

ABSTRACT

LANCASTER, JENNIFER LEIGH A Historical Study of Early Industrial Education Centers in North Carolina. (Under the direction of James E. Bartlett, II).

This dissertation uncovers the initial history of North Carolina's Industrial Education Centers, an essential part of the history of vocational education and community colleges in the State of North Carolina. These centers opened in the late 1950s through the early 1960s and served as part of the predecessors for the future community college system in North Carolina. Research questions for this study are as follows:

1. What role were the Industrial Education Centers in North Carolina originally intended to serve and who were the major contributors and influencers?
2. How did the formation of the initial IECs contribute to the growth of the North Carolina Community College System?

The original IECs served their purpose - training rural young adults in areas of technical and vocational careers, which would help them transition from agrarian jobs to industrial ones. Additionally, the centers sought to help individuals advance in trade and industrial careers. The initial IECs, and Burlington IEC, served as models for what community colleges could be, with model administrations, carefully selected staff, and students who were trained in key industrial fields. While they focused on vocational education, they were models for the community colleges to come and provided insight into what the larger systems could be.

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A Historical Study of Early Industrial Education Centers in North Carolina

by
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DEDICATION

This study is dedicated to my parents, Jim and Camille, and to my daughter, Vivian. You have each supported me during this process, never doubting that I would achieve my goals. I love you all.

BIOGRAPHY

Jennifer Leigh Lancaster was born in Greensboro, North Carolina on February 22, 1979. She grew up in Greensboro and attended Appalachian State University from 1997 through 2001, graduating with a Bachelor of Science degree in history and a minor in art history. During her undergraduate work, she completed an honor's thesis about Quaker women's meetings in North Carolina.

Jennifer's passion for history led her to pursue an internship at Chinqua-Penn Plantation, a historic house museum located in Rockingham County, North Carolina. She then enrolled in a Master of Arts in history program at the University of North Carolina at Wilmington, which she completed in 2005. This degree included a thesis entitled, "Chinqua-Penn Plantation: A Permanent, Practical House."

It was not until beginning a new career in the community college field in 2008 that Jennifer found her true calling as a history faculty member at Wilkes Community College. She immediately felt a connection to the students and fellow faculty in the North Carolina Community College System, and was deeply moved by the transformative nature of these schools.

This love of community colleges led Jennifer to pursue a Doctorate of Education in adult and community college education at North Carolina State University. Jennifer's interests include reading, traveling, horseback riding, and higher education.

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CHAPTER 1: INTRODUCTION AND HISTORICAL FRAMEWORK

Community colleges have filled a specific and critical need to the State of North Carolina since their inception in the late 1950s and 60s. They have served students from all walks of life, from all regions of the state, in the pursuit of new and improved skills, which often contribute to new job opportunities.

For hundreds of years North Carolina was largely rural, with an agrarian economy based on tobacco farming. With the development of the railroads in the late 1800s, small towns grew into budding marketplaces and centers for trade. Banking came to the region during this period, with BB&T (Branch Banking & Trust) opening in North Carolina in 1872. Belk department stores were founded in Monroe, NC in 1888, and established their headquarters in Charlotte a few years later. The state was evolving from its agricultural roots as entrepreneurs established businesses and sought employees to fill jobs.

During the mid-1900s, businessmen eyed North Carolina as fertile ground for the development of industrial opportunities in textiles, furniture, and manufacturing. Research Triangle Park was developed in the 1950s amid the growing cities and universities of Raleigh, Durham, and Chapel Hill. The state boasted numerous highly regarded universities but lacked formal trade schools. At this time, state and local politicians and business professionals were engaged to improve the economy of North Carolina. Individuals in the communities were available and eager to join this new workforce however, the previously largely agrarian state lacked a means to prepare workers for these new types of work.

World War II ended in 1945 and young GIs returned to an America they had fought for, only to be denied equal access to education, work, and general discrimination in much of the country, particularly the South. It seemed to many observers from other countries that

the United States was highly duplicitous. America fought to contain the Nazi regime, yet did not provide equality to its own citizens. Eventually, nearly 8 million World War II veterans attended college with funds from the 1944 GI Bill of Rights, or The Servicemen's Readjustment Act.

The 1950s were a time when significant social and political shifts took place, most notably marked by the rise of the civil rights movement. Marginalized groups, including ethnic minorities and women, sought more opportunities in the workplace and education. Martin Luther King, Jr. rose to prominence as a leader of the movement. Major civil rights events of the 1950s included the Montgomery Bus Boycott from December 5, 1955-December 20, 1956, as well as the Sit-In Movement which began at a Woolworth's lunch counter in Greensboro, NC February 1, 1960. The Civil Rights Act of 1964 was passed by Congress in 1964, stipulating that no person could be discriminated against based on sex or race in hiring, promoting, and firing ("The Civil Rights Act of 1964 and the Equal Employment Opportunity Commission," n.d.). What began as grassroots movements culminated in legal political action. During this time period, educational opportunities opened for disparate groups as well. Title IX, which called for equal educational opportunities for women, was passed in 1972.

America's emergence from World War II, as well as the struggle for civil rights and equality turned the spotlight on disparate groups who were not adequately served by state and national education systems. The new awareness created by these issues led to increased services, training, and opportunities for more people than ever before. This increase could be seen in North Carolina, a state that prided itself on local public education and impressive four-year colleges but lacked technical programs beyond the high schools.

Many of the new opportunities coming to fruition in America and North Carolina in particular were in the form of changing industries. This industrial shift created a demand for the much-needed vocational training. Across the country this manifested in an increase in the formation of additional postsecondary education and specialty two-year colleges across the country. The formation of colleges meant to serve all the people came about following the passing of The Morrill Act of 1862. This act provided for the establishment of land-grant institutions, which modern community colleges are often modeled after. Lange, in particular, endorsed the idea of technical and some terminal programs being taught in junior or two-year colleges (Vaughan, 1985). The need for such institutions was felt at both the state and national levels.

Discussions related to enhancing pre-existing two-year programs began years before the first community colleges were established (Cohen & Brawer, 2008). Leaders of prominent universities in the late nineteenth and early twentieth centuries advocated for a separation of the first two years of college from the four-year experience. Such men included president of Stanford University David Starr Jordan, dean of the University of California at Berkeley Alexis Lange, and president of the University of Chicago William Rainey Harper, among others. Harper is often thought of as “the father of the junior college” (Vaughan, 1985, p. 3-4) in America, as he opened an early junior college at the University of Chicago (Harper’s vision for two-year programs was continued with the opening of what is considered the first community college, Joliet Junior College, in 1901. Joliet received formal academic accreditation in 1917. This institution was set up increase access and to provide students with a pathway to a bachelor’s degree (Wood, 1987).

As part of these developments, state and federal commissions and studies were conducted which indicated deficits in training and preparedness among the young American workforce. Such research suggested further education in technical programs was not sufficiently addressed at the high school level. California high schools were authorized by the state legislature in 1907 to provide postgraduate education in the form of junior colleges, though they were not granted any funding at that time. Districts with their own budgets and local control were endorsed through further legislation in 1921. Many of these actions were later replicated by other states as they established two-year educational opportunities (Vaughan, 1985). The American Association of Junior Colleges held its first annual meeting in 1921 and later became the American Association of Community and Junior Colleges (Vaughan, 1985).

With the passing of the GI Bill, scholarships for servicemen were provided through federal funding. This helped end some of the economic barriers to education faced by people who were previously unable to pay for college. The federal government took a more active interest in post-high school education with the 1947 President's Commission on Higher Education for American Democracy, more commonly referred to as "The Truman Commission." A significant finding of the commission was that the United States should create a system of community colleges, and thus popularized the term "community college" (Vaughan, 1985, p. 7), in reference to public two-year colleges.

Though junior and two-year colleges existed prior to the mid-1900s in North Carolina, they did not emphasize areas of study that typically prepared vocational education students to enter the technical workforce. Several were also religious-based institutions of higher learning, and many provided degrees in humanities. Thus, North Carolina

stakeholders, including public school officials, state legislators, local municipalities, and teachers, discussed ways to fill the deficits in equipping students for technical jobs. Though an initial bill to provide community college funding in NC failed to pass in 1953, four years later the North Carolina State Board of Education agreed to provide \$500,000 to fund training centers to help students attain vocational and technical training. At this time, Dallas Herring was one of the most prominent leaders in public education in North Carolina (Wescott, 1998). As revealed in his personal papers, Herring proposed the concept for Industrial Education Centers (IECs) in 1958 to fill the need for technical and vocational training in North Carolina. By 1958, the first seven of these IECs had opened in Burlington, Durham, Goldsboro, Greensboro-High Point, Leaksville, Wilmington, and Wilson (Lochra, 1978, p. 44).

Programs provided at the IECs helped multiple constituencies in North Carolina. While these programs provided direct benefits to students, such educational programming was also created for the purpose of preparing a ready workforce for new industries and businesses in the state. Available areas of study at the IECs included textile and furniture manufacturing, automobile, refrigeration, and television repair, and other mechanically inclined offerings. At this time, most educational programming was regional in nature, and the IECs offered some program areas specific to their locations, providing a natural fit for training centers to open and train students for these fields. These included commercial art, which was only offered at the Burlington IEC, as well as Power Machine Sewing at the Gastonia IEC.

Courses and degrees offered at the IECs were intended to prepare citizens for new industries and hone their skills in specific trades, beyond what was available in the

preexisting schools. At this time, the preexisting programs stopped at the high school level, leaving students lacking adequate training to compete for technical jobs. The resulting North Carolina training institutions were called Industrial Education Centers, or IECs. These IECs provided part of the foundation for the fledgling North Carolina Community College System, which was also developing during the same time period. Both entities were intended to better prepare students for the workforce using different programming. At the time plans were underway for the first IECs, North Carolina only had a few community colleges, in addition to junior and other two-year schools. These included Asheville-Biltmore College, which was established in 1957, and Wilmington College, which was certified as a state-supported community college the following year. “Regulations Governing the Establishment of Industrial Education Centers,” were passed by the State Board of Education on March 6, 1958 (Randolph Community College Library, 2018). Today there are 58 state community colleges serving students of varying ages and abilities across the state. Developed and sponsored by the State of North Carolina, these IECs and community colleges serve the purpose of equipping students for improved and new jobs, as well as attracting new industries to the state.

Though significant contributors in the formation of community colleges, scholarship related to the IECs in North Carolina is limited. It typically appears in the research and literature as only a small part of the timeline of the State of North Carolina’s higher education history, with the exception of the work of Joseph Warren Wescott in his 2000 master’s thesis at Wake Forest University. The study of industrial education centers (IECs) is deserving of additional scholarship as they were critical to the start and continued growth of two-year and community college education in North Carolina. The IECs were among the

first locations for rural students to gain technical career specific training, when they may not otherwise have had access to education beyond the high school (Wescott, 2005). The industrial education centers remind us of the importance of student-focused education that meets students where they are, as part of the open door goals of the current North Carolina Community College System. According to North Carolina higher education historian Joseph W. Wescott, "... the IECs became the foundation and future financiers for the fast moving expansion of higher education in the 1960s and 1970s" (Wescott, 2005, p. 6). This shows evidence of a time when the State of North Carolina allotted resources to support the goals promoted by Dallas Herring.

Indeed, in the decades since the formation of the IECs and community colleges in North Carolina, millions of people across the state have been served. According to data located on the North Carolina State Community College website, approximately 700,000 students were enrolled in one of North Carolina's 58 community colleges during the 2016-17 academic year (Annual Statistical Reports, Vol. 52). Students from a variety of socioeconomic backgrounds and ages have enrolled in workforce training, degree and certificate programs, and college transfer curriculums. No matter where these students live, there is a community college or affiliate a short drive from their homes. The North Carolina Community College System estimates all North Carolina citizens are within a 30-minute drive of a college (NC Community Colleges "Get the Facts"). This includes centers and campuses operated remotely by community colleges.

The history of the North Carolina Community College System, from its inception to the present, is well documented (Little, 2003; Lochra, 1978; Mayberry, 1972; Senger, 1974; Wescott, 1998, 2000, 2005, 2014; Wiggs, 1989). The foundation for the initial community

colleges is less widely known, with scholarship specific to the Industrial Education Centers even more scarce. Clarity regarding the context, political, social, and economic factors, and key players and decisions involved in creating the Industrial Education Centers in North Carolina will enhance our knowledge of the early history of community colleges in the State of North Carolina. This will help community college practitioners today and in the future understand the legacy of structures in the community colleges and make more informed decisions which are rooted in a clearer understanding of the original vision and intent of the IECs and community colleges.

Workforce development and vocational education were the focus of the industrial education centers. The goals of the IECs were to educate students for specific jobs and to reach and enhance the lives of students who might otherwise not have access to such training. In addition to supporting the development of students, the IECs also existed to serve as a way to create a prepared workforce for new industries in the State of North Carolina. The thought behind investing in the development of the workforce was that providing adequate skills would attract new businesses to the State of North Carolina. Today, the community colleges are still part of a strategy to attract businesses to North Carolina. According to the North Carolina State Community College System, “For over 50 years, North Carolina has offered no-cost, company-specific training to eligible companies in our state ... Training may be provided to companies that create eligible jobs, make significant technology investments or take on critical productivity enhancement efforts” (“Get the Facts”). Being mindful of these goals is essential if community colleges are to adequately and appropriately continue to serve students in the modern community college system and provide opportunities to support economic development for North Carolina. Similar challenges in funding and mission based

on economics, political support, and program offerings were present with the opening of the IECs and are still present in today's community colleges. Further, by looking at the history of the IECs, we can better learn about past successes and failures, which will help community college leaders and stakeholders in their decision making to better prepare the State of North Carolina's workforce for current and future challenges.

Problem Statement

This study uncovers the initial history of the formation of industrial education centers in North Carolina, including the decisions that led to their creation and the process of establishing the centers. After conducting a review of available literature, it was evident that a study examining this process and foundation was lacking and that the industrial education centers are not adequately discussed in the history of education in North Carolina. Without an understanding of the history of the IECs, practitioners do not have a complete picture of the foundation of the North Carolina Community College System, a key aspect of the state's higher education history. Evidence demonstrates the IECs were formed to train students for specific, local vocations and provide leverage for today's community college advocates in their search for funding and support. Information about these centers exists in primary source documents and is also discussed in portions of dissertations and published texts, but there is no study dedicated exclusively to them. As an important element of the history of the North Carolina Community College System, such a study is a critical component to creating a more full and complete understanding of the origins of the system.

In addition to filling gaps in the history of higher education in North Carolina, this study also serves to address the more recent economic history of the state. The Twentieth Century brought thriving industries to North Carolina including textile and furniture

manufacturing, both of which the state is now known for internationally. Though much of the manufacturing of furniture has since moved overseas, The High Point Market remains “the largest furnishings industry trade show in the world, bringing more than 75,000 people to High Point, North Carolina, every six months” (HP Market “Market Facts”).

Unfortunately, a significant economic downturn in the last few decades has seen an extreme decline in the availability of jobs in furniture and other industries. “Tens of thousands of furniture jobs in North Carolina have packed up since the 1990s, with most shifting to China” (“Many in Ailing NC Furniture Industry Couch Support for Trump in Economic Terms,” 2016). Former North Carolina furniture business owner Francel Goude said, “I had about 150 employees, and as I moved things to China, we ended up with 24 people, and it wasn’t the same business” (“Many in Ailing NC Furniture Industry Couch Support for Trump in Economic Terms,” 2016). The relocation of furniture manufacturing from North Carolina to China is largely economically driven. In 2008, workers at Lacquer Craft in Dalingshan, South China, had 4,000 workers who made about .70 per hour. At this time, a furniture factory worker in North Carolina reported earning about \$15 per hour. In an article titled, “Furniture Work Shifts From N.C. To South China,” one employee in Dalingshan reported working in the furniture factory was better than working on a farm, stating, “In a factory, you don’t have to work in the sun – that’s the best thing. I prefer working here. At least I get paid. At home, nobody paid me” (Langfitt, 2009). Despite lower production costs in China, many companies have still downsized or closed. Creation Furniture in Dalingshan, South China closed factories in 2008 due to the recession in America (Langfitt, 2009).

Though many key industries including furniture, tobacco, and textiles, all of which were once major contributors to the economy of North Carolina, led to the formation of

training programs in these fields, the more recent demise of them has again forced educational entities to revamp their programs. These losses led to unemployment and the need for retraining for thousands of workers. More than 350,000 manufacturing jobs in textiles, furniture, and other industries have been lost since the 1990s (Kromm, 2016). Community colleges have filled this need across the state, with funding from federal programs, including the Workforce Investment Act (WIA) in 1998, and the Workforce Innovation and Opportunity Act (WIOA) in 2014. Such acts provided funding for employment services, job training, and education based on the cooperation of postsecondary continuing education institutions and local industries (Policy and Advocacy “Workforce Investment Act”).

