancellor Harrelson experienced difficulties in locating a suitable person because many believed that the position lacked any real authority or prestige. In addition, Gray soon discovered that the State College deans expected to report directly to him, not Harrelson, continuing the practice begun under Frank Graham. A strong believer in effective management and administration after his experiences in Washington, Gray faced two major problems at this time: to find a successor to Harrelson, and to determine a way to make the chancellorship more attractive to a first rate administrator.[1]

First, Gray and the trustees intensified their efforts to locate a replacement for Harrelson, who announced in spring, 1952, that he would retire in June 1953, after he reached the age of sixty-eight. In their search they also received assistance from faculty and alumni committees. Several possible candidates refused the job because of the low salary and limited authority, and others were not acceptable to all parties. Finally, after a search of more than a year, Gray and the groups involved agreed to ask long-time agriculture faculty member Carey Hoyt Bostian, then the school's Director of Instruction, to take the job. Bostian, a native of China Grove, Rowan County and a graduate of Catawba College and the University of Pittsburgh, was surprised by his selection. Aware of the many problems that would face him as chancellor, he was reluctant to continue in administration, and longed to return to teaching. After consulting with Gray, who promised him that a major administrative reorganization was contemplated, Bostian agreed to become chancellor, with the understanding that he could step down in a few years if he wished. On September 1, 1953, he assumed the chancellor's duties, and began his efforts to cope with several long-term problems.[2]

At the same time, Gray took steps to reorganize the Consolidated University. To assist him he secured the services of the management firm of Cresap, McCormick, and Paget, which had a great deal of experience in educational administration. In order to fund their study Gray obtained in late 1952 a grant from the Ford Foundation, and a few months later Cresap, McCormick, and Paget representatives began their work. In June 1954, the firm presented its final

recommendations to the trustees, who in principle accepted the findings of the study, but left the actual implementation to university officials. Over the next several years most of the major recommendations were implemented. [3]

One of the first problems that Cresap, McCormick, and Paget addressed was the chancellor's lack of authority. Gray believed that the deans and other administrative officials on each campus should be responsible to the chancellor, and his consultants agreed with him. In addition to the deans, after 1954 the business manager reported to the chancellor and not to University of North Carolina officials. In the past, business manager John Graves Vann of State College reported directly to UNC Controller William D. Carmichael, a situation that caused Chancellor Harrelson frequent embarrassment on financial matters. Vann was required to give Bostian monthly reports and keep him informed on business matters. In addition, the business office was reorganized gradually, bringing several previously quasi-independent parts of the college, such as the student supply store, cafeteria, coliseum, and laundry, under better coordination and management.[4]

The Student Supply Store had long been a sore spot with students who believed that they were forced to pay high prices, while receiving little benefit from the profits. Many resented the fact that manager Lonnie L. Ivey received a large percentage of the profits, and the rest of the money went for grants-in-aid to athletes. As early as 1952 student leaders petitioned the college administration to turn all profits over to student government to be used for student activities. In response, the trustees investigated the situation, but they voted to continue the existing arrangement with Ivey until 1955 when his contract expired. In 1955, however, after the management study, the trustees voted not to renew Ivey's contract, although they allowed him to continue as store manager on a fixed salary. After this change, profits from all sales were used for grants-in-aid; 60 percent for athletes, 40 percent for non-athletes. Bostian and other college officials worked with student leaders to implement these changes, which eventually reduced student discontent on the issue.[5]

The quarrel over the amount of supply store profits spent for grants-in-aid to athletes was part of a larger problem that Cresap, McCormick, and Paget consultants addressed when they recommended that the chancellor be responsible for athletics. During the late 1940s and early 1950s State College's athletic programs, despite the phenomenal success of basketball coach Everett Case, were constantly in financial trouble. A primary cause of this situation was the

failure by the coliseum to generate the profits that some of its advocates predicted mainly because the state had failed to provide a maintenance budget for the structure. In order to raise revenue, the coliseum management charged rent for the use of the building, causing discontent among student groups who could not pay the high fees. The policy also drew money from the athletics program that would otherwise have been used for scholarships or other expenses. Several student demonstrations against the coliseum's policies were held in the early 1950s and, surprisingly, opinion within the state sided with the students. In addition, many of the building's promoters requested college officials to allow non-campus, profit-oriented activities to be staged in the building, which also caused discontent among students and faculty who believed that the campus should be reserved only for college activities. Many believed that Vann and Carmichael had too much control over the structure. Although Harrelson appointed a campus committee to examine the problem, little was done.[6]

When he became chancellor, Carey Bostian was well aware that the coliseum's revenue difficulties was one of the problems that he faced. The situation was especially critical, because ice-making machinery, used to provide a commercially operated ice rink for Raleigh skaters, damaged the basketball facilities. State budget officials demanded the removal of the ice rink, setting off a quarrel with powerful alumnus David Clark who believed that the coliseum should be operated for a profit. Bostian sided firmly with students and faculty who opposed Clark's ideas, reminding the powerful alumnus that the building existed in the middle of a college campus and, therefore, should serve a purpose in accordance with its surroundings. In order to settle the problem, he appointed in 1954 a faculty committee to examine the management of the building. The following year the committee reported that events were planned with little regard for students in the nearby dormitories, and it recommended that the director of athletics manage the coliseum. This was approved by the trustees, but despite increased use by campus groups, the building still failed to make a profit, and in 1958 it's operation was returned to the college business office. Gradually, however, student and faculty distrust of the coliseum's management lessened as it became more a part of the college.[7]

Other problems existed in the early 1950s with State College's athletic programs, many of which were related to the Sanity Code enacted in 1948 by the National Collegiate Athletic Association (NCAA). Under this code, all outside aid to athletes from alumni and boosters was forbidden, and student athletes were permitted to

receive only enough money to cover tuition and fees. A similar plan created by President Frank Graham in 1935 for the Southern Conference, which included State College, had met with dismal failure. Despite the warning of the NCAA and the Atlantic Coast Conference, established in 1953, alumni and boosters in the late 1940s and early 1950s continued to give State College athletes outside aid. State was put on probation by both the NCAA and ACC for a year in 1954 after it was revealed that several potential Wolfpack players received extra money and that eleven prospective basketball players participated in an illegal tryout.[8]

At the same time the Student Aid Association, or Wolfpack Club, faced frequent money shortages. This association, which was created in 1936 to aid student athletes, often failed to pay its debts. Part of this difficulty arose because the Wolfpack Club found that concession profits promised from the coliseum failed to materialize. State auditors in 1952 examined the athletics budget and they reprimanded business manager Vann for some of his practices. Distressed by these financial revelations, college officials for a time considered abandoning football, but ultimately decided against this move. In order to correct these problems, the trustees accepted Cresap, McCormick, and Paget's recommendations that the chancellor assume responsibility for the management of the athletics program.[9]

During his tenure as chancellor, Carey Bostian spent much of his time trying to solve the problems associated with State's athletic programs. Gradually, under the guidance of new Athletics Council Chairman H. Brooks James, the Wolfpack Club yielded more funds for student athletes, and the Athletics Department improved its financial management overcoming its $90,000 deficit. At the same time, with the support of Gordon Gray, Bostian refused to yield to alumni demands that football receive more emphasis. He faced his greatest crisis concerning athletics, however, when in 1956 the Jackie Moreland scandal unfolded.[10]

Jackie Moreland, from Louisiana, was one of America's top basketball recruits in 1956; he also was an outstanding student. Many of the top collegiate basketball programs attempted to attract him, and at one time or another, he signed non-binding letters of intent with Kentucky, N.C. State and Texas A & M. Despite the protests of his girlfriend, he refused to attend Louisiana's Centenary College, electing to come to Raleigh to play for Coach Case. At that point an unidentified individual reported the matter to the NCAA, alleging that State College violated the organization's recruiting regulations when it contacted Moreland. The investigation that followed

was confusing as Moreland changed his testimony several times. In the end the NCAA charged that assistant coach Vic Bubas, Wolfpack Club director Harry Stewart, and Willis Casey offered Moreland aid in excess of the amount permitted, including a five-year engineering education for Moreland and a seven-year medical education for his girlfriend at Chapel Hill. Chancellor Bostian, confronted with these charges, demanded to see the evidence and confront the accusers, but the NCAA refused, and called for Case's removal as basketball coach. When Bostian on the advice of President William C. Friday refused to act, all State College athletic programs were placed on a four-year probation, depriving them of several trips to post season football bowls or basketball tournaments. At this point, Bostian and UNC officials appealed to the NCAA, but found little sympathy for their position. Suspecting that Case's great rival Adolph Rupp of Kentucky lay behind the matter, State's administrators on Friday's advice decided that they had little choice but to drop the matter. Moreland, the focus of the controversy, went to Louisiana Tech. When State won several ACC football titles, but could not play in the Orange Bowl because of the NCAA probation, several other ACC teams appealled unsuccessfully to the NCAA on State's behalf. A faculty investigation of the athletics program recommended that the teams be continued, since they brought valuable publicity and revenue to the campus. Throughout the crisis, Bostian, distressed by the high-handed tactics of the NCAA, defended State's coaching staff, although warning them that he would tolerate no further scandal. He believed that the NCAA used State College as a scapegoat, and gave undue weight to the testimony of Moreland and his girlfriend. His actions brought the program under better control, and allayed some of the concerns of the faculty and students. The Moreland incident deprived the college of several post-season bowls and tournaments, and it brought the institution some bad publicity, but it did little real damage to the college athletic or academic programs.[11]

Another area where Cresap, McCormick, and Paget declared that State College needed reorganization was its graduate programs. Although the college made some strides towards autonomy in the late 1940s and early 1950s many faculty still believed that their program was controlled by Chapel Hill. In seeming agreement Cresap, McCormick, and Paget cited the fact that the Consolidated University dean was on the Chapel Hill payroll, and few meetings of the graduate faculty were ever held on any matters. The study also bewailed the lack of clearly defined policies, declaring that rules were made up as they were needed. In addition, the chancellors had little

authority over the program because the associate deans from each campus reported directly to the consolidated dean. Also it was claimed, the faculty had an insignificant role in admissions, curriculum, or other policy matters, and the deans of the degree-granting schools possessed a great deal of sway over the graduate program. In order to solve this problem, the Cresap study recommended that the position of consolidated dean be abolished, and replaced by a Vice President for Graduate Studies. It also suggested that each associate dean be upgraded to dean and given more authority.[12]

Although State College officials supported the Cresap recommendation, they were forced to wait several years for it to become reality. Under Associate Graduate Dean Donald B. Anderson policies were regularized, records were kept separate from undergraduate records for the first time, and the graduate program became financially responsible to the chancellor. Graduate faculty membership was re-evaluated and more meetings of the graduate faculty were held. When Bostian requested that Anderson be elevated to dean, however, UNC officials temporized. When they announced in March 1957, that his new title would be Dean of Graduate Studies, State College faculty protested, claiming that they wanted more autonomy than the word "Studies" implied. Finally, in May 1958, Anderson became Dean of the Graduate School. He soon resigned, however, to become Vice President for Academic Affairs at the consolidated office and was replaced by Walter J. Peterson. By this time, State's graduate program possessed much of the autonomy that the faculty desired.[13]

More input into graduate programs was but one advance made by the State College faculty in the wake of the Cresap, McCormick, and Paget study. Until this period the average faculty member at State had little to do with the policy decisions concerning admissions, curriculum, scholarships, or other academic regulations. General Faculty meetings were rarely held, and the Faculty Council, created in 1923, was in reality a committee of deans who advised the chancellor. No clear cut tenure or promotion policies existed, and the chancellor tended to automatically approve all personnel recommendations made by the deans. In addition, the Faculty Council spent much of its time on student disciplinary matters, instead of academic policy. As early as 1950, led by the local chapter of the American Association of University Professors (AAUP), the State faculty began to demand a larger role in all college decisions, and urged the appointment of a chairman for the general faculty. In addition, in 1952, the AAUP convinced Harrelson to appoint a Committee on

College Government to study the situation. In January 1953, while this study progressed, Carey H. Bostian became the first chairman of the faculty: he was subsequently succeeded by Walter Peterson when he became chancellor. The Cresap survey noted this progress, but it also stressed that more faculty responsibility was necessary.[14]

The management study called for several reforms related to the faculty. It recommended more faculty input regarding academic matters, the establishment of a committee on undergraduate teaching, a codification of rules and regulations relating to faculty personnel matters, and the establishment of a faculty senate, something already suggested by the Committee on College Government. In addition, it called for the appointment of a dean of the faculty to oversee and coordinate all academic matters. The trustees approved these recommendations in principle, but left their implementation to the Bostian administration.[15]

On the recommendation of the Committee on College Government the Faculty Senate in September 1954, was created for a trial period of three years; in 1957 it was renewed for another three years. Chaired initially by Walter Peterson, this organization consisted of elected senators from each school, and it served in an advisory capacity to the chancellor. At the same time, the Faculty Council became the Administrative Council to advise the chancellor on larger policy matters. This group consisted of the deans of the schools and other administrative personnel. Much of the previous power held by the Faculty Council was delegated to standing faculty committees, with many being formed for the first time. One of the more important of these standing committees was the curriculum committee established in 1955 to advise the chancellor on all matters related to the curriculum. Other standing committees studied scholarships, admissions and retention policies, and diverse non-academic matters such as the coliseum and parking. Through these committees, as well as the Faculty Senate, the faculty during the mid-1950s obtained a greater role in the college's decision-making process.[16]

The Cresap, McCormick, and Paget study also urged the creation of the Dean of the Faculty in an effort to relieve the chancellor of some administrative duties, as well as to provide a more efficient coordination of academic matters. In the implementation of this part of the report, John W. Shirley, Dean of the School of General Studies since 1948, became in November 1955, the first Dean of the Faculty at State. The Dean of the Faculty relieved the chancellor of many of the more routine academic matters and worked with the faculty of the several schools to improve the curriculum. In addition, the Dean of

the Faculty sought the assistance of the Faculty Senate and AAUP representatives in formulating more clearly defined and uniform tenure, promotion, and appointment policies, with the aim of ensuring that all individuals would receive equal treatment in these matters in the future. Much of the power over the curriculum and personnel was gradually removed from the deans. By the end of the 1950s State College's faculty saw their position improve dramatically in terms of both decision-making and personnel matters.[17]

Student affairs were also drastically revised in the aftermath of the Cresap, McCormick, and Paget study. Before 1954 the various aspects of student personnel work were scattered in several independent offices, some reporting to the business manager, some to the chancellor, and some to the Dean of Students. This situation created many bureaucratic snarls that did little to endear the college to the students. In addition, no overall direction to student activities work existed, and many faculty and staff members believed that the college could do much more to improve the quality of student life.[18]

The Cresap, McCormick, and Paget survey recommended the creation of the Dean of Student Affairs, to replace the Dean of Students who spent the majority of his time with student absences and disciplinary matters at the expense of the more positive aspects of student activities. James J. Stewart, the director of student housing, who had an excellent relationship with students, became the first Dean of Student Affairs in 1954. One of his first actions was to upgrade State's musical organizations. He obtained new uniforms with the help of ROTC and replaced the aged Christian Kutschinski with Robert Barnes. Under Barnes and his assistant J. Perry Watson, State's musical organizations began to establish a first-rate program. In addition to music, under Stewart's direction, all aspects of the college's non-academic program became better coordinated and planned.[19]

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While the college administration was revamped in the 1950s, a number of changes also occurred in the individual schools. All schools continued their efforts to attract strong faculty members who had doctorates. In addition, in the wake of a major curriculum study conducted in 1953 as the college prepared to switch from the quarter to semester system, the course offerings and graduation requirements of all schools were revised. Although the deans lost some of their power to other administrators, they successfully continued to lobby for larger appropriations for research and better

facilities. During the 1950s the college's academic programs, especially in certain fields of agriculture, engineering, and design, grew in prominence, and for the first time other colleges and universities complained that they lost some outstanding faculty to N.C. State.[20]

Under the leadership of Dean Wallace Colvard, who replaced James H. Hilton as Dean in 1953, the School of Agriculture underwent several major changes in the 1950s. As the result of a 1957 curriculum study conducted as part of the Long Range Plan which was begun by Bostian and Dean of the Faculty John W. Shirley, the curriculum was once again reorganized. This change provided the students with three degree tracks within each major field, agribusiness, agricultural science, and agricultural technology. This revision reflected the continued importance of science in the agricultural curriculum, as well as the growing awareness of the special needs of agribusiness and industry. The science curriculum was designed for those who planned to attend graduate school or professional school, while the agricultural technology option included a new emphasis on the application of technology to production.[21]

The fifties also saw several departmental reorganizations within the School of Agriculture. As the Agronomy Department, a pioneer in graduate study, continued to grow, it became unwieldly; therefore, in January 1956, it split into Soils and Crops. In addition, the growth of the Division of Biological Science also necessitated a reorganization. The division was discontinued in July 1958, and the Departments of Botany, Entomology, Plant Pathology, Zoology, and Genetics were created. As the bacteriology faculty increased within the Botany Department, that department was renamed Botany and Bacteriology. At the same time, the School of Agriculture began to lay the groundwork for the Department of Food Science to meet the needs of one of North Carolina's developing industries. These departmental changes reflected the continuing importance of science in the school.[22]

The School of Agriculture also took steps during the 1950s to become a leader in international educational efforts. After Michigan State University President John Hannah pledged that the land-grant colleges would resoundingly answer President Harry Truman's call for aid to developing nations under the United States' Point Four Program State College's agricultural faculty expressed strong interest in the undertaking. Upon a request for assistance from the Peruvian Ministry of Agriculture in 1954, Experiment Station Director Ralph Cummings left for Peru where, under the aegis of the International Cooperation Administration, he and a group of experts began to

advise the Peruvians in their efforts to improve agricultural education. An experiment station was established at Tinga Maria, and professional training was provided for Peruvian nationals. After 1959, N.C. State faculty assisted the Peruvians in the academic and fiscal reorganization of the National University of Agriculture at La Molina. This program continued into the 1960s, and it was judged to be one of the three or four major successes by an American college in this area.[23]

Agricultural Extension also underwent a major reorganization in the late 1950s in an effort to improve its service to North Carolinians. Between 1945 and 1956, extension personnel doubled, and the annual budget increased from $2 million to $6.3 million. With this tremendous expansion, many believed that the service needed to be streamlined. From 1956 to 1957, a major study of the service was conducted, the results of which were published in the controversial "Greenbook." Although the study committee applauded past efforts by the service, they cited need for improvements in several areas. They recommended more local input and community planning, as well as better coordination of long-range planning and budgets. In addition, they called for district personnel to spend more time on administrative matters, and less on the actual extension program. The committee also recommended the placement of all county work under the direction of the male county agricultural agent. The study condemned certain aspects of the home demonstration program, questioning its degree of specialization and its emphasis on cultural matters at the expense of economic ones. This criticism caused some distress among the Home Demonstration workers, led by Ruth Current, as did the suggestion that the title of their program be changed to Home Economics Extension. Faced with this opposition, state officials delayed the change, and named the home demonstration agent vice chairman of county work. They also refused to reduce the number of home economics specialists and permitted the women to continue their club work as they saw fit. The rest of the recommendations were approved, and the structure of extension modified, while allowing for more community interaction with the program.[24]

State College's Engineering School also increased in prestige during the 1950s, building on the progress of the early post war years. New undergraduate programs in engineering physics and applied mathematics were inaugurated, and a doctoral program in civil engineering was established. In June 1954, the school became the first program in the country to award the doctorate in nuclear engineering. The departments of ceramic and geological engineering were combined in 1954 into Mineral Industries to better coordinate the subject

matter. The following year the departments of mechanical and diesel engineering were also combined. In addition, the school's mathematics department was one of the only educational organizations in North Carolina to own an analog computer. As enrollment rose in the mid-1950s, the school established an honors program in order to attract outstanding students. In May 1958, with the support of the North Carolina Engineering Foundation, the school created seven distinguished professorships in engineering. Agricultural engineering and the construction option in civil engineering received accredidation in 1958 for the first time. In 1959, Dean Lampe and his faculty could point to a decade of growing prestige.[25]

In research the school also made substantial progress in the 1950s, acquiring more facilities and increasing the research budget through state, private, and federal sources. A new high voltage laboratory, capable of generating one-half million volts, began operations in early 1953; it was one of a few of its kind at that time. As of July 1954, the school assumed full responsibility for the Mineral Research Laboratory at Asheville, which had earlier been conducted in cooperation with the state. Both of these facilities enhanced the school's research capabilities.[26]

Engineering's pride and joy, the nuclear reactor, experienced a temporary set back in 1955 when a leak developed in the core. After radioactive gases bled off into the atmosphere in early June, the core was dismantled and returned to Oak Ridge for disposal. A study of the reactor's problems, and its relation to campus health and safety followed. As the study progressed, serious friction developed between reactor director Clifford K. Beck and health and safety officials and the engineering faculty. The controversy, which understandably became emotional, caused Beck to resign. He was replaced by Raymond L. Murray, who began negotiations with the Atomic Energy Commission to reconstruct the reactor. The reactor core was replaced and it was re-activated on May 2, 1957; meanwhile, a grant of $80,000 was received from the AEC to construct a larger facility. This rebuilt reactor was crucial, since State College in April 1956, had signed a contract with the AEC to train foreign students and industrial personnel in reactor operation. The facility was also enhanced by the addition of a subcritical assembly and a Van de Graff generator. As the 1950s drew to a close, engineering faculty continued to plan for the new reactor, while continuing their leadership in nuclear science.[27]

During the 1950s the School of Engineering continued to expand its extension program. In addition to its many short courses for water-works operators, meter readers, sewage plant operators,

and plumbing inspectors, the school also offered night courses at several industrial centers. After several years of agitation by industrial leaders and campus faculty members, the General Assembly also provided support for the establishment of the Industrial Experiment Program, a service which provided technical information to small industries. Beginning operations in July 1955, the program was designed to encourage new industry for the state and to increase utilization of the state's natural resources. The IEP published its own newsletter, which it distributed to industry, and made other efforts to provide technical assistance.[28]

Continuing its efforts to encourage the development of technical institutes, the School of Engineering also retained its sponsorship of the Gaston Technical Institute. At first, after its relocation at Gastonia, the institution offered four one-year technical courses in electrical, television and radio, automotive, and mechanical technology. With a gift of property from the Firestone Textile Company, however, the institute was able to expand its program. Beginning in the fall of 1958 the institution offered two-year programs in civil, electrical, electronic, and mechanical technology. It continued under the auspices of State College until the mid-1960s when it became part of Gaston Community College.[29]

In a further effort to expand engineering education in North Carolina, the School of Engineering also sponsored the development of an engineering program at Charlotte College. During the late 1940s college officials discussed the creation of a technical institute in the Charlotte area, but little was done. In 1956, after a meeting with industrial leaders in Raleigh to discuss engineering education, State College officials opened negotiations with Charlotte College leaders that led to the establishment of a two-year course that was transferable to State Colleg.e This program began in January 1957, and it expanded in September 1958, to a four-year program. This effort laid the basis for the University of North Carolina at Charlotte's School of Engineering.[30]

Although it suffered a temporary decline in enrollment because of economic problems in the textile industry, N.C. State's School of Textiles continued in the 1950s to be recognized as a leader in its discipline. During the 1950s the school made several important additions to its research facilities, including a radiology laboratory and a fabric analysis laboratory. With the help of the textile industry, private support for the school grew from $250,000 in 1954 to $450,000 in 1956; no state funds were provided for research until 1959. One of

the school's earliest research accomplishments was the creation in 1955 of a synthetic aorta by Knitting Department head William E. Shinn. In cooperation with Charlotte heart specialists Paul W. Sanger and Frederick H. Taylor, Shinn used a modified necktie machine to create an orlon tube to be used to replace damaged heart vessels. As before, much of the research conducted during this period was related to industrial problems, and little fundamental research was done.[31]

The School of Textiles joined the School of Agriculture as a pioneer in State College's international program when it agreed in December 1954, to assist with the development of a teaching and research program at the National University of Engineering in Lima, Peru. Under the sponsorship of the International Cooperation Administration, several members of the State College textile faculty served as consultants to the faculty in Lima. They experienced some problems because of frequent changes in the Lima faculty and a breakdown of communication with Washington. Despite these problems, five test laboratories were established, and a program in machine design developed. With limited financial resources, however, the textile program was not as successful as its counterpart in agriculture.[32]

Despite a continued increase in its national reputation, the School of Design remained controversial. In 1953 it was one of ten schools exhibiting work at the Pan American Exhibition of Architecture in Havana. During the same period the school was also one of twelve exhibiting its work in Edinburgh. Despite this international success, the school remained housed in a ramshackle army barracks because the state Budget Bureau refused to provide funds to remodel the old library building that State College promised to Dean Kamphoefner. Finally, in 1954 and 1955 the structure was remodeled, and renamed Brooks Hall in honor of former President Brooks. Prestigious visiting lecturers continued to serve at the school, including Buckminster Fuller and British landscape architect Bruce Hackett.[33]

At the same time that State's programs in architecture and landscape architecture mushroomed into prominence, Dean Kamphoefner took steps to create a third program in product design. Kamphoefner, who pushed for the program soon after his arrival in 1948, obtained the support of leading North Carolina newspapers in his efforts to get the program approved and funded by the General Assembly. The department began operation in fall of 1958. It trained students in the art of improving the appearance of textile, ceramic,

and other North Carolina products. Only the second such department in the southeast, the product design program was only barely established by the end of the 1950s.[34]

The School of Design was also the setting for the only incident at State College associated with the Cold War phenomenon known as McCarthyism. This incident, occurring in 1952, was "Le affair Mumford." At a time when many leading government officials were under investigation for alleged subversive activities, N.C. State was relatively free of "red-hunting" activities. Although Consolidated University President Gordon Gray included an attack on communism in his 1950 inaugural speech given at Reynolds Coliseum, he also told his audience that he believed the Consolidated University was not affected. When local right-wing journalist W. E. Debham, famous for his attack on Eleanor Roosevelt entitled *Weep No More My Lady* (1950), assailed visiting Design Lecturer Lewis Mumford and his textbook *Technics and Civilization* a minor episode of McCarthyism occurred at State College. Mumford was seriously offended, and he looked to Chancellor Harrelson and President Gray for support. After some discussion, Harrelson and Dean Kamphoefner agreed that Debham was too insignificant to cause concern. Mumford, however, persisted in his efforts to obtain vindication from the college administration. Finally, Kamphoefner convinced the *Technician* editors to publish an article in defense of Mumford, but this proved insufficient to soothe Mumford's anger. Still seething over the administration's failure to act, he left to accept a full-time position at the University of Pennsylvania. When he was invited to speak at the College Union in 1965, he refused. Many at State College believed that Mumford had overreacted to Debham's attack and that the McCarthy malaise had not seriously intruded into the institution's life.[35]

As before, the School of Education suffered from a lack of space, equipment, and faculty. Despite a growth in enrollment from 509 in 1955 to 659 in 1959, Dean Kirkland and his staff were repeatedly disappointed by inadequate state appropriations. The school managed to expand its graduate programs in high school teaching, but found itself limited in its ability to develop other programs. In its one major change, the Department of Rural and Industrial Recreation dropped its existing programs, established an option in park administration, and changed its name to the Department of Recreation and Park Administration. For most of the 1950s, however, Dean Kirkland and his staff mainly sought better facilities and equipment.[36]

The School of Forestry was another part of N.C. State that increased its national prestige during the 1950s. It continued to be the

SREB's regional school for undergraduate studies in pulp and paper technology, and rapidly increased its enrollment. At the same time, Dean Preston and his faculty made numerous strides in developing the school's research and graduate programs. The doctorate in forestry, the second in the South after Duke University, was authorized in 1954, and the number of graduate students rose rapidly. In order to retain outstanding teachers, the Rueben Robertson Professorship in Pulp and Paper Technology and the Carl Alwin Schenck Professorship of Forest Management were established. The school also obtained funds to replace the old NYA building that housed the Pulp and Paper laboratory. When completed in 1956, the structure was named for Rueben Robertson, longtime chairman of the board of the Champion Paper and Fiber Company of Canton, North Carolina, a pioneer in the southern pulp and paper industry. In 1958 funds were also obtained to begin construction on a wood products laboratory. Throughout the period the school maintained close ties to the pulp and paper industry.[37]

During the 1950s, the final school, General Studies, formerly the Basic Division, sought to define the role of humanities and social sciences at State College. Beginning in the mid-1940s, individuals such as Dean Benjamin Franklin Brown had urged college officials to allow the Basic Division to grant degrees, citing the benefit of a program of this kind to Raleigh residents. Brown's pleas received little attention, however, because the technical schools continued to distrust him and his colleagues remembering the "Battle of the Basic Division." When he retired in early 1947 the Basic Division was stripped of its guidance function and limited to a service role: many faculty members believed that this was a final blow to division autonomy. Slowly, however, after the arrival in 1949 of new Dean John W. Shirley, faculty morale improved and divisional conflicts resolved for a time. In addition, more upper level courses were established in the division at the behest of the degree-granting schools. Shirley, a proponent of general education who supported the social studies department's development, unsuccessfully urged Chancellor Harrelson and UNC officials to define the division's role once and for all. Shirley and his colleagues received a boost in morale in May 1952, when the trustees elevated the division to the School of General Studies.[38]

After this change, Dean Shirley continued to press for a better definition of his school's place at State College. Within the school debate raged in the early fifties over whether to retain departmental organization, or restructure the unit in four divisions—physical education, social studies, humanities, and social sciences.