In 2009, following a national recession, North Carolina took advantage of funds provided by the American Recovery and Reinvestment Act (ARRA). According to a report by the North Carolina Division of Commerce “Putting North Carolina Back to Work: How Stimulus Money and the Workforce Investment Act Benefitted the State,” the Workforce Investment Act (WIA) provided \$23 million “to support regional and statewide strategic investments to build our youth, adult, and dislocated workforce” (n.d.). According to a document released by the North Carolina Commission on Workforce Development, from July 2009 – June 2011, over 18,500 adults and dislocated workers were supported by ARRA funds and 73% of dislocated workers served found employment in 2010 (“Putting North Carolina Back to Work, n.d.”). Funds were utilized by local boards and community colleges to build training programs at community colleges (“Putting North Carolina Back to Work, n.d.”). Local community colleges form partnerships with companies in need of a steady stream of skilled laborers and formulate programs to prepare students for these jobs. Recent examples

include GE Aviation, which announced the expansion of four sites across North Carolina “expected to bring in \$195 million in capital investment through 2017” (“GE Aviation Planning to Expand West Jefferson Facility,” (2013). Sites included West Jefferson, NC, home to a campus of Wilkes Community College. “GE partnered with Wilkes Community College in March 2014 to develop and implement a customized training program to prepare for the expansion” (“GE Expands, Adds Jobs in Ashe, WCC Aids Training,” 2015). An article in the *Wilkes Journal Patriot* stated, “Over 1,000 people are expected to be trained through WCC, including those in pre-hiring, 143 incumbent workers and 105 new hires. All 143 incumbent workers completed the first portion of their training by February 2015, using WCC’s new stand-alone CNC Training Center with state-of-the-art machinery” (2015).

Guilford Technical Community College has a long history of contributing to the regional aviation industry. “In 1969, GTCC (then named Guilford Technical Institute) started their first aviation program, Aviation Management Technology, followed by an Avionics and Airframe and Powerplant mechanics program in 1970” (“Aviation Campuses,” n.d.). There are currently three buildings known as “The Aviation Campus” which comprise over 143,000 square feet (“Aviation Campuses,” n.d.). The idea of matching courses and training to local jobs began with the Industrial Education Centers and community colleges, and continues today.

Historically, this training of individuals for new jobs and industries is at the heart of what community colleges were intended to do in North Carolina. Their predecessors, the industrial education centers, were part of the foundation for this history. Northeastern industrialists sought cheaper labor and more business-friendly locales in the first half of the 1900s. “North Carolina was a major beneficiary of this movement, with a dramatic increase

in manufacturing employment. Manufacturing's share of total employment grew from less than a fifth of total employment in 1900 to nearly a third of total employment by 1960" (Carlisle, 2010, p. 5). According to a report to the Institute for Emerging Issues, NC State University, by Rick Carlisle, a partnership of government, business, and Raleigh-area research universities formed "in the face of an alarming outflow of well-educated graduates from the research universities to metropolitan areas outside the state. The political and business leaders sought to stimulate the economy and provide new jobs in the emerging high-technology industries through the creation of a premier research complex" (Carlisle, 2010, p. 6). This ultimately led to the opening of Research Triangle Park (RTP) in 1965 (Carlisle, 2010, p. 6). The IECs provided a new form of training for people who originally had only experienced limited education and work in agriculture. Many of the young people in NC lived in rural locations and typically ended their educational pursuits before or immediately following high school graduation.

Concerned educators, as well as political and economic leaders, in the State of North Carolina recognized the need for further training. The IECs were established as a means to prepare students for work in mills and factories at a time when manufacturing and processing jobs were on the rise, rather than diminishing in number. With the right skills and a ready workforce, state leaders hoped to also attract new industries to North Carolina, thereby relying less on agriculture, which had been the state's primary economic mainstay for hundreds of years. The State of North Carolina's shift from agriculture to industry in the first half of the Twentieth Century was illustrated by the state's rapid growth in manufacturing employment, growing "far more rapidly than the U.S. as a whole, increasing its concentration in manufacturing from 10 percent less than the U.S. to 40% more than the U.S." (Carlisle,

2010, p. 5). IECs were viewed as a way to increase revenue for the state and continue the education of many rural citizens, with the first industrial education center opened in Alamance County in 1957 (Adams, 2014)

In recent years, community colleges in NC have adopted new degrees and programs to serve a wider variety of students. Citizens beginning in high school are eligible to take career preparation courses as well as college transfer classes. According to the North Carolina Community College System's annual reports, in 2015-2016 over 210,000 students were enrolled in state community colleges full time. This figure includes 166,726 students in curriculum programs, 14,596 in basic skills, and 28,992 in continuing education. When part-time students are accounted for, the number of individuals who enrolled at the state's community colleges was over 710,000 ("Get the Facts," n.d.). The forces behind these enrollment figures as well as the drivers for the establishment of the initial IECs are largely socioeconomic and political in nature. Many adults who have lost jobs due to layoffs find themselves without the skills needed to pursue new careers. Retooling and expanding their abilities through programs in modern community colleges prepares them for jobs they would otherwise not be able to attain. Community colleges also provide adult basic skills, providing a path for students unable to complete high school, to achieve a high school equivalency. Those students then have a familiarity and comfort with community college and can choose to continue their education. Even high achieving high school students can attain college credit at their local community college while still attending high school classes, thus preparing for college and completing credits before graduating from high school.

Significance of the Study

Understanding the major forces behind the advent of the Industrial Education Centers will provide the necessary context to better clarify their role in the formation of the future community college system in North Carolina.

Uncovering the historical context for the creation of the IECs is at the heart of this study. Research questions that will be addressed include: determining the impetus behind the advent of the IECs, the process of securing funding and support for them, and the location and specialty of the early IECs. This initial history is murky at times, with some community colleges claiming they were the “first” to open as an IEC. Much of the information has been stated on websites or passed down in college ephemera without being grounded in historical evidence.

Some of this information has previously been discussed in other publications, including dissertations and theses, located at state colleges. This previous scholarship provides direction as to the location of pertinent publications and primary source documents that are of use in this study. There are primary source documents in the form of newspaper clippings, letters, personal notes, and other items located in community college and four-year collegiate libraries around the state. Many of these documents help answer questions about the process of developing the IECs, including concerns at play in the decision-making process of where to locate the IECs. The majority of the research for this study focuses upon the Dallas Herring Papers, which are located in the Special Collections of North Carolina State University. Dallas Herring was a businessman, member of the NC State Board of Education, and is regarded as a primary founder of the IECs and NC State Community College System. Over 200 boxes of his personal notes, letters, newspaper clippings,

pamphlets, meeting minutes, and other documents still exist. Letters between local school superintendents, as well as NC Governor Hodges provide insight into the early discussions about the need for IECs as well as their formation.

Analyzing the secondary published and unpublished scholarship in concert with the available primary resources affords a more clear and complete picture of the early years of the Industrial Education Centers in North Carolina. Methods utilized in gathering and assessing the available information is discussed in Chapter 2. This includes historical research and writing. An analysis of the available literature surveyed for this study is conducted in Chapter 3.

A discussion of key historical highlights in the history of higher education in America and North Carolina follows this section. This serves to provide contextual information so the reader may have a better understanding of the development of the IECs and community colleges in North Carolina.

Brief History

American higher education began in Cambridge, Massachusetts with the first students entering Harvard in 1638, over 100 years before the nation's founding (Bok, 2015, p. 9). The college was named after a minister who left much of his estate and his library to the school upon his death in 1638 (Harvard at a Glance "History," n.d.). Though the history of adult education in America is hundreds of years old, it was primarily restricted to people of means who wanted their sons to study theology or law. Early colleges were only for men and could only be afforded by the wealthy.

Public education was established in later years to serve the needs of average citizens and the larger society. It took many decades for this trend to catch on, with some significant

slowing in progress during the Civil War. Professor of Higher Education, John R. Thelin discusses a “wave of campus building” (2011, p. 205) across America beginning in the late 1800s, citing a belief that Americans were growing more interested in higher education. Further, Thelin explains that Americans were shifting away from the notion that higher education was only for the elite in society (2011). Interest in industrial education grew exponentially in the years surrounding and following the Industrial Revolution in America, which took place toward the end of the 1800s after beginning in Europe. Americans found new and more efficient ways to mass-produce goods. People moved from cottage industries with master craftsmen and a few apprentices to larger scale factories requiring increasingly more skilled laborers. This type of manufacturing eventually manifested itself in assembly lines in the early 1900s, as America emerged as a world economic power. By 1913, the United States produced more than one-third of the world’s industrial output (Foner, 2013). Further feeding the push toward industrialization was the arrival of approximately 25 million immigrants, as well as the move of almost 11 million Americans from farms to cities from 1870-1920 (Foner, 2013).

Several factors thus contributed to the development of public education during this time period. Thelin’s discussion is also supported by increasing presidential and congressional attention being paid to public higher education near the turn of the century. These views lend validity to the idea of public community colleges and technical and industrial education centers developing during the 1900s, though they did not truly come to fruition until the years following World War II. Joliet Junior College was established in 1901, and is generally considered the first community college in America (Lochra, 1978).

As further evidence of the growth of technical education, new organizations were established in America. The National Society of the Promotion of Industrial Education (NSPIE) was founded in 1906. Members included educators, manufacturers, mechanics, businessmen, and individuals from other fields (Gordon, 2015). Government agencies and committees were formed during the first half of the twentieth century to further the development of vocational and technical education programs. These included the National Advisory Committee on Education, which operated from 1936-1938 (Gordon, 2015).

By the late 1800s, every state had its own publicly supported universities (Cohen & Brawer, 2008). As early as the World War I era in America, federal legislation was passed that set the nation on a course for increased vocational training and industrial preparedness. Funding was a key issue in creating educational programs. The Smith-Hughes Act of 1917 provided federal funds for vocational education only if a state board of vocational education was established. In addition to supporting industrial and trade education in public schools, the act also funded home economics and agricultural education (Moore, 2017). This created a more formalized framework for technical training but also drove a wedge between what were deemed traditional academic studies and vocational education (Gordon, 2015). Some, including John Dewey, feared the duality that would result from separating these types of education (Gordon, 2015). His sentiments were echoed by North Carolina vocational education champion Dallas Herring, who hoped students in technical programs might also take courses in humanities to form more well rounded citizens (D. Herring, personal communication, August 21, 1959). In a 1958 letter, Herring explained, “we cannot do a good academic job in the high schools in a one-track, artificial situation under which we pretend that terminal students should be reading MacBeth, taking more of the teacher’s time and

talent than the gifted, when, as a matter of fact, those students need instruction in the fields in which they are gifted, as a supplement (not a replacement of) to the academic courses they can get (D. Herring, personal communication, April 7, 1958). In this example, Herring advocated for career-specific training that accompanied traditional academic courses.

As the years passed, funding from the national government increased, which would benefit state-level programs. On the heels of the Great Depression, the George-Dean Act provided increased federal funding for vocational education in the amount of \$14 million per year (Gordon, 2015). The George-Barden Act of 1946 increased this amount to \$29 million per year (Gordon, 2015). These acts not only assisted in the growth of vocational and technical training in America, but also indicate the level of support, interest, and necessity for these fields in the first half of the twentieth century. The Great Depression put unprecedented numbers of people back to work using skills typically not taught to people after high school. These included masonry and other building and repair trades. The time was ripe for the establishment of higher education programs extending beyond the high school to help prepare workers for new vocations.

Associations for professionals and other interested parties were formed in the twentieth century to support technical and industrial education. The National Society for Vocational Education changed its name to the American Vocational Association, or AVA, in 1925. This group then absorbed the Vocational Association of the Middle West in 1926. The group's modern name, the Association for Career and Technical Education (ACTE) was adopted in 1988. Part of the impetus for this change was the commonly held notion that the term "vocational" was often associated with non-college training (Gordon, 2015, p. 92-93). At that national level, the American Vocational Education Research Association (AVERA

was started that is today known as the Association for Career and Technical Education (ACTE).

During World War II, science and technical skills were in high demand in the American workforce. National defense training was anticipated and planned for by the United States Congress in the early 1940s. This resulted in the establishment of the War Manpower Commission, the Bureau of Training, the Training Within Industry Service, and the War Training Programs in the United States office of Education (Stubblefield & Keane, 1994).

The importance of education for service members was still touted by many politicians and governing bodies in the years following World War II. President Roosevelt signed the “GI Bill of Rights” or Servicemen’s Readjustment Act on June 22, 1944. It was a measure that established the importance of basic literacy classes, high school, and college completion, as well as vocational training for GIs (Stubblefield & Keane, 1994). President Truman instituted The President’s Commission on Higher Education in 1947 in large part to address the concerns about the affordability of college (Heller, 2011).

“Junior college” became the popular name for private two-year colleges as well as a term for the initial years of education provided at some of these schools during the 1950s and 60s. This was differentiated from “community college,” which typically referred to publicly funded institutions, though this phrase became the norm for both types of schools by the 1970s (Cohen & Brawer, 2008). A special form of two-year schools, those focused on technical and industrial education, were part of a growing national trend in the middle of the twentieth century. North Carolina was a major participant in the formation of this type of

training. The decision to establish technical education centers in the state was both an organic and a political process, born out of necessity and passion.

By 1946, North Carolina Superintendent Clyde Erwin called for the consideration of establishing community junior colleges in North Carolina, citing the need to serve increasing numbers of veterans seeking education (Segner, 1974). Director of Vocational Education J. Warren Smith voiced the need for vocational schools to serve adults after high school, claiming only 3,600 of 190,000 North Carolina high school students in 1950-51 took courses in the skilled trades (NC Public School Bulletin, 1952). He clearly recognized the educational deficit that further training through public education could help fill. Smith stated:

There is no provision for instruction leading to the development of technical skills except that taught in the farm shops, which is for those boys who plan to be farmers, and a very few commercial courses. Because of the rapid changes toward mechanization in farming, it must be recognized that probably not more than half of the rural boys and girls now living in rural communities, will be needed on the farm. For these rural and urban boys and girls who at present do not have available to them the specific vocational courses they should have, some suitable type of school should be provided. The answer to this problem seems to be the provision of several regional vocational-technical schools in connection with some of the community colleges, which are sure to be developed in the state. (p. 11)

Smith and his peers in North Carolina recognized a trend that was emerging around the country. The needs of GIs coupled with the desires of local and state entities to expand the skills of their workforces made the time ripe for the growth of IECs and community colleges. North Carolina was poised to join the movement.

By the 1950s, most of the adult public education programs in America were located in urban locations. These were still not vast in number (Stubblefield & Keane, 1994). Junior colleges in North Carolina were often found in urban settings, while early technical training facilities were placed in more rural areas, serving citizens with less access to larger four-year colleges. It was only a matter of time before state leaders in positions of power began to devise plans to formalize and institutionalize training programs in North Carolina.

Progressive Governor Luther Hartwell Hodges and businessman and public education proponent William Dallas Herring were passionate about education in North Carolina, but disagreed on many of the finer points of how to best serve the state's citizens (Wescott, 1998). As a State Board of Education member and future founder of the North Carolina Community College System, Herring pushed for technical and industrial training in North Carolina throughout the 1950s. New York and California were well on their way toward establishing viable community college systems and Herring believed the time was ripe for North Carolina as well (Wescott, 1988). As someone who came from rural North Carolina, Herring was uniquely suited to understand the educational needs of citizens in these areas. Local public schools had already experimented with offering additional courses and programming beyond the twelfth year. Buncombe County Junior College was already supported by local tax dollars in the 1920s. The North Carolina Supreme Court upheld the constitutionality of relying on these funds for the college's operation in 1930 (Wiggs, 1989).

Though similar, there were differences between two-year colleges and training centers. In a 1996 interview, Dallas Herring discussed the importance of training centers as fulfilling the specific needs of people in North Carolina, stating, "... the public schools have far more in increases since we got the centers. The community colleges 'primed the pump'

and got more money for them. Because it was responding to what the people wanted and what they needed” (Wescott, 1988, p. 78). Herring further recounted speaking across the State of North Carolina in the 1950s in favor of new kinds of education, which eventually took the form of industrial education centers (IECs). In a 1987 interview, Herring said,

The staff were young and energetic and optimistic, and our desire was, after World War II, to awaken interest all over America in the public schools – how tragically the need had been neglected. We carefully avoided telling the people what to do about it. The philosophy was to get them to form democratic groups, lay and professional, to inquire into the status of education, and then to determine what the needs were, and thirdly, to see what could be done to get the kinds of schools we agreed we needed. It was phenomenally successful. We had some 38,000 people involved in citizens’ committees all over the country. They urged me to get Governor Hodges to appoint a state citizens’ committee in North Carolina, which he did. (personal correspondence, May 16, 1987).

Dallas Herring recalled a conversation with then Governor Hodges that led to a discussion about, “training people who were leaving the tobacco farms going to the electronic plant or whatever he bought (sic) into the State. That opened the door further. He said if you’ll stay and get us up a proposal for the training of industrial employees I’ll get you some help on that Board (of Education). (Wescott, 1988, p. 80)

Such interviews reflect the changing economic patterns of North Carolina as well as the political struggle inherent in obtaining funding and cooperation for the establishment of the industrial education centers during the 1950s. Tobacco farming was lucrative for large companies in North Carolina, like R.J. Reynolds, American Tobacco, Lorillard, Liggett and

Myers, and the British-American Tobacco Company, but not for most of the farm workers. Many were barely able to survive as tenant farmers or sharecroppers who did not own their own land, and by 1923 nearly half of the tobacco farmers in North Carolina were tenants (“North Carolina & Tobacco: Historical Background,” n.d.). Though the need for industrial and technical training seemed apparent, state support was somewhat slow in coming. A State Community College Bill presented to the General Assembly by Representative Roy Taylor of Buncombe County, failed to garner adequate support for passage in 1953, indicating political obstacles that lay ahead in establishing affordable adult industrial training. Though the Taylor Bill (HB 579) was supported by the Finance Committee, it hit a roadblock in the form of Roger Kiser, a member of the Education Committee. Kiser, a representative from Scotland County was a supporter of private education and believed funding community colleges might harm private junior colleges. Some argued the State of North Carolina could not afford to fund a system of community colleges (Wescott, 2005). Additional reasons for the failure of the Taylor Bill have been discussed by numerous historians and include a fear in rural communities that church-related colleges would be harmed, a lack of support from the governor following the death of Clyde Erwin, and concerns around the implementation of segregation (Segner, 1974; Lochra, 1978; Wescott, 2005). It was not for another decade that the movement toward a North Carolina Community College system resumed.