Ultimately, the older structure was retained. Shirley's concern about General Studies' role continued, and when the Ford Foundation provided a grant in 1952 to study liberal arts education at State College, the Dean appointed a self-study committee to explore the problem. The study, completed in 1953, recommended that the school play a greater role in the development of the college curriculum.[39]

Still not satisfied, Shirley appointed in 1954 a general steering committee to continue the examination of the school's role at N.C. State. This committee issued a report in April 1955, calling for the establishment of degree programs in the liberal arts. In support of this recommendation, the report indicated that the majority of other land grant colleges already had such programs. In addition, the committee declared that the absence of such programs prevented the school from attracting highly talented faculty members. Chancellor Bostian urged patience in the matter, and a more elaborate proposal was represented in 1957 after the college-wide Long Range Plan called for degree programs in the liberal arts. The Long Range Plan declared that the School of General Studies' position on campus was "archaic." It also cited the need for liberal arts offerings in the Raleigh area. With the support of the Faculty Senate, Bostian recommended in 1959, just before he resigned, the establishment of a Bachelor of Science program for the School of General Studies. His successor, John T. Caldwell, would see the idea to fruition.[40]

At the same time, many concerned individuals urged the creation of a separate school of science for N.C. State. Fearing that they would be lost in the shuffle, faculty in service departments such as chemistry, physics, and mathematics were reluctant to join a proposed School of Arts and Sciences. Many faculty members, however, believed that these departments must be removed from the engineering and agricultural schools to be of any real value to the rest of the college. Promoters of the proposed School of Science argued that the mathematics courses were designed for engineering students, while the physics department was primarily interested in the nuclear reactor. In addition, they believed that such an organization would enable the college to attract better faculty in these disciplines. Despite the urgings of many faculty members, action on this issue was delayed until after the 1950s because many believed that such a step would violate the consolidation settlement of the 1930s.[41]

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One of the most significant developments at N.C. State during the 1950s was the expansion of research of all kinds. State

College faculty and graduate students conducted studies that ranged from searches for disease and pest resistant crops to the invention of a mechanical harvester for tobacco. Since they brought money and prestige to the institution, college officials welcomed these projects. But many campus leaders feared that the control over contract research was too decentralized and ineffective. Contact with federal or industrial officials was made by individual faculty members or department heads, with little consultation with college administrators. The Cresap, McCormick, and Paget study recommended better control of research through the creation of a campus-wide committee. Chancellor Bostian appointed this committee in February 1954, and it issued in 1955 a policy designed to coordinate all campus contract research. In addition, research committees were established in most of the schools.[42]

Despite these activities, many individuals viewed contract research as a continuing problem for the college. Indeed, their concern inspired a movement that led to the establishment of the Research Triangle Institute. As early as 1952, renowned University of North Carolina sociologist Howard W. Odum proposed a research institute to be sponsored by the Consolidated University for studies in the humanities, social sciences, and sciences. The university rejected the proposal, however, because it lacked the resources to develop the project alone. A similar idea was suggested in 1954 as part of an industrial park proposal by Romeo Guest of Greensboro, who coined the term "Research Triangle" after seeing similar developments in other states. In his efforts to gain support for the idea he sought the help of Chancellor Bostian, and Deans Campbell, Colvard and Lampe. While Campbell and Textile School research director William Newell drew up a proposal for a research center, Bostian and Brandon Hodges urged Governor Luther Hodges to lend his support for the project. The governor was interested in the proposal because he saw the industrial park idea as a good tool to attract more high wage, high tech, industry to the state, which was one of his pet projects. Concerned because of the low-per-capita income of North Carolinians, Hodges appointed N.C. State's Dean Colvard and Chapel Hill's Gordon Blackwell to study the situation. At first more attention was devoted to the industrial park, and a committee appointed in the spring of 1955, chaired by Robert Hanes of Wachovia Bank, recommended that the park be located near the Raleigh-Durham-University Airport. Planning for the center began in 1957, and the Pinelands Company was formed to purchase a site for the institute. In the meanwhile, planning also continued for the industrial

park, and with the help of faculty at State College, Chapel Hill, and Duke University, several major companies agreed to locate in the park where they would benefit from the expertise of the research institute. George L. Simpson, a member of the Chapel Hill faculty, was appointed as the first director of the institute. With the help of Institute of Statistics director Gertrude Cox, who needed better facilities for her unit, Simpson began plans for the institute. When he returned to Chapel Hill in 1958 he was replaced by George R. Herbert, the former director of the Stanford Research Institute. In January 1958, the institute was formally established by State College, Duke University, and the University of North Carolina at Chapel Hill. It was owned by the Research Triangle Foundation for North Carolina, and described as a "separately operated affiliate of the three universities." One of the first research efforts was in statistics, under the direction of Cox. Located in the heart of the rapidly developing Research Triangle Park, the institute served as the ideal meeting place for industry, education, and government.[43]

Foundation support for research and teaching also grew rapidly during this period. Two new fund-raising organizations, the Pulp and Paper Foundation and the 4-H Development Fund, joined the existing foundations during the 1950s, and the North Carolina State College Foundation assumed control of the campus's bequest program. Named professorships, graduate fellowships and assistantships, and undergraduate scholarships such as the Talent For Service program were created. At the same time, money continued to be provided for new equipment for research. By 1958, income from all foundation efforts exceeded $800,000 a year.[44]

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Student life at State College in the 1950s changed in several significant ways, as the composition of the student body was altered and student activities received a new focus. Although they expressed discontent with such things as the operation of the student supply store and the management of the coliseum, student leaders preferred to work with the Bostian administration rather than engage in showy demonstrations. Bostian and his colleagues established a good relationship with students, overcoming the distrust of the late 1940s and early 1950s that had been engendered by Harrelson's failure to address student concerns. Bostian and Stewart began weekly meetings with student government officials that helped create a better atmosphere. At the same time, Stewart worked to foster a better nonacademic program for campus dwellers and commuters.[45]

Although the number of veterans in the student body remained high with the influx of the Korean War veterans, the most significant change in State College's student body in the 1950s was the admission of the institution's first black graduate and undergraduate students. At State College, little resistance to racial integration developed but in the larger North Carolina society white passions were inflamed. Ever since the 1930s when the first black demanded but was refused admission to one of Chapel Hill's professional schools, Consolidated University trustees and state authorities engaged in a running battle over the issue with federal officials and the National Association for the Advancement of Colored People (NAACP). Many black leaders insisted that black students should be admitted to white colleges' professional programs, declaring that the alternative, sending blacks out of state to existing black colleges, was wasteful and failed to meet the "separate but equal" criterion established by the Supreme Court in 1896 in *Plessy versus Ferguson*. The court confirmed this opinion in 1938, and North Carolina officials were forced to seek an in-state alternative. Although a law school was established at North Carolina College in Durham, and other graduate programs were created at this institution and North Carolina Agricultural and Technical College in Greensboro, blacks still insisted that these efforts were inadequate, and not equal to those provided for white students.[46]

In 1948 two black medical students and two black law students sought admission to Chapel Hill, but the trustees deferred any action on their admission. Two of these individuals, Harold T. Epps and Robert D. Glass, filed suit in October 1949, in the United States District Court in Durham, asserting that the state failed to provide them with equal access to education. Although in the original trial the court accepted the state's contention that the law facilties were not unequal, the case was sent back to trial and later decided for the plaintiffs. On June 4, 1951, the Supreme Court denied the state a writ of certiorari, and the Gray administration decided that they had no alternative but to admit blacks to the Consolidated University graduate program.[47]

The Board of Trustees, however, vehemently opposed this turn of events. Led by State College alumnus John W. Clark, a number of the trustees demanded that the administration exhaust every legal and technical possibility before admitting the blacks. Some trustees even suggested the closing of the Chapel Hill law school, but the administration refused to consider this drastic course of action. Gray, who personally opposed integration, believed that the Consolidated University had no alternative but to admit blacks to

the graduate and professional programs. He initiated a plan known as the Pearsall Resolution. Under this plan State College admitted blacks to those graduate programs that did not exist at the North Carolina Agricultural and Technical College.[48]

At State College, the integration of the graduate school was peacefully accomplished. In the fall of 1953 Robert L. Clemmons and Hardy Liston, graduates of A & T, enrolled in the masters programs in electrical and mechanical engineering. Faculty members reported that no difficulties occurred in the laboratories or classes attended by Clemmons or Liston. Some sympathetic whites at State College even criticized the trustees for their continued refusal to allow integrated seating in the coliseum, and their refusal to permit State officials to bring sporting events to the coliseum because they included black athletes. In addition, the trustees insisted that black personnel attending extension meetings be housed off campus, usually at Shaw University. Despite efforts as early as 1951 by School of Agriculture faculty members, the college was allowed to permit mixed dining only if the dinner was "closed." Many State College staff members chafed under these restrictions, especially the School of Agriculture faculty who found that the trustees' restrictions hindered their extension activities.[49]

In 1955 black undergraduates were admitted to State College after *Frasier versus University* (1955) declared that blacks must be admitted to Chapel Hill's undergraduate program. Again, there was little protest from State College officials, and some faculty members even opposed the introduction of standardized admissions tests, a tool used by other southern states to discriminate against blacks. Two black undergraduates, Edward Carson and Manuel Crockett were admitted as freshmen in the summer of 1956, with no disturbance. At the same time, college officials allowed them access to the cafeteria and college union. Since most of the early black undergraduates were Raleigh residents who lived with their parents the issue of black on-campus housing did not materialize at that time. In addition, the trustees agreed to allow members of extension conferences to have equal access to dining facilities. The General Assembly, angered by the trustees' actions, removed State College supporters Clarence Poe and L. Polk MacLendon from the board after they agitated for the step towards integration. Bostian supported integration, although he was diplomatic in responding to public inquiries, he refused to give in to outside pressure when in 1956 Walter Holmes became the first black member of the marching band. White students accepted the black presence, and never resorted to the intimidation

tactics used by white students in the 1960s at other southern colleges. During the rest of the 1950s black enrollment remained small, but the precedent was peacefully established. Only later would campus officials make an effort to recruit black students.[50]

The number of women also remained small, although their numbers rose steadily during the decade. At the same time, however, they remained isolated from the rest of the student body because no women's dormitory existed, and they were forced to live off-campus. Furthermore, they were exempt from ROTC, and could participate in few activities outside the classroom. In 1952 Betty Anne Cline served as the first female editor of the *Agromeck*, and in 1956 Betty Brown became the first State College coed to be named Miss Wolfpack. Nevertheless, women students played a limited role in campus life.[51]

The most important development in student life during this period was the establishment of the College Union program under the direction of Gerald O.T. Erdahl. In 1949, after considerable study of college unions at other colleges and universities by Dean of Students, Edward L. Cloyd, Erdahl, the former assistant director of the college union at Wisconsin, was employed to develop the program at State College. In the same year, the General Assembly appropriated money for a college union building. Construction, however, was delayed until the early 1950s, and the building was finally opened in September 1954. The Union activities program began in 1950 before the building was completed, and received student fees in 1951 for the first time. The program consisted of social and recreational events, concerts, dances, and exhibits. The building, when completed, housed game rooms, offices for student activities, and a cafeteria. The program was controlled by a Union Board consisting of students and faculty, who oversaw the work of numerous student committees that planned dances, movies, lectures, and exhibits. By the end of the 1950s, the College Union provided students with a successful on-campus social program that greatly enhanced college life.[52]

At the same time, the student government obtained a new lease on life when it secured more autonomy and a greater voice in campus affairs. For many years campus government had been limited in its authority by the administration, despite the protests of campus leaders and Consolidated University officials. In addition, student disciplinary matters were controlled by the Faculty Council, and student leaders believed that they had little opportunity to demonstrate responsibility or participate in the college's decision-making. In 1954 and 1955 after the report of the Cresap, McCormick, and Paget advisory team, Student Government was reorganized as the Bostian

administration chose to grant students more responsibility for their own conduct, and more input into college affairs. The disciplinary functions were removed from the Faculty Council and turned over to the newly created student Judicial Board. Faculty members, formerly included in the administration of the honor system, were removed from all but the appeals process. Student leaders worked well with the Bostian administration and Dean Stewart, and student government grew rapidly in prestige.[53]

ROTC, long an important institution on campus also underwent several changes during the period. The course had been reorganized during the late 1940s and more specialization permitted. In addition to its existing Infantry and Signal Corps units, State College organized an Air Corps (1946) and Engineers Corps, Quartermasters Corps, and Ordinance Department (all in 1947). When the Air Force separated from the Army in July 1949, it assumed responsibility for the Air Corps program. The armed forces in the early 1950s sought to limit enrollment in the basic military course, but they abandoned this idea after strenuous objections from the land-grant colleges. At the same time an effort was made to upgrade the intellectual content of the course. The Air Force curriculum became more general, and the Army abandoned its specialized organization. After this action, both branches limited enrollment in the advanced class, demanding a 3.0 grade point average for advanced cadets.[54]

Although the armed services settled on a formula that satisfied them, the ROTC program at State College faced increasing criticism from faculty members who questioned its academic content. Many faculty and students disliked the amount of time the students were forced to spend on the courses, considering them to be extracurricular activities. The General Faculty reduced the number of hours permitted for drill from three to two in 1954, and the engineering faculty requested that the chancellor make the program optional. Despite faculty hostility, the program remained a vital part of student life, as many student organizations such as the Pershing Rifles, the Arnold Air Society, and the varsity rifle team had their origins in the ROTC.[55]

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During the mid and late 1950s State College again added to its physical plant. Efforts were also made to develop a long term campus building plan. The David S. Weaver Labs for agricultural engineering and the Brandon Hodges Wood Products Labs, both on Western Boulevard, added to State's growing research facilities. In

addition, after most student activities relocated in the new College Union building, the YMCA was remodeled, and with a grant from the Danforth Foundation the nondenominational Danforth Chapel was added. Harrelson Hall, State's round classroom building, was begun, and huge, X-shaped Bragaw Residence Hall was completed. After much planning, the Alumni Memorial Building, honoring State's alumni who gave their lives in World War II and the Korean War, was remodelled with the assistance of the Z. Smith Reynolds Foundation. More attention was paid to landscaping on the campus, and much replanting of shrubs and trees was done. In order to bring some reason to campus growth, Edward Waugh, a member of the Design faculty was commissioned to develop a campus master building plan. Waugh's report, issued in 1958, physically divided the campus between academics (north) and student activities (south), and called for the establishment of research facilities on the periphery, a plan still in effect in the 1980s.[56]

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After six years as chancellor, Carey Bostian decided that he wished to return to his first love, teaching. During his administration, State College further enhanced its reputation. It also took its first steps toward playing a role in the larger world, and peacefully admitted its first black students. Despite these developments, State College still faced many challenges as the fifties drew to a close. How would it serve the ever-growing number of people who elected to attend college? Could its academic and research programs continue to improve and provide true national leadership? These questions, and others, would be partially answered during the tenure of Bostian's successors.[57]

Chapter X

North Carolina State University, 1959-1971

The 1960s were a time of great excitement, at N.C. State and in the world around it, and more than ever before the institution was affected by forces both within and outside North Carolina. As part of the Consolidated University, it faced increasing competition from rapidly growing regional colleges, as the state struggled to redefine its system of higher education. Enrollments skyrocketed and the composition of the student body was altered radically, and the institution established several new programs to help it keep pace with developments in science and technology. At the same time, older, well-established programs maintained their excellence in a variety of fields. In all of these efforts, N.C. State received strong leadership from its new chancellor, John Tyler Caldwell. His dynamic personality set the tone for the entire period.

The first non-North Carolinian to be named administrative head at N.C. State since Alexander Q. Holladay, John T. Caldwell was born on December 19, 1911 in Yazoo City, Mississippi. Caldwell received his undergraduate degree in 1936 from Mississippi State University; he earned his masters at Duke University and received his doctorate in politics in 1939 from Princeton University. He taught political science at Vanderbilt and served in the Navy during World War II, where he rose to the rank of lieutenant commander. In 1947 he became president of Alabama College; where he remained for four years, before becoming president of the University of Arkansas, where he served for seven years. When representatives of the Consoli-

dated University trustees first contacted him in 1959 about the chancellorship at N.C. State, Caldwell was not really interested. He thought his situation at Arkansas quite satisfactory. After further discussion with his family, and with Consolidated University President William Clyde Friday, however, he decided to accept the offer. A small group of trustees opposed his selection because he was an outsider; others feared his liberal political reputation. But with the support of President Friday he was elected without real difficulty. At the time of his selection, Caldwell already had a reputation as an educational leader; he served on the boards of the Educational Testing Service, the Southern Regional Education Board, and the American Association of Land-Grant Colleges and Universities. During his tenure as chancellor, he advocated the expansion and redefinition of N.C. State's role in North Carolina through closer ties to the surrounding Raleigh community, the creation of new schools, and the expansion of international programs.[1]

Caldwell's personality contrasted with that of his predecessor, Carey Bostian. Although Bostian had done much to give the chancellorship new dignity and authority in implementing the Cresap, McCormick, and Paget reforms, many people believed that the office still lacked the necessary power and prestige. John Caldwell was able to control the powerful deans and other college administrators with more success than his predecessors. Like Carey Bostian he also took great pains to work with student leaders. He made vigorous efforts to communicate with the average members of the rapidly increasing student body, often eating in Leazar Cafeteria or inviting individual students to eat at the Chancellor's Residence.[2]

In addition, he was able to attract excellent personnel for several key administrative positions. At his direction, the Business Office, long a problem, was revamped under William L. Turner and John D. Wright, who made many of the changes recommended by the Cresap, McCormick, and Paget survey, but which John Graves Vann failed to implement. The establishment of the "A" budget, "B" budget system in 1959, allowed for a "change" budget that made planning and expansion easier. The college's finances became easier to project and control. Under Turner and Wright, Business Affairs became less a mere accounting office and more closely tied to the institution's educational goals.[3]

When Dean of the Faculty John W. Shirley resigned in 1962 to accept a similar position at the University of Delaware, Caldwell used his influence to obtain Harry C. Kelly, an associate director of the National Science Foundation, as his replacement. Kelly, a physicist who rendered invaluable service in preserving Japanese science

and technology during the American occupation after World War II, made special efforts to encourage research and teaching excellence. In 1968, at his suggestion, the Alumni Association created the Alumni Distinguished Professorships to recognize outstanding educators in all fields of study. He also promoted the continued development of the D.H. Hill Library and the University Computer Center, established in 1961, and provided for a major expansion of multidisciplinary studies, such as the Biological Sciences Institute. In addition, he guided the improvement of the curriculum, and demanded higher admissions and retention standards. His title was changed in 1967 to Provost, and in 1971 to Provost and Vice Chancellor for Academic Affairs, an indication of the increasing importance of Kelly's office.[4]

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From the beginning of his chancellorship, Caldwell sought to increase ties with the Raleigh community, and he demonstrated effective leadership in this area. Although historically few real problems existed between town and gown, aside from occasional difficulties over fraternity housing and student pranks, many believed that the institution should play a greater role in the growing city of Raleigh. Like other southern cities of the 1960s and 1970s, North Carolina's capital underwent rapid expansion: rural people moved to town and northerners flocked to the Sunbelt in ever-increasing numbers. At the same time, two other phenomena—the expansion of the college age population and the growth of adult and continuing education programs—provided new challenges to the college. Under Caldwell, N.C. State endeavored to meet these new demands in several different ways.[5]

The Friends of the College Series was one of the first efforts to broaden then college's role in the community; it was launched in 1959 under the directorship of Gerald O.T. Erdahl, the creator of the College Union program. Conceived during the latter part of the Bostian administration, Friends of the College brought the best of music, theatre, and dance to Reynolds Coliseum, including the Philharmonica Hungarica which inaugurated the series. Exposing college students and local citizens to cultural events normally available only in the larger metropolitan areas, Friends of the College was an instant and enduring success, supported solely by its annual spring membership drive. Its presence and the positive publicity it generated, fostered good will between the college and the community.[6]

The cancellation of another annual college event, the Dixie Classic basketball tournament, had just the opposite effect. The Dixie Classic, held at Christmastime, had begun in 1949, the year the coliseum was completed. It pitted North Carolina's Big Four—N.C. State, Carolina, Wake Forest and Duke—against some of the top collegiate teams in America. The tournament served as an excellent public relations tool and source of revenue for the college, a strong recruiting tool both academically and athletically, and a yearly gathering for North Carolina's basketball lovers. By 1961, it was an institution within the state.[7]

The Dixie Classic, indeed the entire basketball program, faced a serious crisis in the spring of 1961, when State Bureau of Investigation officials charged that three Wolfpack players, Anton "Dutch" Muehlbauer, Stan Niewierowski and Terry Litchfield accepted bribes to fix the outcome of games during the 1960-1961 season. Campus officials were shocked and outraged, especially when it was discovered that Everett Case, in the wake of a 1951 point-shaving scandal that nearly destroyed college basketball, had invited SBI agents to lecture his players each year on the subject. Many North Carolinians believed the trouble stemmed from the use of out-of-state players, and their contacts with gamblers at summer basketball camps in the North. Caldwell exonorated Case and his staff in the matter, but believed that something must be done to preserve the institution's integrity. President Friday took a strong position in the matter. In conference with Chancellor Caldwell of North Carolina State and Chancellor William Aycock of the University in Chapel Hill, the President announced the cancellation of the event. First interpreted as a temporary action it in time became clear that the discontinuance was permanent. A storm of outrage followed across the state from the thousands of enthusiastic Dixie Classic fans. Although he hoped that one day the Classic might begin anew, Caldwell soon discovered that the other members of the Big Four, who resented N.C. State's prominence in the tournament, had little real interest in such an undertaking. Although the basketball program was restored to full status after a couple of years, University officials resisted several attempts—including one by the 1963 General Assembly—to restore the Classic. Despite the wailings of local merchants, much of the press in the state supported the action, labeling the legislature's attempt political blackmail. The University's position in North Carolina was strengthened by the publicity on a similar scandal in Georgia. The decisive action caused the college to face short-term criticism, but protected the institution's reputation.[8]

Caldwell's administration also saw the rapid expansion of another area that provided service to the Raleigh community, the College Extension. Beginning in September 1961, all college and extension courses, day or night, carried resident credit, thus allowing the institution to provide a night degree program for Raleigh's working population. In July 1965 as the demand for continuing education increased in Raleigh and North Carolina, the College Extension was renamed the Division of Continuing Education, a modern term for the program. At the same time, William L. Turner became the Administrative Dean for University Extension, emphasizing the growing importance of the program. As the Raleigh area grew, retirees, professionals, and housewives flocked to campus in increasing numbers for professional enrichment, to earn a degree, or to enroll in a few courses because of personal interest.[9]

Caldwell, urged by Turner and E. Walton Jones, who served as acting dean during Turner's four-year absence with Governor Robert Scott's administration, initiated new campus programs in urban affairs. Raleigh, like other urban areas of the period, was the locus of many problems; the more well-to-do fled to the suburbs and businesses moved to the shopping centers on the urban periphery. At the same time, racial tensions caused much concern, although Raleigh was spared much of the violence that plagued American cities during this period. All agreed that something must be done to improve deteriorating conditions, and many looked to N.C. State to offer leadership in the field, as it had long done for rural problems.[10]

In response to these concerns, the Urban Affairs and Community Services Center was established in 1966, under the auspices of the Division of Continuing Education with financial support from Title I of the 1965 Higher Education Act. Its goal was to bring the research and educational resources of the institution to bear on urban problems. Projects and programs dealt with such urban issues as housing, the environment, social services, and economic development, and the Center cooperated with eleven other colleges in the Environmental Education Program for North Carolina. By 1969, university staff assisted city planners in Raleigh and nearby Zebulon, and established a training program for social service personnel. At the same time, Caldwell, Turner, and Provost Kelly urged the creation of an urban studies program, and established a committee to study the matter. A masters in Urban Design was approved in 1969 for the School of Design in cooperation with the Department of City and Regional Planning at Chapel Hill. As the program continued to evolve, Caldwell named an administrative board for the Center; campus officials continued to plan for its expansion.[11]

In another action designed to benefit the Raleigh area, N.C. State took the lead in 1967 in establishing the Cooperating Raleigh Colleges program. As it evolved, CRC provided: inter-institutional degree programs in forestry and engineering with historically black Shaw University; a library exchange agreement; and cross campus course registration with Meredith College, St. Mary's College, St. Augustine's College (also predominantly black), and Peace College. The Southern Education Foundation, IBM, and the Mary Reynolds Babcock Foundation all provided funds for the program, which was administered from the Meredith College campus. The CRC further enhanced N.C. State's service to the community, and it also promoted better race relations.[12]

During the early 1960s the institution struggled to establish degree programs in the liberal arts as a way to broaden its role in the surrounding community while, more importantly, strengthening the college. After Wake Forest College moved to Winston-Salem in 1956, many local leaders decried the absence of a major school of arts and sciences in the Raleigh area. Although State College officials, led by Dean of the Faculty Shirley and the faculty of the School of General Studies, insisted that N.C. State should be allowed to grant such degrees, the trustees and Consolidated University officials resisted it, insisting that such an innovation violated the principles of consolidation established in 1931. Many State College partisans declared that the refusal was just another example of Chapel Hill's domination of Consolidated University policy. Several degree proposals had met with rebuff, but many at N.C. State hoped that the new chancellor might be more successful.[13]

Citing the recommendations of the Long Range Plan of 1958 and the need for more researchers trained in the basic sciences, on January 11, 1960 Caldwell requested that the trustees create the School of Physical Science and Applied Mathematics (PSAM), with Arthur Clayton Menius as dean. The trustees approved the proposal, which placed the mathematics, chemistry, physics, and experimental statistics departments in the new school, and authorized the Bachelor of Science degree in these subjects. This new organization served the logic of the total campus commitment to strengthen these disciplines and enhance their visibility.[14]

The new school, PSAM, resting firmly on a strong base established during the 1940s and 1950s in several departments, made rapid progress during the 1960s. In 1961, the Computer Center was established under the direction of the school, and in 1967 the Department of Computer Science separated from the Department of Mathematics. By 1968, N.C. State's computer facilities were well-

developed, featuring state-of-the-art equipment and links with the Triangle Universities Computation Center, established by Duke, Chapel Hill, and N.C. State in 1966 in the nearby Research Triangle Park. In an effort to strengthen offerings in earth science, the geology faculty was transferred in 1967 from Mineral Industries in the School of Engineering and reestablished in PSAM as the Department of Geosciences. Doctoral programs in mathematics, chemistry, and biochemistry were approved rapidly, and a Department of Biochemistry established. By the end of the 1960s the school attracted large grants for research in statistics, and provided leadership in computer science and in plasma physics. In addition, it continued to provide strong background courses in mathematics and the physical sciences to students in N.C. State's other schools.[15]

Although the trustees and President Friday accepted Caldwell's arguments for PSAM, they were less enthusiastic about his proposal for degrees in the humanities and social sciences or "liberal arts." At the same time that PSAM was established, Friday rejected the recommendation calling for the creation of a degree-granting School of Liberal Arts. In Raleigh, State College faculty members expressed outrage. Caldwell and the General Studies faculty determined to regroup and continue the battle. Many believed that Addison Hickman, Dean of the School of General Studies since 1956, left because the proposal failed to win approval. He was replaced by Fred V. Cahill, who strongly supported the rejected recommendation, insisting that some duplication of function was necessary and that all students, regardless of major, would benefit from the presence of a strong School of Liberal Arts.[16]

After President Friday, who was surprised by the vehemence of the faculty, had a change of heart in late 1960, Dean Cahill and his faculty worked slowly towards achieving their goal. In 1962, the trustees approved a Bachelor of Science proposal that allowed the School of General Studies to grant degrees in traditional liberal arts subjects, but with a "liberal science" curriculum that contained more science and mathematics than traditional programs. At the same time, undecided students were permitted to register in the School of General Studies for the first time. Caldwell and Cahill agreed not to push for the Bachelor of Arts degree until the "liberal science" program was properly launched.[17]

In the meantime, however, two statewide commissions on higher education—the Carlyle Commission (1962) and the Pearsall Committee (1963)—released reports that reopened the Bachelor of Arts question. Both panels were concerned with the role of higher

education within the state; they specifically examined the expansion and reform of the Consolidated University, and the issue of community college development. Citing the need for a liberal arts program in the Raleigh area, the Pearsall Committee recommended approval for the B.A. degrees for N.C. State. Jonathan Daniels, the influential editor of the Raleigh *News and Observer*, and several members of the state Board of Higher Education also declared their support for a Liberal Arts School at N.C. State. At the same time, officials at Charlotte College demanded the right to grant such degrees when they joined the system as the University of North Carolina at Charlotte. Faced with these arguments, the trustees in January 1963, approved the Bachelor of Arts proposal at N.C. State; the programs were inaugurated in 1964. The long battle for the Bachelor of Arts degree was won.[18]

During the rest of the 1960s, Liberal Arts built on the strengths it had established while still the School of General Studies. Departments were expanded and new faculty employed, joining older colleagues who welcomed their first student majors. A part of this development was the coordination of the programs in economics and sociology. In 1965 the departments of Agricultural Economics and Economics were combined, and in 1966 Sociology and Anthropology and Rural Sociology were also united. Both programs were to be administered jointly by the Schools of Agriculture and Liberal Arts. At the same time, because of the expansion of the student body and the rapid growth of the faculty, the Department of History and Political Science was split into two departments. In 1966, a Master of Arts in economics was approved. This was followed rapidly by masters programs in English, politics, and history. These programs were especially designed to serve Raleigh area residents and government workers. Bachelors of Arts in French and Spanish were approved two years later, while the English Department prepared to offer a major in speech communications. Although much of its work continued to revolve around service courses for the other schools, and its own students were primarily commuters, the school established a Center for Economic Studies in 1966 that attracted grants for research and graduate programs. Still relatively new at the end of the decade, the School of Liberal Arts had proven itself a valuable asset to N.C. State and the Raleigh community.[19]

One of the School of Liberal Arts' most significant contributions during its early years was its Fort Bragg Branch, which was conducted through the Division of Continuing Education. N.C. State faculty, as well as professors from East Carolina Teacher's College

(now East Carolina University), journeyed to Fayetteville to offer course work for Army personnel at Fort Bragg; the program had begun as early as 1947. As the Fayetteville area grew, and as the Army began to urge that its personnel obtain college degrees, the demand for these offerings rose, and the college often conducted classes for almost 3,000 people. In 1962, N.C. State assumed full responsibility for these programs, and plans began for a degree-granting branch. In September 1964, the N.C. State faculty began to offer work at Fort Bragg leading to the Bachelor of Arts in history, political science, and economics. Later, programs in English and sociology were added, as were masters in sociology and education. As responsibilities increased in Raleigh, and the demand to integrate historically black Fayetteville State College became more intense, N.C. State officials decided to withdraw from the program. After three years of negotiations, the Fort Bragg Branch was transferred in 1973 to Fayetteville State University. Like earlier efforts in engineering instruction in Charlotte, the Fort Bragg program conducted by the Liberal Arts faculty demonstrated State's willingness to foster higher education for important sectors of the state's population.[20]

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N.C. State's older schools also adapted to changes during the 1960s. The processes of industrialization and urbanization accelerated in North Carolina during the decade. Concurrently, technology played an increasingly vital role in the lives of all North Carolinians. The general prosperity of the period allowed more people to obtain labor-saving devices, and the communications network linked larger segments of the population together. In its research and teaching phases, N.C. State endeavored to anticipate these changes in North Carolina with new programs and different emphases.[21]

In the School of Agriculture, the faculty attempted to keep their program relevant to the needs of North Carolina's rural people. More prosperous in some ways than at any previous time, North Carolina's agricultural sector still included many people living on many small farms. In the age of agribusiness and large farming units, these individuals were bypassed by general prosperity. At the same time, science continued to play an important role in all aspects of the study of agriculture. Under Deans D. Wallace Colvard, and H. Brooks James, N.C. State's School of Agriculture developed new areas of study to meet these demands.[22]

The 1960s were a time of rapid expansion in the biological sciences, and changes in N.C. State's School of Agriculture reflected

this phenomenon. In 1962, the Departments of Soils, Field Crops, Food Science and Processing, Horticulture and Animal Industry changed their names to Soil Science, Crop Science, Food Science, Horticultural Science, and Animal Science, respectively. Furthermore, the Biological Sciences Institute was created under the direction of Harold F. Robinson; it contained the Departments of Botany, Entomology, Genetics, Plant Pathology, and Zoology. The institute was created to encourage more inter-departmental research and to obtain more grants for the faculty. Faculties of microbiology and biochemistry were quickly established within the institute. The faculty of the School of Agriculture began a long-range study to develop an undergraduate major in biological science, and this program began in 1964. In 1968 the first conservation degree program in the Southeast was established, reflecting the growing concern for the environment and the scarcity of natural resources. Throughout the period, the majority of students in the school, many of them preprofessional students, chose to major in the science options within their departments. In an effort to attract students who might be discouraged by the name agriculture alone, the school in 1964 became the School of Agriculture and Life Sciences.[23]

At the same time it formally recognized the central influence of science in agriculture, the school urged the establishment of a two-year Agricultural Institute for students who did not wish to pursue traditional four-year degrees. This program was suggested by Dean Colvard as early as 1956, but action was delayed for several years. In 1959, however, it was created by the General Assembly, and it began operation the following fall. Designed to provide education for technicians in fields such as farm equipment sales and service, livestock management, and pest control, the two-year program awarded a certificate. Programs were later added in turf grass management and ornamental crops technology. The Agricultural Institute allowed the school to serve a different sector of the agricultural population.[24]

Meanwhile, the school took steps to establish the Agricultural Policy Institute to study long-term southern economic problems and disseminate educational information on these concerns. Sponsored by the Department of Agricultural Economics, which later merged with the Department of Economics, the institute received $2 million from the W.C. Kellogg Foundation and an additional $2 million from N.C. State between 1960 and 1970. The program, operated on a regional basis, evaluated existing agricultural policy, conducted seminars for agricultural leaders, funded graduate study and

research, and published the *Agricultural Policy Review*. The institute was one of only two in the country; it examined the problems of adjustment faced by southern farmers; despite overall prosperity farm income fell during the 1950s, and many small farmers remained outside the mainstream. By the time the program ended in 1970, the institute had published many significant articles and had enlarged N.C. State's capacity to advise government officials on agricultural policy, and brought solid recognition to the university.[25]

Agricultural Extension also changed during the 1960s in its efforts to improve service to North Carolina's rural people. In the wake of the recommendations of the "Greenbook" in 1957, the extension service initiated a series of five-year plans that sought increases in farm income and emphasized community planning. To create and implement these plans, county advisory boards were established. The first five-year plan "$1.6 in '66" began in 1961, and 75 percent of the counties reached their goals. The second program, "Target 2," attempted to raise farm income by 1971 to $2 billion. The plans stressed better marketing, processing, and educational efforts. In an effort to draw the 4-H Clubs closer to the community, the club program was removed from the local public schools and more local leadership was encouraged. At the same time, state extension personnel received faculty status at N.C. State, becoming extension professors. The Department of Extension Personnel Development was created in 1964 with the aim of providing professional enrichment for extension personnel. Although it ranked second only to Texas in amount of funds provided for agricultural extension, only 2 percent of North Carolina's personnel held advanced degrees, comparing poorly to the 20 percent average for other states. The new department, later renamed the Department of Adult Education, helped overcome this weakness, as extension reformed its program during this period.[26]

The School of Engineering also changed with the times during the 1960s. It received a valuable boost for its graduate programs when it obtained grants totaling several million dollars from the Ford Foundation (1961) and the National Science Foundation (1966). The initial NSF grant, under a program to aid "developing institutions" was $3.55 million. These funds were used to employ new faculty, provide professional enrichment, buy new equipment, and to fund graduate study. New doctoral programs in industrial engineering and mechanical engineering, along with a new field—operations research, where computers solved engineering problems in mathematical form—were established. Previously devoted primarily to undergraduate education, the School of Engineering made important

strides in the 1960s to meet the increasing demand for engineering researchers and educators.[27]

The School of Engineering made several changes during the decade in its undergraduate programs to keep up with the advanced educational demands of the profession. A new major, engineering operations, designed to train engineers to solve industrial problems, was created in response to the needs of industry. A much more practical course than many of its counterparts, engineering operations was initially intended to be only a Bachelor of Science program. In addition, to keep up with national trends in engineering education, the undergraduate curriculum was altered. A freshman engineering division was created to advise all new students, and a common first year initiated. At the same time, more elective choices were allowed in the liberal arts stem of the engineering curriculum. These changes enabled the School of Engineering to retain its national standing.[28]

Engineering extension also expanded as more funding became available. Under North Carolina's State Technical Services Act and the Public Works and Economic Development Act, financial support for engineering extension doubled. The Industrial Experiment Program changed its name to the Industrial Extension Service to give it a title more indicative of its function. The School of Engineering continued its extension classes in several industrial centers, notably Greensboro, Winston-Salem, and High Point. It frequently offered upper level and graduate course work at the centers. Through the offerings at the centers and the Industrial Extension Service, the School of Engineering continued its service to the state's industrial sector.[29]

With the creation of the School of Physical Sciences and Applied Mathematics, responsibility for the nuclear reactor was transferred from physics to the new Department of Nuclear Engineering. The 5 kilowatt reactor was dismantled and reassembled in the Bureau of Mines building, while a new 10 kilowatt reactor was constructed in the Burlington Nuclear Laboratory. This new reactor was operational in early 1960, and the older reactor was dismantled in October 1964. In 1965 a Cobalt-60 source was added through a grant of $62,000 from the North Carolina Board of Science and Technology. In an effort to keep up with changes in the field, plans were developed in 1967 for the construction of a 1 megawatt Pulstar reactor, but federal funds were curtailed, and the project delayed until the early 1970s; it finally was dedicated in 1973.[30]

In the face of industrial difficulties, the School of Textiles struggled to maintain enrollments and improve its curriculum.

School officials complained that they could not attract students because of the industry's reputation for low wages. In order to overcome these problems school officials began intensive recruiting activities, and the Textile Foundation established several new undergraduate scholarships. These efforts resulted in higher enrollments at the end of the decade.[31]

At the same time, under the leadership of Malcolm Campbell and his successor after 1967, David Webb Chaney, the school's curriculum changed to meet industrial demands. Between 1961 and 1965 more business, economics, and science courses were introduced in an effort to train men for management positions. The number of hours was also greatly reduced, and at the insistance of Chancellor Caldwell and Provost Kelly, the last of the shop-oriented work removed from the curricula. In addition, an undergraduate honors program was begun in Textile Chemistry. At the urgings of industrial leaders such as Chemstrand, a doctorate in Fiber and Polymer Science was approved in 1967; its main purpose was to provide researchers for industrial laboratories. Textile research received state support for the first time in 1959, and after that date it relied increasingly on public sources. Private funds were curtailed in the face of industrial woes. Despite concerns over enrollment, the School of Textiles remained the largest of its kind in the nation at the end of the decade.[32]

During the 1960s and early 1970s the School of Education finally achieved many of the goals that it had established immediately after World War II. As its enrollment continued to climb each year, the school changed its programs to meet the professional needs of North Carolina educators. In 1966 the school achieved a milestone when both the Doctor of Education and the Doctor of Philosophy in psychology were approved. In addition, masters and doctoral programs in mathematics and science education were created during the decade to combat shortages in these vital areas. In 1966, the school also obtained the largest federal grant in N.C. State history to that date, when it received $4,672,582 from the Office of Education to develop a Center of Occupational Education. One of two of its kind in the United States, the center was created to study the basic education of industrial workers, especially the underprivileged. When J. Bryant Kirkland retired in July 1969, construction of Poe Hall, named for Clarence Poe, the long-awaited headquarters for the school, was under-way. It provided adequate space finally for a faculty which had expanded from eight members in 1948 to eighty under Kirkland's leadership. His successor, Carl Dolce, prepared to develop new areas in school administration and personnel.[33]

The most important development in the School of Education during the 1960s, however, was the establishment of the Department of Adult and Community College Education, which was originally named the Department of Adult Education. This department developed in response to two phenomena: first, the need to provide graduate level work for extension personnel, and second, the growth of the adult education movement throughout the nation. Originally begun in 1964 as the Department of Extension Personnel Development in the School of Agriculture, the new program soon expanded into the training of all kinds of adult educators. As the community college movement grew in North Carolina during the 1960s, department members also assumed leadership for training in this area. The department, after its relocation in the School of Education, quickly developed masters and doctoral programs, and it rapidly become one of the largest departments in the school. This department, along with the Center of Occupational Education, enabled the School of Education to provide a unique service not found in other schools of education in the state.[34]

The School of Design continued to maintain its often controversial, national reputation; it, too, changed its programs to meet the needs of the profession and the society around it. After 1967, all students enrolled in a common first two years in the newly created Basic Design program, which had been initiated to encourage study of design problems. At the same time, a visual design option was established in the Department of Product Design. The five-year degrees in the architecture and landscape architecture departments were abolished, and were replaced by four-year undergraduate programs and two years of graduate study. The name of the degree was changed to Bachelor of Environmental Design to reflect the school's continuing philosophy of designing structures that harmonized with their setting. In an effort to meet the growing problems of urban areas in North Carolina, a masters in Urban Design was approved in 1969, in conjunction with the Department of City and Regional Planning at Chapel Hill. Throughout the period, it continued to be recognized as a national leader.[35]

The School of Forestry also maintained its high standing during the 1960s, as its emphasis became less technical and more scientific. All vocational work was placed in a ten-week summer practicum, and more time was devoted to science and methodology and less to description. In order to reflect this new orientation, Wood Science and Technology was renamed Wood and Paper Science. At the same time, the Department of Forest Management became the Department of Forestry, reflecting a broader emphasis on forest

resources, not just timber management. New programs in areas such as wildlife biology, conservation, and entomology were created in cooperation with the School of Agriculture and Life Sciences. In addition, the Department of Recreation and Parks Administration was transferred to Forestry from the School of Education and renamed the Department of Recreation Resources Administration, to indicate its new emphasis. In 1967, the School was renamed Forest Resources to reflect its broadened area of interest. During the 1960s enrollments climbed, and by 1968 the school was the fourth largest of its kind in the United States. When Dean Richard Preston, the co-author of the McIntyre-Stennis Cooperative Forestry Research Act of 1964, retired in 1971, he could look back on many achievements since his arrival in 1948, when the faculty were only eight in number, with 206 students. By 1970, the faculty numbered more than 50 and students totaled over 700 as the school prepared to move to its new headquarters in Biltmore Hall, named for Carl Schenck's pioneering Biltmore Forestry School. Preston's successor, Eric L. Ellwood, looked to the 1970s confident that he headed one of the leading forestry faculties in the South.[36]

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As its academic reputation continued to grow in prominence during the 1960s, the institution became embroiled in several major controversies that raged within North Carolina and American society. Issues such as race and United States' foreign policy confronted the Caldwell administration during this period. Although the end of racial segregation and the expansion of the Vietnam War were emotional issues, N.C. State avoided the violent disturbances that occurred elsewhere. Faculty, administrators, and students, many of whom came from conservative backgrounds, in general demonstrated the desire to conduct peaceful discussions of the issues. N.C. State students, who tended to be more career-oriented than their counterparts at predominately liberal arts institutions seemed to prefer to concentrate on their studies, although they also demonstrated an increasing concern with events in the world around them.[37]

The first of these controversies, the renaming of the institution, was far less earthshaking than the turmoil over race or Vietnam, but it generated a surprising amount of debate. Before this issue had been settled, it had threatened the Caldwell administration's relationship with the Consolidated University as students, faculty, and alumni all vehemently expressed their opinions. Since the mid-1950s the faculty had periodically discussed dropping the name State Col-

lege in favor of North Carolina State University. In 1960 the Faculty Senate and Student Government both passed resolutions requesting such a change. Chancellor Caldwell also supported the idea, as did the Alumni Association who, in 1962, reminded North Carolinians that State College was one of only six land-grant institutions in the nation that had not yet been redesignated "university."[38]

The name-change supporters soon encountered opposition from Consolidated University officials and Governor Terry Sanford. These opponents professed the desire to retain the unbroken unity of the Consolidated University, and wanted to rename the institution "the University of North Carolina at Raleigh." Although Caldwell and the Faculty Senate initially agreed to support such a suggestion, alumni, faculty, and students expressed outrage at the very thought that the school might be viewed as a branch of its sister institution at Chapel Hill. Fraternities picketed the Chancellor's Residence, and alumni engaged in a letter writing campaign. They insisted that the proposed name would hurt State College traditions and destroy the institution's identity. Caldwell himself was torn between his duty to Friday and the trustees and his own desire to rename the institution North Carolina State University. Led by Alumni Association President Charles Reynolds, Alumni Secretary Herman Ward Taylor, and future governor Robert W. Scott, State College boosters engaged in a loud campaign that left some individuals wondering if this was another attempt at deconsolidation. When it became evident to Consolidated University officials that UNC-Raleigh would never be accepted, they sought a compromise. Finally, after a year of bickering that made headlines throughout the state, State College by legislative action in June 1963, became North Carolina State of the University of North Carolina at Raleigh.[39]

Although this action resulted in a temporary lull in the conflict, the battle was not yet over. Alumni, again led by Reynolds, Taylor, and Scott, continued to insist that the institution merited the name North Carolina State University, and the letter-writing campaign began anew. The matter soon moved beyond the trustees' control when Representative George Wood, Class of 1950, guided a bill for the NCSU name through the 1963 House of Representatives, although it failed to gain Senate approval. Meanwhile, N.C. State faculty members expressed discontent with the new name, labeling it awkward and embarrassing. In January 1964, the Alumni Association Board of Directors again proposed their preferred name change to the trustees, but it was rejected. Throughout the rest of 1964, however, the alumni continued to agitate the issue. When the General

Assembly met the following year, Representative Wood introduced another NCSU bill, this time threatening to make the name change an issue in the 1967 elections. Finally, in April 1965, the Senate approved Wood's bill, with the support of Governor Dan K. Moore. As of July 1965, N.C. State became North Carolina State University at Raleigh, and the long, bitter battle was won.[40]

During the 1960s N.C. State's students and faculty members involved themselves in other controversial issues. One of the areas in which they became concerned, often to the distress of the larger society around them, was the issue of integration. N.C. State's desegregation was peaceful and orderly, as contrasted to events at universities in Mississippi and Georgia where student riots threatened to close the public institutions of the state. Although there was no need for the National Guard to escort them to class, N.C. State's black students quickly discovered that Raleigh area merchants and landlords were reluctant to abandon long-standing racial mores. Events elsewhere, especially the February 1, 1960 Woolworth's lunch-counter sit-in at Greensboro, conducted by four black North Carolina Agricultural and Technical College freshmen, inspired N.C. State blacks and their white allies in Student Government and on the faculty to pressure Raleighites to abandon segregation.[41]

Chancellor Caldwell, unlike his counterpart at the University of North Carolina at Greensboro, Gordon Blackwell, who condemned his students' support of the lunch counter sit-ins, supported the anti-segregation activities of N.C. State's student body. Both he and the Faculty Senate applauded an April 11, 1960 resolution of the Student Government calling for the racial integration of Raleigh's public facilities. The Faculty Senate quickly followed with a similar resolution. With the encouragement of Caldwell, the Student Government formed a Human Relations Committee that engaged in a letter-writing campaign to local merchants. The chancellor, a member of the Mayor's Advisory Committee formed to study the desegregation matter, also wrote and spoke to area businessmen urging the integration of public facilities. For three years, the Student Government conducted its crusade, and finally, in 1963, Baxley's became the first restaurant on Hillsborough Street to serve blacks. Most college district businesses followed the example; blacks, however, were still denied service at many eating places in downtown Raleigh.[42]

The difficulties of integrating downtown facilities were fully demonstrated when Dr. Angie Brooks, a black United Nations delegate from Liberia, was refused service at the S & W Cafeteria and the Sir Walter Raleigh Coffee Shop. Brooks was accompanied by out-

spoken N.C. State political scientist Allard Lowenstein, already unpopular with Raleighites for his work with black civil rights groups. The *Technician* and the Student Government expressed outrage at the refusal of the downtown businesses to serve Dr. Brooks. Secretary of State Dean Rusk and Governor Terry Sanford both quickly apologized to Dr. Brooks. In the meantime, students and faculty joined black students from Shaw University — the birthplace of Martin Luther King, Jr.'s Student Nonviolent Coordinating Committee—and from St. Augustine's College to picket such places as the State Theatre and Cameron Village businesses that refused to provide equal services for blacks. Many N.C. State people signed a May 1963 petition circulated by the School of Design's Professor Charles Kahn and published as an ad in the *News and Observer* that called for an end to segregation in Raleigh. In addition, Caldwell, as a member of a citywide Community Relations Committee, continued his campaign. Gradually, the number of integrated businesses increased, and after the passage of federal civil rights legislation in 1964 and 1965, few holdouts remained.[43]

Off-campus housing for blacks remained a problem, however, and it became the next focus of concern for Caldwell and the student leaders. Many Raleigh landlords refused to rent to black students. In order to combat this discrimination, the off-campus housing office refused to list landlords as of November 1966, who denied housing to blacks. The Faculty Senate established a Good Neighbor Council to press the issue, and black graduate students in August 1966, formed DARE (Direct Action for Racial Equality) to pressure the reluctant landlords to rent to blacks. For the next several years, campus officials and students waged an ongoing battle to find off-campus housing for blacks. Eventually, they were successful, although at times progress was slow.[44]

The April 4, 1968 assassination of civil rights leader Dr. Martin Luther King, Jr. triggered further events at N.C. State. Black and white students assembled on campus to denounce the murder, but they were not permitted to march to the capitol because of a city-wide curfew. At Chancellor Caldwell's request they dispersed. Instead, student leaders presented a petition to Governor Dan K. Moore on the subject while the Faculty Senate passed a resolution expressing shock and sorrow at the tragedy. The Faculty Senate also sought to reduce tensions. After economics Assistant Professor Leonard Hausman made some emotional remarks to a campus gathering blaming Governor Moore and all white North Carolinians for King's death, the Senate urged faculty members to avoid "intemperate and

ad hominum" remarks. Hausman insisted that this amounted to censure, and he demanded an investigation by the AAUP. Hausman, an activist who urged his students to promote union organization and to question Department of Economics policies, received little satisfaction in his efforts for vindication. He left campus for another university, blaming Caldwell and Provost Harry Kelly for his trouble. The Faculty Senate insisted that its sole intention was to maintain calm in the assassination crisis.[45]

The racial situation continued to cause concern and it led in 1969 to the first significant demonstration at N.C. State. Black student leaders, now organized as the Society for Afro-American Culture, and their white allies became involved in a dispute between black physical plant workers and the Caldwell administration. The physical plant workers, led by Eddie Davis who claimed that his union-organizing activities caused his demotion to window washer, presented Caldwell and Physical Plant director J. McCree Smith with a list of grievences regarding their working conditions. They were especially concerned about the plight of black women employed as maids in the mens' residence halls, where they were frequently subjected to rude, suggestive remarks. On February 28, a crowd of more than 200 students, organized by the Society for Afro-American Culture and the white activist organization "The Group," gathered at the Morris Building to support the black employees. Alerted by these events, Caldwell called a convocation on March 5 where he spoke to the campus community. Although he defended the right of the protestors to express their discontents, he reminded them that disruption of the university would not be tolerated. When the university moved slowly on the workers' demands, however, a group of workers staged a sit-in at Caldwell's office. When discussion was exhausted Caldwell called the police to remove them. The workers were arrested, prompting the Society for Afro-American Culture, along with black students from Shaw University and St. Augustine's to march in a torchlight parade on the Chancellor's Residence and later the capitol. The Raleigh City Council promptly banned torchlight parades. Maid service in the dormitories ceased, and Student Affairs personnel worked to resolve the other problems. Although The Group staged another demonstration in May, the situation soon eased.[46]

After 1969, the race issue moved into other channels as students and faculty became involved in other protests. The question remained a vital one, however, because Department of Health, Education, and Welfare officials in Washington began to pressure southern states to further the integration of their public universities.

Throughout the 1960s the number of black students and faculty at N.C. State remained very small, much to the dissatisfaction of federal authorities. The Caldwell administration made systematic efforts to remedy the situation. It employed black students as recruiters and made scholarships available to prospective black students. Initial investigations by HEW representatives in the late 1960s revealed that N.C. State acted in good faith to recruit blacks, but federal officials warned that more must be done in the future or they would intervene.[47]

Although the actual number of N.C. State faculty and students involved in the racial integration movement was small, because the majority of people on campus avoided the controversy, reaction in the larger North Carolina society to N.C. State's involvement was strong. Many state political leaders and conservative citizens, distressed by the growing civil rights movement throughout the nation, expressed their dismay at the activities of N.C. State's faculty and students. Most of their ire, however, was reserved for the Chapel Hill faculty, who they viewed as subversives who wished to undermine white dominance and radicalize America. Led by several conservative lawmakers and long-time Secretary of State Thad Eure, who were distressed by the sight of Consolidated University professors leading civil rights demonstrations in downtown Raleigh, these individuals decided to strike back at the university. They did so with little concern for the serious consequences for the Consolidated University or for the reputation of the state.[48]

In order to accomplish their goal, Eure and conservative allies Phil Godwin and Ned Delamar in 1963 drafted a bill, based on similar legislation in Ohio. The legislation prohibited the Consolidated University from permitting any known member of the Communist Party, anyone advocating the violent overthrow of the government, or any Fifth Amendment pleaders to speak at campus. After proponents suspended the House rules on the last day of the session, the bill passed this chamber with little debate. At this point, someone notified President Friday in Chapel Hill about the matter, and he set out for Raleigh. By the time he reached the capitol, however, the bill was through the Senate and was already a law. Consolidated University administrators and faculty expressed outrage and concern at this attack on academic freedom. Conservative forces were jubilant, declaring that they would remove any trustees or university officials who failed to enforce the law.[49]

The impact of the so-called Speaker Ban Law at N.C. State was almost immediate. On July 2, the Faculty Senate passed a

resolution of "profound concern" over "legislative interference" which clearly restricted academic freedom. In September, campus authorities expressed more distress when noted British scientist J.B.S. Haldane refused to lecture on campus after he was questioned about his previous editorship of the British *Daily Worker*, a leftist publication. Student leaders joined their counterparts from other North Carolina institutions of higher learning in a petition to the legislature for repeal of the bill, but the lawmakers refused to reconsider. In late October, the trustees declared that the situation violated the essential principles of the Consolidated University's existence, and reminded the lawmakers that a 1941 statute already forbade speakers who advocated the violent overthrow of the government. They requested Governor Terry Sanford to appoint a study commission on the subject, but no action was taken. In the meanwhile, conservative forces noted with some satisfaction that professors no longer led civil rights marches in Raleigh.[50]

While the State chapter of the AAUP threatened to take the matter to court, the college continued to suffer under the interdict. N.C. State's faculty discovered that they could not participate in foreign exchange programs because Russian scientists were barred from their campus. Several departments were forced to cancel or refuse to hold seminars and professional meetings, and Chancellor Caldwell labeled the law "A Berlin Wall of the Mind." Political leaders insisted that they could not repeal the ban because the majority of North Carolinians supported it.[51]

In late November 1964, after continued pressure from Consolidated University authorities, Governor Sanford finally appointed a trustee committee to study the speaker ban question. Known as the Medford Committee, after chairman William Medford, the group reported to President Friday the following spring. They called for an amendment to the controversial legislation that would return control of the matter to the trustees. The committee reminded North Carolinians that several other states, including Georgia, Florida, and Alabama, refused to pass similar legislation. They expressed concern about the damage caused by the law and warned legislators that it posed a serious threat to the Consolidated University's accreditation. Their report was accepted by the full board of trustees in May 1965, who then awaited further developments.[52]

When the Southern Association of Colleges and Secondary Schools threatened to revoke the Consolidated University's accreditation in the early summer because of the law, Governor Dan K. Moore appointed a committee, chaired by Representative David M.

Britt to examine the problem. In November 1965, the Britt Commission recommended that the suggestions of the Medford Committee be accepted, and control of campus speakers be returned to the trustees. Governor Moore called a special session of the General Assembly, which quickly adopted the Britt Commission's recommendation. Although some conservatives threatened to take the matter to the people in a referendum, most lawmakers were satisfied with the result.[53]

After the passage of the amendment to the Speaker Ban law, the trustees voted to place control of speaker policy in the hands of the chancellors. Many faculty members expressed discontent with this action because the Speaker Ban law still remained on the books. When Chapel Hill students in 1966 requested permission to invite communists Frank Wilkinson and Herbert Aptheker to campus, the matter came to a crisis. Chancellor J. Carlyle Sitterson had to forbid their appearance, and students and faculty took the matter to court. Finally, on February 19, 1968, the United States Middle District Court of North Carolina sitting in Greensboro, led by Justice Clement Haynesworth, declared the Speaker Ban Law unconstitutional because of its vagueness and restrictions on Fifth Amendment pleaders. University officials breathed a sigh of relief, and state officials decided to let the matter rest.[54]

As concerns over racial matters moved into other channels, the N.C. State community became involved in another bitter controversy—the Vietnam War. American military advisors had been in Indo-China ever since the French withdrew in 1954, after the fall of Dienbienphu. Slowly, under Eisenhower and Kennedy this presence grew. But not until the introduction of American ground forces and military conscription under Lyndon Johnson during the mid-1960s, did protests at N.C. State and other American campuses erupt. The 1960s generally were a turbulent time on American campuses, with the civil rights movement, the youth rebellion against the establishment, and the protest against the war, all of which seemed to culminate at the same time. Students and professors questioned the country's involvement in the Vietnam conflict, as well as the morality of the military draft. At N.C. State this protest took a much milder form than it did at campuses such as Berkeley, Cornell, Columbia, and Kent State, but N.C. State students frequently demonstrated that they were as concerned about Vietnam as their counterparts at other colleges and universities.[55]

N.C. State's involvement with the anti-war movement began in 1967, when a small group of concerned students joined their

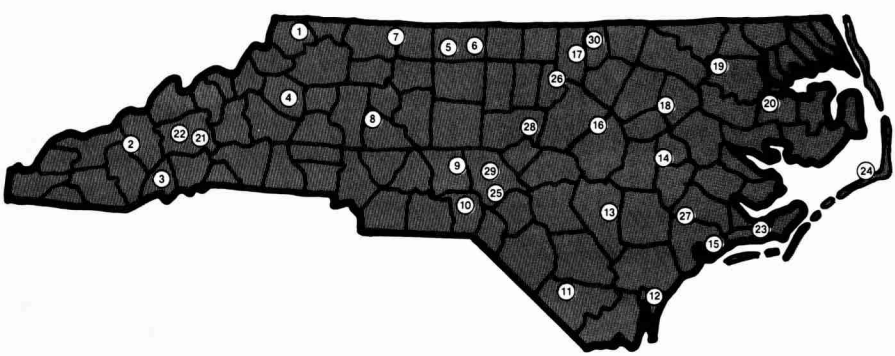
counterparts from Duke and Carolina in several demonstrations against the draft in downtown Raleigh. Over the next three years an increasing number of N.C. State students participated in antidraft rallies on campus and at the induction center on South McDowell Street. In addition, a peace vigil conducted by students and professors began in 1967 on Fayetteville Street. Then, in April 1969, a draft information service was established in the Bar Jonah Coffee House at the College Union. Activist organizations, such as The Group and The New Mobe were formed by concerned students, who distributed information on the issue. Campus authorities gave tacit approval to these activities as part of the academic experience, and in keeping with academic freedom. But they also established in early 1968 a policy which prohibited the disruption of the normal operations of the institution. Consolidated University trustees, aware of the rapidly escalating protests at other campuses, watched the situation with caution, but permitted the demonstrations as long as they broke no laws. When state officials led by Governor Robert Scott declared that they would intervene in campus demonstrations without the request of university officials, however, the trustees adopted in June 1969, a disruptions policy for the Consolidated University. Faculty members protested the new policy because it placed the fate of all educators who were accused of disruption in the hands of the Consolidated University president, and not with a campus jury of their peers. After some agitation on this matter, the disruptions policy was revised, giving more power to the chancellors and allowing far more student and faculty input.[56]

The academic year 1969-1970 proved to be the most turbulent at N.C. State. In September, students and faculty announced that they intended to participate in the national moratorium on Vietnam scheduled for October 7. After some discussion, however, they decided to hold a separate moratorium on October 15, co-sponsored by the Faculty Senate and the Student Government. Chancellor Caldwell gave the keynote address in a program that included films, lecturers, and workshops. Faculty were allowed to participate if the event did not conflict with their class schedule. Despite the concerns of state officials and Raleighites, the event was peaceful.[57]

As the Nixon administration broadened the war in the spring of 1970 with the invasion of Cambodia, antiwar sentiment increased at N.C. State as well as on other campuses. On May 4, Student Body President Jack Barger and Student Senate President Eric Moore called for a convocation on Cambodia. On the same day, at Kent State University in Ohio, four students were killed in a

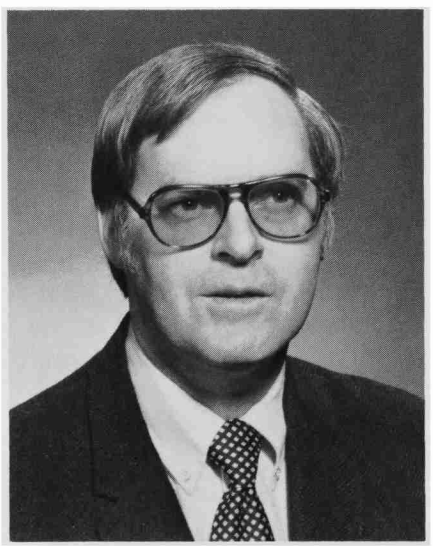
Besides the main campus, Blue Ridge Road complex, Centennial Campus, and the University research farms in and around Raleigh, North Carolina State University has numerous other facilities throughout the state. These include the Agricultural Research Service's research farms (some owned by the North Carolina Department of Agriculture), other research facilities, 4-H Camps, the Chinqua-Penn Plantation, Key Haven, and several forests.

1 Upper Mountain Research Station, Laurel Springs
2 Mountain Research Station, Waynesville
3 Mountain Horticultural Crops Research Station, Fletcher
4 Anita-Alta 4-H Outpost Camp, Lenoir
5 Upper Piedmont Research Station, Reidsville
6 Betsy-Jeff Penn 4-H Center & Chinqua Penn Plantation
7 Sertoma 4-H Camp, Westfield
8 Piedmont Research Station, Salisbury
9 Sandhills Research Station, Jackson Springs
10 Millstone 4-H Camp, Ellerbe
11 Border Belt Tobacco Research Station, Whiteville
12 Horticultural Crops Research Station, Castle Hayne
13 Horticultural Crops Research Station, Clinton
14 Lower Coastal Plain Tobacco Research Station, Kinston
15 Mitchell 4-H Camp, Swansboro
16 Central Crops Research Station & Randleigh Farm, Clayton
17 Oxford Tobacco Research Station, Oxford
18 Upper Coastal Plain Research Station, Rocky Mount
19 Peanut Belt Research Station, Lewiston
20 Tidewater Research Station, Plymouth
21 Swannanoa 4-H Camp, Swannanoa
22 Minerals Research Laboratory, Asheville
23 Seafood Laboratory, Morehead City
24 Hatteras Marine Research Station, Hatteras Village
25 Veterinary Equine Research Center, Southern Pines
26 Hill Forest & Quail Roost Farm, Durham County
27 Hofmann Forest, Jones and Onslow Counties
28 Hope Valley Forest, Chatham County
29 Goodwin Forest, Moore County
30 Key Haven, Vance County



Clement Market, animal science

Llewellyn H. Thomas, physics



Major Goodman, Crop Science

North Carolina State University members of The National Academy of Science. Founded in 1863, the National Academy of Science is a society of distinguished scientists and engineers who are dedicated to the furtherance of science and its use for the general welfare. Clement Markert is an authority on isozymes and gene activity. Llewellyn Thomas developed the statistical model of the atom also known as the Thomas-Fermi model. Major Goodman administers NCSU's corn bank and conducts significant work in statistical genetics. Stanley Stephens conducted important work in cotton genetics that encouraged the development of gossypol-free protein meal and better lint strength.

C. Clark Cockerham, statistics and genetics

Gertrude Cox, statistics

Ellis Cowling, plant pathology, wood & paper science

Stanley Stephens, Genetics

Clark Cockerham's research applied statistical genetics to plant and animal breeding. Gertrude Cox was a pioneer in statistics who was the first head of the UNC Institute of Statistics. She helped to spread the discipline abroad and she was one of the planners of the Research Triangle Institute. Ellis Cowling is an authority on forest pathology and the biochemistry of wood decay. He also administers the EPA's acid-rain program.