A solution came in 1958, when Dallas Herring proposed the concept for Industrial Education Centers (IECs) to fill the need for technical and vocational training in North Carolina. While the Community College Bill in 1953 did not pass, Dallas did not give up hope. Dallas also alluded to the idea that these centers could eventually become community colleges. In 1957, the State Board of Education proposed a \$500,000 appropriation be used

to support these training centers, thereby moving the IEC program in a positive direction (Wescott, 1998). The first seven centers opened in 1958 (Lochra, 1978). Only a few years after failed funding for the State Community College Bill, it seemed funding for post-high school vocational training programs was finally coming to fruition.

Initially, the IECs offered the following programs: machine operators, craftsman, technicians, supervisory training, and upgrading classes for employed adults, and trade preparatory classes. These would be offered at the locations around that state where they were most beneficial to the types of industry located in the region. In the first few years the IECs were open, from 1958-1963, the North Carolina Department of Public Instruction (NCDPI) was responsible for operating them, as part of local public school systems in North Carolina (Lochra, 1978). The Industrial Education Center Proposal stated the program would provide instruction “under administration supervision of the local boards of education and the State Board of Education in buildings provided by the local community, which may or may not be separate from the high school building (“Industrial Education Proposal,” 1957). This type of start made sense, as extensive brick and mortar construction and the hiring of all new staff would have been economically unfeasible. The first courses suggested by Herring’s proposal were basic machine shop training; maintenance, operation and construction of electronic equipment; drafting and blueprint reading; sheet metal work; welding; and other programs such as instrumentation, quality control, and tool and die-making.

A directory published by the United States Government lists the technical education programs and the areas of study for each in a document published in 1962. Table 1 indicates the types of training offered at each industrial education center in North Carolina as of 1962.

Table 1:

Nineteen North Carolina Industrial Education Centers and Areas of Training as of 1962

IEC	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Asheville IEC			X						X			X		X			X				X	
Burlington IEC	X		X														X					
Catawba County IEC			X	X		X			X			X				X	X		X			
Central IEC		X	X						X			X		X		X					X	X
Davidson IEC			X		X				X			X				X						
Durham IEC								X														
Fayetteville IEC			X						X							X	X					X
Gastonia IEC			X						X			X	X			X	X				X	X
Goldsboro IEC			X						X						X	X						
Guilford IEC			X			X			X		X	X				X	(Refrigeration)		X		X	X
Leaksville IEC			X		X				X			X				X						
Lee County IEC			X						X			X				X						
Lenoir IEC			X						X													
Randolph County IEC			X					X				X				X						
Rowan IEC			X						X			X				X						
Wake County IEC			X						X			X		X		X						
Wilson IEC			X						X			X					X					
Wilmington IEC									X	X		X										
Winston-Salem IEC			X	X				X	X			X		X	X							

Table 2:

Coded Programs of Study for North Carolina Industrial Education Centers

Code	Program of Study
A	Art, Commercial
B	Auto Body and Fender Repair
C	Auto Mechanics
D	Bricklaying
E	Carpentry
F	Cutting and Sewing (Furniture)
G	Dental Technical Training
H	Diesel Mechanics
I	Drafting, Technical
J	Gas Engine Mechanics
K	Knitter Fixing
L	Machine Shop
M	Power Machine Sewing
N	Practical Nursing
O	Printing (Graphic Arts)
P	Radio and TV Service
Q	Refrigeration and Air Conditioning
R	Textile Work
S	Upholstery
T	Sheet Metal Work
U	Welding
V	Woodworking (Furniture)

As evidenced in the table, there were a few programs that were available at most of the IECs. The Guilford Industrial Education Center had the most with ten, and the Lenoir Industrial Education Center had the least with two. These programs offered at the centers were vocational education in nature and included Auto Mechanics, Technical Drafting, Machine Shop, and Radio and TV Service. Other areas of study were unique to specific IECs. Commercial Art was available exclusively at Burlington IEC. Leaksville Industrial Education Center, located in the northern Piedmont region was the only location that provided Textile Work training. While almost every IEC had Auto Mechanics courses,

students could only take Auto Body and Fender Repair at Central IEC in Charlotte. To receive state approval for a program from the State Board of Education, local boards had to show evidence of need by completing an occupational survey. Programs were need-based and proposals had to demonstrate at least 15 persons per year would participate in each occupational area (Regulations Governing the Establishment of Industrial Education Centers, 1958).

There were 11,099 students enrolled in the first year (1958-1959) of the IECs' operations. This number jumped to 34,000 students four years later (1962-1963), indicating a rise in their popularity of the postsecondary vocational training in the local schools (Lochra, 1978, p. 46). By the early 1960s, 20 centers (see Appendix A) were approved in North Carolina, while the budding community colleges in the state struggled (Wescott, 1998). The quick growth shows clearly, the IECs satisfied a need for vocational training in North Carolina before the community colleges were firmly established. Several of the IECs (see Appendix A) actually became future community colleges. This history, including where and when each center was created, will be explored further in this study.

Additional political developments in the State of North Carolina helped promote the growth of the centers and community colleges, including the election of democratic Governor Terry Sanford. Sanford, another strong supporter of public higher education in NC, announced the implementation of the Carlyle Commission in 1961. It was the Carlyle Commission members including Dallas Herring and President of the University of North Carolina William Friday, that recommended the state system of comprehensive community colleges be developed (Wescott, 1998). State Superintendent of Public Education Charles F.

Carroll also encouraged the idea of community colleges to allow more opportunities for students (Lochra, 1978).

The State General Assembly passed the first Community College Act in North Carolina, in 1957. It was also during 1957 that funding was provided for the formation of the initial industrial education centers. The history of these educational institutions in North Carolina has been intertwined since the 1950s. Both the community colleges and the industrial education centers have played critical roles in the State of North Carolina, as well as their counterparts elsewhere around the country.

The importance of community colleges to the American education system and economy cannot be overstated. Today all but approximately 85 community colleges are publicly funded. Community colleges account for about 40% of undergraduate enrollments in America (Bok, 2015, p. 11). In North Carolina specifically, community colleges in the fall semester of 2017 accounted for 100,095 full-time enrolled students. According to the University of North Carolina System website, the 17 campuses in the state system serve approximately 225,000 students (The University of North Carolina System, n.d.). The number of community college students accounts for approximately 44% of undergraduate student enrollment. At the community college level, 83,366 of these students were in curriculum programs, while 11,800 were enrolled in continuing education (North Carolina Community Colleges Summary Report Fall 2017). Central to these community colleges in North Carolina is workforce development (industrial and vocational training upon which North Carolina Community Colleges were founded). As of 2010, in North Carolina 49 of the 58 community colleges are located in “rural” cities. Rural is defined by the US Census Bureau as cities or towns with less than 50,000 people. The community colleges located in

the five highest populated cities are Central Piedmont Community College in Charlotte with a population of 731,424, Wake Technical Community College in Raleigh (403,892), Forsyth Technical Community College in Winston-Salem (229,330), and Fayetteville Technical Community College in Fayetteville (200,564). The five community colleges in the lowest populated cities are Brunswick Community College in Bolivia (143), Bladen Community College in Dublin (338), Pamlico Community College in Grantsboro (688), James Sprunt Community College in Kenansville (855), and Haywood Community College in Clyde (1,223) per the US Census Bureau (See Appendix A for populations by city). In addition to the 58 primary community colleges in North Carolina, there are also 124 remote sites (“NC Community Colleges Remote Locations Map,” n.d). Particularly in North Carolina, where the majority of community colleges are located in rural areas, the sort of workforce development and career training available is critical in maintaining local economies and infrastructure. As such, understanding the history of the early technical education centers in the state will help explain their initial and continued importance as a critical component of North Carolina community colleges.

Impact on the Field of Higher Education

Since the middle of the twentieth century, community colleges have grown in importance in America as places to train and re-train the workforce, prepare students for further study, and provide an economical alternative to pricier education options. According to Arthur M. Cohen and Florence B. Brawer, a major reason states developed community colleges was that “several prominent nineteenth- and early-twentieth-century educators wanted the universities to abandon their freshman and sophomore classes and relegate the function of teaching adolescents to anew set of institutions, to be called junior colleges.

Further, most of the early public community colleges acted as extensions of secondary schools” (Cohen & Brawer, 2008, p. 7-9), as was the case with industrial education centers in North Carolina.

Community colleges have typically seen increased enrollment due to the following factors: “older students’ participation; financial aid; part-time attendance; the reclassification of institutions; the redefinition of students and courses; and high attendance by women, low-ability, and minority students” (Cohen & Brawer, 2008, p. 44-45). Serving students with limited options is at the heart of what community colleges were designed to do, “For most students in two-year institutions, the choice is not between the community college and a senior residential institution; it is between the community college and nothing” (Cohen & Brawer, 2008, p. 58). During economic downturns, community colleges provide an opportunity to help individuals train for career changes and become more competitive job seekers (Van Noy, Heidkamp, & Manz, 2013).

Many of the skills students acquire today to be workforce ready in North Carolina community colleges are rooted in the same philosophy of vocational and industrial training programs begun in the 1950s with the establishment of Industrial Education Centers (IECs). The history of these centers has largely been ignored, or included as part of larger studies of the North Carolina Community College System itself. Providing research specific to the IECs places them in their rightful place as critically important to the foundation of the System in North Carolina.

This study aids in filling the areas of information that are missing in the community college history of North Carolina, which is an important part of the larger history of public education in the state and nation.

Chapter 1 has provided a background of the general history of higher education in America and North Carolina, as well as some information about the Industrial Education Centers in North Carolina. Chapter 2 will explain the methods used in this study, followed by a review of relevant literature and further analysis and historiography of the IECs.

CHAPTER 2: METHODS

Introduction

In undertaking the study of the history of industrial education centers in North Carolina, approaching this research from a historical methodological approach is germane to the project. There are a variety of historical approaches and perspectives to consider. I have outlined a number of the best known and highlighted the methods that are most pertinent for this project.

Defining History

In his 2012 text, *Essaying the Past*, historian Jim Cullen attempts to explain to students what history is and what it is not. Cullen writes:

What history has to offer is not simply knowledge of the past, or an awareness of recurring themes in people and societies, but rather a kind of lens – specifically a consciousness of time – that can heighten and intensify one’s experience and desire to express oneself. (p. 13)

It is this heightening of experience and consciousness of time that can be enhanced through the study of history, and in particular, the role of key events and people. Uncovering information about the development of the IECs enhances our knowledge and understanding of a largely unexamined piece of the history of adult and community college education in North Carolina and can provide an a lens for understanding industrial education centers.

Historical Practice

In her book of selected essays, historian Barbara Tuchman relates some of her thoughts about practicing history. She states that being in love with your subject is indispensable in writing good history (1981). Though this may seem to be a frivolous way to

embark on important scholarly work, I agree wholeheartedly with Tuchman. This passion for one's subject is an essential element of doing history that matters and has meaning.

Tuchman also relies exclusively on primary sources, stating:

Bias in a primary source is to be expected. One allows for it and corrects it by reading another version. I try always to read two or more for every episode. Even if an event is not controversial, it will have been seen and remembered from different angles of view by different observers. (p. 19)

Sources of Data

It is useful to have a working understanding of the types of information that will be utilized in this historical study. Two types of historical data are necessary in undertaking such work: primary and secondary sources. Primary sources involve “the oral or written testimony of eyewitnesses ... they may include documents, photographs, recordings, diaries, journals, life histories, drawings, mementos, or other relics” (Berg, 2007, p. 268-269). For the purposes of this study, these artifacts will largely be letters, meeting minutes, newspaper articles, government documents, personal papers, and interviews. As far as secondary sources, these involve “the oral or written testimony of people not immediately present at the time of a given event. They are documents written or objects created by others that relate to a specific research question or area of research interest.” (Berg, 2007, p. 269). These largely include dissertations, books, and articles written from the standpoint of an individual who was not present at the historical events, meetings, or other situations of the time periods being discussed.

This study relies on several key dissertations and texts, which have used primary sources for much of their information. As history is written with some inherent bias, it is

important to revisit these primary source documents to insure any information used from them is relevant to this particular study, and is interpreted as accurately as possible.

Social History

One of the lenses through which this study is produced is that of social history. Social history rose to prominence in Europe and America in the years following World War II. This history of normal people and their everyday lives was especially popular in America during the Civil Rights and protest movements of the 1950s and 1960s. Themes and topics of research were often politically charged in nature. This differed from the social history that grew in popularity in France at the same time, commonly referred to as the Annales School. Annales historians did not agree with political motivations for writing history and conducting historical work. Fernand Braudel is one of the most prominent Annales historians. Braudel embraced the idea of the *longue durée*, or the long view of history, rather than being chained to immediate contexts and circumstances. He was also a strong supporter of the sciences and embraced a scientific approach to the study of history (Cheng, 2012). Though much of the history surrounding the formation of industrial education centers and community colleges is political in nature, it will be important to present this history in a straightforward manner with as little bias as possible.

Social historians in America often wrote about groups who had previously been overlooked or whose history was overshadowed by Eurocentric perspectives. W. E. B. Du Bois, who exposed the black experience in American Reconstruction, is one well-known example. Marginalized groups including women, blacks, and Native Americans became popular topics for historians dissatisfied with 1950s consensus history (Cheng, 2012). It is clear that many of the citizens of North Carolina who have most benefitted from community

college and industrial and technical training have been marginalized. They were historically from rural areas in the State and did not have easy access to higher education. The advent of the IECs and community colleges helped to level the playing field for these individuals.

Today, due to its accessibility based on low cost and location in each of North Carolina's counties, the NC Community College System provides opportunities for students from all walks of life. The System is also committed to meeting students where they are and helping them achieve their goals. This commitment speaks to the needs of individuals who may face challenges including learning differences, low income, or lack of job skills, among others, that may not be able to attend higher education institutions. IECs and community colleges have served underrepresented groups from their inception in the mid-twentieth century.

In keeping with this theme of studying less represented and marginalized groups, Jesse Lemisch was a proponent of the emerging "New Left" history. He, and other historians like him, intended to write history that uplifted the powerless. New Leftists sought social change along with a desire to be objective historians (Cheng, 2012). This form of history is also part of the study of IECs and community colleges as agents of social change. Education is a way to advance the socioeconomic possibilities for people who might otherwise not have opportunities to improve themselves through higher paying or more stable jobs. This is an enduring force behind the growth and importance of community colleges in North Carolina.

Social history is a useful perspective through which the history for this study is viewed. Though it is not my intent to bring about social change, many of the people impacted by improvements in industrial education in North Carolina have been economically and socially depressed and thus marginalized by history. It is important to shed further light

on the significance of industrial education as a means to assist these people and build the larger community college system, which continues this critical work today.

Method of Study

This study is largely based upon a model of historiographical interpretation. The process of doing a historiography involves beginning with an idea, in this case research questions, then searching for background information to complete a literature review. This review reveals what materials are available, as well as what is lacking related to the subject one wishes to examine. The topic or questions might be further refined following the completion of this review. Primary source documents are then located and data needed to fill in perceived gaps in the historical record will also be noted. After assessing the validity of sources, the data is developed and a narrative is drafted which addresses and attempts to answer the research questions (Berg, 2007). In this way, historiography is not unlike other forms of social science in that it utilizes research and data to address questions.

METHODS EXECUTED AND ANALYSIS FOR THIS STUDY

For this study, research questions for this study were selected, and a literature review was conducted, revealing several useful resources.

Primary Documents.

Primary source documents were located online and many remain in the footnotes and reference sections of the dissertations included in the literature review. Though many documents from such libraries exist online, some physical trips to these institutions were necessary to make use of all available documents. Surveys of these documents were made in order to determine their potential use for this research. Additional supplemental secondary

books and articles were located, largely from online educational institution repositories, particularly university libraries.

Secondary Sources.

The initial historical framework for the IECs came from secondary sources, largely in the form of theses and dissertations. These provided the basic timeline accepted among scholars who have worked with some of the primary sources relevant to this study. After becoming familiar with this general timeline of events in developing the IECs, it became necessary to assess the potential information contained in the Dallas Herring Papers, housed at North Carolina State University.

Data Analysis.

The papers are cataloged and boxed with general topics summarized for each box, making the process of finding pertinent information relatively simple. A list of potentially useful boxes was made by determining which boxes had subjects that seemed likely to address the research questions of this dissertation. The boxes were requested in small batches, then each document within the boxes was examined by hand and digitally photographed. Notes were made about the potential use of each document. For example, letters from the early 1950s between Dallas Herring and legislators and school board members provide evidence of why and where the first IECs were located. They also reveal Herring's intentions for the IECs, the perceived deficits in the public school system, sources of funding, and other pertinent information.