Ralph E. Fadum, civil engineering

Paul Z. Zia, civil engineering

Alan S. Michaels, chemical engineering

North Carolina State University members of The National Academy of Engineering. The National Academy of Engineering was established under the charter of the National Academy of Science in December 1964. It is a society of outstanding engineering researchers. Paul Zia is an authority on structural concrete design practice. Ralph Fadum is an expert on soil mechanics and foundation engineering. Alan Michaels conducted significant research in applied chemistry and membrane science.

confrontation with National Guardsmen. Despite this shocking event, campus officials agreed to permit the May 6 convocation. Caldwell addressed some 2,000 students who assembled on the brickyard to participate in a program that included several seminars. About twenty-five students posted an eviction notice for ROTC at Reynolds Coliseum, but the program, optional since September 1965, faced little real opposition. The remainder of the demonstrators under the leadership of N.C. State Student Body President-elect Cathy Sterling joined students from nearby colleges in a march to the capitol to protest Governor Scott's support of Nixon's Cambodia policy. Although the governor met with student leaders, Scott refused to withdraw his support for Nixon's war policy, but he assured young people that he would convey their concerns to the president. Some students expressed dissatisfaction with Scott's position, but Sterling reminded them that most governors would have refused to even meet them.[58]

Returning to campus, student leaders began to study ways to broaden their discussion of the war. On May 11, members of the New Mobe and Sterling, who had the confidence of the activist element on campus, unveiled plans for a Peace Retreat that included a program of self-education, community action projects, and political lobbying. Originally, student leaders planned to call the event a "strike" as did students at other campuses, but they decided on the name Peace Retreat because it was less threatening. With final examinations fast approaching, however, Peace Retreat organizers feared that the need to study might discourage many potential participators. In order to overcome this difficulty, student leaders decided to petition the Faculty Senate to enact an examination exemption policy for legitimate participants in the retreat. After a three-and-one-half hour debate on May 12, the Senate declared that only participating seniors could miss examinations. Led by Sterling, the students elected to take the unprecedented step and appeal the matter to the General Faculty. Impressed by the seriousness of student organizers, the General Faculty voted to permit not only student leaders, but reporters from the *Technician* and WKNC into the meeting. After listening to Sterling's persuasive presentation, the General Faculty, swelled by the presence of graduate assistants and lecturers, voted 265-233 to allow students to take pass/fail or incompletes if they elected to take part in the Peace Retreat. After this victory, student leaders retired to plan the upcoming activities.[59]

The Peace Retreat lasted for two weeks and included a number of activities. A blood drive was conducted, and students went

door-to-door in the campus neighborhood to discuss the war. At first, Raleighites were reluctant to respond, but gradually proved more receptive. A group of over 100 students went to Washington to meet with their congressmen. Events also included speeches by Caldwell and other campus leaders, seminars, films, and workshops. A genuine effort was made to include all viewpoints, and New Mobe leaders frequently cooperated in workshops and displays with such pro-Nixon groups as the American Students for Action. Although WRAL-TV personality Jesse Helms went to great lengths to turn the community against the students, most people noted that the activities were peaceful, and those who wanted to attend classes encountered no interference. As the semester ended events quieted down.[60]

The next fall students at N.C. State and elsewhere continued to express concern over the war. In October, when it was announced that radical-baiting Vice President Spiro T. Agnew planned to speak in Reynolds Coliseum in a Republican campaign rally, authorities waited to see how the students would react. Student Body President Sterling urged her constituents to behave in an orderly manner and to avoid outbursts that would only serve Agnew's purpose. Although a few students picketed the October 26 event, the entire episode passed peacefully, and N.C. State students demonstrated once again that they preferred a peaceful discussion of issues to violent confrontation. Although moratorium events were conducted in the fall of 1970 and 1971, student concerns at N.C. State in the early 1970s shifted fairly rapidly from national to local issues.[61]

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During the 1960s and early 1970s, several aspects of student life also changed. Many long-standing rules and restrictions regarding class attendence, dormitory life, and personal conduct were abolished. The university, like its counterparts throughout America, abandoned the traditional *in loco parentis* stance and treated students as adults who could conduct their private lives with a minimum of university supervision. The position of Dean of Men and Dean of Women, long associated with student discipline, were abolished, and students who violated state laws faced legal action. In addition, the institution permitted alcohol in student residence halls, relaxed certain prohibitions on coed "visitation," and gave into student demands concerning cooking in the dormitories. Students who behaved in an irresponsible manner faced penalties assessed usually by their peers, not the administration.[62]

The 1960s saw the rapid increase in the number of coeds at N.C. State; the number rose from 197 in 1961 to 2,097 in 1969. There were several reasons for this phenomenon, including the creation of the Bachelor of Arts degree, and the gradual erosion of prejudices against women in fields related to science and technology. Chancellor Caldwell, formerly the president of a women's college in Alabama, supported the increase in the campus's female population. In order to serve this growing minority better, a half-time advisor to women, Julia Miller, was hired in 1961. The position became full-time in 1965. Coeds established a Women's Association (1963) and obtained a lounge area in the Erdahl-Cloyd Union. In addition, in 1959, the first national sorority, Sigma Kappa, was chartered at N.C. State. Women were not governed by the Men's Campus Code Board, but conducted their own until 1968, when the two boards merged. Still barred from ROTC until 1970 when the Air Force accepted them for the first time, women did not even take physical education classes until 1962, when a special course was designed for them. The biggest problem facing coeds, however, was eased in 1964 when Watauga Hall was remodeled as a women's dormitory. The Watauga residents were subject to curfews on weeknights and weekends, and they could sign out only with parental approval. Additional women's housing became available in 1967 when Alexander Residence Hall was renovated and in 1969 with the completion of Carroll Hall. The first coed residence hall, Lee, was established in 1970, when women moved into the upper floors of a formerly all-men's dormitory. Gradually, the restrictions on women eased, and after a May 1968 conference between President Friday and the chancellors, junior and senior coeds were exempt from curfews. In 1971, restrictions on all women ended; since they had existed for only a brief time, their abandonment resulted in less trauma than at other campuses. Meanwhile, women established themselves in campus activities; Cora Kemp served in 1963 and 1964 as the editor of the *Technician*, Cathy Sterling became the first female president of the Student Body in 1970, and Jane Carol Pickard was the first female valedictorian in 1971. By the early 1970s women enrolled not only in liberal arts programs, but in increasing numbers in engineering and other departments.[63]

The other important change that occurred in student life during the period was the abolition of mandatory ROTC. Though long a source of campus pride, the Air Force and Army programs came under increasing fire in the early 1960s from faculty members who considered them extra-curricular activities. Students also expressed some discontent with the mandatory two-year course because

it was time consuming. At the same time, officials in Washington also wanted to alter the program to make it more efficient and effective. They saw little need to provide officers and material for the basic course for all students. Instead, they chose in 1963 to reduce the scope of the program, and at the same time enrich its value. This new policy permitted the basic course to be replaced by summer camp, and it provided increased federal scholarship support. They hoped that this new course would attract the better students and avoid the waste of the old program. In light of this policy, the Faculty Senate voted on November 10, 1964, to abolish compulsory ROTC, an action that was approved by the Consolidated University trustees the following January. In September 1965, a long-standing tradition ended when the voluntary military program began. ROTC continued to have a special place at N.C. State, however, and many students elected to include military science in their studies.[64]

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As the student body grew rapidly during the 1960s, passing 10,000 for the first time in the fall of 1966, and as the university's teaching and research staff expanded as well, many additions were made to the physical plant. The expansion required more concern for physical planning, demonstrated in 1960 by the establishment of the Office of Campus Planning. This organization advocated a master plan for campus development that included increased use of high rise structures, the creation of a pedestrian campus, and the placement of research facilities on the periphery of the college. Throughout the 1960s the institution struggled to obtain construction funds from a legislature that was frequently stingy and from a Board of Higher Education that at one point slashed requests by 67.5 percent. In addition, a 1961 bond issue met with defeat, depriving the college of $4.5 million for building projects. Despite these problems, the 1960s were a period of tremendous campus development.[65]

During the early 1960s, as it battled with state officials for more construction funds, the college completed several important structures begun in the previous decade. Harrelson Hall, named for the former chancellor, the institution's first round classroom building and a winner of several major design awards, was completed in 1961 for mathematics and General Studies. In addition, construction on a long-awaited modern gymnasium, named for long-time Consolidated University Controller William D. Carmichael, Jr., was completed, providing college physical education programs and intramural sports with adequate room for the first time in years. The old Thompson

Gymnasium was remodeled as a theatre, and the College Union's craft center relocated in the basement. At the same time, construction began on Cox Hall, named for statistics pioneer and professor, Gertrude Cox, and the building was completed in 1963 for physics and statistics. Civil engineering received a new building, which was named Mann Hall, after Professor Carroll L. Mann. For students, a new cafeteria was built. It was named Harris Hall, after long-time steward Louis Hines Harris. The cafeteria provided dining service to students living on the west side of campus. Fraternity Court, a dream of greek leaders since the 1920s, was finally completed in 1964, with houses for twelve organizations. Construction on a new, high-rise dormitory, later named Lee Hall, was also begun during the early 1960s. Other buildings, such as Daniels and Polk, received major additions.[66]

During the decade, the campus also lost one of its more venerable structures to arson—Pullen Hall. In late 1964 and early 1965, the campus was threatened by a series of deliberately set fires. Most of these were minor blazes in the older buildings on campus that were quickly discovered and extinguished. On the night of February 22, 1965, however, Pullen Hall exploded into flames and was lost. The band instruments housed in the structure were destroyed and the roof of nearby Peele Hall damaged as well. Students, staff, and Director of Student Activities Banks Talley quickly removed student records from Peele. Although Raleigh fire fighters remained on the scene until 7:00 a.m. the next morning, the building was totally lost. The General Assembly quickly passed a law that made the arson of a state building a felony, and the campus was placed under curfew. In April, a student suspended from the School of Forestry was arrested for the Pullen blaze. Students, concerned groups, and insurance helped the band buy new equipment; the campus slowly returned to normal.[67]

Another long-standing campus landmark, Riddick Stadium, was replaced by a larger football stadium during this period. With the growth of the student body and the improvement of the football program under Coach Earle Edwards, a modern facility was urgently needed. College officials decided to locate the new stadium away from the overcrowded main campus, and to convert Riddick Stadium into a parking lot. Funds for the new structure were raised by the Wolfpack Club and through the sale of bonds. The initial donations came from the Carter brothers, Nick and Harry, and the largest single donation was from real estate man A.E. Finley. The $4 million stadium was completed in time for the 1966 football season, and N.C. State played its first game in the new stadium on October 8

against South Carolina. Initially named Carter Stadium, the structure was renamed Carter-Finley Stadium in 1979. The new facility was an enormous success, and the bonds were paid off by 1978, twenty-six years ahead of schedule.[68]

The late 1960s saw the addition of buildings of all kinds on the campus. Four new residence halls—Sullivan, Metcalf, Bowen, and Carroll—were completed, with Carroll for women. McKimmon Village, later renamed Edward S. King Village, was finally completed in 1967 for married students. Fourth Dormitory, another campus landmark, was demolished to make room for the second addition to the School of Design complex. The Forestry School received Biltmore Hall and the School of Education, Poe Hall while Dabney Hall was completed for Chemistry and Schaub Hall for Food Science. Several new research facilities, including the Southeastern Environmental Laboratory, or Phytotron (one of three of its kind in the nation), the Dearstyne Avain Research Center and the Grinnels Animal Health Laboratories were completed. Plans also were developed for a new University Student Center to replace the outmoded Erdahl-Cloyd Union. Several of these buildings received some federal and private support, in addition to state funding, as the university endeavored to provide adequate facilities. These financial policies characterized all of public education in the United States.[69]

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During the 1960s, through its graduate programs, research efforts, and international outreach, N.C. State increased its impact on the North Carolina economy. Several research breakthroughs occurred during the decade, including the development of root knot resistant flue-cured tobacco. N.C. State could claim a major research success in 1960, when, in Robeson County, the first commercial bulk cure barn for tobacco was established. Combined with the mechanical harvester developed at N.C. State in 1954 by Robert W. Wilson, the bulk cure facility allowed tobacco to overcome several bottlenecks and become mechanized like other cash crops. This proved exceedingly valuable for North Carolina's agricultural sector. Genetic research on crops such as sweet potatoes, and peanuts that yielded such varieties as NC4X—the atomic peanut—also bolstered farm production. In physics, University Professor Llewellyn H. Thomas continued work on the Thomas-Fermi or statistical atom model. Economist Charles P. Jones published a series of seminal articles on "standardized unexpected earnings" that became extremely influen-

tial in the investing community. These were just some of the contributions made to the state and national scene by university researchers during the period.[70]

As America's interest in science was renewed during the 1960s, and as the faculty's reputation grew, N.C. State's researchers received more financial support from a variety of sources. Several multi-million dollar grants from institutions such as the National Institute of Health, the National Science Foundation, the Public Health Service, and the Rockefeller Foundation were obtained for work in biomathematics, pesticides, and genetics. Engineering and textile research also received greater support from the state, doubling previous totals. In addition, foundation support reached $1 million in 1962 for the first time. By 1968, the total expenditure for research was well over $19 million, more than twice the 1960 figure. In an attempt to encourage more coordinated university-faculty efforts to obtain federal research grants, Frank Guthrie became the Associate Dean of the Graduate School for Research in 1962. In January 1965, in an effort to improve this mechanism, the position separated from the Graduate School, and Harold F. Robinson was appointed the first Administrative Dean for Research.[71]

The impact of the Research Triangle Institute on N.C. State also increased as the nearby Research Triangle Park grew. The permanent home for the institute was constructed in 1960, while programs in operations research, isotopes, and polymer science—all developing research fields at N.C. State—were added. As the institute expanded, campus authorities noted that its presence enabled them to attract and retain many top flight scientists. With the help of Corning Glass and the Air Force in 1961 a solid state laboratory was established; in 1963 the National Aeronautics and Space Administration (NASA) added a radioactive synthetics facility. The Chemstrand Research Center, the United States Forestry Laboratories, and the American Association of Textile Chemists and Colorists all quickly located in the Triangle, establishing research programs in areas of considerable interest to N.C. State faculty. In the late 1960s and early 1970s the institute began to move toward a greater emphasis on research in the social and health sciences. By 1975, contract revenues reached $16,200,000, and the institute employed a staff of 650, supplementing many of the facilities on the N.C. State campus.[72]

N.C. State's international outreach also expanded during these years, as the Peru Project was enlarged and other efforts begun. The textile project in Peru suffered serious difficulties because of

philosophical differences with officials at the National University of Engineering in Lima. Local faculty in-fighting at the National University had caused confusion, and the textile institute at Lima had lost its autonomy when it was transferred to the faculty of Industrial Engineering. In addition, Peruvian officials expressed little interest in any educational program beyond the vocational level. N.C. State representatives found both of these developments discouraging. In September 1961, after continued difficulties, N.C. State cancelled the textile contract.[73]

The School of Agriculture's Peru Project proved much more successful. In 1962 the project was reorganized under the Kennedy administration's Alliance for Progress program, and it received additional support for new research projects in agricultural economics and sociology from the Ford and Rockefeller Foundations. At the same time, N.C. State assumed, along with Iowa State University, complete direction of the project, and more faculty members became involved on a full-time basis in Peru. Greater emphasis was now placed on research, and an agricultural extension service was established. By 1967 there were more than thirty N.C. State faculty members in Peru, under the direction of Jackson Rigney. In addition to research and extension programs, the N.C. State personnel assisted their Peruvian counterparts in the establishment of graduate programs in agriculture. At the same time, many Peruvian nationals entered N.C. State for their graduate training.[74]

When the socialists took over Peru in 1968, however, N.C. State officials began to have serious reservations about continuing the program. The socialists initiated land and agrarian reforms that damaged the N.C. State efforts, and also reduced funds for research and teaching. Relations rapidly deteriorated when N.C. State representatives refused to involve themselves in the new government's reforms. In 1972, the university decided to withdraw from the project. Although many people were distressed by this decision, the project achieved several important results. The National Agricultural University became one of the best of its kind in Latin America. Furthermore, more than one hundred Peruvian nationals received graduate training at N.C. State. The Peru Project in 1971 encouraged the establishment of International Potato Center which sought to increase the world's supply of white potatoes. The efforts of the Peru Project also helped Peru's agricultural sector to increase its income by 6 percent a year.[75]

During the early 1960s another long range research effort began in tropical soils. In 1963, under the auspices of the Agency for International Development, a soils test service for Latin America and

West Africa began under the direction of N.C. State's James W. Fitts. Initial funds totaling $250,000 were provided by NCSU and AID, and an additional $500,000 from AID was received in 1970 to strengthen and expand the work.[76]

Two other N.C. State programs were established in Asia. In India, Pat Hassler directed a project, created in 1964, that was designed to improve agricultural engineering education at the India Institute of Technology at Kharagpur, located in India's rice-producing area. With a grant from the Ford Foundation, short-term N.C. State representatives assisted the Indians in efforts to upgrade the institute's library and engineering equipment, and provide faculty training. The other project, at Kabul, Afghanistan, began in 1963 to upgrade engineering education in that country. N.C. State and ten other American institutions of higher learning participated. Funds for the program, which lasted until 1973, were used to improve faculty and equipment. Both of these projects demonstrated N.C. State's willingness to expand its land-grant commitments abroad.[77]

At the N.C. State campus, the Caldwell administration made several attempts to coordinate the international program. Although Jackson Rigney became Dean of International Affairs in 1968, and a masters degree in international technology was established, federal aid for further efforts disappeared in the late 1960s. Some N.C. State departments opposed such developments because they were already overworked. In the end, State limited its efforts to its existing overseas programs, contributing two outstanding leaders in this area, Ralph Cummings and Jackson Rigney.[78]

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As N.C. State's student body, research facilities, and faculty grew during the 1960s, higher education became more and more important in the state, and at the same time became more controversial. As the number of people attending undergraduate and graduate school increased rapidly during the decade, other state-supported colleges began to demand larger state appropriations, along with the right to offer costly graduate and professional programs. Many astute North Carolinians expressed dismay at the situation because there seemed to be no overall plan or direction to these developments. North Carolinians, citizens of a traditionally fiscally conservative state, had little use for what they perceived to be wasteful duplication in public higher education. Throughout the late 1950s and 1960s many individuals demanded that lawmakers control the educational empire building conducted by ambitious university administrators.[79]

During the 1950s, the state took steps in an attempt to confront the proliferation problem. In 1953, after numerous complaints from the public about the loose and haphazard administration of higher education, the governor appointed a seven-member committee chaired by Victor S. Bryant to examine the situation. The report of the Bryant Commission, released in 1955, declared that there was a great deal of waste in higher education. It also concluded that the state's colleges and the Consolidated University had failed to meet the needs of North Carolinians. At the same time, the commission noted that the existing method of appropriation was entirely too competitive, and a crying need existed for long-range planning, especially for graduate studies. In response to this report, the 1955 General Assembly created the state Board of Higher Education to oversee the fiscal and programatic development of the state colleges and the university. In an effort to promote education beyond the high school, the board in 1957 secured the creation of the community college system. In an effort to reduce wasteful expenditures it also created a revolving fund for all self-liquidating facilities such as dormitories. The Board of Higher Education was not popular, however, especially with the Consolidated University trustees, who believed that it supplanted their authority. Through a series of careful negotiations in the late 1950s, Consolidated University officials and the board came to a better working arrangement that clarified their roles. But as the regional colleges grew in the early 1960s, more trouble developed. In the wake of the Carlyle Commission Report the 1963 legislature declared that the Consolidated University was the "only one primarily dependent for its support on the state of North Carolina." But during the latter part of the 1960s, the General Assembly, responding to political pressure from ambitious locals, upgraded all of the state's remaining nine four-year colleges to universities. These universities bypassed the Board of Higher Education, lobbying directly with the legislature for increased funds and the creation of new graduate programs. Once again, the public and their representatives in the General Assembly, became concerned over wasteful duplication and demanded prompt action from the state.[80]

Despite much agitation on the subject during the late 1960s, it was not until 1971 that Governor Robert Scott appointed a 23-member commission to study the issue and report to the General Assembly. This study followed up the 1968 recommendations of the Board of Higher Education's Long Range Plan, calling for a single hierarchy with the power to plan and budget for all public universities.[81]

Although they cooperated with Scott's study commission, the chancellors and presidents of the fifteen institutions expressed reservations about the governor's ideas. Many feared that their authority would be undermined, especially East Carolina University's Leo Jenkins, whose ambitious expansion of the Greenville campus was the cause of much of the concern expressed by Scott and his supporters. Others, especially at the Consolidated University level, feared that changes recommended by the governor's commission would damage, if not deconsolidate, the six-campus system.[82]

The governor's study commission, known as the Warren Committee, released its report later in the year, and it documented the long-standing rivalries within the state's system of higher education. In its majority report, however, it recommended the creation of a loose structure that left most of the power in local hands. Consolidated University trustees voiced opposition to the proposal and urged further study of the matter. President Friday and his assistants announced that they supported the minority report which called for the establishment of a powerful central board with control over budget and academic programs. This plan also received support from influential Duke University President Terry Sanford. In the wake of this reaction, Governor Scott elected to allow more time to examine the problem, and the General Assembly conducted a number of public hearings on the subject.[83]

Finally, when the legislature convened in special session in the fall of 1971, the issue was resolved. The General Assembly merged the fifteen state universities and the North Carolina School of the Arts into the University of North Carolina system. It created a 32-member Board of Governors, and it established a Board of Trustees with defined powers for each constituent university. At the same time, any additional local trustees' authority would have to be delegated by the Board of Governors, which had firm control of planning and budget. Although some of the regional universities expressed dissatisfaction with this solution, most were content that the issue was resolved. In March 1972, William Clyde Friday, an alumnus of both N.C. State and the University at Chapel Hill, who had succeeded Gordon Gray in 1956 as the president of the Consolidated University, became the first president of the new system. In August, at N.C. State an interim Board of Trustees chaired by George M. Wood was formed; a permanent one was organized the following year, with Walter L. Smith as chairman. Under the new system, all the chancellors soon discovered that they had less contact with President Friday and the legisla-

ture; instead, they usually had to deal mainly with University of North Carolina vice presidents.[84]

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The 1960s were a time of growth and achievement at N.C. State, as the university interacted more than ever before with the world around it and was also involved in controversial matters close to home. As the institution's growing student body participated in the national civil rights and anti-war movements, university faculty members played important roles in the development of higher education in several foreign countries. At the same time, as the university's researchers made a number of significant contributions to the North Carolina economy, the state's lawmakers, responding to public pressure attempted to control both the growth of the institution and some of the controversial activities of the university community. At the end of the period, the Caldwell administration could point to many achievements, as it looked optimistically toward the future.

Chapter XI

Toward Excellence, 1971-1982

After the excitement of the 1960s and early 1970s, the N.C. State campus quieted considerably, even as the institution continued to alter its role in the state and world. Although some individuals believed that the enrollment ceilings established in the early 1970s to relieve over-crowding in certain curricula were a step away from the land-grant purpose, the institution continued its historic mission in research, teaching, and extension. As campus administrators and faculty developed new programs to encourage academic excellence, the success of university research efforts placed it among national leaders. Although students became less vocal during the period, they still retained an interest in events both on and off campus. The decade beginning in 1971 was a period of fine tuning, as N.C. State administrators sought to increase the institution's national repute.

John T. Caldwell remained as chancellor until 1975; during his last few years in office he continued to provide the university with strong, effective leadership, and laid the groundwork for several programs developed by his successors. Although the role of the chancellor was altered and in some ways diminished by the new University of North Carolina system, Caldwell had no difficulty working within the new organization. At the same time, however, some faculty members voiced concern at the creation of several vice chancellors between 1971 and 1974, warning that the chancellor was increasingly isolating himself from university affairs. Despite these concerns, when Caldwell announced in November 1974, that he

planned to retire the following June, all agreed that he had been a major factor in the institution's development from a state college to a university on the threshold of national academic and research prominence. Under his leadership strong programs in the liberal arts began, while the older disciplines discarded the last vestiges of their trade school orientation with an ever-increasing emphasis on science and professionalism. The student body grew from 6,122 in 1959 to 15,751 in 1975, and during the same period the faculty increased from approximately 600 to over 1,200, as Caldwell's optimism and enthusiasm had clearly set the tone for the entire era. By late 1974, however, Caldwell, who had been a university head for twenty-eight years, believed that both he and N.C. State needed a change; therefore, he stepped down. Jackson Ashcroft Rigney, Dean of International Programs since 1968, served as acting chancellor until January 1, 1976, when Joab Langston Thomas became the ninth administrative head of NCSU.[1]

The third non-North Carolinian to be selected as head of N.C. State, Joab L. Thomas was born in 1933, a native of Russellville, Alabama. He attended Harvard University, receiving his bachelors, masters, and doctorate there. A botanist, he taught briefly at Harvard, before returning to his native state to teach at the University of Alabama. After a number of years in teaching, he served in several administrative capacities, becoming the Vice President for Student Affairs in 1969, the position he held when he accepted the chancellorship of N.C. State. He came to N.C. State because he was impressed by the institution's potential and the state's commitment to higher education. During his tenure at N.C. State, he continued to promote the University's role in the Raleigh community, its position as an emerging center for research and graduate studies, and its academic development. Thomas' personality was different from Caldwell's; he tended to be much more low-key and less visible. He considered his task one of fine-tuning the university and its programs, and he sought to give priority to quality on every level.[2]

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During this period, through its University Extension, the institution continued to expand as an urban university. The Center for Urban Affairs and Community Service, established in 1966, remained a part of the university extension organization, and it was joined in 1980 by the International Trade Center which was transferred to N.C. State from President Friday's office. It was the comple-

tion of the long-awaited Jane S. McKimmon Center for Continuing Education, however, that was the high point of the program during the period.[3]

Plans for the McKimmon Center were discussed as early as 1951, but during the 1950s other building projects had been given priority. The Consolidated University trustees approved the idea of the center in 1961, but no funds were appropriated for the actual construction. The 1965 and 1969 General Assembly failed to provide funds for the structure, in spite of the donation of $100,000 in "butter and egg" money from the home demonstration women. With the support of Governor Robert Scott and his Director of Administration William L. Turner, former Administrative Dean for University Extension at N.C. State, the legislature finally appropriated in 1971 $4.25 million for the center. University extension officials were jubliant for only a short time. Local hotel owners were annoyed because the proposed structure included hotel facilities—something fairly common at other centers of this type throughout the nation—and they brought suit against the university. Construction was delayed until late 1973 when the university agreed not to include the hotel facilities. The new structure was finally completed in 1976, allowing the University Extension to move out of its cramped quarters in the 1911 Building.[4]

With the completion of the new center, William L. Turner, who returned as Vice Chancellor of Extension and Public Service in 1973, took steps to expand the extension program. Much more emphasis was placed on adult learning programs, as demand in Raleigh increased. Beginning in 1978, the center served as the home of a night college established to serve area residents. At the same time, McKimmon Center provided the space for the university to host conferences and seminars for businessmen, as well as academic and extension personnel. By 1981 the center required a 14,500 square foot addition, as University Extension boasted a budget of $5 million, and served approximately 100,000 people a year.[5]

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At the same time that it expanded its offerings for adult students, the university became embroiled in a controversy with the federal government over the recruitment and retention of black and female faculty and students. This legal battle lasted until the early 1980s, and it caused campus administrators many headaches. The major issues in the matter revolved around the hiring, promotion, and

salaries of black and women faculty members, and the recruitment and retention of black students. Throughout the controversy, university officials insisted that they were acting in demonstrable good faith, although the Department of Health, Education, and Welfare, several black groups, and numerous female faculty members complained that this was untrue. Despite this legal entanglement, minority presense increased significantly during this period.[6]

The number of women in the student body rose significantly during the 1970s and early 1980s, and by 1983 they totaled 35 percent of the student body. They were absorbed into the student body proper with few difficulties. An indication that women had achieved a high degree of acceptability was the fact that the Women's Association disbanded in 1972, and in the fall of 1973 women enrolled in Army ROTC for the first time. At the same time, Sigma Kappa was joined by several new sororities, including Alpha Delta Pi, Alpha Xi Delta, Chi Omega and the short-lived Alpha Phi. Pan-Hellenic Council, which formulated rush rules and promoted good fellowship between the individual organizations, was established in 1971, and Sigma Kappa and Alpha Delta Pi received a house in 1976 on Fraternity Court. In 1974, after a study by Athletics Department personnel under the direction of Athletics Director Willis Casey, women's varsity sports teams were established. The first major team sport, basketball, began in 1974, and it quickly developed into a nationally prominent program. Kay Yow arrived in 1975 to serve as basketball coach and coordinator of women's athletics, and by the early 1980s the Wolfpack women participated in eleven different sports. In addition to basketball, the university became the home of an outstanding women's cross country team, producing such national figures as 1984 Olympic marathon gold medalist Joan Benoit, Julie and Mary Shea, and Betty Springs. During the period, more and more women also received degrees in science and engineering, largely erasing old stereotypes.[7]

Although coeds found fewer and fewer barriers at N.C. State, their female counterparts on the faculty were not as fortunate. Federal authorities, led by HEW, first became concerned about their problems when Joan Joesting, a visiting professor of psychology, filed suit in April 1972, alleging that the Department of Psychology paid her significantly less than they paid her male counterparts with the same rank and duties. HEW decided in her favor, but the salary issue remained unresolved. As late as December 1974, women received 31 percent less than their male colleagues of similar rank and

experience, and there was only one female full professor and only five female associate professors. HEW insisted that the university file an Affirmative Action plan with goals to alleviate this problem. By the end of the period, more women were hired and promoted, but the salary situation was not completely resolved.[8]

The university's major difficulties with the federal government revolved around the recruitment and retention of black students and faculty. Although Vivian Henderson, a black female economist, joined the faculty in 1962, there were still few black faculty in the early 1970s, and most black personnel were employed in clerical positions or by the physical plant. In addition, there were only about 200 black students enrolled at N.C. State. In February 1970, HEW officials declared that the Consolidated University, including N.C. State, had failed to adequately comply with the Civil Rights Act of 1964, and it must take steps to remedy the situation. Over the next decade, federal officials tried several different tactics to force the university to increase its black presense.[9]

At first, after initial visits by HEW personnel in 1971, the institution was permitted to make voluntary and informal efforts to comply. The Division of Student Affairs hired a black counselor, made financial aid available to needy blacks, and took several steps to encourage black cultural programs. In January 1972, the university also eased its admissions requirements in an effort to encourage black enrollment. Later in the year, however, federal authorities declared that all public institutions must file Affirmative Action plans which contained definite goals to increase minority presence on campus. As the Caldwell administration prepared the N.C. State plan, they were shocked when the NAACP filed suit asking the United States courts to deny federal funds to public schools and colleges in all states that were in violation of the Civil Rights Act. Campus officials, insisting that they acted in good faith, received a further jolt in July 1973, when HEW rejected N.C. State's Affirmative Action plan as too vague. Although a revised version of the plan was informally accepted in 1974, university officials worried that federal authorities had failed to appreciate their predicament, insisting that it was difficult to attract black students in a state with five state-supported black universities. In addition, the university asserted that it was especially hard to find qualified black faculty in many of the scientific and technical fields taught at N.C. State.[10]

As the University of North Carolina system's quarrel with the federal government continued, black students increased in

number and they made greater demands on campus authorities. The Society for Afro-American Culture pressured Student Affairs personnel for better counseling, more learning assistance progams, and better cultural activities for black students. Gradually in the mid-1970s progress was made in these areas. Black social programs received more funding, and in 1974, upon recommendation, the Division of Student Affairs turned a major part of the old print shop over to black students for a Cultural Center. At the same time, they assisted blacks with the organization of black social fraternities and sororities, beginning with Alpha Phi Alpha (1971) and Delta Sigma Theta (1974). By the early 1980s, most of the schools had established minority recruiting programs, and black enrollment had grown from 222 in 1972 to 1,657 by 1982.[11]

Despite these limited gains, N.C. State still faced pressure from HEW officials who threatened to withdraw over $100 million in federal funds from the University of North Carolina system if their demands were not met. In 1977, after the first Affirmative Action planned expired, the battle resumed. Federal authorities insisted that the University of North Carolina system by 1982 must increase its black presence by 150 percent. When University of North Carolina Board of Governors rejected this plan, adopting an alternate one that aimed for only a 32 percent increase, HEW officials ruled that this alternative was unacceptable. They agreed, however, to relax threats to prosecute if the university system failed to reach the HEW goals. President Friday believed that the issue at this point was not integration but federal control of the University of North Carolina system, and he fought a four-year court battle that ended in 1981 when the Reagan administration, courting southern conservatives, agreed to sign a consent decree, and drop threats of prosecution. The issue was finally resolved in 1984 when the United States Supreme Court upheld the consent decree over the protests of the NAACP.[12]

During the same period, demands for equal pay and promotion effected the North Carolina Agricultural Extension Service. Although the service merged its black and white organizations in 1965 in the wake of the Civil Rights Act of 1964, salary differences between white and black agents employed before 1965 were never completely eliminated. In November 1972, approximately fifty black agents brought a class action suit against the extension service to remedy the situation. After the case finally went to trial in 1981, the United States District Court ruled in favor of the extension service; this decision was upheld by the 4th United States Circuit Court of Appeals. In 1986, however, in a unanimous decision, the United States Supreme Court

overturned the decision, and it ruled that the black agents were entitled to equal treatment regardless of when they were employed.[13]

Federal officials also became troubled by the events involved in the establishment of the School of Veterinary Medicine, especially after North Carolina Agricultural and Technical University expressed a late concern in the matter. N.C. State officials, along with state veterinary organizations, became interested in the development of such a school during the late 1960s, when officials at the institutions that provided the Southern Regional Educational Board's regional programs in veterinary medicine complained that they lacked enough space even for their own students, and they wished to discontinue their arrangement to train outsiders. This agreement, begun in 1949 and formalized by the SREB in 1951, sent North Carolina veterinary students to such institutions as the University of Georgia, Auburn University, and Oklahoma State University, saving the state the expense of developing another costly professional program. By the end of the 1960s, however, the demand for veterinary education greatly exceeded existing spaces and in 1967 the North Carolina Veterinary Association requested the establishment of a school at N.C. State, a move long considered by the institution itself. Administrators in the School of Agriculture and Life Science undertook a study of the matter and began preparation of a long-range plan for the new school. In 1970 the school established a Veterinary Advisory Committee as a forerunner to the establishment of a faculty in veterinary science. Governor Scott also appointed a committee to study the question.[14]

Although some individuals insisted that the school was an unnecessary expense, the governor's committee in 1971 recommended the creation of the school at N.C. State. In making its selection, the committee cited N.C. State's long association with the field of animal health. In 1973 in a step toward the establishment of the school, Terrence Curtin was hired to head the Department of Veterinary Science. Even after Curtin's appointment, critics, most notably Governor James Holshouser, insisted that the school was unnecessary.[15]

The matter was finally decided by the 1973 General Assembly which passed a joint resolution requesting the Board of Governors to select a site for the school. In response to this request, the Board of Governors, encouraged by the SREB recommendation calling for the establishment of the school in either Virginia or North Carolina, affirmed its support for the school. At this point, North Carolina A & T University officials declared that they were interested in securing the

new school for their campus. When a team of consultants from Ohio State University announced that they considered N.C. State the better site for the school, A & T officials charged discrimination. Subsequently, the Board of Governors chose N.C. State as the location, whereupon A & T officials appealed to HEW for assistance. HEW responded by proclaiming that the University of North Carolina was at fault for not taking into consideration the racial impact of the veterinary school decision. University of North Carolina officials, led by President William C. Friday, countered HEW arguments, insisting that the location of the program at A & T would lead to costly duplication. Unsympathetic to this assertion, HEW officials in August 1975, threatened to stop federal funds to the university system if the school was put in Raleigh. President Friday hastened to Washington to resolve the impasse, and in October, 1975, HEW officials reluctantly withdrew their objection. The last opposition to the Raleigh location ended when a U.S. District Court judge denied a temporary injunction sought by A & T alumni to halt the project. Finally, in the 1977 General Assembly appropriated a $2.5 million operating budget for the new school.[16]

After this lengthy controversy had ceased, the veterinary school was rapidly established. In 1975 the Department of Veterinary Science became the School of Veterinary Medicine under Terrence Curtin who now had the title of dean. Faculty recruitment began in 1978, along with the construction of the school's facilities located at the university's dairy near the State Fairgrounds, and the school was formally launched as an administrative unit. In 1980 four departments, Anatomy, Physiology and Radiology, Companion Animal and Special Species Medicine, Microbiology, Pathology, and Parasitology, and Food Animal and Equine Medicine, were created. Research programs related to animal health and biotechnology were created; therefore, the school did not limit itself to the training of veterinarians. In addition, internship and residency programs began as the new facilities neared completion, and in 1981 the first class of forty students was admitted to the school.[17]

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During the 1970s, the older schools continued their historic tasks in both undergraduate and graduate education. In the latter Caldwell period, and especially during the Thomas era, all of these schools raised admissions standards in the face of ever-increasing numbers of applicants. The development of the Raleigh area, as well as the university's reputation, contributed to this continued growth.