This work relies heavily upon the contents of the Dallas Herring Papers for several reasons. One of the most obvious is that Herring kept an incredible amount of correspondence, notes, and other documents, thus providing voluminous amounts of

information on the subject of public education in North Carolina. These papers became part of the NCSU library and thus available for public research and use. Because of Herring's role as a recognized leader in higher education, as well as his official capacity as director of the State Board of Education and member of numerous committees, his letters, speeches, and notations provide valuable insight into the developments which took place during the 1950s and 60s. He was widely sought after for his views and opinions as an expert in the field.

Because of the volume of information contained in the Dallas Herring Papers, one of the challenges for researchers is to account for the fact that most of these documents are written from Herring's perspective. Though there are letters to Herring from others, as well as newspaper clippings, meeting minutes, and other resources, it is important to remember it exists today because Dallas Herring wrote it or believed it was significant enough to hold onto.

Some of the challenges included determining what was relevant to the IECs and where to draw a line between that information and the information that only related to public schools or colleges. Many of the letters and memos refer to "Boards" or decisions and bills without using the proper name of such groups or actions. In some cases this made it difficult to determine specifically what the authors of each document were referring to.

In crafting answers to the research questions, I relied upon primary sources as much as possible, in the manner of historian Barbara Tuchman, as discussed previously. Relying upon these sources helps to reveal as much factual information as possible while filtering out the unintended biases of the historians and scholars who have interpreted them over the years.

This is the basic outline for conducting historical research and has been widely used and accepted for many years. There are no flaws or concerns, other than the need to be as thorough as possible in discovering all relevant and useful resources that should be included and being aware of the biases of historians conducting this research.

Layout of Dissertation

This study follows a format often associated with historically based dissertations. It begins with an introduction in which the study is presented, including the problem addressed and its significance to the field. This is followed by a discussion of the context and history of industrial education centers in North Carolina. This contextual information is among the most critical and lacking thus far in studies discussing the IECs. Providing an outline of the social, economic, and political issues at play in the state during the mid-1900s is essential to better understand why the centers were needed, how they came to be created, and the key players involved in their inception. A description of these founders and their contributions to the formation of IECs will follow. This section will include extensive information about the role of Dallas Herring and Governor Luther Hodges, the major leaders in formation of the IECs. Herring is commonly accepted as the father of the North Carolina Community College System and did much of the initial planning and discussing with local public school and state leaders to begin the process of developing the Industrial Education Centers. Governor Hodges was a strong supporter of Herring and his ideas about education in North Carolina, and was also a proponent of the IECs.

The movement to develop and open the IECs and community colleges in North Carolina was led almost entirely by men. The governors of the State of North Carolina and leaders serving on the State Board of Education were exclusively male during these years.

Almost all correspondence discussing the IECs occurred between men who were teachers, politicians, board members, and other prominent officials.

A discussion of the significant events in the creation of the centers, followed by the process in developing them follows. This includes information about where the centers were located and the reasons for these choices. Though many figures in the North Carolina Community College System over the years have claimed their schools were the first industrial education centers created, this information has largely been undocumented. It is also subject to interpretation. Multiple institutions claim that they came first. Part of the goal of this study was to clarify the order of the establishment of each IEC. I hoped to uncover evidence to indicate the following details for each site: when teaching began, when brick and mortar buildings were constructed, and when students were initially admitted. Some of these details were difficult to obtain or clarify, leaving room for future scholarship. Finally, the outcome of the Industrial Education Centers is discussed. The IECs grew into community colleges during the 1960s, thus paving the way for the modern community college system in North Carolina. The legacy of the IECs and the implications for future research are discussed in the final chapter.

Research Design

While this study is largely a historiography, it was completed in partial fulfillment of a social science degree, thus it also relies on qualitative research design. When determining the appropriate research design, I consulted John W. Creswell's *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2009). In his preliminary considerations, Creswell suggests researchers address the following: the philosophical worldview proposed in the study, a definition of basic ideas of that worldview, and how the

worldview shaped their approach to research. In approaching this study, I defined my worldview based upon my experiences in two primary areas of training and experience: history and community college education. The majority of my experience as a researcher has been qualitative in nature, predominantly focused on American history and the history of community colleges. I also recognize the significance of my advocacy for community colleges and their students, as well as my experience teaching in the North Carolina Community College System. Thus, my worldview shapes this study as I approach it from a historical perspective and with the understanding that I am a supporter of community colleges.

Joining my experiences with a qualitative approach is suited to this study because it requires the utilization of open-ended questions, interview data, document data, and text and image analysis to address research questions (Creswell, 2009). Creswell's (2009) modified questions to design research are:

1. What knowledge claims are being made by the researcher (including a theoretical perspective)?
2. What strategies of inquiry will inform the procedures?
3. What methods of data collection and analysis will be used? (2003, p. 5)

The knowledge claims used for this study are mainly constructivist in nature. According to Creswell (2009), one of the tenants of this knowledge claim is social and historical construction. Though this study did not require research on human subjects, it depended heavily upon socially constructed concepts and historical themes developed by humans over time (Creswell, 2009). These concepts and themes are based on the evolution of public education in America, and particularly vocational and technical training. The way

people in communities as well as government leaders view such training was also important to consider.

Research conducted to understand and interpret these topics consisted of locating and examining primary and secondary historical sources, which were evaluated for relevant content. Research approaches for this study were qualitative in nature, as they rely upon historical research methods. Creswell's research methods proposed in his framework for research model consist of questions, data collection, data analysis, interpretation, and validation (Creswell, 2009). These methods work well with this historically based dissertation, as I sought to address research questions through the collection and assessment of primary and secondary documents.

Research Questions

This research is based upon the previously disclosed research questions:

1. What role were the Industrial Education Centers in North Carolina originally intended to serve and who were the major contributors and influencers?
2. How did the formation of the initial IECs contribute to the growth of the North Carolina Community College System?

Much of what is now known about qualitative research was developed during the 1960s and 1970s, largely in the field of educational evaluation. One of the earliest proponents of this sort of inquiry was educational psychologist Lee Joseph Cronbach. In 1963, Cronbach famously stated that researchers should “reconceptualize evaluation – not in terms of a horse race between competing programs but as a process of gathering and reporting information that could help guide curriculum development” (Madaus, Scriven, & Stufflebeam, 2012, p. 12). Others who supported Cronbach's views that experimental and

psychometric evaluation methods were not useful included Robert Stake and Egon Guba, among others (Goodyear, Barela, & Jewiss, 2014).

Bruce L. Berg explains that qualitative techniques “might lead researchers to believe in the adequacy of any procedure resulting in nominal rather than numerical sorts of data ... The purpose of research is to discover answers to questions through the application of systematic procedures” (2007, p. 8). Though this study did not rely on direct evaluation of human subjects, it depended largely on primary source documents, which relate the thoughts, ideas, plans, and interactions of individuals. The study was systematic in that it utilized as much primary documentation and secondary evidence available to draw the most correct and unbiased conclusions possible about the history of Industrial Education Centers in North Carolina. Though there is always some amount of inherent bias in research, using a historical approach based on primary sources is a way to rely as heavily as possible on the words and actions of the people most closely involved with the topic being studied. For example, reading the letters drafted by W. Dallas Herring about the formation of the Industrial Education Centers reveals the challenges he faced, the people he corresponded with, and his goals and ideas. Utilizing such sources is the closest historical researchers can get to being present during the events they study. The pursuit of historical information is similar to the techniques described by Cronbach and other practitioners and scholars in social science fields, and is discussed further in the next section.

Historiographical Methods

This study relies heavily upon historical research, or historiography. According to Berg, “From a social science perspective, history is an account of some past event or series of events” (2007, p. 264). The historiography is the amassing of information relevant to these

events in a form that is accessible and offers a theoretical framework for understanding what occurred. Further, “understanding the historical nature of phenomena, events, people, agencies, and even institutions is important. In many ways, it may be as important as understanding the items themselves” (Berg, 2007, p. 266). Approaching the primary and secondary sources pertinent to this study enhances our understanding of the significance of Industrial Education Centers in the history of North Carolina’s Community College System. The relationship of the people, places, and events leading to the creation of IECs is central to this study, and is best understood by reading and interpreting the primary source documents from when they were established in the 1950s and 1960s.

Though largely historical in nature, this study was written using American Psychological Association (APA) style, as it is part of the fulfillment of a degree in education. This included the use of parenthetical citations throughout the work and a list of works cited at the end.

Historiography of Education in North Carolina

The historiography of education in North Carolina is rich. Many books, dissertations, and primary sources exist which reveal its significance over several hundred years. Despite the voluminous accounts of public education from primary through secondary levels and beyond, the historiography related to community colleges, and in particular, their predecessors, the Industrial Education Centers, is severely lacking. Much historical work has been conducted related to public education, though it is largely focused upon grade schools. Filling the significant gaps regarding public education at the secondary level will help us to better understand the role of IECs and community colleges in contributing to the economic and political history of North Carolina. Contributing to this history of the IECs will also

promote better understanding of how to combat current and future economic and employment challenges in the state. In this way, uncovering and presenting the history of the IECs will benefit scholars of educational history as well as practitioners working in the community college field.

Conclusion

North Carolina boasts one of the strongest community college systems in the United States. Numerous scholars have undertaken projects recounting the history of the system as well as that of individual community colleges. The most relevant and significant studies to date were undertaken by Joseph Warren Wescott, II, largely in his work in graduate school (1998, 2000, 2005). There remains a deficit in this research in the area of the initial Industrial Education Centers, which served as the precursors to the community colleges established in the 1950s and 1960s. These centers were established after university extension centers and public junior colleges in North Carolina.

As a history student who has previously completed an undergraduate honors thesis as well as a masters-level thesis, I felt equipped to undertake this historiographical study of Industrial Education Centers in North Carolina. Though I have some knowledge of the history of community colleges based upon previous research and education through my current doctoral program, much of this information is new to me and presents challenges and opportunities to impact the field of higher education in North Carolina. Following proven methods of historiography hopefully provided a study that is rich in information and should be useful to those interested in the history of North Carolina's Industrial Education Centers. It is also my hope that practitioners in the North Carolina Community College System will have a better understanding of the origins of the system, and will continue to focus on many

of the founding principles of the IECs as they guide the future of the state's community colleges.

This chapter has explained the methods and approach applied to this study. It has provided a discussion of how historical methods and qualitative research design were used to reveal information about the development of the Industrial Education Centers in North Carolina. The format of a historically based dissertation is somewhat different from those completed for most students in this EdD cohort in Adult and Community College Education. Thus, explaining the way the research questions were devised, how material is presented and the methods of historical research employed are useful in aiding the reader in their understanding of the study. The next chapter contains a review of literature relevant to answering these queries.

CHAPTER 3: LITERATURE REVIEW

This chapter contains a review of available literature relevant to the study of Industrial Education Centers. It is organized thematically based upon the areas of study significant to this project. Sources consulted include published works related to the history of higher education, including community colleges and other two-year institutions such as technical schools and junior colleges, in America and North Carolina. This review provides general information about this history, creating a framework for the development of Industrial Education Centers in North Carolina. The majority of the information related to the IECs in North Carolina came from primary source documents located in the William Dallas Herring Papers located at North Carolina State University. A more detailed examination of these primary sources occurs in Chapter 4.

A significant amount of literature exists surrounding the history of higher education in North Carolina and the larger United States. Several pieces of literature have direct and significant relevance to the history of Industrial Education Centers in North Carolina. A few key dissertations and other published texts provide some discussion of the history of the centers, while extensive primary source documents also exist in the form of personal notes, correspondence, and other materials. Utilizing primary source documents in concert with the extant literature regarding the history of community colleges in the United States and within North Carolina helps to better understand the formation of such education centers and their impact upon today's community colleges. This history also provides some guidance in how the State of North Carolina has helped its citizens train for better and new careers, which could shed light on current employment challenges faced by its citizens.

Though much information exists about adult education in America, and, more recently, publications regarding the community college movement, there seem to be few resources expressly devoted to the history of technical or industrial education centers, with the exception of the work completed by Joseph Warren Wescott, II (1998, 2000, 2005). Further, many of the more modern publications about community colleges and higher education focus on recent research trends such as student access and retention. While these current topics are important to modern community colleges, there seems to be less interest from today's historians and practitioners in uncovering the history of community colleges and similar institutions. This history is highly significant in demonstrating the true roots of North Carolina's community college system and can aid current practitioners in steering the direction of these institutions so they can best serve their students and communities. Thus, this study fills a gap in the existing literature regarding how and when the industrial education centers were created in North Carolina, as well as defining potential future research areas and advising current advocates and leaders about potential goals and directions for their institutions.

Several seminal works exist which outline the history of community colleges in the United States as well as in North Carolina, though technical and industrial education centers are usually not discussed in great depth (Brawer, F. & Cohen, A., 2008; Gordon, H., 2014; Senger, K., 1974; Wescott, J., 1998 and 2014; Wiggs, J., 1989). Dissertations and theses completed at colleges and universities in the state provide insight into the North Carolina Community College System as well as the formation of individual community colleges and other programs (Barrier, L., 1977; Little, J., 2003; Lochra, A., 1978; Mayberry, L. 1972; Wescott, J., 1998 and 2005). Some of these works touch on early public education

institutions in North Carolina, including technical education centers, though few are devoted specifically to them: Barrier (1977) *A history of industrial arts education in North Carolina, 1919-1977*; Little (2003) *South Piedmont Community College: Historical description and analysis of events leading to the establishment of a new community college in the North Carolina Community College System*; Lochra (1978) *The North Carolina Community College System: Its inception – its growth – its legal framework*; Senger (1974) *A history of the community college movement in North Carolina, 1927-1963*; Wescott (2005) *A vision of an open door: The establishment and expansion of the North Carolina Community College System*; Wescott (1998) *Competing visions: Herring and Hodges and the conception of the community college system in North Carolina*; Wescott (2000) *Wescott (2014) Creating success: The North Carolina Community College System*; and Wiggs (1989) *The community college system in North Carolina: A silver anniversary history, 1963-1988*.

This review focuses upon a few key works that have contributed to the larger field of community colleges in America and North Carolina and is divided thematically into the following sections: Higher Education in America, Community Colleges in America, Community Colleges and Public Education in North Carolina, and Key Figures in the Field. Introductory information about the texts appears in this review under topical headings. More specific material from each text that is relevant to this study is located in Chapter IV: History of the Industrial Education Centers.

Higher Education in America

A selection of key works were consulted to provide background information about the history of American higher education. This is a broad topic with a large amount of research and publications focused upon its various subject areas. The following is a general

discussion about a few of these texts for the purpose of providing some contextual information about the history of higher education.

Understanding the history of various types of colleges in America is a useful starting point when researching specific types of higher education. Christopher J. Lucas's 1994 work, *American Higher Education: A History*, situates the community college movement alongside the other developments in education from its beginnings in antiquity to the post-war era into the 1990s. The text is divided into four parts: Historical Origins and Antecedents, American Higher Education: The Formative Period, American Higher Education: Maturation and Development, and Contemporary Challenges and Issues. Lucas evaluates key movements and devotes some attention to specific types of American institutions including women's colleges and black colleges. Regarding American education in the early Twentieth Century, Lucas states,

Discussions of academic ideals and goals at the turn of the century seemed markedly less polemical, more restrained, more inclined to point to areas of agreement than formerly. Statements of academic purpose became hazier, less distinct, more temperate in their expression. The mood now seemed to be one of incorporating every desirable goal within a common institutional framework. Thus, commentators tended to speak in generalities about the value of a college education: about how it afforded contact with a cultural legacy, fostered exemplary habits of self-discipline and restraint, and promoted professional skill and competency (2006, p. 193-194).

Lucas further explains the literature from the time period indicates a desire of colleges to attempt to be all things to all people, an impossible task to be sure. Lucas continues, "If the old-time college typically was defined by teaching and a fixed curriculum

still dominated by classical languages and literature, the new university defined itself in terms of research and a bewildering array of modern utilitarian programs of study ... Above all, as the old college was small, the university large” (2006, p. 194). Indeed, economic titans of American history leant their fortunes and names to a number of colleges in the late 1800s and early 1900s (Thelin). This assessment describes the sprawling public colleges so common across the country. Lucas accurately explains the growing dominance and popularity of public colleges during the Twentieth Century in America. Unfortunately, a large number of students have been unable to attend such schools due to distance, finances, or other reasons. This left a clear space for more affordable two-year options such as community colleges providing specific, focused training in technical fields.

Like Lucas’s text, John R. Thelin’s 2004, *A History of American Higher Education*, currently in its second edition, republished in 2011, is a well-researched account of higher education in America. This book is often considered one of the most comprehensive texts on the subject, covering major shifts and trends over time, as well as more recent topics such as governance and dealing with the economic downturn. Thelin discloses a shift in the way colleges approached learning during the 1700s and it becomes clear in reading his work, how many of America’s founding leaders came to their political perspectives. Thelin wrote much of the scholarship in America was based on the teachings in England and Scotland, stating, “Political oratory based on classical allusions and sound logic helped to develop the critical analytic skills that defined political economy as a discipline, a discipline that would be central to the college education of future statesmen in the New World” (Thelin, 2004, p. 19)

Though there were some early “public” colleges in America, there was not a drive toward a national college system. As Thelin points out, however, there were two service

academies: the United States Military Academy at West Point, founded in New York in 1802; and the United States Naval Academy at Annapolis, Maryland, founded in 1845. These schools had federal support at a time when the United States government also delved into areas of scholarship and history with the establishment of the Smithsonian Institution in 1846 (Thelin, 2004).