In 1975, the Board of Governors pressed N.C. State officials to limit the size of the freshman class, but the university experienced difficulties when it tried to do this. Some people believed that this mandate violated the land-grant ideal, but increasing shortages of classroom, laboratory, and dormitory space forced officials to reevaluate the matter. In January 1976, a computer lottery was created to control the dormitory problem, and during the same period many of the schools announced ceilings on enrollment for certain curricula. These programs included the English, social studies, and language education curricula in the School of Education, the forestry and recreation curricula in the School of Forest Resources, and the business and accounting majors in the School of Humanities and Social Sciences. In addition, all schools raised their requirements for predicted grade point average, and some individual departments went even higher than their schools. Despite these attempts, head count enrollments continued to climb during the late 1970s, reaching 20,600 by 1980. The University of North Carolina administration wanted to limit N.C. State to a figure closer to 15,850 full-time-enrollment, and the university was forced to curtail new enrollments the following spring, as well as deny readmission to a large number of former students. These methods provided only temporary relief, however, as N.C. State's career-oriented programs continued to attract numbers beyond its capacity.[18]

At the same time that they took steps to raise enrollment standards, university officials made a concerted effort to offer incentives to attract outstanding students. When John T. Caldwell retired in the spring of 1975, the N.C. State Alumni Association announced the establishment of the John T. Caldwell Scholarship fund which was used to endow a merit scholarship program that began in the fall of 1977, with two students. The School of Textiles also established a merit scholarship program of its own during the period. In 1980 the university began a coordinated merit scholars program, greatly expanding previous efforts, while most schools revamped or established honors programs, including the Scholars of the College program begun by the School of Humanities and Social Sciences.[19]

As part of the effort to encourage academic excellence, the university in the 1970s took several steps to upgrade the D.H. Hill Library. Long a cause of concern because of its small, inadequate collection, the library received a major boost in 1971 with the completion of an eleven-story book stack. At the same time, expenditures for books increased with the help of larger legislative appropriations and the efforts of the Friends of the Library; in the academic year 1975-

1976 the library received $1 million for the first time. With the encouragement of Chancellor Thomas, the one-million volume mark was reached in April 1981, and in 1983 the library was accepted for membership in the prestigious Association of Research Libraries, providing the university with yet another point to attract the outstanding student.[20]

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During this period the older schools at N.C. State maintained high ranking in their respective disciplines. They also continued to adjust their academic programs to suit the changing needs of the industries and professions they served. Several studies revealed that most of the schools compared favorably with their counterparts throughout the country, including agriculture, which was ranked eighth in the surveys, forestry fourth, and architecture tenth. The School of Textiles continued to be the largest of its kind in the world. Despite unfavorable national trends, Education and Agriculture and Life Science, the latter bolstered by the presence of the biological sciences, maintained steady enrollments throughout the period. The School of Forest Resources reached a milestone when its curricula in wood and paper science and recreation received accredidation. In the School of Education a decided shift toward graduate education occurred with the development of programs in education administration, and the establishment of pioneering programs in special education. In addition, engineering, textiles, and forestry placed increased emphasis on science, management, and professionalism.[21]

The School of Design was the scene of a major change during the period. Claude McKinney, who had replaced Henry Kamphoefner in 1973, abolished the traditional department structure within the school and placed more emphasis on interdisciplinary study. In addition, McKinney encouraged more interaction between students on all levels of the program through the development of a series of core courses. These reforms caused some discontent among the architecture faculty, who believed that the changes deemphasized their respective courses of study, and they engaged in a battle with McKinney on the subject for several years. Despite these problems, the accrediting organizations for the School of Design still labeled it "a center for innovation."[22]

During the 1970s and early 1980s the Agricultural Extension Service endeavored to serve an agricultural sector increasingly damaged by inflation. The service, along with the local advisory councils, continued its long-term planning efforts to guide develop-

ment. In view of new emphases nationally it altered its message to include energy conservation, pest control, and improved management. With the assistance from Title X of the federal Rural Development Act of 1972, increasing emphasis was placed on better communications, income, family life, and community organization in rural areas. The service also made efforts to increase assistance to rural blacks through such programs as the Farm Opportunity Program and the Expanded Food and Nutrition Education Program. At the same time, extension personnel expressed concern about the continued economic problems, particularly inflation, facing North Carolina's farmers.[23]

In an effort to improve its relationship with its constituent industry, the School of Textiles during this period developed its extension program for the first time. Beginning in 1968 with funds from the North Carolina Textile Foundation, school faculty offered short courses, summer internships and coop programs, and vocational courses at the high school level. After several years of struggling on inadequate support, the program was greatly expanded when it received state funding for the first time. In the mid-1970s, the textile extension developed a unique program, Textile Off-Campus Televised Education (TOTE), that delivered textile courses to students at selected off-campus sites via television. In the early 1980s this was expanded and televised in several other states. It remains the only one of its kind in the nation. The textile extension program also enabled the School of Textiles to maintain close ties with industry at a time when economic woes contributed to a downturn in the school's enrollments.[24]

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The 1970s saw the rapid development of the School of Liberal Arts, renamed the School of Humanities and Social Sciences in 1977. Although it continued to provide service courses to students in all schools, SHASS faculty during the period also developed several majors that appealed to the career-oriented student of the latter 1970s and early 1980s. These included business, accounting, social work, criminal justice, public affairs, writing and editing, and speech-communications. So popular were the business and accounting majors that at one time in the early 1980s 63.8 percent of all undergraduate students in the school were enrolled in these curricula. In an attempt to provide for a better distribution of majors, enrollment ceilings were implemented, but the imbalance remained. A number of SHASS faculty members received fellowships during this

period from the National Humanities Center located in the nearby Research Triangle Park, demonstrating the strength of the school's faculty. Many of the students in the school, particularly in the masters programs, continued to be Raleigh residents, and enrollments remained steady for much of the period.[25]

The school also developed a unique humanities extension program during this period. Planning for the effort began in the fall of 1975, and a proposal for funding was submitted the following spring to the National Endowment for the Humanities. Although this initial plan was rejected, a revised version was accepted, and in 1977 the NEH agreed to provide financial support for the program for eighteen months. Faculty in several departments, including English, history, and political science, developed courses and seminars that they taught to off-campus audiences frequently via video tape. The response was enthusiastic, and in July 1979, NEH agreed to increase funding for the project. One popular course, "Disappearing Roots: The Small Town in North Carolina," attracted over 1,300 people in Asheboro and inspired a downtown revitalization project. When NEH funds lapsed in 1981, the program had been so successful that it received state funding, permitting the school to continue this unique extension service to the state.[26]

Under Dean Robert O. Tilman who replaced Fred Cahill in 1971, the school, in response to a request made by Governor James B. Hunt, Jr. in 1980, assisted in the establishment of the North Carolina Japan Center. North Carolina political and business leaders had developed a strong interest in promoting closer economic ties to Japan, and the Japan Center was created to encourage this cause. The center, supported by state funds, promoted the study of the Japanese language, greeted foreign visitors, and established a fellows program that permitted participants to spend extended time in Japan to gain exposure to the culture. Through its promotion of the Japan Center, SHASS developed an unusual way to serve North Carolina's economy.[27]

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The 1970s and early 1980s witnessed N.C. State's growth as a research institution of national stature, as research efforts of all kinds made important contributions to the economic development of the state. Signalling the growing importance of these undertakings, the position of Administrative Dean for Research was elevated first in 1974 to Vice Provost and then in 1983 to Vice Chancellor for

Research. In addition, in March 1978, several fringe areas near the McKimmon Center were designated as the University Research Annex, in an effort to encourage the development of new facilities away from the crowded main campus. Support for research from all sources totaled over $56 million by 1982. Although federal funds were curtailed in the late 1970s for certain projects such as the Sea Grant Program and the Water Resources Research Institute, other important projects received large grants from the National Science Foundation and other important sources. New foundations for the School of Education (1972), the School of Humanities and Social Sciences (1974), and the School of Veterinary Medicine (1978) were established to provide private support for these schools. The Agriculture Foundation increased the Nickles-for-Know-How donation to ten cents in 1981. Support from all foundations exceeded $3 million in 1978 and $4 million the following year, as the Development Council prepared to launch the State-of-The-Future fund-raising campaign to honor the university's centennial in 1987. These efforts, as well as the reputation of the faculty, enabled the institution to rate high among research institutions in studies conducted by such prestigious organizations as the Carnegie Foundation.[28]

Inspired by the passage of the International Development and Assistance Act of 1975, N.C. State moved to expand its international research efforts as well. Title XII of the act recognized the vital role the land-grant institutions played in combating world food problems and poverty, and for the first time since the late 1960s it provided large scale funding for international undertakings. The majority of the new projects were conducted by the faculty of the School of Agriculture and Life Sciences, although in 1981 the School of Forest Resources joined the Central American and Mexican Coniferous Research Cooperative, a program that attempted to genetically preserve the tropical conifers.[29]

One of the larger SALS efforts, the International Meloidogyne Project, was aimed at a comprehensive world-wide study of root-knot nematodes. It began in 1975 under Joseph Sasser with a grant of $400,000 from the AID. During the first ten years of the project a research center was established and seven regional studies begun. By 1980, when the AID grant was renewed, over $2,895,000 was received in support, and a global network of scientists established to combat the parasite.[30]

In addition, the older project in tropical soils expanded during this period. In 1975, AID awarded soil scientists at N.C. State over $1.6 million to continue the work begun during the previous

decade. The purpose of the study was to increase food production in Latin American countries by the improvement of marginal soil. When the grant expired in 1980, the tropical soils study was again expanded, this time with the assistance of a $16.6 million grant from AID. N.C. State researchers joined faculty from Texas A & M, Cornell University, and the University of Hawaii in a Collaborative Research Support Program conducted in Peru, Indonesia, Niger, Upper Volta, and Brazil. N.C. State served as the group leader in Peru and it also collaborated in the efforts in Indonesia and Brazil.[31]

The early 1980s also saw N.C. State's return to the Peru Project, discontinued in the early 1970s because of difficulties with Peru's military government. By the late 1970s the land reforms conducted by the new government adversely effected agricultural production in Peru, and the nation was forced to import foodstuffs. This difficulty, coupled with other problems, convinced the military government to permit a regularly elected congressional government. This new administration placed high priority on rebuilding the country's agricultural economy. In January 1982, N.C. State was selected over ten other American universities to receive a $2 million grant from AID to improve agricultural education, extension, and research in Peru. These goals were very similar to the aims of the project conducted during the 1950s and 1960s.[32]

Research efforts in the 1970s and early 1980s also led to the establishment of an important new multidisciplinary department, Marine, Earth, and Atmospheric Sciences. Although earth science, or geology, was a well-established subject at the university, in the late 1960s N.C. State faculty began to express an interest in marine sciences and engineering. In 1968 the General Assembly provided funds for the Coastal Research Program, conducted primarily by members of the engineering faculty. The following year, in an effort to coordinate these efforts, as well as lay the groundwork for the establishment of graduate programs in these areas, the Center for Marine and Coastal Studies was created. In 1974 the faculty began to plan for the creation in 1978 of the Department of Marine Science and Engineering; it later merged with Geosciences to form the Department of Marine, Earth, and Atmospheric Science. The new field attracted a growing number of graduate students, as its researchers developed better ways to preserve sea food, studied weather patterns in North Carolina, and developed Hatteras Beach Grass which combated erosion on North Carolina's Outer Banks.[33]

During the 1970s, in all of N.C. State's schools, faculty made significant research contributions. Whether assisting North

Carolina's agricultural sector or perfecting a theory in plasma physics, N.C. State scientists enhanced the university's reputation through their efforts. Although some individuals criticized the university's reliance on industrial support, including the Ralph Nader-inspired *Hard Tomatoes, Hard Times* (1972) which blasted the land-grant universities' research program as a sell-out to greedy agribusiness, N.C. State administrators defended the institution's role in these efforts, insisting that the university fulfilled its land-grant mission by developing the means to improve life for all.[34]

At its university farms near Raleigh and the fifteen research stations scattered throughout North Carolina, the School of Agriculture and Life Sciences continued its historic mission, serving the state's agricultural sector through the projects conducted by its Agricultural Experiment Station, renamed in 1979 the Agricultural Research Service. During the 1970s the school received major grants from the Public Health Service, R.J. Reynolds, and the National Science Foundation for research in pesticides, tobacco, and biotechnology. Efforts in the latter field were greatly enhanced in 1974 by the completion of the Plant Cell and Tissue Culture Laboratory. Major breakthroughs in agricultural engineering produced a mechanical cucumber harvester, while N.C. State scientists also improved the brining process for pickles, enhancing the state's pickle production. In 1979 discovery of controls for the black shank disease saved the state's vital tobacco industry, while Marvin Speck perfected sweet acidophilous milk. Successful research in plant and animal genetics, integrated pest management, and plant and animal disease enabled North Carolina to become a leading producer of sweet potatoes, cucumbers, broilers, turkeys, peanuts, hogs, and eggs. Despite the critics who pointed to the impoverished conditions of sections of North Carolina's rural area that often seemed overlooked in the development of expensive new technology and some other aspects of the experiment station's programs, the School of Agriculture and Life Science's research program had a significant impact on the state's economy.[35]

Engineering research during the 1970s shifted away from fundamental research towards efforts that would benefit the state's industrial sector more directly. At the same time, in an effort to attract federal and corporate grants and contracts, which expanded during the period, engineering faculty formed many centers and institutes, often across department lines. The oldest of these, the Highway Research Program established in the early 1960s, was joined by the late 1970s by others such as the Center for Engineering Design, the Center for Acoustical Studies, and a component of the National

Solar Energy Consortium. These research groups were funded by both public and private agencies and worked closely with the constituent industry. In other efforts; James K. Ferrell conducted important studies on coal gasification with a grant from the Environmental Protection Agency, and other researchers developed the first monolithic cascade solar cell. Significant work was also begun in microelectronics, while N.C. State faculty members also perfected the heat tiles for the space shuttles. Many of these projects were aimed at specific industrial needs, and their accomplishments greatly aided the North Carolina economy.[36]

During the 1970s, research programs in the School of Textiles received new impetus, as the school was awarded several large federal grants for the first time in its history. Much of the research, like that in engineering, was linked to specific industrial problems. One major project developed a method to convert shuttle looms to jet air looms. Another examined the problem of mill noise, and under the auspices of the NSF produced the influential *Manual of Textile Industry Noise Control*(1978). In addition, textile faculty members also studied ways to reduce the dangers of Brown lung disease in the mills. Other work developed noncancerous dyes and examined energy conservation. These efforts helped the state's struggling textile industry, and by 1981 N.C. State featured the largest university-based textile research program in the United States.[37]

The School of Forest Resources during this period also made several important contributions to the forestry sector. Work begun in the early 1970s helped the state develop a thriving Christmas tree industry by the end of the decade. In 1977, after twenty-one years, the NCSU-Industry Cooperative Tree Improvement Program, established to create a genetically superior strain of Loblolly pine, produced enough seed to allow reforestation efforts to rely entirely on genetically improved seedlings. With the help of the forestry industry, the Southern Forest Research Center was created in 1978 to study soil management. Ellis Cowling encouraged the development of a national research program on acid rain, while Awatiff Hassan perfected a mechanical tree planter. All of these efforts helped the state's forest economy survive a downturn in the late 1970s.[38]

Although much of its work was conducted in pure, not applied science, the School of Physical and Mathematical Sciences, as it was called after June 1970, also carried out a large-scale research program of note. The SAS package developed by Department of Statistics members continued to grow in popularity throughout the period, while Clark Cockerham, with funding from the National Institute of Health, discovered new chromosomal enzyme loci that

allowed agricultural scientists to use better sampling techniques for hybrids. In plasma physics Wesley O. Doggett and other faculty members set up the first relativistic electron beam accelerator in the southeast. In addition, Willard Bennett studied high energy density in electron beams, as the Physics Department's research budget by 1981 grew to over $1 million in federal funds. These pure-science contributions, unlike many of the efforts in the other schools, had less immediate impact, but were extremely important nonetheless.[39]

Graduate education, the partner of research, also increased dramatically during this period. Upon his arrival in Raleigh, Joab Thomas found the necessary faculty and infrastructure already in place, and his administration made a special effort to encourage the development of post-baccalaurate education. Between 1975 and 1982 enrollment increased by 15.4 percent, and the number of fields of concentration grew from seventy-two to eighty-five. Much of the increase in enrollment was due to greater numbers of doctoral students. Several nationally competative fields such as biotechnology and solid state physics were encouraged, as a broad base for graduate study was established in all areas.[40]

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Although student activism declined considerably in the early 1970s, N.C. State students demonstrated a continued concern for important issues during the period. In April 1972, while Stanford University, Columbia University, and Amherst were closed by student protests against the bombing of Hanoi and Haiphong conducted by the Nixon administration, N.C. State students staged a peaceful convocation and march to the capitol in which about 2,000 participated. In the fall of the same year, Chancellor Caldwell informed the Board of Trustees that normalcy reigned at the N.C. State campus, while *Technician* editorials noted that the activism of the past was gone, replaced by student apathy. When a memorial marking the announcement of peace in Vietnam was held on January 29, 1973, only forty or fifty students attended to listen to speeches by Caldwell, Senator Sam Ervin, Jr., and Governor James Holshouser. No further major political protest occurred on campus until 1980, when on November 12, in the wake of the Iranian Hostage crisis, 1,500 N.C. State students staged an anti-Iranian rally on the Brickyard. As Chancellor Thomas noted, however, the majority of student concerns during this period revolved around campus issues, such as academic policies, student fees, athletic ticket distribution, and the food in the cafeteria.[41]

The first major campus issue of the 1970s was the question of who controlled the Student Union program and its funds. The controversy began in the summer of 1970, when Gene Messick, husband of Student Body President Cathy Sterling and recently dismissed intermedia director of the Thompson Theatre, issued a report entitled "Death of a Union." This document alleged that the administration of the Division of Student Affairs, led by Director of Student Activities Banks Talley and College Union Director Henry Bowers, had conspired since Gerry Erdahl's death in 1961 to destroy student control of the College Union. Messick declared that gradually during the 1960s Bowers and Talley assumed more and more control over the program, and finally ignored the student Board of Directors altogether. At the same time, he complained that only 16 pecent of the budget actually went to student social activities; the rest of the money, he said, supported an unnecessary staff that dominated all decisions about the Union program. He labeled the 1969 referendum which placed the Union's social program under the control of Student Government as the final blow to the Erdahl-developed Union, because he charged that Student Government was too weak to combat the "designs" of Talley and Bowers. In his report he ignored the activities of Student Government officials who expressed a strong interest in the union program and budget, as well as the activities of the Union Board of Directors. In closing, Messick demanded that the Association of College Unions-International investigate the situation. His criticism set the stage for the controversy of the following year.[42]

In September 1970, Student Body President Sterling began her campaign to revitalize the Union, labeling the existing social program as a "showcase." Then, in the following spring a Union reorganization referendum passed by a ten-to-one margin. It re-established the Union Board of Directors, and separated the organization from Student Government and control of the Division of Student Affairs, giving students control of the Union's financial and personnel matters. Chancellor Caldwell, who had the final say in the matter, disappointed student leaders the following fall by refusing to consider the section of the referendum that removed the Union from the control of the Division of Student Affairs. At the same time, however, he agreed to the re-establishment of the Board of Directors. Although student leaders, including Student Body President Richard "Gus" Gusler, insisted that the staff was too large, and that it spent too much time on the Friends of the College concert series, students elected a president and Board of Directors who began to develop new plans for Union cultural activities.[43]

When the new University Student Center was finally opened in June 1972, after many delays, the student union program assumed a new importance. This meant that the controversy over the control of funds would continue. Student leaders of the Union program refused to fund non-student related activities, and they urged student organizations to seek funding from their expanded budget. When utilities' costs in the new building threatened to endanger the social activities budget, student leaders negotiated with Business Affairs personnel to separate operating and social budgets. In the spring of 1973 students approved a referendum that removed the Union program from Student Government, after the Student Senate announced that it did not have time to cope with the Union budget. Despite an unsuccessful attempt in 1977 to make the President of the Union an appointed position, the Union remained independent of Student Government, and it rapidly increased in popularity.[44]

Another controversy, closely related to the control of the Student Union, revolved around student fees. In February 1971, President Sterling presented a position paper concerning the allocation and control of student fees to Chancellor Caldwell, demanding that students receive more voice in the matter. She noted that all fees were held in an interest-earning trust fund by the university, and that students deserved a say in how that interest was used. After a meeting with the chancellors of the other institutions in the University of North Carolina system, Caldwell agreed to allow the interest to be credited to student accounts. Despite this victory, student leaders still insisted that they wanted a greater role in the policies related to various nonacademic fees. When students continued to press the matter, Caldwell instructed the University Governance Committee, appointed in 1971 to examine all aspects of campus government, to study the student fees question. Student leaders were disappointed with this decision because they wanted a separate committee to examine the student fees issue, but after some soul-searching, appointed student members to the committee. In March 1972, a sub-committee on student fees proposed a drastic revision in the membership of committees that dealt with student fees, voting to give the students a plurality on such groups. The full committee, however, rejected the proposal, and they informed the chancellor that they could reach no consensus on the issue. Student leaders expressed dismay at the outcome, but the matter soon faded as the semester ended.[45]

The other major student controversy of the early 1970s led to the closing of the two university dining halls. Since the late 1950s,

the dining facilities located in Leazar Hall suffered from a bad press and student disaffection. Many individuals complained that they found the service poor, the food cold and inedible, and the atmosphere unattractive. They declared that they preferred to eat in the many restaurants on Hillsborough Street, in the snack bars operated by the Student Supply Store, or in the Erdahl-Cloyd cafeteria. In order to try to solve this problem Chancellor Bostian in 1956 appointed a faculty food service committee to advise him on the subject and monitor the situation. In 1961, upon recommendation of the food service committee, Slater Food Service was hired to operate the Leazar cafeteria, with the hope that this professional food service could save the faltering business. In response to student gripes that the cafeteria was located on the older campus, away from the new center of student life, in 1963 Harris Hall was opened. Despite these efforts, the university's food service woes continued in the 1960s as students constantly complained about bad food, poor choice, and the lack of atmosphere. Throughout the period, the food service was a frequent issue in Student Government elections. In October 1966, student leaders called for a boycott of the Slater Food Service, and they discovered that Dean of Student Affairs James J. Stewart sympathized with their position. Some reforms were made, and student use of the facilities rose over the next few years to the point where the existing dining halls were inadequate. Then, in 1969, patronage dropped from 13,000 meals per week to 4,000 per week, and the Slater Food Service was in trouble. The following spring, in an effort to help Slater, Business Affairs officials allowed them to assume control of all sandwich sales. This decision led to further student unrest on the subject. After sandwich sales dropped by nearly 50 percent, Caldwell instructed the food service committee to study the matter closely.[46]

During the summer of 1970, students urged the administration to close Leazar and to end the Slater sandwich monopoly, while Student Body President Sterling urged incoming freshmen and transfers to avoid the cafeteria. In the face of continued protest, the administration decided to close aging Leazar in December. After this, only Harris Hall, the Erdahl-Cloyd cafeteria, and the Student Supply Store snack bars remained. This did not save the campus food service, however, because students preferred to eat off-campus or cook in their rooms. As Harris cafeteria experienced continued difficulties, Caldwell and the food service committee debated their next move. They were well aware that the new University Student Center food facilities served only as competition for Harris Hall. Student Government and the *Technician* gave the administration little

encouragement, and they constantly urged students to boycott the cafeteria. In May 1973, after a long agony, Harris cafeteria was closed, and only the Union food services and snack bars remained. Not until the fall of 1982, when the new University Dining Hall opened its doors, did the university attempt to provide students with cafeteria service. The cafeteria controversy demonstrated that N.C. State students, when organized, could exert considerable influence in campus affairs.[47]

During the remainder of the 1970s student protests were more low-key. The usual concerns over athletic ticket distribution, the activity or inactivity of student government, residence hall conditions and regulations, and academic policies all caused outbursts of student concern. Throughout the period, however, the majority of students preferred to avoid an activist stance, and instead they concentrated on their studies. Most were intensely career-oriented, as N.C. State students were throughout the university's history. Some individuals joined highly visible conservative political organizations, such as Accuracy in Academics and Students for America, which caused some university officials as much concern as their earlier liberal counterparts, but the greater part of the student body, conservative or liberal, avoided the limelight.[48]

Students and alumni alike took a great deal of pride in the university's athletic teams during this period. Under Lou Holtz and Bo Rein the football team continued the success begun by Earle Edwards during the 1950s and 1960s, winning several post-season bowls. The rifle, swimming, and wrestling teams also posted outstanding records during the period. It was the basketball team, however, under Everett Case's former player and successor Norman Sloan, that achieved the most recognition, when in 1974 it won the Division I NCAA championship.[49]

Under Coach Sloan, who succeeded the "Old Gray Fox" in 1966, the Wolfpack continued its tradition of excellence in basketball. During the early 1970s, with such outstanding players as David Thompson and Tommy Burleson, Sloan's teams did well in the ACC. Although the NCAA slapped the program in 1973 with a one-year probation over some ill-considered campus visits by Thompson, the Wolfpack posted a 27-0 record and won the ACC championship. Because of the probation, however, the Wolfpack was barred from the NCAA tournament. The following season, with the probation ended, the Wolfpack defeated defending champion UCLA, led by All-America center Bill Walton, in the semifinals and then, anticlimactically beat Marquette University to claim the championship.

Thompson, an All-America selection, became the first N.C. State basketball player to have his number retired, and remained a hero in the hearts of Wolfpack fans. The NCAA championship was excellent public relations for the university, attracting more prospective students, as well as financial support. In addition, the presence of black players like Thompson helped to change racial stereotypes held by numerous North Carolina whites. Many individuals expressed satisfaction with the institution's athletic programs, declaring that they served as an important unifying force on the diverse, overcrowded campus.[50]

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By 1981 N.C. State had made significant strides toward achieving Joab Thomas' goals for excellence, and the chancellor frequently expressed great pleasure with this progress. During his five and one-half year tenure the research activities doubled and academic standards increased, while the new merit scholarship program acted as a magnet to attract talented students. In addition, many believed that faculty morale and self-confidence were improving. When Thomas announced in 1981 his resignation and acceptance of the presidency of the University of Alabama, many were disappointed at the loss. Nash Nicks Winstead, Provost and Vice Chancellor since 1974, became acting chancellor, while the NCSU Trustees and UNC Board of Governors began a search for Thomas' successor. As N.C. State entered its ninety-fifth year Bruce Robert Poulton, chancellor of the University of New Hampshire system, was selected as the new chancellor. Under his leadership N.C. State prepared to enter its second century, determined to overcome its weaknesses and build on its strengths.[51]

Chapter XII

Epilogue

Soon after he became chancellor Bruce R. Poulton remarked to the trustees that N.C. State had evolved ideally within the context of the original hopes and aspirations of the land-grant concept. Indeed, throughout its history, the institution had always aimed at the primary land-grant goal—to be the "People's University." By 1985, when it celebrated its ninety-eighth birthday, the university had weathered many storms, some internal and some external, as it evolved from a technical school to a major research institution.[1]

The idea for N.C. State began with the notion that the traditional, classical education, transplanted from Europe, was inadequate to train the men who would promote the economic development that nineteenth-century Americans believed was necessary to improve the life of the common man. In North Carolina, this impetus took a special form, derived from the fusion of New South reformers, who sought to remake the region through industrialization, and the Farmers Alliance, who saw the land-grant movement as a way to promote an equitable society for the farmer. Despite the aims of the Populists and their heirs, from its beginning N.C. State did not produce a large number of educated farmers. Most of its graduates became part of the ever-growing network of southern businessmen, industrial personnel, and researchers who by the late twentieth century had become the foundation for another "New South." Nevertheless, N.C. State contributed significantly to North Carolina's important agricultural sector. Its main service to agriculture was through its

research and extension functions, as its scientists discovered, through genetics, studies of disease, better management techniques, and mechanization, the way to a more productive agriculture that benefitted a larger sector of the state. Agricultural Extension provided the means to communicate these innovations to the state's large rural population.

Despite its reputation as "Cow College," N.C. State, like other land-grant institutions, never limited itself to just agriculture and engineering studies. Although from the earliest period curricula often featured a high degree of specialization and corresponding technical electives, they also included an exposure to the arts and sciences which traditionally were part of a college education. By the 1920s, these subjects received more and more emphasis, as N.C. State had begun to move away from a trade school atmosphere toward the multi-purpose university of the late twentieth century. The institution broadened its emphasis to include majors in education, forestry, architecture, and briefly, the liberal arts, always with the understanding that its graduates would use their education to serve the state. At the same time, however, the institution suffered an identity crisis, because the faculty and administration often seemed unsure of its goals, and many people, both on and off campus, questioned its direction. Although the depression of the late 1920s and early 1930s caused a temporary setback, it also led to the formation of the Consolidated University of North Carolina, under the leadership of Frank Porter Graham. During the late 1930s, building on the efforts of the Brooks years, Graham, who dominated the three-campus university, began to develop the modern N.C. State. After World War II temporarily interrupted Graham's activities, N.C. State expanded beyond its historic concentration on agriculture and engineering, developing in a short period of time outstanding schools of forestry and design, while its School of Education provided unique vocational opportunities to its graduates. At the same time, the college began to develop pioneering southern doctoral programs in agriculture and engineering. By the end of the 1950s, N.C. State was ready to shed its State College image and become a university.

It was during the Caldwell era (1959-1975) that N.C. State moved beyond many of its previous limitations, including those placed on it by university consolidation. The change of its name to North Carolina State University at Raleigh accurately indicated its emergence as a bonafide land-grant institution of national repute. Also it awarded degrees in the liberal arts, thereby contributing to its status as a true university. At the same time, its student body grew

enormously as it educated the baby boom generation and endeavored to extend its land-grant mission of service to the Raleigh-area community. Its students and faculty also expressed a greater interest in the surrounding world as the university community involved itself in the national issues of the period. While acknowledging Caldwell's achievements as a university builder, his successors sought to fine tune the institution by placing a new emphasis on scholarship and research. By 1985, N.C. State was the most populous campus of the University of North Carolina system, research activities doubled again, and financial and physical resources continued to grow. University officials, led by Bruce R. Poulton, expressed confidence in the university's future.