More recently published, *The History of American Higher Education: Learning and Culture From the Founding to World War II*, was written by Roger L. Geiger and published in 2015. Geiger takes a unique approach to this history by discussing regional trends and variations. His discussion of the development of higher education in the South is particularly relevant to this study.

Understanding the larger history of American higher education is important to students and researchers seeking a greater understanding of the place of community colleges within this larger context. Lucas and Thelin's books provide a solid foundation of the history of higher education as well as modern themes in this field.

Howard R. D. Gordon's book, *The History and Growth of Career and Technical Education in America* delves into the 1700s as the foundation for training American workers. Published in 2014, Gordon's text is the most comprehensive book on this subject. In its fourth edition, the book contains thirteen chapters ranging from the history of career and technical education in America to chapters covering leaders, legislation, and the role of special groups, workforce trends and concerns, issues and trends, and the future of this field. The text is geared toward students and contains appendices with a timeline, as well as a glossary. Chapters end with questions for review, educational resources, and references for additional reading. Images, charts, and graphs are found throughout the book, making it

highly accessible and interesting. Additional information about texts related to technical and vocational training is found in the following section.

Bailey, Jaggars, and Jenkins (2015) *Redesigning America's Community Colleges: A Clearer Path to Student Success* calls for a revamping of the way community colleges operate. The authors advocate that modern community colleges focus on higher quality programs rather than the earlier model of turning out as many students as possible at a low cost, thus better preparing them for the workforce.

Community Colleges in America

Joliet College in Illinois is commonly regarded as the first community college in the United States. It was founded in 1901 and came out of the Joliet Township High School in Chicago (Lochra, 1978).

With their tremendous growth since the 1950s, community colleges have rightfully become the subject of numerous publications. A few of the essential books that guided my research are discussed in this section.

For many years in America, terminal and transfer students were served by junior colleges. John Thelin explains “community colleges” came to have this name because they were typically aligned with larger four-year colleges to which students transferred. In states such as California, these junior colleges generally received public funds. Thelin states,

Data from the University of California indicate that from about 1955 to 1965 those students who opted to transfer from community colleges to upper-division bachelor degree work at the state university did well in terms of grade-point average and degree completion – or at least as well as their counterparts who entered the university as freshmen. This profile seemed to confirm the community college's

promise as a transfer institution. However, the picture is incomplete because only a small percentage of community college students sought such articulation or transfer (Thelin, 2004, p. 301).

Thelin further explains that it was unclear during this time what precisely students sought in the massive network of California's community colleges. The 1950s and 60s were also a critical time in the development of community colleges in other states, including North Carolina.

Among the more essential texts related to community colleges is *The American Community College* by Arthur M. Cohen and Florence B. Brawer, originally published in 1982. Now in its 6th edition, this book has been completely revised and has an additional author: Carrie B. Kisker. The 5th Edition, published in 2008, is utilized for this study. The text is divided into thematic chapters including: Students, Faculty, Finances, Instruction, Student Services, Vocational Education, Developing Education, and Toward the Future, among others. *The American Community College* was written during a critical time in the growth of community colleges, as the 1980s could be viewed as a peak in the growth and support for community colleges around the country.

This book is useful as a comprehensive guide to modern community colleges in America. It would be of great use for a practitioner in the field, as well as a text for students learning about how community colleges work. Cohen and Brawer outlined the history of community colleges briefly at the beginning of the book, but focus on the roles of administrators, offices, and the government for the majority of the text. The chapter most relevant to this study is Chapter 1: Background: Evolving Priorities and Expectations of the

Community College. It focuses on the roots of American institutions whose primary purpose was to train workers during the Industrial Era.

The Community College and its Critics, published in 1986, is part of the series *New Directions for Community Colleges*. Though community colleges are often lauded today as essential components of the American education system, this collection of essays provides insight into the issues faced by these institutions in the 1980s. Critics discuss the economic benefits to industries but lack of support for students, fewer students transferring to four-year colleges, issues faced by minorities and women, among other topics. This text aids in understanding the historical context of community colleges and the challenges they have faced only a couple decades into their inception.

The ASHE Reader on Community Colleges was originally published in 1994 and is currently in its fourth edition. The third edition, published in 2006, was utilized for this study. The ASHE Reader consists of six subject areas: *The Varieties of Community Colleges*; *Theoretical Foundations*; *Finance, Governance, and Administration*; *Curricular Missions*; *Faculty*; and *Students*. Each part contains several articles previously published in journals and books, and written by practitioners and scholars in the field of community college education. Most of the text does not provide much in the way of historical information, rather, it contains current studies and observations about contemporary issues in community colleges. Such knowledge is useful in understanding the current challenges and changes faced in recent years. Part II: *Theoretical Foundations* is most useful to this study as it delves into some of the reasons for the founding of American community colleges.

Chapter 6: *Community Colleges and the American Social Order*, Chapter 7: *The Community College: The Impact, Origin, and Future of a Contradictory Institution*, and

Chapter 9: The Community College: Educating Students at the Margin between College and Work, are most relevant as they all disclose historical information.

George A. Baker III's book, *A Handbook on the Community College in America: Its History, Mission, and Management*, is an additional resource that provides a larger context for the community college movement. The book contains insights from various practitioners and scholars in the field. In addition to historical context, the work also includes extensive information about theory and practice in the field of community colleges. Chapters most pertinent to this study include *Historical Development of the Community College*, *The Mission and Functions of the Community College*, *Curriculum and Instructional Development in the Community College*.

Baker's text is useful for scholars as well as those working in community colleges, particularly due to the inclusion of chapters related to resource development, leading and management, student development, external forces, and human resources. Those new to the field or others who are seeking guidance about their roles and functions in community colleges would find Baker's work helpful.

Rural Community Colleges: Teaching, Learning, and Leading in the Heartland, edited by Pamela L. Eddy and John P. Murray, provides chapters written by scholar practitioners in the field of community colleges. The text is an excellent primer for those with limited knowledge of community colleges as they exist in rural America, as well as those employed by such institutions. Useful information including how to advertise for and retain faculty and leaders, as well as connecting to the local and global environment are among the topics included. It also explores major challenges faced by such schools including limited financial, cultural, and technological resources, and offers potential solutions to overcome them.

Additional sources related to workforce development include *What Excellent Community Colleges Do: Preparing All Students for Success* by Joshua S. Wyner, (2014), and *Community College Leaders on Workforce Development: Opinions, Observations, and Future Directions*, published in 2017 (Rothwell, W., Gerity, P., & Carraway, V., 2017). A push toward clarifying and enhancing career-based outcomes for graduates is proposed in the 2015 book, *Redesigning America's Community Colleges: A Clearer Path to Student Success* (Bailey, T., Jaggars, S., & Jenkins, D., 2015).

The History and Growth of Career and Technical Education in America (2014) by Howard R. D. Gordon is one of the most comprehensive texts available about the subject. Gordon's research goes beyond information about key laws and acts in the development of CTE in America and explores lesser-available areas of inquiry, such as the role of women and special needs learners in career and technical education. Future trends, globalization, and areas of growth are also discussed, making this a timely and useful tool in understanding the history and trajectory of technical education.

Community Colleges and Public Education in North Carolina

North Carolina boasts a proud history of higher education. The state commonly claims its flagship university, the University of North Carolina as the oldest state university in the country. It was founded in 1795, though the University of Georgia received its state charter in 1785. UNC clings to its status as first because UGA did not enroll its first student until 1801 (Thelin, 2004, p. 45). Other four-year colleges followed throughout North Carolina and the larger South. It is worth noting, that though many states celebrate long histories of higher education, this is restricted to men. It was not until the first half of the 1800s that colleges enrolled women. This is a challenging history to define as female-only

institutions were often referred to as academies or seminaries rather than colleges (Thelin, 2004, p. 56).

Several doctoral dissertations exist which compile key primary sources and secondary documents into studies about North Carolina's community colleges. One such text is *William Dallas Herring: Leader in Five Issues in Education in North Carolina, 1955-1965* by Lena Pearl Dula Mayberry. This dissertation was completed in 1972 at North Carolina State University in Raleigh, NC. As a seminal figure in the North Carolina public education and community college movements, information about Dallas Herring is essential to any study of North Carolina Community College history. In her text, Mayberry discloses information about Herring's life and family history, including anecdotal snapshots from personal letters and interviews.

A History of the Community College Movement in North Carolina, 1927-1963 examines the early years of planning and discussion through the establishment of the first state community colleges. This dissertation by Kenyon Bertel Segner, III contains six chapters examining the first public junior colleges, political efforts in the post-war years, Industrial Education Centers, the Governor's Commission on Education Beyond the High School, a summary, and bibliographic essay. Subheadings within each chapter make this text easily searchable and accessible for students and researchers.

Of most significance for the purpose of this study is Chapter 3: *The Industrial Education Centers*. The chapter provides the history of legislation impacting public higher education as well as newspaper accounts, meeting minutes, interviews, and state publications. The inclusion of such primary source documents is essential in understanding this history and interpreting it as accurately as possible.

Lynn Pickens Barrier's work, *A History of Industrial Arts Education in North Carolina, 1919-1977*, provides information about the early educational opportunities available to adults in the state. This 1977 dissertation from North Carolina State University discloses the need for professionally trained industrial arts teachers as well as better training for industrial arts students in North Carolina. The book contains tables, figures, an introduction, research and methodology, and the history of this form of education in North Carolina.

Though Barrier's dissertation does not directly address the development of industrial education centers for adults, it contains valuable information about the need for industrial education during the time period these centers were established in the state. A significant amount of attention is paid to the establishment and actions of the North Carolina Industrial Arts Association, which was established in 1949 (Barrier, 1977). The book provides a useful context for those studying the history of the system and development of technical education in the public sector of North Carolina.

Albert Pultz Lochra's 1978 dissertation, *The North Carolina Community College System: Its Inception—Its Growth—Its Legal Framework*, is often cited for its comprehensive look at the formation of the System. It contains several chapters relevant to this study, including: *The Beginning of the Community College Movement*, *Responses to Building Pressures for Postsecondary Education*, *Industrial Education Centers—An Interim Period*, and *The Philosophical Foundation of the Community College System*, among others. Lochra discusses numerous movements and individuals that contributed to the growth of public education in North Carolina, dating back hundreds of years. He provides a solid

historical context from this past to more recent history in which to understand the formation of the state system.

Lochra's text is highly readable and contains useful appendices including extensive statements by leaders in the North Carolina Community College movement, largely taken from interviews. The dissertation also contains charts with the basic historical information of the state community colleges at the time of publication. It indicates the years they were established, the initial institution names, changes in names, and years for these changes. Lochra's dissertation also serves as a useful model for this study as it is written from a historical perspective with chronological chapters.

The Community College System in North Carolina: A Silver Anniversary History, 1963-1988, by Jon Lee Wiggs began as a dissertation in pursuit of a doctoral degree from North Carolina State University. Regarding the way in which he approached this 1989 work, Wiggs stated in the preface, that it "deliberately avoided interviews and hearsay, reminiscences and vignettes. The choice was made not as a matter of preference, but in self-conscious awareness of the need to first establish a document-based foundation upon which such contributions can be erected" (Wiggs, 1989, p. ix). Wiggs attempted to create what he felt was a pure historical account of the development and growth of community colleges in North Carolina. His heavy reliance upon primary source documents lends credibility to his work, though he may have passed up on a remarkable opportunity to speak with some of the most influential people in the movement.

The book is divided into chronological chapters with each one focused upon a year from 1963-1988. It is a highly readable text that is simple to follow. The nature of its organization makes it a useful reference tool when examining events from a specific time

period. The back matter of the book contains indexes of dissertations, as well as subject, and names indexes. It is a book that is useful for any scholar studying the history of the community college system in North Carolina. Though some discussion exists in Chapter 1 related to developments in the 1950s, the book does not disclose early history predating the development of the Community College System.

James E. Little's doctoral dissertation, *South Piedmont Community College: Historical Description and Analysis of Events Leading to the Establishment of a New Community College in the North Carolina Community College System*, was completed in 2003. Though the information is specific to one community college, its format and style are historical in nature, making it a useful resource for this study. Little's chapters include an introduction, thematic literature review, methodology, findings, and conclusions.

One of the more significant works pertaining to this study is a doctoral dissertation completed by Joseph Warren Wescott II at North Carolina State University in 1998. Wescott's work, *Competing Visions: Herring and Hodges and the Conception of the Community College System in North Carolina* outlines the development of the system, largely focusing upon these two visionaries. The dissertation consists of seven chapters, including comparisons of Herring and Hodges, and a chapter highly relevant to this study: "The Vision: The Industrial Education Centers and the Community College Act of 1957." The indices and sources are also useful as they contain information about unpublished dissertations, personal papers of Hodges, and interviews with Herring.

Partnerships between community colleges and local industries are also discussed in the 2014 article, *A History of the Community College Internship Program at North Carolina State University* (Broadhurst, C., & Bartlett, J., 2014).

Key Figures in the Field

Several people contributed tremendously to the growth of public higher education in America and North Carolina. John Dewey was an early proponent of technical education in America, whose work impacted the development of community colleges and their predecessors. He believed vocational education should not follow the path of traditional higher education in which it seemed attainable only by the wealthy and elite (Gordon, 2014).

He stated:

It would give those who engage in industrial callings desire and ability to share in social control, and ability to become masters of their industrial fate. It would enable them to saturate with meaning the technical and mechanical features that are so marked a feature of our machine system of production and distribution. (Gordon, 2014, p. 316).

Dewey shunned eighteenth-century pedagogical notions that isolation was best for students in technical programs, believing instead in the importance of socialization and the teaching of skills in concert with one another (Gordon, 2014). According to Dewey scholar Svend Brinkmann:

In all of his action, Dewey regards thought as a kind of action. To think is thus to make a difference in the world, doing one thing rather than another, and the question of whether one thinks intelligently depends on the quality of the resultant difference. (2013, p. 13).

Over the course of his life, Dewey was a professor and writer of many subjects including philosophy, art, religion, politics, and pedagogy (Brinkmann, 2013). Dewey believed in the power of education and the importance of its role in social progress and

reform (Brinkmann, 2013). Dewey's socialist and progressive ideas about education have been read and followed around the world.

Clifford P. Harbour's 2015 book, *John Dewey and the Future of Community College Education*, provides a history of the development of community colleges in America including useful contextual information. Though other books have focused on the impact of John Dewey on public education, this text promotes following Dewey's ideals about developing individuals and encouraging a democratic society as critically important for the future of America.

Closer to home, Dallas Herring is a legend in higher education circles in North Carolina. He came from a family that valued education and loved learning. As a child, he established a local library at a grocery store and later served as a volunteer librarian at Rose Hill High School (Wescott, 1998). Herring attended Davidson College where he faced some discrimination for his rural upbringing. After college, Herring became president of his family's business and was elected mayor of Rose Hill at age 23. He was later elected to the Duplin County Board of Education and quickly became a well-respected administrator and champion of public education (Wescott, 1998). After serving a few years on the State Board of Education, Herring decided to return to his home county, where he felt he could better address the needs of local people, but was dissuaded by then Governor Luther Hodges, who promised support if Herring stayed on the Board (Wescott, 1998).

It was during the 1950s that Herring faced the greatest support and opposition for his goals of improving public education in North Carolina. Governor Hodges remained a staunch supporter of industrial training, though he and Herring disagreed about how to accomplish this. While Herring sought more of a liberal arts-based training to develop the

whole person, Hodges was mainly concerned with providing a ready work force for the growing industries in the state (Wescott, 1998).

As a member of the State Board of Higher Education, Herring was involved in the conversations about developing, funding, locating, and operating vocational training centers and new community colleges. Following legislative approval for Industrial Education Centers in 1958, Herring continued to push for the development of a State Community College System (Wescott, 1998). Under Progressive Governor Terry Sanford, Herring pressed the Carlyle Commission to produce a report advocating for the need of such a system. The 1963 General Assembly adopted the vast majority of suggestions in the report, finally bringing Herring's dreams to fruition (Wescott, 1998).

Herring's support of technical training, and perhaps moreover, his passion for educating students in rural North Carolina and preparing them for careers make him one of the most highly regarded and influential figures in the state's educational history. In a letter dated December 30, 1957, Herring wrote, "It is not enough simply to survive. We want our civilization to survive with us. To assure this we must keep public education responsive both to our traditions and to the changing times. It is not an easy task" (D. Herring, personal correspondence, December 30, 1957). In this and many other pieces of correspondence, Herring's passion for education in North Carolina is clear.

From a political perspective, Governor Luther Hodges was a key player in the early state community college movement, using his political position and clout to further the progressive idea of Industrial Education Centers in North Carolina. As a young man, he attended the University of North Carolina at Chapel Hill and was elected president of the student body and senior class. Following graduation, Hodges began work at Marshall Field

and Company mill in Leaksville-Spray, NC, becoming general manager of all their mills in 1938. It was at this time that he also served on the North Carolina State Board of Education (Wescott, 1998). Hodges became lieutenant governor of North Carolina in 1952, and governor in 1954 after the death of Governor Umstead.

As state governor, Hodges supported the industrial and vocational technical schools proposed by Dallas Herring. Though Hodges was in favor of training workers for North Carolina's industrial future, he did not agree with Herring about the necessity of a liberal arts foundation (Wescott, 1998). Though Herring could be viewed as the mastermind of career and technical higher education in North Carolina, Hodges was the governor who oversaw the formation of the initial Industrial Education Centers.

Conclusion

The study of Industrial Education Centers in North Carolina is an important and missing component in the history of the state community college system. Even the few existing dissertations that examine the system's history do not fully address the details leading to the formation of the IECs, or their early years of growth. They were not intended to do so. More research delving into primary source materials is required to fully explore and present this history, placing the IECs in an accurate and more complete context. Such documents are located in special collections including the University of North Carolina at Chapel Hill. Others exist as digital scans accessible online, and a few are still held in private collections. A full review of the Dallas Herring Papers, along with other primary sources, combined with information available in secondary publications will provide the historical documentation of the IECs that has been lacking since their inception in the mid-twentieth century.

Chapter 3 has provided an overview of key texts pertinent to and utilized in this body of research. Through understanding the key leaders and events in the development of the Industrial Education Centers, we can move toward a better understanding of why they were created. As precursors to many of the early community colleges in the state, this knowledge will help guide leaders in their decision making for the future of the community colleges in North Carolina, by better understanding the original intent and purpose of the IECs.

Chapter 4 will delve into the history of the Industrial Education Centers. It contains evidence in the form of research from primary source documents. These exist as letters, memos, notes, meeting minutes, unpublished booklets, and other materials that give us first-hand accounts of what was happening during the preliminary discussions about developing and building the IECs. It also helps explain what became of these centers as many merged with other institutions or became community colleges on their own. Examining these primary resources gives us the best opportunity to understand the reasoning behind creating the IECs and why they were so significant to the state.

CHAPTER IV: HISTORY OF THE INDUSTRIAL EDUCATION CENTERS

The Years Prior to Founding the IECS in North Carolina

President William Rainey Harper of the University of Chicago, a great proponent of college learning leading to applicable career skills, divided the university into a junior level, which offered associate's degrees, and a senior college in 1900 (Drury, 2003). This marked the beginning of a century in which two-year public education in America began to flourish in the 1900s. The first Associate of Arts degree was granted at the University of Chicago in 1900, followed closely by the establishment of Joliet Junior College, which grew out of Joliet Township High School in 1901 (Lochra, 1978).

The Smith-Hughes Act was passed in 1917, which provided federal funding for vocational education in public schools in the areas of industrial and trade education, home economics, and agriculture. A key feature of the Smith-Hughes Act was it provided federal funds, which could be matched with local money (Latta, 1990). Two-year colleges continued to open through the 1930s, partially fueled by the need for training of returning soldiers from World War I, as well as unemployment due to the Great Depression. Increased numbers of high school graduates also contributed, leading to enrollment in public and private junior colleges to rise from under 56,000 to almost 150,000 from 1929-1939 (Brint, 1989). The Carnegie Foundation for the Advancement of Teaching created a report on public education in California in 1932. Members of the panel were referred to as the Commission of Seven, and were primarily university administrators. The Commission's findings had a tremendous impact on California, and the rest of the United States, advocating for junior colleges that focused upon terminal education, rather than college preparation for transfer students

(Carnegie Foundation 1932). North Carolina's industrial education centers followed this recommendation as evidenced by their emphasis on vocational education training.

The 1940s were also a time that called for an increased need for technically trained workers. In the mid to late years of the 1940s, soldiers returning to America needed training and the passing of the GI Bill provided funding for soldiers to obtain postsecondary education. This made the 1940s a decade that witnessed tremendous growth in postsecondary education in America. Junior colleges were common in several states including Illinois, California, and New York (Drury, 2003).

By the 1950s, it was clear there were widespread deficits in the educational training and preparedness of young adults in North Carolina. A report to the North Carolina Advisory Committee entitled "Equal Protection of the Law in Education in North Carolina" was published April 6, 1961. The report stated that in 1950, "North Carolina ranked 47th among the states in the number of school years completed by a person 25 years of age or older. North Carolina ranked 48th in the percent of population 25 years and older with at least 4 years of high school. It ranked 41st in the percent of the population 14 years old and older able to read and write, and 44th in percent of population 25 years old and older with more than 4 years of schooling" (Equal Protection of the Law in Education in North Carolina by NC Advisory Committee April 9, 1961, p. 1-2). The glaring educational gaps between North Carolina and its southeastern neighbors, and the rest of the country, is staggering. The 1961 report further indicates that North and South Carolina received very low funding or expenditures per student in comparison with other states. North Carolina ranked 45th in the category of expenditure per pupil for 1960-61, with an average of \$240 spent. At the time of the report in 1961, schools in NC only expended 61.5% of the national average spent by

states on education (Equal Protection of the Law in Education in North Carolina by NC Advisory Committee April 9, 1961, p. 9).

According to United States Census records released in 1959, in 1950 North Carolina ranked 41st out of 48 states in illiteracy (Equal Protection of the Law in Education in North Carolina by NC Advisory Committee April 9, 1961, p. 17). This low rate of literacy and the lack of funding dedicated to education are worth noting as much of the support for IECs and community colleges was based on public funding and the need to provide education to rural areas of North Carolina. This data also indicates a lack of funding for the state's larger public education system. This is important because the IECs and community colleges will become part of the state public education system for North Carolina.

There was a perception, also supported by data, that North Carolina and the larger south lagged behind the rest of the country in educating adults. In a document entitled, "Education Beyond the High School," Leo Jenkins of Burlington IEC wrote,

"Neither teachers nor students will dedicate themselves willingly and knowingly to a pursuit of mediocrity. Whatever the academic status of any of our institutions may be at the present time, an environment must be provided in which hope and the exercise of initiative are possible. As mentioned in the Commission on Goals for Higher Education in the South, we must cast away forever the traditional double standard according to which southern institutions are compared only with others in the region. Within North Carolina, we must neither initiate nor encourage a double or triple standard, but strive for excellence in all institutions." (Education Beyond the High School, n.d.)

The need for additional education and training was also apparent based on the median number of school years completed in North Carolina as of 1950. According to the Census, for “white students,” the number was 8.6, while for “nonwhite students” it was 5.9 (Equal Protection of the Law in Education in North Carolina by NC Advisory Committee April 9, 1961, p. 23). North Carolina had a long and difficult road ahead in improving public education at all levels and that striving for equitable educational outcomes was needed.

L.H. Jobe, editor of the *Public School Bulletin*, wrote in November 1951 that community colleges were needed for students, “Who desire training for vocations which require only two years for completion – business, trades, technical jobs, salesman, etc. Such a college would also provide courses for adults who would like to change their vocations, or to add to training received on-the-job” (Wescott, 2005, p. 12). Jobe’s statement shows the need for community colleges was being supported by a foundation that called for vocational education.

Director of Vocational Education in North Carolina J. Warren Smith in May 1952 said, “Publicly supported regional vocational-technical schools are needed in this state to provide effectively those types of training which are not feasible in our present organization. For the rural boys and girls ... there is no provision for instruction leading to the development of technical skills except that taught in the farm shops ... For these rural and urban boys and girls who at present do not have available to them the specific vocational courses they should have, some suitable type of school should be provided” (Wescott, 2005, p. 13).

During this time Smith (1952) also provided a look into future labor market needs and indicated that fewer than half of the rural young people at that time would actually be needed for farm work.

The State Board of Higher Education was formed in 1955 to prepare for an expected uptick in enrollment in the coming years. The board was also charged with the duty of eliminating duplicate programs in colleges across the state (Wescott, 2005).

On August 2, 1956 a meeting took place between Dallas Herring and Luther Hodges. At this time, Hodges made it a priority to improve higher education in NC and to diversify industry in the state (Wescott, 2005). Herring was fed up and wanted to resign from state Board of Education. Hodges promised to get some help for Herring on the Board, though Herring faced several challenges in the form of board members who did not support expanding adult or vocational education in North Carolina, mainly believing the State of North Carolina did not have adequate funds and that the programs promoted by Herring were not necessary.

Not everyone was supportive of Hodges's ideas to diversify training and industry in the state. Dr. Allan S. Hurlburt directed Publication No. 285 "Community College Study" as part of the Survey of Public Education in 1952. According to State Superintendent of Public Education, the Community College Study was realized with the hope that "citizens of our State will become more sensitive to the possibilities of a community college. The community college may well be the next step in the expanding structure of our public school system" (Community College Study, 1952, p. 2). Hurlburt challenged Herring's promotion of vocational training centers because he believed Herring was turning against the idea of a more comprehensive community college system. Chairman of the Board of Higher

Education D. Hiden Ramsey also supported traditional colleges and was wary of vocational training after high school (Wescott, 2005). This shows that, even in the 1950s, academic and vocational education were seen in a competitive light rather than a collaborative with similar goals.

The Community College Act and Early Legislation

A series of appointments and legislative measures affected the initial years of planning and implementation of the IECs and community colleges in North Carolina. Table 3, provides a list of the actions and legislation and the year.

Table 3:

North Carolina State Actions Contributing to IECs

Action or Legislation	Year
State Education Commission	Est. 1947
The Hurlburt Commission	Est. 1950
The Community College Study	1952
State Board of Higher Education	Est. 1955
Community College Act of 1957	1957
Community College Act of 1963	1963

Table 3 shows the significant occurrences in the state. A study was commissioned in 1950 to determine the need for a state-supported system of community colleges in North Carolina. The commission was led by Allan S. Hurlburt, and was thus referred to as the Hurlburt Commission (Mayberry, 1972). This commission was established following a recommendation by one of the State Education Commission's subcommittees, the Secondary Education Committee (Wescott, 2005). The Community College Act was passed in 1957 on

the heels of opposition to vocational / technical training. Sponsored by the Board of Higher Education, the Community College Act of 1957 provided aid for public junior colleges but no financial support for vocational programs.

Dallas Herring, dismayed by the lack of funding for vocational education, worked with the Board of Higher Education Community College Committee and the State Board of Education Committee on Professional Services to find a solution. After initially deciding to ask the state for \$1 million in funding to establish the first community colleges, members of the committees raised the figure to \$2 million (Wescott, 1998, p. 23). During the winter and spring of 1957, the proposed funding for the initial community colleges was still in doubt. Members of the state legislature feared the funding would only provide additional sub-par vocational instruction without any real improvements. It was eventually determined that \$500,000 would be left out of the state budget and appropriated to the Advisory Budget Commission until an appropriate use was determined by the North Carolina State Board of Education. Under the Community College Act, three community colleges were set into motion. These community colleges were located in Asheville, Charlotte, and Wilmington. It was also noted that a fourth community college in Elizabeth City scheduled to be opened (“For Immediate Release” from the Governor’s Office, February 20, 1961). Thus, community colleges and industrial education centers were proposed and established during the same time period.

A series of influential leaders in education were appointed to lead the North Carolina State Board of Education from the 1940s through the 1970s. Table 4, shows the leaders of the State Board of Education from 1945. Most of these men served for one or two years, but Dallas W. Herring started serving in 1957 and continued to serve for two decades until 1977.

These chairmen worked closely with the governors and legislators in the implementation of plans for the IECs and community colleges.

Table 4 shows the leaders of the North Carolina State Board of Education from 1945 through 1977. These were critical years in the development of two-year education in the State of North Carolina.

Table 4:

State Board of Education Chairmen from 1945 to 1977

Name	Dates of Service
Lynton Y. Ballentine	1945-1948
Hoyt Patrick Taylor	1949-1952
Luther H. Hodges	1953-1954
Stanford Martin	1954-1955
A.S. Bower	1955-1956
William Dallas Herring	1957-1977

Source: <https://stateboard.ncpublicschools.gov/about-sbe/history/chapter-ten>

During the mid to late 1950s, industrial education centers were started and the North Carolina state government started to explore policies for the creation of the community college system. In a press release from Governor Terry Sanford's office dated February 20, 1961, the governor called for a study to "establish long-range policies governing the creation and operation of community colleges in this state" ("For Immediate Release" from the Governor's Office, February 20, 1961, p. 1). This study would be conducted by a committee drawn from a list of potential members created by the State Board of Higher Education. Four major questions were proposed by the governor, to be answered by the committee. Among them was "What should the relationship among the two-year educational programs, the technical programs of the community colleges, and the post-high school, non-degree-granting programs of the Industrial Education Centers?" ("For Immediate Release" from the

Governor's Office, February 20, 1961, p. 2). The committee established with studying the efficacy of community colleges in North Carolina was tasked with sorting out this potentially complicated and politically charged question.

Table 5 shows the series of governors in North Carolina during the years of planning and development of the Industrial Education Centers. Luther Hodges and Terry Sanford are generally credited with much of the work responsible for the formation of the early community colleges. William Scott and William Umstead should not be overlooked as they were at the helm of the state when the IECs and community colleges were initially proposed.

Table 5:

North Carolina Governors During Key Years of IECs 1949 - 1965

Governors	Years of Tenure
William Kerr Scott	1949-1953
William Bradley Umstead	1953-1954
Luther Hartwell Hodges	1954-1961
Terry Sanford	1961-1965

Senate Bill 468, more commonly known as "The Community College Act," was ratified June 12, 1957. The bill was introduced by Senator Richard Long, a member of the Joint Appropriations Subcommittee, with the intention of providing funds for local vocational schools (Wescott, 2005). Plans for state community colleges continued to move forward with little discussion or plans to include technical training. Dallas W. Herring was named chairman of the State Board of Education in August of 1957. From this position, he could wield more influence on the direction of vocational and technical training programs in the State of North Carolina (Wescott, 2005). In a letter dated June 28, 1957 to Guy Phillips, a

member of the Board of Education, Herring wrote of a “special committee” that would discuss vocational and industrial education (D. Herring, personal correspondence, June 28, 1957). Among the immediate hurdles faced by Herring was funding. In the letter to Mr. Phillips he wrote, “Thus far I have been unable to get any action on the revisions suggested by the (1957) Advisory Committee. You also saw for yourself how little effective control over policy in vocational education the board exerts” (D. Herring, personal correspondence, June 28, 1957). This shows that Dallas W. Herring was concerned about funding and policy related to vocational education in North Carolina.

The Committee on Terminal Education was established on July 4, 1957, with members chosen by Dallas Herring. It was meant to establish a plan to educate mature high school students and adults in vocational technical and industrial areas. Wescott mentions the Industrial Advisory Panel, that Dallas convened, made up of leaders in industry from around the State of North Carolina (Wescott, 2014). Herring noted on August 9, after meeting with the panel, the group felt not enough was being done to adequately educate this population. Additionally, the more traditional disciplines such as math, English, and the sciences should be included in the curriculum (Wescott, 2014). This shows that business and industry leaders felt that vocational and academic education should be conducted collaboratively to education the future workforce.

In late July, Herring decided Wade Martin should be named head of the Trade and Industrial Education section of the State Board of Education. Martin was the assistant to Murray Thornburg, State Supervisor of Trade and Industrial Education, and in Herring’s estimation, had shown enthusiasm about the industrial education centers (D. Herring, personal correspondence, August 9, 1957). Martin officially took over leadership of the

Trade and Industrial Education Section at the end of 1957. It was during this time that Herring coined the term “Industrial Education Centers” or IECs as part of a proposal to the State Board. This was a critical point in the development of industrial education in the State of North Carolina. It was also during this time that special study commissioned by the General Assembly was completed to examine the need for development of a system for the IECs (Wescott, 2014). “As a result of surveys which it made in 1957-1958, the State Board of Education, on its own motion, but with the co-operation of other agencies, including the State College Development Council and the State Board of Higher Education, proposed the development of a system of Industrial Education Centers to meet the needs that were then becoming apparent” (INDUSTRIAL EDUCATION CENTERS, n.d., p. 1-2). Dallas Herring prepared a statement about the industrial education centers proposal, which he planned to make at the December 1957 board meeting. An advanced copy of Dallas Herring’s proposal was sent to Governor Hodges. Additionally, the findings from the study were approved December 5, 1957 (Wescott, 2014).

Also in December, Herring indicated a need for more communication between high school and college representatives. In calling for a Special Committee on High School-College Relations, he stated there were three areas of concern, one of which was community college curricula. Herring wrote to the board, “Since there will be other matters to consider in the future, I wish to suggest that you appoint a small group to whom I may turn for advice in these matters and who, in turn, may obtain a summary of your thinking through questionnaires, when needed” (D. Herring, personal correspondence, December 10, 1957).

Even before its approval there were those who voiced concern over the IECs. Hiden Ramsey, a newspaper editor and manager who served on the State Board of Education, was

the first chairman of the State Board of Higher Education when it was established in 1955 (D. Hiden Ramsey Papers). Ramsey, for example, was angered over the proposed location of the industrial education centers, stating, “The program, as implemented by these decisions is, of course, dead. It is so stupid, so unrealistic” (Wescott, 2014, p. 29-30). The IECs were also being considered during the height of the Civil Rights Movement when race relations in the south were extremely heated. In a letter to Dallas Herring in December of 1957, Congressman Graham Barden bemoaned the “education problem,” concluding the letter with “Excuse me, Dallas. I’ve written too much, but the school situation has been in my hair and since Little Rock I almost blow a fuse when I begin to discuss it” (D. Herring, personal correspondence, December 20, 1957). When referencing Little Rock, Arkansas, Barden is expressing concern and dismay over the attempts to integrate schools in that area, indicating challenges related to civil rights elsewhere.