Bruce Robert Poulton, the tenth administrative head of N.C. State, was the first non-southerner to lead the institution. Born in 1928, a native of Yonkers, New York, Poulton was educated at Rutgers University, receiving his doctorate in 1956 in endocrinology. An animal scientist, he taught at Rutgers and the University of Maine, and then served in several administrative positions, including vice president for research and public service at the University of Maine. In 1975 he became the first chancellor of the University of New Hampshire system. He elected to accept the chancellorship at N.C. State because, he said, he wanted more contact with students and faculty. He believed that his task was to give the university the extra impetus that it needed to achieve greatness.[2]

During his first several years as chancellor the institution achieved several additional milestones. The institution reached another milestone in late 1984 and early 1985, when Governor James B. Hunt, Jr., class of 1959, approved the transfer of 350 acres of surplus property located at Dorothea Dix Hospital and the North Carolina Council of State sanctioned the transferal of an additional 400 acres to N.C. State. This second land-grant offered the university a new source of income, as well as room to develop many needed facilities. During the spring of 1986, the Carley Capital Group of Washington unveiled its plan for the incremental development of the centennial campus. When completed the new campus will include numerous research facilities, living areas for students and faculty, and recreation facilities, as well as commercial property. In 1984 N.C. State's research program received an additional boost when the General Assembly provided $5 million to N.C. State and UNC-Chapel Hill to attract top research scientists. In January 1986, Clement Markert, an outstanding animal scientist and the director of Yale's Center for Reproductive Biology, became the first of four University

Distinguished Research Professors supported by this appropriation. The highly successsful State-of-the-Future fund-raising campaign, which in early 1986 passed its $32 million goal a year ahead of schedule, provided new financial resources for research equipment, endowed professorships, and merit scholarships. In addition, new programs in robotics, biotechnology, and microelectronics reinforced the effort to keep N.C. State and North Carolina in tune with the most recent trends in science and technology. Despite its many successes, N.C. State's leaders recognized that there was still room for improvement if the institution was to continue to serve the needs of North Carolina and the goals of higher education.[3]

Since the day that Walter Mathews and his nineteen classmates enrolled at North Carolina A & M, the state of North Carolina has made considerable progress. No longer part of a stagnant region, the state continues to rely on its important agricultural sector, but this part of the economy is now balanced by the presence of many thriving industries. North Carolina State University and its graduates played an important role in the state's evolution. In the classroom it trained the businessmen, mill managers, research scientists, natural resource managers, designers, engineers, and teachers who became some of the leaders of North Carolina. In the laboratory, its scientists discovered ways to increase agricultural productivity, improve industrial conditions, and make more efficient use of natural resources such as coal, clay, timber, and water, that also contributed to the state's development. Finally, through extension, the university provided information on better farm methods, home improvement, cultural enrichment, and problem-solving services for business and industry that greatly expanded its usefulness to North Carolina. As it prepared to enter its second century, N.C. State continued its mission of service to the state.

Footnotes

Chapter I

[1]Raleigh *News and Observer*,, May 28, 1955, September 3, 1967; *Statelog*, (October, 1967), 2; *Alumni News* 40 (September-October, 1967), 7; Walter J. Mathews, Interview, Oral History Collection, North Carolina State University Archives.

[2]Raleigh *News and Observer*, September 3, 1967; Raleigh *State Chronicle*, August 22, 24, 1888.

[3]Christopher Allen, "The Land Grant Act of 1862 and Practical Education in North Carolina: The Founding of the North Carolina College of Agriculture and Mechanic Arts," (Unpublished masters thesis, North Carolina State University, 1984), p. 1; Burton J. Bledstein, *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America* (New York: W.W. Norton and Company, Inc., 1976), p. x; Edward Danforth Eddy, *Colleges for Our Land and Time: The Land Grant Idea in American Education* (New York: Harper and Brothers, 1956), pp. 3-4; George Bugliarello and Harold A. Simon, *Technology, The University and the Community: A Study of the Regional Role of Engineering Colleges* (New York: Pergamon Press, 1976), p. 337; George S. Emmerson, *Engineering Education A Social History* (New York: Crome, Russok, 1973), p. 138; Lindsey Otis Armstrong, "The Development of Agricultural Education in North Carolina," (Unpublished masters thesis, North Carolina State College, 1932), pp. 6-7.

[4]Allen Nevins, *The State Universities and Democracy* (Urbana: University of Illinois Press, 1962), p. 2; James Gregory McGivern, *First Hundred Years of Engineering Education in the United States* (Spokane: Gonzoga University Press, 1960), p. 118; Frederick Rudolph, *The American College and University: A History* (New York: Vintage Books, 1962), pp. 222-226, 232; Lawrence Cremin, *American Education: The National Experience, 1783-1876* (New York: Harper and Row, 1980), pp. 270-271; John S. Brubacher and Willis Rudy, *Higher Education in Transition: An American History, 1636-1956* (New York: Harper and Brothers, 1958), p. 62; Eddy, *Colleges for Our Land and Time*. p. 9; Margaret Rossiter, *The Emergence of Agricultural Science Justis Liebig and the Americans, 1840-1880* (New Haven: Yale University Press, 1975), pp. 171-172. Note: Modern Liberal Arts education did not exist at this time. It became popular at several northeastern institutions in the period immediately after the Civil War, although several southern state universities resisted the change until the late 19th century. Social sciences, etc. did not exist until the early 20th century.

[5]Nevins, *The State Universities and Democrary*, pp. vi-vii; Bledstein, *The Culture of Professionalism*, pp. x-xi; Lawrence R. Versey, *The Emergence of the American University* (Chicago: University of Chicago Press, 1965), p. 70; Rudolph, *The American College and University*, pp. 201-202; Cremin, *Amer-*

ican Education, p. 338; Earle D. Ross, *Democracy's College: The Land Grant Movement in the Formative Stage* (Ames: Iowa State College Press, 1942), pp. 3-4; Walter Stemmons, *Connecticut Agricultural College—A History* (Storrs: Connecticut Agricultural College, 1931), p. 81. Note: Webster's defines "practical" as disposed to action as opposed to speculation and abstraction, designed to supplement theoretical training. "Democracy" implies more opportunity. Whatever Andrew Jackson and other political leaders wanted, there was strong popular support for educational reform.

[6]Rudolph, *The American College and University*, p. 217; Eddy, *Colleges for our Land and Time*, pp. 15-16; Samuel Rezneck, *Education for a Technological Society A Sesquicentennial History of Rensselaer Polytechnic Institute* (Troy: Rensselaer Polytechnic Institute, 1968), pp. 3, 15, 19; David Lockmiller, *The History of the North Carolina State College of Agriculture and Engineering* (Raleigh: Edwards and Broughton, 1939), pp. 5-7.

[7]Joseph Blount Cheshire, *Nonnulla. Memories, Stories, Traditions More or Less Authentic* (Chapel Hill: University of North Carolina Press, 1930), pp. 66-67; Charles L. Coon, *The Beginnings of Public Education in North Carolina. A Documentary History, 1790-1840* (Raleigh: Edwards and Broughton Printing Company, 1908), pp. 300-307.

[8]Coon, *The Beginnings of Public Education in North Carolina*, pp. 308-329.

[9]Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 58-59; Cheshire, *Nonnulla*, p. 67. Note: Websters defines "practical art" as serving an ordinary or material need.

[10]Kemp Plummer Battle, *History of the University of North Carolina* 2 Volumes. (Raleigh: Edwards and Broughton Printing Company, 1907), vol. II, p. 81; Brubacher and Rudy, *Higher Education in Transition*, p. 431; Armstrong, "The Development of Agricultural Education in North Carolina," pp. 20, 22.

[11]Ross, *Democracy's College*, p. 3; Lockmiller, *History of North Carolina State College*, p. 7; Stemmons, *Connecticut Agricultural College*, p. 9.

[12]Allister G. Holmes and George R. Sherrill, *Thomas Green Clemson His Life and Work* (Richmond: Garrett and Massie, Inc., 1937), pp. 123-178; Lockmiller, *History of North Carolina State College*, pp. 8-9.

[13]Allen, "The Land Grant Act and Practical Education in North Carolina," p. 13; Nevins, *The State Universities and Democracy*, p. 15; Ross, *Democracy's College*, p. 46; William B. Parker, *The Life and Public Service of Justin Smith Morrill* (Boston: Houghton Mifflin, Company, 1924), pp. 10, 21-24, 260-261; Lockmiller, *History of North Carolina State College*, p. 10.

[14]Thirty-Fifth Congress, *The Congressional Globe*, Part I, pp. 32, 36-37, Part II, p. 1692; Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 17-18; Eddy, *Colleges for Our Land and Time*, p. 30; Lockmiller, *History of North Carolina State College*, pp. 9-12.

[15]Allen, "The Land Grant Act and Practical Education in North Carolina," p. 23; Eddy, *Colleges for Our Land and Time*, p. 33; Eric Foner, *Free Soil, Free Labor, Free Men The Ideology of the Republican Party before the Civil War*, (New York: Oxford University Press, 1970), passim; Parker, *The Life and Public Service of Justin Morrill*, pp. 266-268.

[16]Allen, "The Land Grant Act and Practical Education in North Carolina," p. 25, 28.

[17]Battle, *History of the University of North Carolina*, vol. I., pp. 754-756.

[18]Robin Brabham, "Defining the American University: the University of North Carolina, 1865-1875," *North Carolina Historical Review* 57 (October, 1980), 437, 441-445; Battle, *History of the University of North Carolina*, vol. I., pp. 757, 763-766, 774.

[19]Brabham, "Defining the American University," pp. 446-448; Battle, *History of the University of North Carolina*, vol. II., pp. 14, 20; James G. DeRouhlac Hamilton, *Reconstruction in North Carolina* (New York: Columbia University Press, 1914), pp. 622-626.

[20]Brabham, "Defining the American University," pp. 449-451; Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 50, 53; Battle, *History of the University of North Carolina*, vol. II., pp. 71, 81, 190, 122, 123; Kemp Plummer Battle, *The Head and Hand* (Goldsboro: n.p., 1886), pp. 3-7; Lockmiller, *History of North Carolina State College*, pp. 22-23.

[21]Gilbert Fite, *Cotton Fields No More Southern Agriculture 1865-1980* (Lexington: University of Kentucky Press, 1984), pp. 1, 7-8, 28; Willard W. Cochran, *The Development of American Agriculture: A Historical Analysis* (Minneapolis: University of Minnesota Press, 1979), pp. 93-96; Carl Cleveland Taylor, *The Farmers' Movement, 1620-1920* (New York: American Book Company, 1953), pp. 115-171; Hugh T. Lefler and Albert R. Newsome, *North Carolina: The History of a Southern State* (Chapel Hill: University of North Carolina Press, 1954), pp.490-497.

[22]Cochran, *The Development of American Agriculture*, pp. 93-96; Taylor, *The Farmers' Movement, 1620-1920*, pp. 115-171; D. Sven Nordin, *Rich Harvest: A History of the Grange, 1867-1900* (Jackson: University of Mississippi Press, 1974), p. 22; Solon J. Buck, *The Granger Movement: A Study in Agricultural Organization and its Political, Economic, and Social Manifestations, 1870-1880* (Lincoln: University of Nebraska Press, 1913), pp. 290-291.

[23]Stuart Noblin, *Leonidas LaFayette Polk, Agrarian Crusader* (Chapel Hill: University of North Carolina Press, 1949), pp. 87-109.

[24]*Ibid.*

[25]Battle, *History of the University of North Carolina*, vol. II., pp. 137-138; North Carolina Agricultural Experiment Station, *Annual Report*, 1877-1880, passim; Ira Obed Schaub, *The First Sixty Years, 1877-1937* (Raleigh: North Carolina Agricultural Experiment Station, 1955), pp. 14-20.

[26]North Carolina Agricultural Experiment Station, *Annual Report*, 1880-1887, passim; Battle, *History of the University of North Carolina*, vol. II., p. 139; Schaub, *The First Sixty Years*, pp. 21-30.

[27]Schaub, *The First Sixty Years*, pp. 27-30.

[28]*Ibid.*, pp. 31-49.

[29]Alfred Charles True, *A History of Agricultural Education in the United States, 1785-1925* (Washington, DC: United States Government Printing Office, 1929), pp. 200-208; Rossiter, *The Emergence of Agricultural Science*, pp. 171-172; Richard A. Hatch, ed., *An Early View of the Land-Grant Colleges* (Urbana: University of Illinois Press, 1967), pp. vii, xiv.

[30]True, *A History of Agricultural Education*, pp. 200-208.

[31]Schaub, *The First Sixty Years*, pp. 32-32; North Carolina Agricultural Experiment Station, *Annual Report*, 1887-1889, passim.

Chapter II

[1]Comer Vann Woodward, *Origins of the New South, 1877-1913* (Baton Rouge: Louisiana State University Press, 1951), pp. 75-174; Paul Gaston, *The New South Creed: a Study in Southern Mythmaking* (New York: Alfred A. Knopf, 1970), passim.

[2]"*The Land We Love*, vol. I., pp. 2-11, 24-25, 83-90, 146-156, 235-239; Dan T. Carter, *When The War Was Over. The Failure of Self-Reconstruction in the South, 1865-1867* (Baton Rouge: Louisiana State University Press, 1985), pp. 117-118; Gaston, *The New South Creed*, pp. 28-30; Hal Bridges, "D.H. Hill and Higher Education in the New South," *Arkansas Historical Quarterly* 15 (Summer, 1956), passim.

[3]Gaston, *The New South Creed*, pp. 49-52, 59-63, 105-106, 161-162; John M. Cooper, *Walter Hines Page. The Southerner as American, 1855-1918* (Chapel Hill: University of North Carolina Press, 1977), pp. 69, 78-79.

[4]Charles W. Dabney, *Universal Education in the South* 2 volumes, (Chapel Hill: University of North Carolina Press, 1936), vol. I., pp. 182-183; Cooper, *Walter Hines Page*, p. 70; Richard Walser, *The Watauga Club* (Raleigh: Wolf's Head Press, 1980), passim; Lockmiller, *History of North Carolina State College*, p. 26.

[5]Watauga Club, *An Industrial School* (Raleigh: np, 1885), passim; Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 56-57, 60; Clarence Poe Diary, September 16, 1901, Clarence Poe Papers, North Carolina Division of Archives and History; Lockmiller, *History of North Carolina State College*, pp. 26-27.

[6]Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 61-64; Battle, *History of the University of North Carolina*, vol. II., p. 353; Lockmiller, *History of North Carolina State College*, pp. 28-29. Note: Thomas Dixon was the author of the trilogy that served as the basis for D.W. Griffith's "Birth of A Nation" (1915).

[7]Fite, *Cotton Fields No More*, p. 1, 7-8, 28, 34; Woodward, *Origins of the New South*, pp. 175-204.

[8]Noblin, *Polk*, pp. 147-162; Adolph Jenkins Honeycutt, "The Farmers' Alliance in North Carolina," Unpublished masters thesis, North Carolina State College, 1925), pp. 1-5, 12; Allen, "The Land Grant Act and Practical Education in North Carolina," p. 68; Robert C. McMath, *Populist Vanguard: A History of the Southern Farmers Alliance* (New York: W.W. Norton and Company, 1975), pp. 38-40.

[9]*Progressive Farmer*, February 10, 17, 1881, May 12, 19, August 25, 1886.

[10]James Brittain and Robert C. McMath, "Engineers and the New South Creed: The Formation and Early Development of Georgia Tech," *Technology and Culture* 18 (1977), passim; Josephus Daniels, *Tar Heel Editor* (Chapel Hill: University of North Carolina Press, 1939), p. 296; Clarence Poe, *My First 80 Years* (Chapel Hill: University of North Carolina Press, 1963), p.66.

[11]Noblin, *Polk*, pp. 163-182.

[12]Allen, "The Land Grant Act and Prac-

tical Education in North Carolina," p. 74; McMath, *Populist Vanguard*, p. 39; Raleigh *State Chronicle*, January 20, March 3, 1887.

[13]Raleigh *State Chronicle*, January 27, February 3, 1887; Daniels, *Tar Heel Editor*, p. 297. Note: In order to reconcile University of North Carolina officials the legislature voted a maintenance appropriation for it.

[14]Daniels, *Tar Heel Editor*, p. 297; Lockmiller, *History of North Carolina State College*, pp. 36-37.

[15]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, April 22, 1887, North Carolina State University Archives; Raleigh *State Chronicle*, April 28, 1887; Lockmiller, *History of North Carolina State College*, pp. 36-37. Note: Because of the power of the Alliance, both political parties, Democrat and Republican, were represented.

[16]Raleigh *State Chronicle*, August 22, 24, 1888; Lockmiller, *History of North Carolina State College*, pp. 38-39.

[17]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, July 11, 1889, August 30, 1889; Lockmiller, *History of North Carolina State College*, pp. 40-41, 45.

[18]Edwin Bentley Owen, "Random Sketches of College History," *Alumni News* 6 (June, 1923), 6-7; Lockmiller, *History of North Carolina State College*, pp. 40-41. Note: The North Carolina State Normal and Industrial College for Women was founded in 1891. It is now the University of North Carolina at Greensboro.

[19]Frenise A. Logan, "The Movement in North Carolina to Establish a State-Supported College for Negroes," *North Carolina Historical Review* 35 (1958), 169-170; Rhett Y. Winters, *Early Fertilizer Control Laws Challenged by Fertilizer Industry* (Raleigh: School of Agriculture and Life Sciences - NCSU, 1967), pp. 10-13.

[20]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, November 13, December 4, 1890, June 17, 1891; Warmoth T. Gibbs, *History of the North Carolina Agricultural and Technical College* (Dubuque: William C. Brown Book Company, 1966), pp. 5, 10.

Chapter III

[1]Raleigh *News and Observer*, May 29, 1955, September 3, 1967.

[2]David Lockmiller, *The History of North Carolina State College of Agriculture and Engineering* (Raleigh: Edwards and Broughton, 1939), pp. 45-46.

[3]*Ibid.*, pp. 41-42.

[4]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, June 15, August 19, 1892.

[5]North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1890, pp. 7-12; Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 86-87; *Alexander County Journal*, November 7, 1889.

[6]Allen, "The Land Grant Act and Practical Education in North Carolina," pp. 8, 80; Eddy, *Colleges for Our Land and Time*, pp. 87-89; Ross, *Democracy's College*, p. 115; Bledstein, *The Culture of Professionalism*, p. 193; Owen, "Random Sketches of College History," *Alumni News* 8 (June, 1925), 6; Lockmiller, *History of North Carolina State College*, p. 49. Note: Common first year is not "core curriculum" of liberal arts.

Throughout much of North Carolina State University history common courses meant common technical courses.

[7]Owen, "Random Sketches of College History," *Alumni News* 6 (October, 1923), 2; Owen, "Random Sketches of College History," *Alumni News* 6 (December, 1922), 6-7; Lockmiller, *History of North Carolina State College*, p. 56.

[8]Owen, "Random Sketches of College History," *Alumni News* 7 (December 1923), 2.

[9]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, January 11, 1894; C.C. Early, "History of Military Training at State College," *Alumni News* 1 (new series) (November, 1927), 7; Lockmiller, *History of North Carolina State College*, p. 51.

[10]Ross, *Democracy's College*, p. 113.

[11]Eddy, *Colleges for Our Land and Time*, p. 92.

[12]North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1890, p. 7; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, June 15, 1893; Lockmiller, *History of North Carolina State College*, p. 49.

[13]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, September 10, 1894; North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1892-1893, p. 41; North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1897-1898, p. 21.

[14]Owen, "Random Sketches of College History," *Alumni News* 9 (November, 1925), 6-7; Lockmiller, *History of North Carolina State College*, pp. 63-64.

[15]North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1890-1891, pp. 38-39.

[16]*Ibid.*, p. 37.

[17]Early, "History of Military Training at State College," 7.

[18]Leazar Literary Society, Minutes, 1889, North Carolina State University Archives; Arthur J. Klein, *Survey of Land Grant Colleges and Universities* 2 Volumes, (Washington, DC: United States Government Printing Office, 1930), vol. I., p. 521; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, June 12, 1895.

[19]Lockmiller, *History of North Carolina State College*, p. 55.

[20]William Beezley, *The Wolfpack: Intercollegiate Athletics at NCSU* (Raleigh: University Graphics, 1976), pp. 3-9. Note: The Wolfpack name was first used in 1922 after an anonymous writer complained about the team's behavior, both on and off the field. The students, as a joke, adopted the name for the football team.

[21]Owen, "Random Sketches of College History," *Alumni News* 5 (October, 1922), 2; R.H. Morrison, "In the Gay Nineties," *Statelog* (November, 1956), 1. Note: The teachers' institute was not part of the A & M program. It was part of a state-wide system of institutes established by the 1889 General Assembly at the behest of Edwin R. Alderman and Charles D. McIver. Funded by the state, they lasted a week in each location. Therefore, these women were not A & M students.

[22]Owen, "Random Sketches of College History," *Alumni News* 6 (December, 1922), 6-7; North Carolina College of

Agriculture and Mechanic Arts, Board of Trustees, Minutes, June, 1895; Raleigh *Times*, January 13, 1961; Benjamin S. Skinner to Alexander Q. Holladay, June 12, 1895, Chancellor's Office - Correspondence, North Carolina State University Archives.

[23]*Agromeck*, 1903, p. 36; Raymond C. Manieri, "Streetcar Speculators: The Role of Street Railway Promoters in the Development of Surburban Neighborhoods in Raleigh and Greensboro, North Carolina, 1886-1923," (Unpublished masters thesis, North Carolina State University, 1932), p. 20.

[24]Owen, "Random Sketches of College History," *Alumni News* 5 (October, 1922), 2; Lockmiller, *History of North Carolina State College*, pp. 46-47.

[25]Schaub, *The First Sixty Years*, pp. 40-41.

[26]*Ibid.*; North Carolina Agricultural Experiment Station, *Annual Report*, 1889-1899, passim; Wilbur Fiske Massey to William Alphonso Withers, September 2, 1897, William A. Withers Papers, North Carolina Division of Archives and History.

[27]Lawrence Goodwynn, *Democratic Promise The Populist Movement in America* (New York: Oxford University Press, 1976), pp. 409-411, 442-444; Theodore Saloutos, *Farmer Movements in the South, 1865-1933* (Berkeley: University of California Press, 1960), pp. 124-126.

[28]Goodwynn, *Democratic Promise*, pp. 409-411, 442-444; Paul D. Escott, *Many Excellent People Power and Privilege in North Carolina, 1850-1900* (Chapel Hill: University of North Carolina Press, 1985), pp.241-249.

[29]Schaub, *The First Sixty Years*, pp. 49-50, 56; Escott, *Many Excellent People*, p. 249.

[30]Schaub, *The First Sixty Years*, pp. 49-50, 56.

[31]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, June 7, June 29, 1897; North Carolina Agricultural Experiment Station, *Annual Report*, 1898-1899, passim.

[32]William J. Peele, "Report on the College," June, 1899, William J. Peele Papers, North Carolina State University Archives; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, June 5, 1899.

Chapter IV

[1]Lockmiller, *History of North Carolina State College*, pp. 71-72.

[2]*Ibid.*, pp. 97-98.

[3]*Ibid.*, pp. 125-126.

[4]Dewey W. Grantham, *Southern Progressivism. The Reconciliation of Progress and Tradition* (Knoxville: University of Tennessee Press, 1983), pp. 268, 270, 331-333; George Brown Tindall, *The Emergence of the New South, 1913-1945* (Baton Rouge: Louisiana State University Press, 1967), pp. 227-230, 303; Rudolph, *The American College and University*, pp. 356-357, 363-369; Brubacher and Rudy, *Higher Education in Transition*, p. 261.

[5]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, May 28, June 4, 1901.

[6]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, July 1, 1901, May 27, 1902, May 30, 1905, May 30, 1906; North

Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1901-1902, pp. 19, 22; Eddy, *Colleges for Our Land and Time*, p. 115.

[7]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, November 22, 1907, March 3, 1908; *North Carolina Student Farmer* 1 (March, 1908), 19-20.

[8]Saloutos, *Farmer Movements in the South*, p. 189; Eddy, *Colleges for Our Land and Time*, p. 120.

[9]*President's Annual Report, 1915-1916*, p. 3; North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1916-1917, pp. 57-58.

[10]North Carolina State College, Board of Trustees, Minutes, May 29, 1917; *North Carolina Student Agriculturalist* 1 (May, 1923), 3-4.

[11]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, May 30, 1906.

[12]*President's Annual Report, 1905-1907*, p. 8; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, December 30, 1908, April 20, 1909.

[13]Bugiarello and Simon, *Technology, The University, and the Community*, pp. 338-339.

[14]Owen, "Random Sketches of College History," *Alumni News* 6 (June, 1923), 6-7.

[15]North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1899-1900, pp. 18-19; North Carolina College of Agriculture and Mechanic Arts, *Catalogue*, 1912-1913, pp. 149-150. Note: The professional degrees required three years of practice, and a thesis, but not course work.

[16]George Tayloe Winston, *A Builder of the New South Being the Story of the Life Work of Daniel Augustus Tompkins* (Garden City: Doubleday, Page and Company, 1920), pp. 199, 205, 207; Walser, *The Watauga Club*, p. 19; Charlotte *Observer*, February 8, 1899.

[17]Charles A. Pearson, "Reminiscing," *Alumni News* 29 (March, 1957), 14; Walser, *The Watauga Club*, p. 17.

[18]Thomas R. Hart, *History of the Textile School* (Raleigh: State College Print Shop, 1951), p. 2; *Agromeck*, 1903, p. 143.

[19]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, March 20, 1900; Hart, *History of the Textile School*, pp. 2, 4-6; *President's Annual Report, 1899-1900*, p. 5; *President's Annual Report, 1901-1902*, p. 8.

[20]Hart, *History of the Textile School*, pp. 2, 4-6.

[21]Hart, *History of the Textile School*, pp. 9-10; *President's Annual Report, 1913-1914*, pp. 7-8.

[22]*President's Annual Report, 1901-1902*, p. 9; *President's Annual Report, 1903-1904*, pp. 1, 9. Note Aycock tied educational reform to the disfranchisement of blacks.

[23]North Carolina State College, Board of Trustees, Minutes, May 29, 1917; *President's Annual Report, 1916-1917*, p. 10.

[24]Louis Round Wilson, *The University of North Carolina 1900-1930: The Making of a Modern University* (Chapel Hill: University of North Carolina Press, 1957), pp. 50-51.

[25]Owen, "Random Sketches of College History," *Alumni News* 8 (April, 1925),

3-5.

[26]North Carolina State College, Board of Trustees, Minutes, May 30, 1922; *Technician*, January 20, 1921.

[27]Owen, "Random Sketches of College History," *Alumni News* 6 (January, 1923), 6-7.

[28]Owen, "Random Sketches of College History," *Alumni News* 6 (February, 1923), 6.

[29]Owen, "Random Sketches of College History," *Alumni News* 9 (November, 1925), 6-7.

[30]*Ibid.*

[31]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, May 29, 1900, May 25, 1904; *YMCA Newsletter*, 1 (December, 1910), 1.

[32]Benjamin Hood Interview, 1976, Oral History Collection, North Carolina State University Archives; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, August 1, 1899; Arthur Gregory to Father, April 20, 1903, John T. Gregory Papers, North Carolina Division of Archives and History.

[33]Morrison, "In the Gay Nineties," 2.

[34]*Agromeck*, 1905, pp. 61-63, 228; Battle, *History of the University of North Carolina*, vol. II., p. 527; Brubacher and Rudy, *Higher Education in Transition*, p. 261.

[35]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, May 30, 1905; *Agromeck*, 1906, p. 27; *Red and White* 8 (October, 1906), 76; *Red and White* 8 (December, 1906), 188.

[36]*Agromeck*, 1915, p. 124.

[37]A.O. Alford "Old and New Bands at N.C. State College," *Alumni News* 1 (new series) (June, 1929), 181-182.

[38]*Agromeck*, 1905, p. 25; *Agromeck*, 1908, p. 24. Note: Each fall, as "Kings of the Campus," the sophomore class painted their class numeral in several conspicuous places on campus, such as the Tompkins tower, the water tower, or the barn roof, as well as in the street in front of Meredith College and St. Mary's College. The freshmen were later required to erase these numerals.

[39]*Agromeck*, 1912, p. 29; Raleigh *News and Observer*, April 11, 1911.

[40]*Red and White* 14 (1913), 235; *Agromeck*, 1908, p. 158; *Agromeck*, 1911, p. 149. Note: Not until 1947 were all North Carolina State University athletic teams consistantly called the Wolfpack.

[41]*Red and White* 17 (October, 1915), *Red and White* 8 (September, 1911), 47; *Red and White* 18 (September, 1916), 1; *Agromeck*, 1912, p. 18.

[42]*Agromeck*, 1903-1923, passim. Note: The sponsors were usually the boys' girlfriends or mothers, not State College coeds. This practice faded by the early 1960s, and was discontinued in the *Agromeck* in 1965.

[43]*Agromeck*, 1904, p. 194; *Agromeck*, 1908, p. 156.

[44]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, July 5, August 2, 1899.

[45]*Summer School Bulletin, State College Record* 16 (1917), 16.

[46]*Agromeck*, 1922, p. 136; *Agromeck*, 1923, p. 118.

[47]Leslie N. Boney, "My Recollection of the Watauga Hall Fire," *Alumni News*

30 (March, 1958), 16.

[48]Lockmiller, *History of North Carolina State College*, p. 100.

[49]*Agromeck*, 1914, pp. 284-285.

[50]Clarence B. Smith and Meredith C. Wilson, *The Agricultural Extension System of the United States* (New York: John Wiley and Sons, 1930), pp. 1-5; Grantham, *Southern Progressivism*, pp. 331-341; Woodward, *Origins of the New South*, pp. 408-413; Rudolph, *The American College and University*, p. 364.

[51]Alfred C. True, *A History of Agricultural Extension Work in the United States, 1785-1923* (Washington, DC: United States Government Printing Office, 1928), p. 22; Ira Obed Schaub, *Agricultural Extension Work A Brief History* (Raleigh: North Carolina Agricultural Extension Service, 1953), pp. 12-13; Thomas and Marilynn Wessel, *4-H: An American Idea, 1900-1980* (Chevy Chase, Maryland: National 4-H Council, 1982), pp. 8-12; James W. Clark, Jr., *Clover All Over* (Raleigh: NCSU - 4-H and Youth, 1984), p. 4; North Carolina Agricultural Extension Service, *Annual Report*, 1914-1915, p. 9.

[52]Schaub, *Agricultural Extension Work*, pp. 14-16; True, *A History of Agricultural Extension*, pp. 22-41.

[53]Schaub, *Agricultural Extension Work*, pp. 17-19; Clark, *Clover All Over*, pp. 4-5.

[54]Schaub, *Agricultural Extension Work*, pp. 18-19; North Carolina Agricultural Extension Service, *Annual Report*, 1907-1909, passim.

[55]North Carolina Agricultural Extension Service, *Annual Report*, 1909-1910, pp. 1, 8; Schaub, *Agricultural Extension Work*, pp. 19-22; Clark, *Clover All Over*, pp. 18-19; Jane S. McKimmon, *When We're Green We Grow* (Chapel Hill: University of North Carolina Press, 1945), pp. 10-12.

[56]McKimmon, *When We're Green We Grow*, pp. 12-19; North Carolina Agricultural Extension Service, *Annual Report*, 1911-1912, p. 6.

[57]Alfred C. True to Charles B. Williams, December 1, 1911, School of Agriculture and Life Science Miscellaneous Collection, North Carolina State University Archives; Schaub, *Agricultural Extension Work*, p. 31; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, November 9, 1911.

[58]Schaub, *Agricultural Extension Work*, pp. 32-36; True, *A History of Agricultural Extension*, pp. 100-115; North Carolina Agricultural Extension Service, *Annual Report*, 1914-1915, p. 12; North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, August 27, 1914.

[59]Joint Committee on Agriculture, Minutes, November 11, 1911, North Carolina State University Archives; North Carolina Agricultural Extension Service, *Annual Report*, 1914-1915, pp. 19, 33.

[60]North Carolina Agricultural Extension Service, *Annual Report*, 1914-1915, p. 16; North Carolina Agricultural Extension Service, *Annual Report*, 1915-1916, pp. 9, 41, 43, 45.

[61]North Carolina Agricultural Extension Service, *Annual Report*, 1916-1917, p. 15; North Carolina Agricultural Extension Service, *Annual Report*, 1917-1918, pp. 93-94; North Carolina Agricultural Extension Service, *Annual Report*, 1918-1919, pp. 12, 14; Schaub,

Agricultural Extension Work, pp. 29-30.

[62]North Carolina Agricultural Extension Service, *Annual Report*, 1918-1919, p. 14; North Carolina Agricultural Extension Service, *Annual Report*, 1920-1921, p. 11; North Carolina Agricultural Extension Service, *Annual Report*, 1921-1922, p. 138, 145; Clark, *Clover All Over*, pp. 70-73.

[63]Schaub, *The First Sixty Years*, pp. 62-110.

[64]*Ibid.*

[65]Owen, "Random Sketches of College History," *Alumni News* 6 (November, 1922), 5-6.

[66]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, May 27, 1913, January 9, 1917; *Red and White* 18 (April, 1917), 213.

[67]*President's Annual Report, 1916-1917*, pp. 1, 2.

[68]North Carolina College of Agriculture and Mechanic Arts, Board of Trustees, Minutes, November 16, 1916.

[69]*President's Annual Report, 1916-1917*, p. 6.

[70]*Agromeck*, 1918, p. 24; *President's Annual Report, 1917-1918*, pp. 1-2, 7, 8, 9.

[71]Carol S. Gruber, *Mars and Minerva: World World I and The Uses of Higher Learning in America* (Baton Rouge: Louisiana State University Press, 1975), p. 214; North Carolina State College, Board of Trustees, Minutes, March 14, May 27, 1918; *President's Annual Report, 1917-1918*, pp. 2-3; *President's Annual Report, 1918-1919*, p. 1.

[72]*Agromeck*, 1919, pp. 38, 78; Gruber, *Mars and Minerva*, pp. 215-217; North Carolina State College, Board of Trustees, Minutes, August, 14, 1918; *President's Annual Report, 1918-1919*, pp. 1-2, 13-14; Brubacher and Rudy, *Higher Education in Transition*, p. 222.

[73]*President's Annual Report, 1918-1919*, pp. 9-11.

[74]*Agromeck*, 1919, p. 38; Raleigh *News and Observer*, April 15, 16, 17, 1919. Note: The students actually elected the six man council, with Zebulon MacCall as president.

[75]Raleigh *News and Observer*, April 16, 17, May 28, 1919; *Agromeck*, 1919, p. 182; Joseph Clark, Interview, July 3, 1981.

[76]*Technician*, April 1, May 21, 1920, November 15, 1921; *Agromeck*, 1916, p. 124; *Agromeck*, 1917, p. 108.

[77]*Technician*, February 1, 1920, September 15, 1922.

[78]General Faculty, Minutes, October 6, 1914, North Carolina State University Archives; *Red and White* 18 (September, 1916), 12; Edwin B. Owen to Fred Olds, February 5, 1919, Fred Olds Papers, North Carolina Division of Archives and History.

[79]*President's Annual Report, 1919-1920*, pp. 5-6; *President's Annual Report, 1920-1921*, pp. 4-5; *President's Annual Report, 1921-1922*, pp. 3-4; *President's Annual Report, 1922-1923*, pp. 5-6.

[80]Carl Cleveland Taylor to Clarence Poe, July 24, 1922, Clarence Poe Papers, North Carolina Division of Archives and History; *Technician*, October 15, 1921.

[81]North Carolina State College, Board of Trustees, Minutes, August 21, 1920; Wallace Carl Riddick to John Tigert,

September 21, 1922, Chancellor's Office - Correspondence, North Carolina State University Archives; Raleigh *News and Observer*, March 22, 23, 1923.

[82]George Zook, *Report on a Survey of the North Carolina State College of Agriculture and Engineering* (Raleigh: Bynum Printing Company, 1923), passim.

Chapter V

[1]Willard B. Gatewood, *Eugene Clyde Brooks: Educator and Public Servant* (Durham: Duke University Press, 1960), passim.

[2]North Carolina State College, Board of Trustees, Minutes, May 23, June 19, August 1, 1923, January 17, May 9, 1924; *Technician*, June 25, 1923.

[3]*Alumni News* 6 (June, 1923), 9. Note: N.C. State deans were traditionally very strong, possessing a great deal of authority in personnel and other matters.

[4]*President's Annual Report, 1923-1924*, pp. 4-6.

[5]*Ibid.*, pp. 7-11, 18, 27; Raleigh *News and Observer*, January 28, 1924; Eugene C. Brooks, *The Relation of North Carolina State College to the State Department of Agriculture* (Raleigh: np, 1924), passim.

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[23] *Chancellor's Annual Report, 1948-1949*, p. 14.

[24] *Technician*, January 7, 1944; *Textile Forum* 3 (February, 1946), 15; *Textile Forum* 5 (Summer, 1948), 14, 18-19, 42.

[25] Hart, *History of the Textile School*, pp. 26-31, 36-37.

[26] Roland, *The Improbable Era*, pp. 98, 107; Thomas E. Browne to John W. Harrelson, December 6, 1946, Chancellor's Office-Correspondence; *Technician*, November 21, 1947; J. Bryant Kirkland to John W. Harrelson, May 17, 1951, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, Sep-

tember 29, 1947, May 17, 1948; J. Bryant Kirkland Interview.

[27]Henry L. Kamphoefner Interview; Frank P. Graham to William H. Dietrick, October 3, 1947, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, July 4, 1946, September 17, 1948; Raleigh *Times*, August 5, 1947.

[28]Henry L. Kamphoefner Interview; Raleigh *News and Observer*, January 14, 1948, March 6, June 29, 1949, June 22, 1958; Raleigh *Times*, March 8, 1951; Louisville *Courier Journal*, October 26, 1952.

[29]*Pinetum*, 1945, p. 5; *Pinetum*, 1946, p. 15; *Pinetum*, 1947, p. 34; Samuel Dana and Evert W. Johnson, *Forestry Education in America: Today and Tomorrow* (Washington: Society of American Foresters, 1963), pp. 68, 296.

[30]Richard J. Preston to John W. Harrelson, June 4, 1947, Leonard D. Baver to Richard J. Preston, December 3, 1947, Chancellor's Office-Correspondence.

[31]*Pinetum*, 1949, pp. 19, 36; *Technician*, February 3, 1950; Miller, *et al., A History of the School of Forest Resources*, p. 29; Redding S. Sugg and George H. Jones, *The Southern Regional Education Board: Ten Years of Regional Cooperation in Higher Education* (Baton Rouge: Louisiana State University Press, 1960), pp. 3, 30-31, 64.

[32]Consolidated University of North Carolina, Board of Trustees, Minutes, May 7, 1943.

[33]J. Fulton Lutz to Clarence Poe, February 13, 1945, Clarence Poe Papers; J. Fulton Lutz Interview, Oral History Collection.

[34]J. Fulton Lutz Interview, Oral History Collection; Leonard D. Baver to Frank Porter Graham, October 3, 1947, Clarence Poe Papers; John W. Harrelson to Edwin Pate, November 4, 1947, W.W. Piersen to William D. Carmichael, *et al.*, January 2, 1948, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, May 7, 1948.

[35]Consolidated University of North Carolina, Board of Trustees, Minutes, February 19, 1945; Raleigh *Times*, May 32, 1946; *Technician*, April 28, 1946.

[36]Consolidated University of North Carolina, Board of Trustees, Visiting Committee, Report, February 7, 1946; *Technician*, November 18, 1949, September 18, 1950.

[37]Consolidated University of North Carolina, Board of Trustees, Minutes, July 18, 1946; *Technician*, September 29, 1944, December 12, 1952; *Alumni News* 20 (July, 1947), 10-11; *Alumni News* 22 (December, 1949), 4, 10.

[38]James M. Gray to Clarence Poe, September 14, 1944, Clarence Poe to O. Max Gardner, *et al.*, October 2, 1944, Clarence Poe Papers; Morrison, *Gardner*, pp. 213-215.

[39]*Technician*, February 4, 1949; Consolidated University of North Carolina, Board of Trustees, Minutes, April 30, 1945; Raleigh *News and Observer*, August 10, 1946; *Alumni News* 18 (October, 1945), 5; *Alumni News* 23 (July, 1950), 11; *Alumni News* 25 (September, 1952), 4; Development Council, Minutes, July 9, 1951, Foundations and Development, North Carolina State University Archives.

Chapter IX

[1]Consolidated University of North Carolina,

Board of Trustees, Minutes, February 14, 1948, February 9, 1953; *Technician*, February 8, 1950; Wilson, *The University of North Carolina under Consolidation*, p. 364; Dean Wallace Colvard Interview.

[2]Consolidated University of North Carolina, Board of Trustees, Minutes, May 26, 1952, June 12, 1953; *Technician*, September 30, 1952; Carey H. Bostian Interview; Wallace Colvard, personal files.

[3]Consolidated University of North Carolina, Board of Trustees, Minutes, September 8, 1952, February 9, 23, 1953.

[4]Cresap, McCormick, and Paget, *Survey of Administrative Management*, 2 vols., (New York: np, 1953), vol. I., pp. 2-3, 7; John W. Harrelson to John Graves Vann, September 12, 1952, Business Affairs Office-Correspondence, North Carolina State University Archives.

[5]*Technician*, February 9, September 28, 1951, February 22, 29, 1952, April 21, 1955; Consolidated University of North Carolina, Board of Trustees, Minutes, May 26, 1952. Note: Ivey owned the store outright until 1944, when State College bought it. After this he received $6,000 a year plus 20% of profit.

[6]Wilmer Z. Betts to Roy Clogston, November 15, 1950, Athletics Department-Correspondence, North Carolina State University Archives; John W. Harrelson to John Graves Vann, November 30, 1951, John W. Harrelson to Gordon Gray, March 23, 1953, H.A. Fisher to John W. Harrelson, August 19, 1953, Chancellor's Office-Correspondence; Kinston *Press*, December 8, 1951; Asheville *Citizen*, December 8, 1951; Durham *Herald*, December 10, 1951.

[7]Carey H. Bostian Interview; F.B. Turner to Carey H. Bostian, February 10, 1954, Coliseum Advisory Committee to Carey H. Bostian, December 19, 1957, Chancellor's Office-Correspondence; Colisuem Review Committee, Minutes, February 19, 1955, Athletics Department; Carey H. Bostian to William C. Friday, February 17, 1958, Athletics Department-Correspondence. Note: Eventually, the coliseum was returned to the Athletics Department.

[8]Bruce A. Corrie, *The Atlantic Coast Conference, 1953-1978* (Durham: Carolina Academic Press, 1978), pp. 34-35, 48; Athletics Council, Minutes, December 10, 1947, Frank P. Graham to Clarence Houston, September 27, 1948, Everett Case to H.A. Fisher, June 25, 1953, A.B. Moore to Gordon Gray, May 8, 1954, Chancellor's Office-Correspondence; William D. Carmichael to Clarence Houston, January 2, 1950, Athletics Department-Correspondence.

[9]William H. Sullivan to Ralph Scott, October 18, 1954, Athletics Department-Correspondence; Bill Brannin to John Graves Vann, May 25, 1951, John W. Harrelson to H.A. Fisher, May 30, 1951, John W. Harrelson to John Graves Vann, September 11, 1951, John Graves Vann to Roy Clogston, November 10, 1952, Carey H. Bostian to Luther Hodges, November 11, 1955, Chancellor's Office-Correspondence; Cresap, McCormick and Paget, *Survey of Administrative Management*, vol. I., pp. 1-7, 9.

[10]Carey H. Bostian to Roy Clogston, October 8, 1953, Carey H. Bostian to Gordon Gray, Telephone Conversation, December 31, 1953, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, January 25, 1954; Carey H. Bostian Interview.

[11]Carey H. Bostian Interview; Corrie, *The Atlantic Coast Conference*, pp. 62-63; Consolidated University of North Carolina, Board of Trustees, Minutes,

February 25, 1957; NCAA to Carey H. Bostian, November 13, 1956, Willis Casey, Harry Stewart, and Vic Bubas to Carey H. Bostian, October 8, 1956, Atheltics Department. Note: Throughout the Moreland incident Bostian was grateful for the legal advice of President Friday.

[12]Cresap, McCormick, and Paget, *Survey of Administrative Management*, part VI, pp. 2-5, 8-10.

[13]Donald B. Anderson, "Plans for the Future of the Graduate Program," (July, 1955), Graduate School-Dean's Office, North Carolina State University Archives; Carey H. Bostian to J. Harris Purks, December 1, 1955, Carey H. Bostian to Donald B. Anderson, March 12, 1957, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, May 26, November 6, 1958.

[14]Key L. Barkley, "Contributions of the Local Chapter of AAUP to the Establishment of Faculty Government at North Carolina State College," (November 13, 1957), American Association of University Professors Collection, North Carolina State University Archives; Committee on College Government to the General Faculty, November 29, 1952, Committees-College Government, North Carolina State University Archives.

[15]*University of North Carolina President's Report, 1953-1954*, pp. 8-9; Cresap, McCormick, and Paget, *Survey of Administrative Management*, part VII, pp. 5-6.

[16]Committee on College Government, Minutes, May 26, 1953, Committees-College Government; Committee on College Government, "Tentative Proposal of the Committee on College Government, December 11, 1953, Committees-College Government; Committee on College Government, "The Committee on College Government Report," March 22, 1955, Committees-College Government.

[17]John W. Shirley, Memorandum, November 14, 1955, Provost's Office-Correspondonce, North Carolina State University Archives; *University of North Carolina President's Report, 1954-1955*, p. 3.

[18]Consolidated University of North Carolina, Board of Trustees, Minutes, May 24, 1954; James J. Stewart to John W. Harrelson, January 9, 1953, Business Affairs Office-Correspondence.

[19]Consolidated University of North Carolina, Board of Trustees, Minutes, November 29, 1954; Carey H. Bostian Interview.

[20]Henry L. Kamphoefner Interview; Carey H. Bostian Interview.

[21]Consolidated University of North Carolina, Board of Trustees, Minutes, March 16, 1953; Dean Wallace Colvard to L.M. Parker, March 6, 1957, Chancellor's Office-Correspondence; School of Agriculture, *Annual Report, 1957*, p. 5; School of Agriculture, *Annual Report, 1958*, pp. 3-5.

[22]Luther H. Hodges, *Businessmen in the Statehouse: Six Years as Governor of North Carolina* (Chapel Hill: University of North Carolina Press, 1962), p. 58; Dean W. Colvard to Carey H. Bostian, August 8, 1955, Carey H. Bostian to Dean W. Colvard, April 9, 1958, Dean W. Colvard to Carey H. Bostian, June 17, 1958, J. Harold Lampe to Carey H. Bostian, March 28, 1959, Chancellor's Office-Correspondence: *News Release*, September 14, 1955, Office of Information Services-News Releases.

[23]Jackson Ashcroft Rigney Interview; Carey H. Bostian Interview; New York *Times*, November 18, 1956; Consolidated University of North Carolina,

Board of Trustees, Minutes, November 29, 1954; Dean W. Colvard, personal files.

[24]Agricultural Extension Service Advisory Committee, *A Report on the Programs, Organization, and Management of the Agricultural Extension Service to the President of the University of North Carolina* (Raleigh: np, 1957), pp. 3, 43, 46, 63, 69, 71, 116, 138; Ruth Current to W. Kerr Scott, August 16, 1957, Agricultural Extension Service-Home Economics.

[25]Carey H. Bostian Interview; Consolidated University of North Carolina, Board of Trustees, Minutes, September 21, 1954, May 16, 1955, May 12, 1958; School of Engineering, Annual Report, 1954, p. 2, School of Engineering-Dean's Office; School of Engineering, Annual Report, 1957, p. 2, School of Engineering-Dean's Office; M.D. Hoover to William C. Friday, October 21, 1958, School of Engineering-Dean's Office.

[26]*Engineering Research News* 3 (January, 1953), 2; Carey H. Bostian to John Harold Lampe, June 5, 1954, School of Engineering-Dean's Office.

[27]Consolidated University of North Carolina, Board of Trustees, Minutes, May 27, 1957; Herman Roth to Carey H. Bostian, June 10, 1955, Ronald Hamilton to William C. Friday, March 15, 1956, School of Engineering-Dean's Office.

[28]School of Engineering, Annual Report, 1955-1956, pp. 2-3, School of Engineering-Dean's Office; N.W. Conner and John H. Lampe, "Report of Funds to Establish the Industrial Experiment Program," June 30, 1954, School of Engineering-Dean's Office.

[29]Gastonia *Citizen*, September 10, 1952; *Technician*, February 3, 1955; Charlotte *Observer*, November 20, 1956.

[30]John H. Lampe to E. H. Garringer, July 29, 1946, School of Engineering-Dean's Office; Charlotte *Observer*, November 20, 1956; William C. Friday to Paul A. Johnston, August 8, 1958, Chancellor's Office-Correspondence.

[31]*Technician*, October 5, 1959; Greensboro *Daily News*, February 17, 1955; School of Textiles, Annual Report, 1955-56, p. 2, School of Textiles, Annual Report, 1956-1957, p. 1, School of Textiles, Annual Report, 1957-1958, pp. 1-2, School of Textiles, Annual Report, 1958-1959, p. 1, Chancellor's Office-Annual Reports.

[32]"Peru Project," 1960, School of Textiles-Dean's Office; School of Textiles, Annual Report, 1954-1955, p. 3, Chancellor's Office-Annual Reports; Carey H. Bostian to Maurice Levy-Howe, December 19, 1956, Chancellor's Office-Correspondence.

[33]Henry L. Kamphoefner Interview; Raleigh *Times*, September 19, 1952; Raleigh *News and Observer*, February 15, 1953; *Technician*, January 22, 1954, February 24, 1955; Wilson, *The University of North Carolina Under Consolidation*, p. 319.

[34]Henry L. Kamphoefner Interview; Consolidated University of North Carolina, Board of Trustees, Minutes, May 14, 1956; Raleigh *News and Observer*, April 6, 1958; *Technician*, April 17, 1958.

[35]Henry L. Kamphoefner Interview; *Alumni News* 23 (November, 1950), 5-9; Debham Affair Folder, School of Design-Dean's Office.

[36]J. Bryant Kirkland to Carey H. Bostian, February 29, 1956, School of Education-Dean's Office, North Carolina State University Archives; School of Education, Annual Report, 1958-1959, p. 1, Chancellor's Office-Annual

Reports; J. Bryant Kirkland to John W. Shirley, August 2, 1957, Chancellor's Office-Correspondence.

[37] *Pinetum*, 1953, p. 31; *Technician*, April 2, November 15, 1954; *Pinetum*, 1954, p. 52; *Pinetum*, 1956, p. 20; *Pinetum*, 1958, p. 21.

[38] Consolidated University of North Carolina, Board of Trustees, Minutes, May 26, 1952; *Technician*, Ocotober 15, 1948, September 23, 1949; John W. Shirley to John W. Harrelson, November 29, 1950, Chancellor's Office-Correspondence; Benjamin Franklin Brown to Clarence Poe, November 30, 1944, Leonard David Baver to Frank Porter Graham, October 3, 1947, Clarence Poe Papers; "Battle of the Basic Division," School of Humanities and Social Sciences -Miscellaneous.

[39] School of General Studies, Annual Report, 1956-1957, p. 4; Raleigh *Times*, May 2, 1959; Faculty Minutes, October 25, 1951, October 14, 1954, April 14, 1955, School of Humanities and Social Science-Faculty Minutes; John W. Shirley to John W. Harrelson, October 26, 1951, May 27, 1952, Chancellor's Office-Correspondence; *Self-Study Report, 1953*, Part I., p. 1, Chancellor's Office-Correspondence.

[40] School of General Studies Annual Report, 1956-57, p. 4; Raleigh *Times*, May 2, 1959.

[41] Jackson A. Rigney to Everett Hall, January 25, 1951, School of Humanities and Social Sciences-Dean's Office; *Long Range Plan*, 1958, pp. 31-32. Note: Under consolidation, Chapel Hill officials argued, State College was supposed to teach "applied," not "pure" science.

[42] Cresap, McCormick, and Paget, *Survey of Administrative Management*, part VI, pp. 41, 43, 48.

[43] Malcolm Campbell and William A. Newell, "A Proposal for the Development of an Industrial Research Center in North Carolina," 1956, School of Textiles-Dean's Office; Louis R. Wilson, *The Research Triangle of North Carolina* (Chapel Hill: Colonial Press, 1967), pp. 2-6; Hodges, *Businessman in the Statehouse*, p. 204; William B. Hamilton, "The Research Triangle of North Carolina: A Study in Leadershp of the Common Weal," *South Atlantic Quarterly* (Spring, 1956), 255-256; James Cobb, *The Selling of the South The Southern Crusade for Industrial Development, 1936-1980* (Baton Rouge: Louisiana State University Press, 1982), pp. 171-173; Dean Colvard Interview.

[44] Development Council, Minutes, May 6, 1953, Foundations and Development; *Technician*, March 6, September 11, 1958; Development Council, *Annual Report, 1955*, passim, Foundations and Development.

[45] Carey H. Bostian Interview; Henry Bowers Interview.

[46] Augustus M. Burns, III, "Graduate Education For Blacks in North Carolina, 1930-1951," *Journal of Southern History* 46 (May, 1980), 195-207.

[47] *Ibid.*, 207-218.

[48] Consolidated University of North Carolina, Board of Trustees, Minutes, June 30, 1950, April 4, 1951; Burns, "Graduate Education for Blacks in North Carolina," 207-218.

[49] Consolidated University of North Carolina, Board of Trustees, Minutes, November 10, 1952; John W. Harrelson to S.F. Daly, August 31, 1953, David S. Weaver to Dean W. Colvard, February 18, 1954, Donald B. Anderson to Gordon Gray, January 26, 1954, Carey H. Bostian to William Strossman, March 7, 1955, Chancellor's Office-Correspondence; Dean Wallace Colvard, *Mixed Emotions As*

Racial Barriers Fell - A University President Remembers (Danville: The Interstate Printers and Publishers, 1985), pp. 5-6. Note: In 1951 several black dairy farmers and the black dairy extension specialist dined at a separate table in Leazar cafeteria when dairy conference officials insisted that they would miss important speakers if forced to eat elsewhere.

[50]Wilson, *The University of North Carolina under Consolidation*, p. 387; Raleigh *Times*, June 19, 1956; James J. Stewart to Carey H. Bostian, 1958, Dean W. Colvard to Carey H. Bostian, January 26, 1956, Chancellor's Office-Correspondence; Charles Eagles, *Jonathan Daniels and Race Relations The Evolution of a Southern Liberal* (Knoxville: University of Tennessee Press, 1982), pp. 182-183. Note: Irwin Richard Holmes became the first black to receive an undergraduate degree when he graduated in 1960. Robert Clemmons received a profesional degree in 1957 in electrical engineering. In 1970 Augustus M. Witherspoon became the first black to receive a Ph.D. from N.C. State.

[51]*Technician*, Ocotber 13, 1950; *Agromeck*, 1952, p. 136; *Southern Engineer* 17 (March, 1956), 15. Note: In 1956 Patricia Anne Sarvella became the first woman to receive a Ph.D. from N.C. State when she finished her work in genetics.

[52]*Technician*, November 18, 1949, November 21, December 1, 1950, February 13, November 6, 1953, September 16, 1954.

[53]Student Affairs, Annual Report, 1954-1955, p. 4, Chancellor's Office-Annual Reports; Student Government, Constitution, 1954, Organizations-Student Government.

[54]A.C. Kincaid to John W. Harrelson, August 10, 1946, John W. Harrelson to Harry C. Byrd, October 17, 1946, John W. Harrelson to E.S.Bress, December 28, 1946, Charles W. Cannon to John W. Harrelson, February 24, 1953, Chancellor's Office-Correspondence; Military Department, Annual Report, 1947-1948, p. 1, Military Department, Annual Report, 1951-1952, p. 2, Chancellor's Office-Annual Reports.

[55]William J. Jowdy to John W. Harrelson, April 10, 1953, Carey H. Bostian to A.R. Bolling, April 22, 1954, Chancellor's Office-Correspondence.

[56]R.J. Reynolds to Herman Ward Taylor, June 4, 1958, Foundations and Development; *Technician*, April 19, 1956, September 19, 1957, September 11, 1958.

[57]Carey H. Bostian Interview.

Chapter X

[1]John Tyler Caldwell Interview; Consolidated University of North Carolina, Board of Trustees, Minutes, August 10, 1959.

[2]John T. Caldwell Interview.

[3]John T. Caldwell Interview; William L. Turner, "Notes of July 8, 1963 meeting," Business Affairs Office; Dean W. Colvard, personal file.

[4]*Technician*, March 1, September 17, 1962.

[5]Roland, *The Improbable Era*, p. 11.

[6]*Technician*, October 26, 1961; Henry Bowers Interview.

[7]Beezley, *The Wolfpack*, pp. 272-285; John T. Caldwell Interview.

[8]*Technician*, May 15, 1961; John T. Caldwell Interview; Greensboro *Daily News*, May 24, 1961; Winston-Salem

Journal, April 15, 1963; William Clyde Friday to Don Kimrey, June 2, 1961, Chancellor's Office-Correspondence.

[9]Edward W. Ruggles to John W. Shirley, June 1, 1961, John T. Caldwell to Dean's, Directors, and Department Heads, June 18, 1965, Chancellor's Office-Correspondence.

[10]Roland, *The Improbable Era*, p. 11; Blaine A. Brownell and David R. Goldfield, eds., *The City in Southern History The Growth of Urban Civilization in the South* (Port Washington, New York: Kennikat Press, 1977), pp. 158-191; John T. Caldwell Speech, September 9, 1963, May 31, 1964, John Tyler Caldwell Speeches, North Carolina State University Archives.

[11]*University of North Carolina President's Report, 1968-1969*, pp. 64-65; *University of North Carolina President's Report, 1969-1970*, p. 65.

[12]Robert W. Shoffner to John T. Caldwell, July 18, 1967, Chancellor's Office-Correspondence.

[13]John T. Caldwell to Deans and Department Heads, December 2, 1959, Chancellor's Office-Correspondence.

[14]*Technician*, January 14, 1960; Consolidated University of North Carolina, Board of Trustees, Minutes, January 11, 1960.

[15]*University of North Carolina President's Report, 1961-1962*, p. 41; *Technician*, March 4, 1963, April 29, September 13, 1967, February 9, 1968; Consolidated University of North Carolina, Board of Trustees, Minutes, May 25, 1964.

[16]John T. Caldwell to William C. Friday, February 2, 1960, Lodwick Hartley to John T. Caldwell, February 10, 1960, Chancellor's Office-Correspondence.

[17]Fred V. Cahill to C. Addison Hickman, School of Humanities and Social Sciences-Dean's Office; *Technician*, October 2, 1961, May 14, 1962; "Resolution of the Faculty of the School of General Studies," May 17, 1962, Chancellor's Office-Correspondence.

[18]Raleigh *Times*, October 4, 1962; Consolidated University of North Carolina, Board of Trustees, Minutes, June 25, 1963; Irving Carlyle, *et al. The Report of the Governor's Commission on Education Beyond The High School* (Raleigh: np, 1962), pp. 1-12, 49-56, 65-76.

[19]*Technician*, December 11, 1964, February 15, 1965, January 10, October 6, 1969; School of Liberal Arts, Annual Report, 1966, p. 1, Chancellor's Office-annual Reports; Consolidated University of North Carolina, Board of Trustees, Minutes, March 18, 1966.

[20]Edward W. Ruggles to Carey H. Bostian, December 19, 1958, Harry C. Kelly to Durwood Hansen, July 15, 1964, Nash N. Winstead to Files, September 14, 1971, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, January 9, 1970; Chancellor's Annual Report, 1964-1965, p. 24.

[21]William E. Leuchtenburg, *A Troubled Feast: American Society Since 1945* revised ed., (Boston: Little, Brown and Company, 1979), pp. 55-69.

[22]Wilson, *The University of North Carolina Under Consolidation*, pp. 271-272; Fite, *Cotton Fields No More*, pp. 206-225.

[23]School of Agriculture, *Annual Report, 1960-1961*, p. 5; School of Agriculture, *Annual Report, 1961-1962*, p. 3; School of Agriculture and Life Science, *Annual Report, 1964-1965*, p. 12, Herman Brooks James to John T. Caldwell, February 26, 1962, John T. Caldwell to

Harry C. Kelly, December 31, 1963, Chancellor's Office-Correspondence.

[24]Consolidated University of North Carolina, Board of Trustees, Minutes, May 14, 1956, July 13, 1959; *Technician*, March 14, 1960; School of Agriculture, *Annual Report, 1955-1956*, p. 5; School of Agriculture, *Annual Report, 1958-1959*, p. 5.

[25]Wilson, *The University of North Carolina Under Consolidation*, pp. 271-272; *Technician*, September 21, 1964.

[26]School of Agriculture, *Annual Report, 1959-1960*, pp. 27-28; School of Agriculture, *Annual Report, 1960-1961*, p. 27; School of Agriculture, *Annual Report, 1962-1963*, p. 37; School of Agriculture and Life Science, *Annual Report, 1965-1966*, pp. 3, 47.

[27]*Technician*, October 26, 1960; School of Engineering, Annual Report, 1965-1966, p. 21, Chancellor's Office-Annual Reports.

[28]*Southern Engineer* 35 (November, 1963), 12; School of Engineering, Annual Report, 1960-1961, p. 5, Chancellor's Office-Annual Reports; L.E. Grinter to William C. Friday, October 1966, School of Engineering-Dean's Office, North Carolina State University Archives.

[29]Consolidated University of North Carolina, Board of Trustees, Minutes, September 10, 1965; School of Engineering, Annual Report, 1960-1961, p. 7, Chancellor's Office-Annual Reports.

[30]*Engineering Research News* 9 (April, 1959), 4; *Technician*, March 21, 1960; H.B. Smith to N.J. Tuftelcald, March 14, 1969, School of Engineering-Dean's Office; *News Release*, January 25, 1965, School of Engineering-Dean's Office.

[31]School of Textiles, Annual Report, 1959-1960, p. 1, Chancellor's Office-Annual Reports.

[32]*Technician*, January 21, 1960; School of Textiles, Annual Report, 1961-1962, p. 2, School of Textiles, Annual Report, 1964-1965, p. 3, Chancellor's Office-Annual Reports; George E. Norman to H.A. Rutherford, February 8, 1967, Chancellor's Office-Correspondence; *Textile Forum* 26 (February, 1968), 6.

[33]J. Bryant Kirkland to John T. Caldwell, February 21, 1967, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, March 13, 1964, March 14, 1969; *Technician*, February 6, 1967.

[34]Bertie E. Fearing, *The Department of Adult and Community College Education at North Carolina State University, 1963-1978, A Need, A Response, and a Model* (Raleigh: University Graphics, 1979), pp. 1-4, 14, 16-17, 26-27.

[35]Consolidated University of North Carolina, Board of Trustees, Minutes, March 8, May 13, 1968.

[36]Richard J. Preston to John T. Caldwell, November 23, 1959, Chancellor's Office-Correspondence; Consolidated University of North Carolina, Board of Trustees, Minutes, November 3, 1966, July 14, 1967; *Pinetum*, 1968, p. 7; *Pinetum*, 1970, pp. 89, 91.

[37]Leuchtenburg, *A Troubled Feast*, pp. 179-200.

[38]Herman Ward Taylor Interview; Faculty Senate, Minutes, November 29, 1960, Faculty Senate, North Carolina State University Archives; *Alumni News* 35 (October, 1962), 9.

[39]*Technician*, October 29, November 28, December 6, 1962; Faculty Senate, Minutes, October 30, 1962, Faculty

Senate; Charlotte *Observer*, January 17, 1963; *News Release*, November 26, 1962, Office of Information Services-News Releases.

[40]J. Fulton Lutz Interview, Oral History Collection; *Technician*, April 24, 1963, February 13, 1964, April 9, 1965; Raleigh *Times*, April 7, 1965; *News Release*, March 13, 1964, Office of Information Services-News Releases.

[41]Roland, *The Improbable Era*, pp. 44-49; Leuchtenburg, *A Troubled Feast*, pp. 98-99, 143-149; *Technician*, October 4, 1962; William A. Chafe, *Civilities and Civil Rights Greensboro, North Carolina and the Black Struggle for Freedom* (New York: Oxford University Press, 1980), pp. 99, 113-120.

[42]AAUP to Luther Hodges, March 23, 1960, American Association of University Professors Collection; *Technician*, April 11, 1960; John T. Caldwell Interview; John Cook to Hillsborough Merchants, December 14, 1960, Division of Student Affairs.

[43]Roland, *The Improbable Era*, p. 44; *Technician*, May 1, 2, 13, 1963, March 15, 1965.

[44]*Technician*, November 8, 1966; Faculty Senate, Minutes, November 29, 1966, Faculty Senate; Raleigh *News and Observer*, June 30, 1967.