The purpose of the program was “to provide instruction in the subjects ... at three or more locations in the state – under administrative supervision of the local boards of education and the State Board of Education in buildings provided by the local community which may or may not be separate from the high school building.” (Wescott, 2014, p. 28). Courses included “basic machine shop training; maintenance, operation, metal work; welding; and other programs such as instrumentation, quality control, and tool and die-making – the equipment for which may be moved as needed into any area of the state.” Facilities for the IECs were to be provided by local schools and districts. (Wescott, 2014, p. 28). These first IECs were an extension of the local high schools and districts.

Opening the First Industrial Education Centers

Once the recommendations from the proposal received board approval, the process of opening the initial industrial education centers moved ahead rapidly. Official approval for the centers was granted April 11, 1958, with the plan for the first seven IECs being established during the following school year. These first seven IECs were located in Burlington, Durham, Goldsboro, Greensboro-High Point, Leaksville, Wilmington, and Wilson. These were deemed important locations due to the perceived urgent demand for training in their areas. A total of \$2.5 million in facilities were to be provided by local school boards. The centers were to operate with an open-door admissions policy, in addition to tuition-free education and training (Wescott, 2014). This places North Carolina as one of the first states to offer free postsecondary training for its citizens. A local publication called, “The Advisor” boasted the headline “First N.C. Vocational Training Center Opens” in a July 1958 article. It states the Leaksville State Vocational Training Center opened the previous month in June of 1958. The article lists the other six initial schools, commonly referred to in other documents and resources as “industrial education centers” (*The Advisor*, July 1958, p. 8). The other six schools were to be located in Guilford, Alamance, Durham, Wayne, New Hanover, and Wilson Counties (The Advisor, July 1958). Due to name changes and local articles using different terms, some confusion arises as to which center opened “first.”

The next 11 centers were selected to be located in Asheboro, Asheville, Charlotte, Fayetteville, Gastonia, Kinston, Lexington-Thomasville, Newton-Hickory, Raleigh, Sanford, and Winston-Salem. These sites pended the approval of funding from their local school systems, and were slated for opening between 1959-1961. Each local school board was tasked with demonstrating a need for a center based on an occupational survey. These were

early examples of needs assessments to plan programming. They were required to submit evidence of financial support, projected enrollment of at least 15 students in each field of study, as well as interest from local industry in the training programs offered. These requirements showed a demand for programs from students and from local industry. In an effort to ensure employability, there were to be approximately 150 tradesmen in the locality of each training program (Wescott, 2014).

There has been some argument over the years as to which center opened “first.” The Guilford County center was to be granted the largest appropriation from the initial \$500,000 approved by the state in 1957. The county was believed to show the most promise for growth with numerous industries and potential for 12 courses of study, including training in textiles, machining, and electronics. According to community college historian, Joseph Wescott II, “the Guilford center was originally housed in the old county tuberculosis sanatorium building at Jamestown. As this was not a new structure, it would be displaced by Burlington as Martin’s flagship institution” (Wescott, 2014, p. 31). A historic marker (J-113) located in Rockingham County claims the Leaksville Industrial Education Center, located in Eden, as the first, leading many people in that county to claim this distinction. This information is based on the Leaksville IEC opening in May of 1958 at Morehead High School, though the local newspaper, *The Advisor*, listed the opening as June of 1958 (*The Advisor*, July 1958).

Burlington, Guilford, Durham, New Hanover, Wayne, and Rockingham Counties were granted approval by the State Board of Education on April 3, 1958. Randolph County also received tentative approval for a center on this date and was formally selected as a site in the spring of 1959. The first industrial education classes in Randolph County were held off-

campus for four textile students in March of 1962, with the new industrial education center opening September 4, 1962. Initial areas of training included automotive mechanics, drafting, electricity, electronics, machine shop, and welding (“Randolph Industrial Education Center: 1957-1965,” n.d.). Sponsors in Wilson pledged \$168,000 for a proposed site, with a target opening in September of 1958.

Table 6 indicates the proposed sites for each of the initial industrial education centers in North Carolina. Seven sites were approved to be established in 1958-1959, with 11 more slated for 1960-1961, pending approval and funding by the North Carolina State General Assembly (Wescott, 2014).

Table 6.

Initial Proposed Industrial Education Centers in North Carolina

1958-59	Burlington Durham Goldsboro Greensboro-High Point Leaksville Wilmington Wilson
1959-61 (pending appropriation of funds)	Asheboro Asheville Charlotte Fayetteville Gastonia Kinston Lexington-Thomasville Newton-Hickory Raleigh Sanford Winston-Salem

Plans for the Wake County IEC were also underway in 1958. This center was opened in October of 1963 under the name of W.W. Holding Industrial Education Center. It was

named for former Wake county commissioner and Wake Industrial Education Center president W. W. "Bill" Holding. Its program areas included automobile mechanics, radio and TV repair, electrical installation and maintenance, and drafting. The school was named the Wake Technical Institute in 1974, Wake Technical College in 1980, and finally, Wake Technical Community College in 1987 ("Wake Tech: Leading the Way for 50 Years, n.d.).

The first industrial education center is commonly believed to have opened in Rockingham County in May of 1958. It was formally named the Leaksville-Rockingham County Industrial Education Center and primarily offered courses in construction and textiles. Like many of the new IECs, Leaksville-Rockingham began offering courses in temporary locations while bidding and construction of permanent facilities took place. The general conference room of the Fieldcrest Mill General Office Building served as the initial classroom for supervisory courses in human relations, textile cost control, textile chemistry, and textile electricity. Eighty-two students participated in these continuing education classes. Initial coursework at other locations included carpentry, drafting, electronics, and machine shop. There were 143 new students preparing for careers in these industries (Wescott, 2014).

Numerous costs were involved in the establishment of each of the industrial education centers. Local school boards and donors provided the brick and mortar buildings as well as payment of instructors. The equipment, often heavy, industrial machinery, was a different matter. State Supervisor of Trade and Industrial Education Wade Martin and W. Dallas Herring became aware of a stockpile of machine tools, left over from World War II, which were to be loaned out to train youth. Governor Hodges contacted North Carolina Congressmen Carl T. Durham and Alvin P. Kitchin, both members of the House Armed Services Committee. Herring, Martin, and McCrary traveled to Washington in July to further

their cause to gain access to the equipment for training. It was agreed that some of the surplus would be moved to North Carolina for educational purposes. Eventually, over \$1 million in machinery and tools were sent to the State of North Carolina by the Department of Defense. By the end of the year in 1958, North Carolina was the first state receiving Department of Defense equipment on loan (Wescott, 2014).

During the first year of operation (1958-59), 6,000 students were served by North Carolina's industrial education centers. This impressive level of enrollment mirrored the rapid increase in industry in the state. Over \$253,000,000 was spent expanding or opening industrial facilities in 1958 (Wescott, 2014, p. 35).

Lenoir County Industrial Education Center in Kinston, NC was appropriated funding in 1958, though it took several years for construction of their first building to be realized. In a letter dated December 12, 1961 from Lenoir Industrial Education Center President Daniel C. Wise to W. Dallas Herring, Wise explained the process of the Lenoir County School Board requesting funds from the Lenoir County Board of Commissioners. Wise noted the Lenoir IEC planned to construct a building with a total cost of \$382,000 (D. Herring, personal correspondence, December 12, 1961). Though optimistic about Lenoir's fledgling program, Wise indicated his fears about the industrial education centers and community colleges,

"I must admit my grave concern about our building program and the industrial education center program. There is still much doubt and confusion over this program and the community college program. The opportunity for clarification still rests with the County Board of Education and the County Board of Education.

Today, the County Board of Commissioners and Tom White, County Attorney, met with the contractors on the industrial education center building. This meeting was held in Tom White's office. No one from the Board of Education, the Superintendent's office, or the Industrial Education Center was asked to attend. No one was notified of such a meeting ... I have a great deal of confidence in our County Board of Commissioners and Tom White. I also have a great deal of confidence in Mr. Bullock and the County Board of Education. I honestly hope things will be worked out soon, so the construction can go forward" (D. Herring, personal correspondence, December 12, 1961).

At the start of 1959, tensions between the State Board of Higher Education and the State Board of Education were apparently heated. It was unclear whether a few of the community colleges in the state would become residential and full-fledged state colleges. Herring believed he had the support of William Friday in that the Board of Education should allow the Board of Higher Education to "do with them what they will." He further stated, "We can then turn our attention to building up the Industrial Education Centers, so that after they are securely settled in good programs we may gradually introduce other vocational courses and then some basic academic courses of a terminal nature. Following this it will be only a step to introduce college level academic programs of a junior college character and thus we will have community colleges after the national pattern" (D. Herring, personal correspondence, Jan. 29, 1959

The Central Industrial Education Center (CIEC) was established in Charlotte in 1959. The Center was located on Elizabeth Avenue in the old Central High School building. The

CIEC eventually joined Mecklenburg College to become Central Piedmont Community College (CPCC) in 1963 (Central Industrial Education Center Collection, CPCC Archives).

The Burlington Industrial Education Center served as a centerpiece and showplace of what the centers could continue to offer the state. It cost \$1 million to construct and was the first of the initial group of seven to open (Wescott, 2014). In a letter to Governor Luther Hodges, Chairman of the Committee on Terminal Education Charles McCrary stated the formal opening of the Burlington Industrial Education Center would be Wednesday, September 30, 1959. McCrary invited the governor, stating, “your presence at this meeting would make it a matter of public interest and would be a tremendous boost for the coming bond election” (D. Herring, personal correspondence, August 17, 1959). This was in reference to the upcoming bond vote for \$1.491 million to help equip additional IECs (D. Herring, personal correspondence, August 17, 1959). During this first fall, almost 1000 students were enrolled at the Burlington IEC. Courses were taught by 12 full-time and 19 part-time teachers. The curriculum focused upon the needs of the industries in the local community. Burlington IEC continued to be highly regarded during the early years of the industrial education centers.

The Wade Martin Years

In 1957 Wade Martin took the helm as the administrator of the Industrial Education Centers when there seemed to be ready public support for the IECs. Prior to his position as state supervisor of trade and industrial education, Martin served as assistant to Murray Thornburg when he was the state supervisor of T & I (Wescott, 2014). The citizens of North Carolina responded enthusiastically to the idea of continued growth of the IECs by voting in favor of the bond in the amount of \$1,491,000 on October 27, 1959. The passing of this

bond helped ensure the next 11 IECs would be built, to join the first seven already in operation (Wescott, 2014). W. Dallas Herring corresponded with across the state about the need for high school vocational programs to prepare young men for work in businesses related to farming (D. Herring, personal correspondence, August 21, 1959). Herring understood the need for higher education in practical, technical areas, but also hoped to eventually educate the whole student with humanities and arts training as well.

A handbook titled “The Administration and Supervision of Industrial Education Centers” with the typed notation “Tentative for Discussion Purposes Only” appears to have been written in 1960 (D. Herring, personal correspondence). A. Wade Martin, state supervisor for Trade and Industrial Education in the Department of Public Instruction stated in the preface that the handbook was meant to “provide for efficient administrative practice in the rapidly growing Industrial Education Center program” (“The Administration and Supervision of Industrial Education Centers”).

Martin noted, “During the past two years it is clearly evident that the people of North Carolina have a great desire to learn, to improve themselves and to assist their fellow citizens” (“The Administration and Supervision of Industrial Education Centers”). Twenty-three industrial education directors, counselor-coordinators, and other state supervisors contributed to the handbook. According to the handbook, maintaining efficient operation of the IECs depended upon personal relationships, facilities, supplies, program evaluation, staff morale, and recognition of achievement (“The Administration and Supervision of Industrial Education Centers”).

In the section titled “Administration and Operation of Industrial Education Centers,” the opening sentence states, “North Carolina is in the midst of a period of transition from an

agricultural to an industrial economy. This changing climate is having a definite influence on the educational needs of the people affected.” It further notes that natural resources attract new industries to specific locations and that North Carolina does not possess as many of these as other states. However, “The greatest treasury of our state is the skills and occupational possibilities of the workers and the potential production of the youth preparing to enter employment” (“The Administration and Supervision of Industrial Education Centers”). The introduction to this section further touts the importance of technical training. “In the future individuals will earn higher salaries; enjoy higher standards of living; total tax receipts will increase and they will demand and be able to support a program of better education for the people” (“The Administration and Supervision of Industrial Education Centers”). The economic stability and mobility of the citizens of North Carolina was a goal of the industrial education centers.

The handbook also contains job descriptions and the desired skills for people in each position. The provides a view into the importance of the labor market outcomes of those that participated in the programs in the IECs. It correctly notes, “The effectiveness of any industrial-vocational program depends primarily upon the teacher, or instructor.” Further, “... the instructor must not only possess the usual professional abilities and characteristics, but must also be skilled in the special abilities of his field - such as a master craftsman, an experienced technician, etc.” (“The Administration and Supervision of Industrial Education Centers”). The skills required also illustrate the goal of the IECs: to prepare students for work that is skill specific. It is stated instructors should “Impart knowledge and demonstrate skills that will aid the student in his preparation to enter a chosen trade or occupational field” (“The Administration and Supervision of Industrial Education Centers”). This provides

support that the early faculty were charged to be have not only the skills in their vocational area, but also the skills to be a good instructor.

The committee also understood the role of the IECs in the larger community. As such, they indicated that each director should have the “ability to interpret the Center to the community” (“The Administration and Supervision of Industrial Education Centers, Occupational Description”).

The Industrial Education Centers Under Ivan Valentine

Ivan Valentine of Burlington, NC was named the new administrator of the Industrial Education Centers system in 1961, succeeding Wade Martin (D. Herring, personal correspondence, September 22, 1961). According to his obituary, Valentine ran a heating and plumbing business with his brother during the late 1940s and later taught industrial education, chemistry, and algebra courses in Faith, South Dakota. In 1958, Valentine received a master’s degree in vocational education administration, and moved to Raleigh, North Carolina with his family the following year. He played an important role in the early years of the Industrial Education Centers, putting his education, training, and experience working in the field of vocational education to good use as the state director of the IECs. Valentine continued to serve the state as the assistant director for community colleges in North Carolina from 1963-1967 (findagrave.com).

W. Dallas Herring referred to this period under Valentine as the second phase of the IEC program. Herring outlined Valentine’s goals for the centers in a letter to Charles McCrary and Guy Phillips. Valentine said it should be characterized by

“an emphasis upon the quality of the work being done. He says that necessarily in starting such a vast program so quickly we have not been able to insist upon uniform

standards, as we announced in our original policy resolution. The standards have not yet been written, although much work has been done on them. He feels, and I agree, that several Centers have still not realized that this is largely a post high school program and are in fact merely operating a glorified high school vocational program. He feels that the best way to cope with this, and to achieve our original objective in all Centers, is to define the standards that must apply to each course, wherever it may be offered, if State reimbursement is to be made. He realizes, however, that we must not be too hasty in making this transition, but he commented that this is a necessity, if we are to get the Centers ready for eventual operation as community colleges where this can and should be done. This does not mean that all courses will be college level, but it does mean that when a course is given we can have assurance that State-level course outlines, texts, etc., will be followed, and a State-level examination will be administered before certification as craftsmen or technicians, as we originally planned. This is something Wade could not get done during the first phase and many courses have been offered that were distinctly below the levels we need” (D. Herring, personal correspondence, October 3, 1961).

The growth of the IECs continued, and there is evidence of increased support and cooperation with other educational entities. State Supervisor of Vocational Agriculture A. G. Bullard noted the shared goals of the NC State Department of Public Instruction and the IECs in a letter to W. Dallas Herring October 2, 1961. He shared a document, “A Guide for Planning Adult Education Programs in Vocational Agriculture.” (D. Herring, personal correspondence, Oct. 2, 1961). Additional IECs came into the system during this year. W. Dallas Herring was invited to the dedication ceremony for Asheville-Biltmore College,

scheduled for October 8, 1961 (D. Herring, personal correspondence, September 21, 1961). The Program of Dedication was titled “New Campus and Buildings” and included the names of the architects, landscapers, and other companies involved in the creation of the new facilities (“Program of Dedication,” October 8, 1961).

After a few years, it was evident the initial IECs were off to a great start. In a letter written October 10, 1961 to Dr. Gerald James of the Department of Public Instruction, W. Dallas Herring noted a recent accreditation of the Gaston Technical Institute. Herring stated, “After taking a rather close look at Gaston Technical Institute and comparing its offerings and facilities with ours, I have the very strong feeling that we are far ahead of Gaston at Burlington (IEC) and several other Centers, although we do offer the trade courses as well” (D. Herring, personal correspondence). He further asked that James ask someone to look into the accreditation process for the Industrial Education Centers (D. Herring, personal correspondence). Among his correspondence, Herring retained a letter from Charles S. Pinkston. Pinkston expressed his gratitude to Herring, the State Board, and General Assembly for the creation of the IECs. In discussing his son’s lack of interest in education, Pinkston wrote, “When the announcement came that the Industrial Center would open in Fayetteville, he became extremely interested. I believe he was the first student to enroll in the school. At present he is enrolled there, is studying hard, and vitally interested in the program, and is apparently on the way to a successful life” (D. Herring, personal correspondence, October 10, 1961). Such letters no doubt helped bolster Herring’s resolve to continue building IECs to benefit other young people across the state.

IECs and Community Colleges Co-existing in North Carolina

William Dallas Herring's long-term goal of building a community college system in North Carolina paralleled his interests in improving the IECs, though there were clearly challenges. In some ways, the IECs served as models for how the community college system might function. Herring stated, "The Industrial Education Centers are a success because they are truly a part of a system of terminal-technical education. Why? Simply because they have firm, aggressive state-level control" (D. Herring, personal correspondence, April 7, 1961). It was just this sort of control that Herring believed was necessary for the community college system to be successful.