[45]*Technician*, April 8, 9, May 7, 1968, February 19, December 3, 1969.

[46]*Ibid.*, March 3, 26, April 16, 18, 23, 1969.

[47]John T. Caldwell to William C. Friday, March 5, 1970, Division of Student Affairs; *University of North Carolina President's Report, 1970-1971*, p. 65.

[48]Raleigh *Times*, November 8, 1963; Raleigh *News and Observer*, n.d., 1963.

[49]*Technician*, September 16, 1963; Raleigh *Times*, October 29, November 12, 1963.

[50]Faculty Senate, Minutes, July 2, 1963, Faculty Senate; *Technician*, September 16, October 14, 1963; Consolidated University of North Carolina; Board of Trustees, Minutes, October 18, 1963; Raleigh *News and Observer*, December 7, 1963.

[51]Slater Newman, Speech, May 15, 1964, American Association of University Professors Collection; *Technician*, October 29, 1965.

[52]Consolidated University of North Carolina, Board of Trustees, Minutes, November 13, 1964, April 27, 1965; Raleigh *News and Observer*, May 27, 1965.

[53]Raleigh *Times*, June 3, 1965; Raleigh *News and Observer*, November 6, 1965; *Technician*, November 19, 1965.

[54]*Technician*, March 1, 1966; Faculty Senate, Minutes, March 15, 1966; Walter Peterson to Dear Colleague, April 14, 1966, American Association of University Professors Collection.

[55]Leuchtenburg, *A Troubled Feast*, pp. 243-246.

[56]*Technician*, December 5, 1967, February 12, 24, May 5, 7, November 3, 1969, September 21, 1970; Faculty Senate, Minutes, January 30, 1968, Faculty Senate; Consolidated University of North Carolina, Board of Trustees, Minutes, May 13, 1968, January 10, 1969.

[57]*Technician*, September 29, 1969; Faculty Senate, Minutes, September 30, 1969, October 10, 15, 1970, Faculty Senate.

[58]Leuchtenburg, *A Troubled Feast*, pp. 243-245; *Technician*, May 4, 8, 1970;

Raleigh *News and Observer*, May 8, 1970.

[59]Raleigh *News and Observer*, May 11, 13, 1970; *Technician*, May 14, 1970; Faculty Senate, Minutes, May 12, 1970, Faculty Senate.

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Chapter XII

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Bibliography

Chapter I There are numerous informative works concerning the evolution of higher education in nineteenth-century America. Discussions of the debate over the content of that education are included in John S. Brubacher and Willis Rudy's *Higher Education in Transition: An American History, 1636-1956* (1958), Frederick Rudolph's *The American College and University: A History* (1962), Lawrence Versey's *The Emergence of the American University* (1965), and Barton Bledstein's *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America* (1976). For a detailed discussion of the origins of the land-grant college see Edward D. Eddy's *Colleges For Our Land and Time: The Land-Grant Idea in American Education* (1956) and Earle D. Ross's *Democracy's College: The Land-Grant Movement in the Formative State* (1942). Less useful, because it confuses state universities and land-grant institutions, is Allen Nevin's *The State Universities and Democracy* (1962). In addition, there are several studies of engineering education, including James McGivern's *First Hundred Years of Engineering Education in the United States* (1960), as well as George S. Emmerson's *Engineering Education A Social History*, (1973) which places developments in the United States in a broader perspective by also discussing the European scene. Also of interest are the several biographies of Justin Morrill and Thomas Green Clemson, as well as Richard Hatch's *An Early View of the Land-Grant Colleges* (1967), Alan I. Marcus' recent *Agricultural Science and the Quest for Legitimacy* (1985), and histories of early land-grant colleges.

For a discussion of the early history of land-grant oriented education in North Carolina Kemp P. Battle's two volume *History of the University of North Carolina* (1907) is still useful, although extremely dated stylistically. Battle's *Memories of An Old Time Tarheel* (1945) also provides several useful anectodes. Robin Brabham's fine article, "Defining the American University: The University of North Carolina, 1865-1875," (1980) corrects the biases found in J.G. DeRoulhac Hamilton's *Reconstruction in North Carolina* (1914), and is an excellent overview of the university during Reconstruction.

The woes of post-Civil War southern agriculture are well-documented in several studies. The most useful synthesis is Gilbert Fite's excellent *Cotton Fields No More Southern Agriculture, 1865-1980* (1984). Also informative in their discussion of farm problems and agrarian unrest were Willard Cochran's *The Development of American Agriculture: A Historical Analysis* (1979) and Carl C. Taylor's *The Farmers' Movement, 1620-1920* (1953), while Sven Nordin's *Rich Harvest: A History of the Grange, 1867-1900* (1974) provided the most recent examination of the Grangers. Of special interest is Stuart Noblin's excellent biography of Leonidas Polk, the North Carolina agrarian crusader.

Chapter II Despite several recent challenges, the standard work on the New South movement of the late nineteenth century remains Comer Van Woodward's *Origins of the New South, 1877-1913* (1951). Also instructive are Dwight Billings' *Planters and the Making of a "New South" Class, Politics, and Development in North Carolina, 1865-1900*, (1979), and Paul D. Escott's *Many Excellent People: Power and Privilege in North Carolina, 1865-1900* (1985). Both are revisions of Woodward. Escott's is the more successful, although neither is really satisfactory. Paul Gaston's *The New South Creed: A Study in Southern Mythmaking* (1970) focuses primarily on the development of the movement's ideology, although it also provides a discussion of the early proponents of the New South not found in Woodward. Dan Carter's recent *When the War was Over: The Failure of Self-Reconstruction in the South, 1865-1867* (1985) also examines some of the educational activities of the early New South spokesmen. In addition, John Cooper's biography of Walter Hines Page and George T. Winston's some-what dated examination of Daniel A. Tompkins provide insight into the lives of these two Wataugans. The memoirs of Clarence Poe and Josephus Daniels, entitled *My First 80 Years* (1963) and *Tar Heel Editor* (1934), respectively, also contribute useful information on the activities of the Watauga Club as does Richard Walser's *The Watauga Club*.

The continued agrarian woes and the farmers' responses are also the subject of several works. Once again, Gilbert Fite's *Cotton Fields No More* provided a good discussion of southern agricultural difficulties. The activities of the Farmers' Alliance are ably discussed in Woodward's *Origins of the New South*, Noblin's biogaphy of Polk, Escott's *Many Excellent People*, and Robert McMath's *The Populist Vanguard: A History of the Southern Farmers' Alliance* (1975).

Chapter III The early history of the North Carolina College of Agriculture and Mechanic Arts is well-documented in a series of sketches on college history written between 1922 and 1928 by alumnus and long-time registrar Edwin Bentley Owen, and published in the *Alumni News*. David Lockmiller's *The History of North Carolina State College of Agriculture and Engineering, 1889-1939* (1939) is an extremely dated compendium that contains numerous errors of fact. For North Carolina A & M's place in the land-grant movement, see discussions of the late nineteenth century land-grant college in Eddy's *Colleges for Our Land and Time* and Ross's *Democracy's College*, as well as Arthur Klein's encyclopedic *Survey of Land-Grant Colleges and Universities* (1930).

For a look at Populism and its effect on the college see Ira O. Schaub's brief *The First Sixty Years* (1955) which examines the controversial North Carolina Agricultural Experiment Station. In addition, Lawrence Goodwynn's excellent *Democratic Promise: The Populist Movement in America* (1976) and Escott's *Many Excellent People*, provide good examinations of the Fusionist movement in North Carolina. Bruce Palmer's *"Man Over Money": The Southern Populist Critique of American Capitalism* (1980), overlooks much of the Fusionist reform program.

Chapter IV Progressivism, an important force at N.C. State and other colleges and universities in the early twentieth century, is exam-

ined in numerous studies. The most useful and interesting discussions of southern progressivism are found in Dewey Grantham's fine *Southern Progressivism. The Reconciliation of Progress and Tradition* (1983) and George B. Tindall's encyclopedic *The Emergence of the New South, 1913-1945* (1967). In addition, the effect of progressivism on American higher education is examined in Rudolph's *The American College and University*, Brubacher and Rudy's *Higher Education in Transition*, and Eddy's *Colleges for Our Land and Time.*

The progressive context for the early development of the agricultural extension movement is discussed in Grantham's *Southern Progressivism*, Woodward's *Origins of the New South*, and Rudolph's *The American College and University*. Clarence Smith and Meredith Wilson's *The Agricultural Extension System of the United States* (1930) and Alfred C. True's *A History of Agricultural Extension Work in the United States, 1785-1923* (1928), provide older examinations of early extension work in the United States, while Ira Schaub's *Agricultural Extension Work: A Brief History* (1953), briefly discusses the early developments in North Carolina. Jane S. McKimmon's *When We're Green We Grow* (1945) is a moving account of early home demonstration work in North Carolina. In addition, the early history of the national 4-H movement is chronicled in Thomas and Marilyn Wessel's *4-H: An American Idea, 1900-1980* (1982), while the North Carolina story is examined in James Clark's *Clover All Over* (1984). Also of interest is Joseph C. Bailey's biography of demonstration pioneer Seamon A. Knapp and Raymond B. Fosdick's *Adventure in Giving The Story of the General Education Board A Foundation Established by John D. Rockefeller* (1962).

Chapter V For a general discussion of the development of North Carolina and the South during the 1920s, see Tindall's *The Emergence of the New South*. For an examination of the forces that affected education during the period Eddy's *Colleges For Our Land and Time*, Rudolph's *The American College and University*, and Brubacher and Rudy's *Higher Education in Transition* provide an excellent background. For the origins of the study of forestry at N.C. State see Carl Schenck's *Biltmore Story* (1955) and Henry Clepper's *Professional Forestry in the United States* (1971), as well as Thomas D. Clark's recent *The Greening of the South: The Recovery of Land and Forest* (1984). Willard Gatewood's biography of Eugene Clyde Brooks gives an extremely brief account of Brook's career as president of N.C. State.

The evolution or monkey-law controversy of the 1920s is discussed in several monographs, as well as Tindall's *Emergence of the New South*. Ray Ginger's *Six Days or Forever? Tennessee versus John Thomas Scopes* (1958) provided a biased, yet useful look at the Scope's Trial in Tennessee. Willard Gatewood's *Preachers, Pedagogues and Politicians. The Evolution Controversy in North Carolina, 1920-1927* (1966) contains an excellent account of N.C. State's role in the evolution debate. Gatewood's biography of Eugene Clyde Brooks also briefly touches on it, as does Suzanne Linder's biography of William Louis Poteat of Wake Forest College.

Chapter VI The depression and its effect on North Carolina are discussed in Anthony Badger's *North Carolina and the New Deal* (1981), Tindall's *Emergence of the New*

South, and Gilbert Fite's *Cotton Fields No More*. Anthony J. Badger's *Prosperity Road The New Deal, Tobacco and North Carolina* (1980) examines the New Deal's effect on North Carolina's most important agricultural crop, as well as the interplay between federal policy and the North Carolina Agricultural Extension Service. For a discussion of the origins and history of the Tennessee Valley Authority see Preston Hubbard's *Origins of the TVA: The Muscle Shoals Controversy, 1920-1932* (1961) and William U. Chandler's *The Myth of the TVA. Conservation and Development in the Tennessee Valley, 1933-1983* (1984).

For discussions of the consolidation of higher education in North Carolina see David Lockmiller's *The Consolidation of the University of North Carolina* (1942) and Louis R. Wilson's *The University of North Carolina Under Consolidation, 1932-1963* (1964). Both are primarily narrative and pro-consolidation accounts, as is Joseph Morrison's highly laudatory biography of O. Max Gardner. Warren Ashby's biography of Frank Porter Graham is useful for its discussion of consolidation, but provides almost no information on Graham's later plans for the improvement of N.C. State.

Chapter VII No study of the war-time experiences of American colleges exists. However, Eddy's *Colleges For Our Land and Time* and Brubacher and Rudy's *Higher Education in Transition* provide useful information on the period, while Tindall's *The Emergence of the New South* examines the war's effect on the South. For a brief narrative of the war-time program at N.C. State see Wilson's *The University of North Carolina Under Consolidation.*

Chapter VIII Although brief, Charles Roland's *The Improbable Era: The South Since World War II* (1975) provides the best overall review of southern history since World War II. It contains useful chapters on the post war economic boom and the progress of higher education. In addition, James C. Cobb's *The Selling of the South: The Southern Crusade for Industrial Development 1936-1980* (1982) examines the post-war southern obsession with economic progress. Eddy's *Colleges For Our Land and Time* and Brubacher and Rudy's *Higher Education in Transition* discuss the changes in higher education that resulted from the war, while Keith Olson's *The G.I. Bill, the Veterans, and the Colleges* (1974) provides an informative examination of the purposes and history of the G.I. Bill. The transformation of southern agriculture, promoted by the war and its aftermath, is ably discussed in Fite's *Cotton Fields No More*. For a brief, contemporary account of the early history of the Southern Regional Education Board see Redding Sugg and George H. Jones's *The Southern Regional Education Board: Ten Years of Regional Cooperation in Higher Education* (1960).

Chapter IX Probably the best source for the period of reorganization is the actual *Survey of Administrative Management* (1953) conducted by the firm of Cresap, McCormick, and Paget. In addition, Wilson's *The University of North Carolina Under*

Consolidation provides a useful narrative account of developments at N.C. State during the 1950s. The further expansion of southern industry, as well as North Carolina industry, is detailed in Cobb's *The Selling of the South*, Roland's *The Improbable Era*, and Luther Hodges's *Businessman in The Statehouse: Six Years as Governor of North Carolina* (1962) which includes an interesting discussion of the origins of the Research Triangle Park, as well as Hodges's efforts to attract new industry to the state. Roland also provides a good overview of the early desegregation movement, while Augustus Burns's "Graduate Education for Blacks in North Carolina, 1930-1951," (1980) is a fine account of circumstances surrounding the integration of N.C. State. Charles Eagles' *Jonathan Daniels and Race Relations The Evolution of a Southern Liberal* (1982) provides the state context for events at N.C. State. For the story of the college's athletic scandals during the 1950s see William Beezley's *The Wolfpack: Intercollegiate Athletics at NCSU* (1976) and Bruce Corrie's *The Atlantic Coast Conference, 1953-1978* (1978).

Chapter X As with the rest of the post-war period, Roland's *The Improbable Era* is the best existing summary of southern history during the 1960's and early 1970's. He included discussion of the further development of higher education in the region, as well as the origins and progress of the civil rights movement. Also useful is the final essay in David Goldfield and Blaine Brownell's *The City in Southern History The Growth of Urban Civilization in the South* (1977), which examines recent developments in the urban south. For an examination of the forces that contributed to campus unrest, both at N.C. State and elsewhere, see William L. O'Neill's *Coming Apart An Informal History of America in the 1960s* (1971); William Leuchtenburg's *A Troubled Feast American Society since 1945* (1979) and James B. Gilbert's *Another Chance* (1981).

Chapter XI & XII Much of these chapters are based on the same primary sources that were used for the other chapters. These sources include: administrative annual reports; chancellor's and dean's correspondence; private papers of numerous individuals associated with the university; student publications including *The Technician, The Agromeck*, and *The Southern Engineer*; the *Alumni News* in its various forms; numerous North Carolina newspapers; and interviews with many individuals. *The Chronicle of Higher Education* also provided useful information on current issues and trends in higher education.

Appendix

A Watauga Medal Recipients

Established in 1975 to honor those who have given outstanding service to NCSU.

1975:
Carey H. Bostian,
chancellor and geneticist
Roy H. Park,
businessman
Richard J. Reynolds,
businessman (posthumously)

1976:
A.E. Finley,
businessman
Mose Kiser,
dairy executive
R. Walker Martin,
businessman

1977:
Raymond A. Bryan,
businessman
Gertrude M. Cox,
statistics
C. Horace Hamilton,
rural sociology

1978:
Lera R. Harrill,
4-H leader
Herman W. "Pop" Taylor,
NCSU Alumni Association

1979:
Henry A. Foscue,
businessman
Claude S. Ramsey,
businessman
Ellen Winston,
government administrator

1980:
Wally Ausley,
Voice of the Wolfpack
Charles H. Reynolds,
textile executive

1981:
George E. Norman,
textile executive
Ralph Scott,
North Carolina legislator

1982:
Wilburn C. Calton,
businessman
Mary Elizabeth Poole,
NCSU librarian
T. Clyde Auman,
businessman

1983:
Walter L. Smith,
NCSU Trustee
Lexie L. Ray,
foundations director
Clifton L. Benson,
businessman

1984:
M. Edmund Aycock,
businessman (Wachovia)
Frank A. Daniels,
News & Observer
James D. Kilgore,
Pine State Creamery

1985:
Alvin M. Fountain,
author of Alma Mater,
English
John N. Gregg,
textile executive
James B. Hunt,
governor

1986:
John Tyler Caldwell,
chancellor
Hubert V. Park,
head,
Mathematics

B NCSU Recipients of the O. Max Gardner Award

Award established in 1949 through a bequest in the will of O. Max Gardner, an alumnus of NCSU and UNC-Chapel Hill. Recognizes outstanding contributions to humanity by a faculty member of the University of North Carolina system.

1951:
Donald Benton Anderson,
botany

1955:
Zeno Payne Metcalf,
entomology

1958:
C. Horace Hamilton,
rural sociology

1959:
Gertrude M. Cox,
statistics

1965:
Raymond L. Murray,
nuclear engineering

1967:
Walton C. Gregory,
crop science

1970:
Stanley G. Stephens,
genetics

1972:
Bruce J. Zobel,
forest genetics

1979:
Solomon G. Hersh,
textiles

1980:
C. Clark Cockerham,
genetics and statistics

1981:
Ellis B. Cowling,
plant pathology,
wood and paper science

1982:
Joseph N. Sasser,
plant pathology

1983:
Frank E. Guthrie,
toxicology

1984:
Vivian T. Stannett,
polymer science

1985:
M. Necati Ozisik,
mechanical and
aerospace engineering

C NCSU Recipients of the North Carolina Award

Given annually since 1964. Recognizes "creative achievement" in Fine Arts, Literature, Public Service, and Science. Selected by a committee appointed by the Governor. The highest award the state can bestow.

1964:
Clarence Poe,
NCSU Trustee,
Public Service

1965:
Frank Porter Graham,
UNC President,
Public Service

1968:
Stanley G. Stephens,
genetics,
Science

1971:
Guy Owen,
English,
Literature

1973:
Ellis B. Cowling,
plant pathology,
Science

1974:
Ellen Black Winston,
alumna,
Public Service

1975:
William Clyde Friday,
alumnus and UNC President,
Public Service
John L. Etchells,
food science and microbiology,
Science

1976:
Richard Walser,
English,
Literature
C. Clark Cockerham,
statistics and genetics,
Science

1978:
Henry L. Kamphoefner,
design,
Fine Arts

1979:
Sam Ragan,
journalism,
Fine Arts

1981:
Vivian T. Stannett,
polymer science,
Science
Ralph Scott,
alumnus,
Public Service

1983:
Frank Guthrie,
toxicology,
Science

1984:
Lee Smith,
English,
Literature
George Watts Hill,
UNC trustee and benefactor,
Public Service

D NCSU Members of the National Academy of Science

Chartered by Congress in March, 1863. Contains approximately 1,000 members, who are elected by the existing membership. A society of distinguished scientists and engineers who are dedicated to the furtherance of science and its use for the general welfare. Advises the federal government on issues concerning science and technology.

C. Clark Cockerham,
statistics and genetics,
1974

Ellis B. Cowling,
plant pathology,
wood and paper science,
1973

Gertrude M. Cox,
statistics,
1975

Major Goodman,
crop science,
1986

Clement Markert,
animal science,
1967

Stanley G. Stephens,
genetics,
1967

Llewellyn Thomas,
physics,
1958

NCSU Members of the National Academy of Engineering

Established under the charter of the National Academy of Science in December, 1964. Contains approximately 1,000 members, who are elected by the existing membership. A society of outstanding engineering researchers.

Ralph Fadum,
civil engineering,
1975

Alan Sherman Michaels,
chemical engineering,
1979

Paul Z. Zia,
civil engineering,
1983

E William Neal Reynolds Distinguished Professors

Fund established in 1950, with 10,000 shares of Reynolds Industries. The professorships honor outstanding contributions in agricultural research.

1951:
James H. Jensen,
plant pathology
Stanley G. Stephens,
genetics
George H. Wise,
animal science

1954:
Zeno P. Metcalf,
entomology
Walter J. Peterson,
chemistry

1955:
Paul H. Harvey,
crop science

1956:
Charles E. Bishop,
agricultural economics
James E. Legates,
animal science
Charles J. Nusbaum,
plant pathology

1957:
Nathaniel T. Coleman,
soils
Walton C. Gregory,
field crops
Henry L. Lucas,
statistics
Marvin L. Speck,
food science
Joseph A. Weybrew,
plant chemistry

1961:
C. Horace Hamilton,
rural sociology
Francis J. Hassler,
agricultural engineering

1962:
Arthur Kelman,
plant pathology
Gennard Matrone,
animal science

1964:
Dan U. Gerstel,
crop science

1972:
C. Clark Cockerham,
statistics and genetics
William A. Jackson,
soil science

1975:
Charles H. Hill,
poultry and animal science
Samuel B. Tove,
biochemistry and animal science

1977:
Ernest Hodgson,
biochemical toxicology

1979:
Lester C. Ulberg,
reproductive physiology

1980:
James G. Lecce,
microbiology

1981:
H. Robert Horton,
biochemistry
Eugene J. Kamprath,
soil science
Robert L. Rabb,
entomology

1983:
William E. Donaldson,
poultry science
Charles S. Levings,
genetics

1984:
R. Wayne Skaggs,
biological and
agricultural engineering,
soil science
Harold E. Swaisgood,
food science

F Alumni Distinguished Professors

Established in 1968, $2,000 salary supplement paid by Alumni Association. Nominated by students, alumni and faculty. No more than nine exist at any one time. Are three year appointments.

Norman D. Anderson, science education

Frank B. Armstrong, biochemistry and genetics

Willard E. Babcock, civil engineering

Burton F. Beers, history

George B. Blum, biological and agricultural engineering

Carey H. Bostian, genetics

Charles B. Bramer, civil engineering

William R. Carter, philosophy

Victor V. Cavaroc, geosciences

Anne C. Clapp, textiles

Maurice C. Cook, soil science

Joseph H. Cox, design

Paul D. Cribbins, civil engineering

John L. Crow, occupational education

Donald A. Emery, crop science

Thomas V. Gemmer, forestry

Rienard Harkema, zoology

Forrest C. Heitz, Jr., chemistry

Robert C. Hitchings, pulp & paper technology

Joseph P. Hobbs, history

Abraham Holtzman, political science

H. Robert Horton, biochemistry

Myron W. Kelly, wood & paper science

Katherine Klein, psychology

A. Sidney Knowles, English

John R. Kolb, math & science education

Michael A. Littlejohn, electrical engineering

Charles D. Livengood, textile chemistry

Peter R. Lord, textiles

Joseph Mastro, political science

R. David Mustain, sociology & anthropology

Guy Owen, English

Hubert V. Park, mathematics

Carmen Parkhurst, poultry science

Robert P. Patterson, crop science

Michael Pause, design

Howard A. Petrea, mathematics

Thomas H. Regan, philosophy & religion

John F. Roberts, zoology

Mendel L. Robinson, textile technology

J. Frank Seely, chemical engineering

Vernon F. Shogren, architecture

Ronald Simpson, science education

Clarence L. Smith, Jr., industrial engineering

Ephriam Stam, nuclear engineering

Duncan Stuart, design

Alan L. Tharp, computer science

John F. Roberts, zoology

Kuruvilla Verghese, nuclear engineering

Larry Watson, mathematics and science education

Jack W. Wilson, economics and business

Charles G. Wright, entomology

G Alumni Distinguished Graduate Professors

First awarded in 1983 by the NCSU Alumni Association. Honors outstanding graduate teaching. Awards are for three years. Salary supplement of $2,000.

Bibhuti B. Bhattacharyya,
statistics

Richard D. Gilbert,
textile chemistry

William A. Jackson,
soil science

John B. O'Neal,
electrical
and computer engineering

H Chairmen of the Faculty Senate

Jan., 1954-Dec. 1955
Walter J. Peterson

Jan., 1956-Dec. 1956
William N. Hicks

Jan., 1957-1958
William W. Austin

1958-1959
Robert J. Monroe

1959-1960
L. Walter Seegers

1960-1961
Jesse S. Doolittle

1961-1962
David D. Mason

1962-Jan., 1963
Abraham Holtzman

Jan., 1963- 1963
Carey H. Bostian

1963-1964
J. Fulton Lutz

1964-1965
William J. Block

1965-1966
Henry W. Garren

1966-1967
A. Sidney Knowles

1967-1968
John W. Duffield

1968-1969
Francis E. McVay

1969-1970
Leroy B. Martin, Jr.

1970-1971
Murray S. Downs

1971-1972
Keith S. Peterson

1972-1973
John F. Ely

1973-1974
John M. Riddle

1974-1975
James B. Wilson

1975-1976
Samuel B. Tove

1976-1977
Richard M. Myers

1977-1978
Roger C. Fites

1978-1979
Charles Smallwood

1979-1980
Ernest E. Burniston

1980-1981
John A. Bailey

1981-1982
Richard D. Mochrie

1982-1983
Khosrow L. Moazed

1983-1984
M. Mohan Sawhney

1984-1985
Robert M. Fearn

1985-1986
Sondra L. Kirsch

1986—
James E. Smallwood

I NCSU Student Government Presidents**

1921-1922
Averette G. Floyd

1922-1923
David B. Vansant

1923-1924
Perry C. Beatty

1924-1925
Clyde R. Hoey

1925-1926
Henry E. Kendall

1926-1927
John F. Matheson

1927-1928
Cornelius S. Tucker

1928-1929
William P. Albright

1929-1930
John P. Chopin

1930-1931
Dan M. Paul

1931-1932
Charles (Romeo) R. Lefort

1932-1933
Mark K. Wilson

1933-1934
William J. Barker

1934-1935
Marshall Gardner

1935-1936
William B. Aycock

1936-1937
Lloyd N. Brown

1937-1938
James C. Frink

1938-1939
William M. Bailey

1939-1940
Ernest E. Durham

1940-1941
Paul H. Lehman

1941-1942
William D. Robbins

1942-1943
Robert D. Boyce

1943-1944
Hugh C. Murrill

1944-1945
Albert N. Perry

1945-1946
Lucien W. Gatlin

1946-1947
Fred H. Wagoner

1947-1948
Jennings B. Teal

1948-1949
Fred A. Kendall

1949-1950
Hoyle B. Adams

1950-1951
Jack B. McCracken

1951-1952
George B. Pruden

1952-1953
Vincent C. Outland

1953-1954
Billy B. Oliver

1954-1955
Lloyd (Doc) M. Cheek

1955-1957
James M. Nolan*

1957-1959
James (Jimmy) B. Hunt*

1959-1960
Haden Edward (Eddie) Knox

1960-1961
Robert (Bob) W. Cooke

1961-1962
Edward Norris Tolson

1962-1963
Woodrow (Woody) M. Taylor

1963-1964
John A. Bynum

1964-1965
John L. Atkins

1965-1966
John A. Mitchell

1966-1967
Myron (Mike) L. Cauble

1967-1969
Wesley (Wes) A. McClure*

1969-1970
John (Jack) V. Barger

1970-1971
Cathy J. Sterling

1971-1972
Richard N. Gusler

1972-1973
Donald R. Abernathy

1973-1974
Terry N. Carroll

1974-1975
Ronnie (Ron) L. Jessup

1975-1976
Mary Beth Spina

1976-1977
LuAnne Rogers

1977-1978
Blas P. Arroyo

*Two terms

**In 1969, the title of president of student government was changed to that of Student Body President.

1978-1979
Carroll Thomas (Tommy) Hendrickson

1979-1980
John (J.D.) Hayworth

1980-1981
Joseph (Joe) K. Gordon

1981-1982
Ronald (Ron) E. Spivey

1982-1984
James (Jim) Yocum*

1984-1985
Shannon S. Carson

1985-1986
A. Jay Everette

1986- —
Gary Mauney

*Two terms

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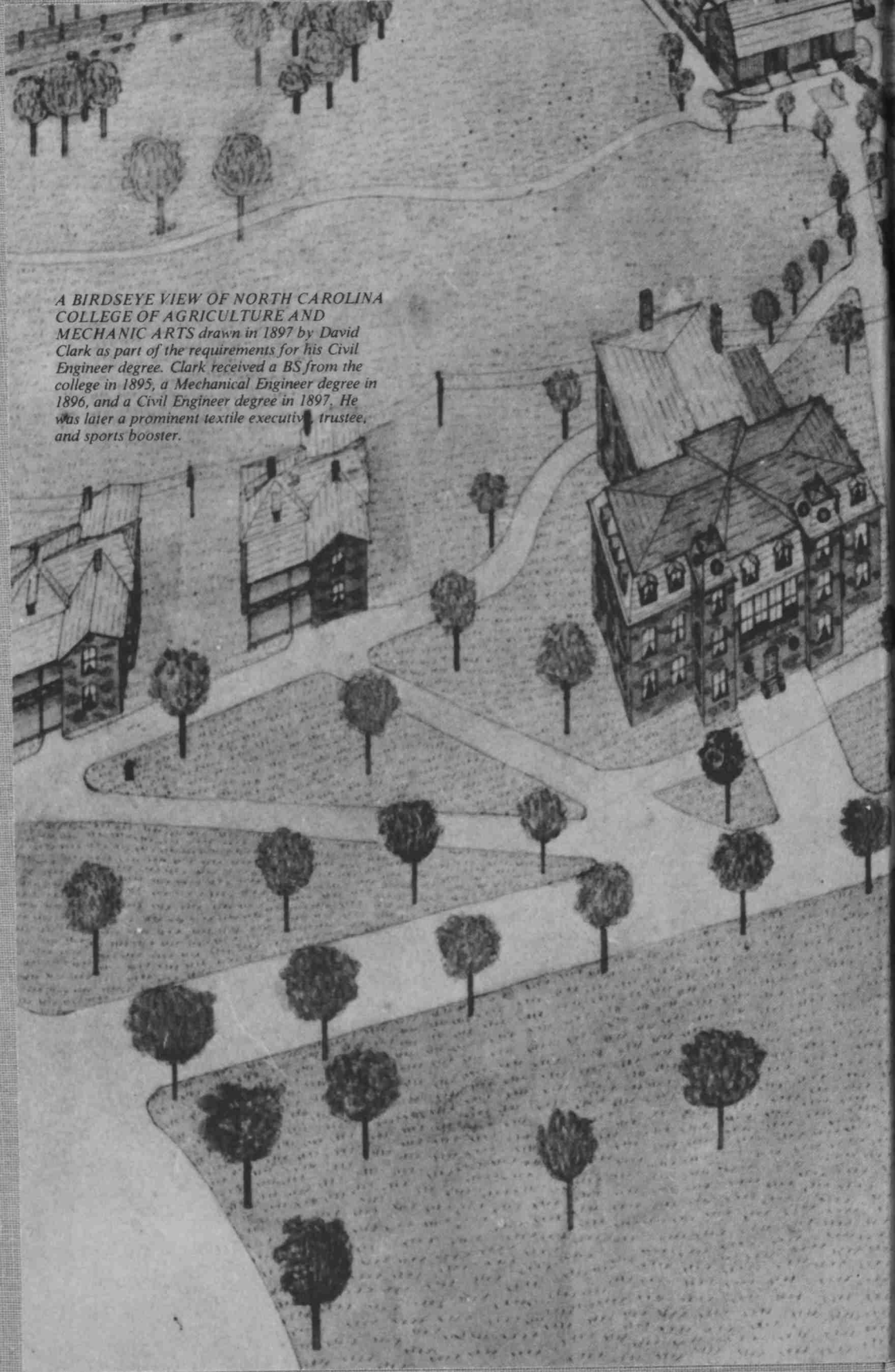

A BIRDSEYE VIEW OF NORTH CAROLINA COLLEGE OF AGRICULTURE AND MECHANIC ARTS drawn in 1897 by David Clark as part of the requirements for his Civil Engineer degree. Clark received a BS from the college in 1895, a Mechanical Engineer degree in 1896, and a Civil Engineer degree in 1897. He was later a prominent textile executive, trustee, and sports booster.