The early years of planning and beginning the community college system were clearly not always smooth. In addition to funding and leadership, there were questions of who should attend the Centers. In a letter dated October 3, 1961, Herring stated, "the Governor's Commission on Education Beyond the High School has gotten off to a good start. I feel that it will be possible, with much work and persuasion to salvage the community college concept and at least get our foot in the door on this issue" (D. Herring, personal correspondence). The wording of Herring's statements is severe, indicating that by fall of 1961, there was the possibility that the notion of a community college system might never come to fruition. Many questions remained about how these two-year institutions and the IECs should function. Though it seems Herring supported the inclusion of capable high school students in the IECs, this point was not clear to some members of the State School Boards Association. In a letter dated October 10, 1961, Guy Phillips, expressed concern that Herring might wish to eliminate high school students from the IEC program. If that happened, he feared, "It inevitably means that city school systems and county school systems

will be forced to set up basic vocational programs in their high schools at considerable cost. It was my idea that the Industrial Education Centers properly located could serve the seniors and, in some cases, juniors of the local high schools of the area” (D. Herring, personal correspondence, October 10, 1961). In response to Guy Phillips on October 12, 1961, Herring made similar comments, “Thank you for your letter about the question of high school students and the IEC program. I agree that it is well for us to review our policies about this, especially in view of the possibility that we may be able to salvage the community college program, which, as you know, has been a long ambition of mine” (D. Herring, personal correspondence, October 12, 1961).

Herring also expressed concern that the IEC programs should not merely duplicate pre-existing high school vocational programs. “I do not object to the inclusion of high school students under the above policy. What I do feel is inadequate is the fact that some Centers seem to feel that the program for high school youths, which admittedly must be on a somewhat lower level, is the major, if not the exclusive purpose of the Centers. If this is true, what have we accomplished by instituting the IEC’s?” (D. Herring, personal correspondence, October 12, 1961). In the letter, Herring further reiterated the purpose of the Centers in 11 points. Among them, he indicated the importance of the IECs supplementing the basic high school curriculum, as well as enhancing the student’s education with useful skills. Additionally, “the curriculum will be responsive to the needs of present and prospective employees in industry and will be flexible so as to meet those needs as the needs change and as they vary from place to place” (D. Herring, personal correspondence, October 12, 1961).

Though it seems Herring supported the inclusion of capable high school students in the IECs, this point was not clear to some members of the State School Boards Association.

Based on the communication between Herring and Phillips, it seems they each sought the formation of the IECs and that they should work alongside high school vocational programs. Phillips stated, “... there should not be a divided emphasis limiting the Industrial Education Centers to post high school people unless it becomes clear immediately that the public school units must provide the kind of vocational preparation which is needed for our rapidly developing industrial economy. Phillips even mentioned concerns that a wall may be built between the IECs and local administrators (D. Herring, personal correspondence, October 10, 1961).

By 1961, it was clear that there were still challenges to overcome for the future of the IECs and community colleges in North Carolina.

“The higher education people simply are not going to do the community college job. They are going to hold on to their academic idols, with the result that thousands of worthy boys and girls will be prevented from having a college education. They do not realize it, but they seem to me to place traditional values above the actual needs of many of these students, especially their financial requirements. For this reason, I am firmly committed myself to the community college and now that Purks has left us I feel there is a real chance to salvage the concept and do something about it. Of course, this will not be possible, if the local administrators do not share this goal and will not support it, but I certainly hope they do share it and will support it” (D. Herring, personal correspondence, October 12, 1961).

Herring understood that the success or failure of the IECs and the community colleges relied not only on state-level support, but also that of the educational leadership at the local level for each site. As far as local funding, Herring wrote, “the localities have not

voiced any complaint that I have ever heard that they have been required to erect IEC buildings entirely from local funds (between six and eight million dollars so far)” and further “we haven’t had a single instance of objection to the high degree of state-level supervision we have in the IEC program. Hard to believe, isn’t it?” (D. Herring, personal correspondence, April 7, 1961). He also indicated that even discussing his concerns with the supporters of four-year colleges was not welcome. While explaining the barriers he perceived to students and the difficulty in conveying them to state leaders, Herring wrote, “This has not been possible for me to originate, in view of the fact that one does not address the profession in person except by invitation and the invitation has not been extended” (D. Herring, personal correspondence, October 12, 1961).

Growing Pains: The Early 1960s

According to Herring’s correspondence, it appears the community colleges and IECs were at a crossroads in 1961. When discussing the State Board of Education, he wrote, “It really is important, Guy, for me to know whether they have any desire to expand the Community College program, for if they do not it would be an awful waste of my own time and energy to hand the program to the State Board and the school system, so to speak, only to find that they do not want to see the Centers develop in this way. I have some strong allies for this goal in Bill Friday and others who at last have come over to this way of thinking, but I would not want to involve them further if it should turn out that the local superintendents feel conscientiously that this is not a proper goal” (D. Herring, personal correspondence, October 12, 1961). From Dallas Herring’s perspective, there had been, to this point, a real struggle to gain wide support for the IECs and community colleges. In this letter to Guy

Phillips, Herring seems to wrestle with his passion for educating underserved students across the state, and what he fears may have been a fruitless pursuit.

Public support of the IECs and community colleges was still not widespread in the fall of 1961. Though the North Carolina General Assembly had supported widespread bonds for building projects including community colleges, citizens rejected a proposed bond measure on November 7, 1961. The bond referendum was highly touted by Governor Terry Sanford and its failure struck a blow to his administration's plans to expand community colleges. As of November 8, 1961, in a table of issues printed by *The News and Observer* in Raleigh, 88,871 citizens voted against community colleges while 55,540 voted in favor of them ("Loss Rebuff for Sanford by Roy Parker, Jr.," November 8, 1961). When questioned about the vote, Sanford said, "It certainly wasn't a rebuff of everything we were trying to do" and further stated it was not a denouncement of his education program (Cooper, 1961, p. 1). As Sanford rightfully noted, the vote was a rejection of the bond referendum, but not necessarily the ideas or programs contained in it.

In an editorial appearing in *The Charlotte Observer* on November 10, 1961, editors shared Sanford's perspective on the failure of the bond referendum. They felt it was largely an opportunity for opponents of Sanford to weigh in on their dislike of his position, rather than the proposed issues in the bond. In writing about the dissenting voters it was noted, "They just wanted to take a punch at him (Sanford). In the process, they didn't seem to mind that a host of college students and mental patients stood in the line of fire." The editors decried what they perceived as a major shift in the voting patterns and views of North Carolinians. "We do not rebuke the voters for venting their wrath and frustration, whatever the cause, on logical targets. But blind attack against one and all of the state's immediate

needs is not, and cannot be, the conduct expected of a progressive citizenry” (“Reason, Selectivity Took Beating in Bonds’ Defeat,” The Charlotte Observer, Friday Nov. 10, 1951).

By the end of 1961, The Lenoir County Industrial Education Center was still accepting bids for construction of its IEC. Director Daniel C. Wise stated on December 12, 1961, “I must admit my grave concern about our building program and the industrial education center program. There is still much doubt and confusion over this program and the community college program” (D. Herring, personal correspondence, December 12, 1961 p. 2). Wise’s concerns seem well founded. Though the new building funds were appropriated in 1958, bids exceeded that amount by \$82,000. Wise stated that the final projected cost of the building was \$382,000 and that the final \$100,000 granted annually by the Lenoir County Board of Commissioners would be available in July of 1962 (D. Herring, personal correspondence, December 12, 1961). Wise said a request for further funds was favorably received, but as of the date of this letter they had not received any confirmation. He further noted that a private meeting was held between the building contractors, the county attorney, and the county board of commissioners and that no representatives from the Board of Education, superintendent’s office, or IEC were notified of the meeting (D. Herring, personal correspondence).

A directory of high school and technical education programs, published in 1963, lists the Industrial Education Centers that were currently operating in each state in 1961-1962. The directory also lists high school and other technical programs, though only the schools specifically referred to as “industrial education centers” are listed in Table 7.

Table 7.

Industrial Education Centers Opened by 1961-1962

Industrial Education Center Name	City	County
Randolph County IEC	Asheboro	Randolph
Asheville IEC	Asheville	Buncombe
Burlington IEC	Burlington	Alamance
Central IEC	Charlotte	Mecklenburg
Durham IEC	Durham	Durham
Fayetteville IEC	Fayetteville	Cumberland
Gastonia IEC	Gastonia	Gaston
Goldsboro IEC	Goldsboro	Wayne
Guilford IEC	Jamestown	Guilford
Lenoir IEC	Kinston	Lenoir
Leaksville IEC	Leaksville	Rockingham
Davidson IEC	Lexington	Davidson
Catawba County IEC	Newton	Catawba
Wake County IEC	Raleigh	Wake
Rowan IEC	Salisbury	Rowan
Lee County IEC	Sanford	Lee
Wilmington IEC	Wilmington	New Hanover
Wilson IEC	Wilson	Wilson
Winston-Salem IEC	Winston-Salem	Forsyth

Table 7 illustrates the city and county of each of the first 19 Industrial Education Centers in North Carolina. The document containing this information also lists the areas of study for several of the centers (Preparatory Trade and Industrial Training Programs in Public Schools: A Directory: 1961-62).

By early 1962, there were still questions about who would govern the new community college system in the coming years. Experts in the field were consulted and communicated their thoughts to Dallas Herring. Dr. Joseph T. Nerden, chief of the Bureau of Technical Institutes, was among them. After visiting IECs in North Carolina, Nerden wrote a letter dated February 13, 1962 in which he outlined the issues he believed were of concern to the IECs and the State Department of Education. He stated, "With the exception of the Burlington I.E.C., the quality of the program of instruction which are offered are generally of a lower level than post high school. In most centers where I have observed, evaluated and submitted reports, I have felt that a secondary level trade program is being offered, and even this needs considerable attention." Nerden also observed, "From what I know of the I.E.C.'s a magnificent start in buildings and equipment has been made, but an evaluation of the instructional program at this time would be disastrous" (D. Herring, personal correspondence, February 13, 1962).

Herring addressed the concerns noted by Nerden in his response February 16, 1962. Largely in agreement with Nerden, Herring said the Burlington IEC was meant to be the flagship of the program, and that it should serve as a guide. He further stated this was challenging because of the lack of experienced leadership and the previously inadequate high school vocational program in the state. To overcome the lack of experience, Herring proposed that Nerden might come to North Carolina to serve as director of an IEC in Charlotte or Winston-Salem. "We need you desperately ... That is why the directorship of the Charlotte Center or the Winston-Salem Center occurs to me ... this would enable us to use you on a Statewide basis part time ... I feel like the Greek who said to St. Paul, 'Come over into Macedonia and help us!'" (D. Herring, personal correspondence, February 13,

1962). In response, Narden indicated he liked North Carolina and would seriously consider Herring's proposal (D. Herring, personal correspondence).

Despite the financial and political challenges facing the IECs, by 1961 15 were operating with 5 additional centers planned ("Education and the Laws of Free Enterprise by Dallas Herring). On February 22, 1962, Dallas Herring and Gerald Jones, director of the Division of Vocational Education, wrote to Congressman David Henderson asking him to support House Bill 8399, also known as the Manpower Development Act of 1961. It was their belief the funding provided through this bill would help support the Industrial Education Centers in North Carolina (D. Herring, personal correspondence, February 22, 1962). Herring and Jones cited the success of the 15 Centers despite strong financial support. They stated, "We believe that it is highly significant that even though these Centers are less than three years old, last year with only 13 in operation more than 22,000 individuals were enrolled. This approaches the enrollment of the Consolidated University of North Carolina" (D. Herring, personal correspondence, February 22, 1962). They further argued that this funding would help purchase equipment and help the Centers expand more rapidly to reach the "masses of our non-college bound people" (D. Herring, personal correspondence, February 22, 1962). The letter further indicates that the funds would go to the Department of Health, Education, and Welfare and that the Employment Security Commission would pay people during their training period, helping ensure that "appropriate standards could be maintained in all areas of instruction, but that the Employment Security Commission would assist in guiding appropriate individuals to appropriate training programs" (D. Herring, personal correspondence, February 22, 1962).

Work on the Rowan Industrial Education Center began in September of 1962. The expected cost of construction was \$442,207.56. Administrators applied for funding through the Manpower Development Training Act (“Industrial Education Center Work Starts” The Salisbury Post, Sept. 25, 1962).

Herring’s Vision for the Future of the IECs

As the community college system grew, this was a time of reflection about the future of the IECs. In a document presumably written by Herring, “By and large, the majority of the 22,000 people enrolled in the IEC’s have their roots down where they are. Most of these are married and have families. They cannot pull up stakes and move elsewhere to engage in a residential education program of any kind ... It is the duty of the State to provide educational opportunities for them that will meet their total needs at a cost which they can afford and at localities within their reach” (INDUSTRIAL EDUCATION CENTERS, p. 2). Among the changes recommended to the state in this document were, “In recognition of the fact that a broadening of the two-year curricula of the IEC’s may pose a threat to the security of other tuition programs in the State, the State Board of Education should be given authority to provide for the requirement that tuition be charged for general education courses related to the rates charged in other institutions” (INDUSTRIAL EDUCATION CENTERS, p. 3).

Herring disagreed with statements made by Dr. Smith at a meeting of a committee of the Commission on Education Beyond the High School. Smith professed that the IECs should not include training in the humanities, but should focus only on technical training. In Herring’s mind, students in the IECs were citizens who “need some basic instruction beyond the high school in these areas” (D. Herring, personal correspondence, December 28, 1961).

Herring also believed there was a place for numerous and varied institutions in the state. In late 1961, he said,

“... it would be wrong to do anything that would jeopardize the private institutions, but I see no reason to fear that this would come about. You see, we have been reaching only about half of the students that should be reached. There will never be a scarcity of students and our policies can be framed so as to meet their needs without hurting any institution” (D. Herring, personal correspondence, December 28, 1961).

To further bolster support for the IECS, the North Carolina Study of Skilled and Technical Manpower Requirements (commonly referred to as the North Carolina Manpower Study) was consulted. Findings appear in several letters from NC Department of Instruction and Industrial Education Center representatives to legislators as evidence of the need for continued funding. The report indicated that the state would need “6,803 trained technicians by June, 1966, and 20,054 trained craftsmen by that date. Furthermore, these needs are based upon present industry and do not allow for expanding industry” (“North Carolina Skill Survey Findings by Occupation,” February 22, 1962). The highest number of skilled craftsmen was projected for the area of carpentry, with 3,027 positions needed by June of 1963, and 5,645 by June of 1966. This craft was followed by a need for 1,855 machinists, 1,634 sheet-metal workers, and 1,512 electricians by June of 1966, in addition to numerous other vocations for skilled craftsmen and technicians (D. Herring, personal correspondence, February 22, 1962).

Figure 1 is a map of the State of North Carolina in 1962. Each college and community college is noted on the map. Only a few years from the decision to fund the

industrial education centers and community colleges, there were institutions of higher education in all areas of the state.

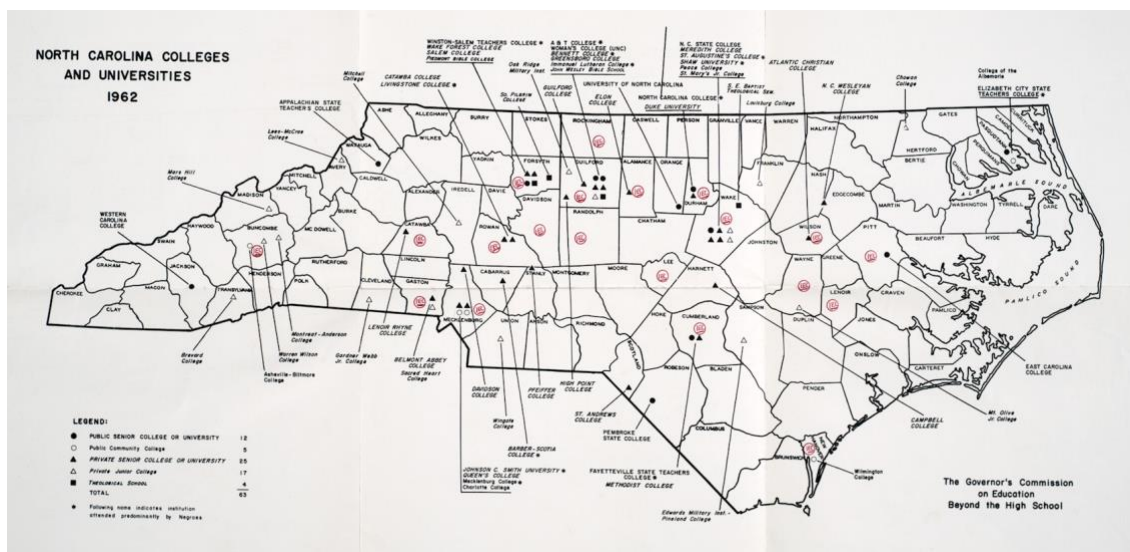


Figure 1: North Carolina Colleges and Universities in 1962

Regarding the IECs, “These industrialists are overwhelmingly of the opinion that the Industrial Education Centers are the institutions best equipped, and best financed, to offer the kind of specialized instruction that is indicated here in large volume with high quality” (“Industrial Education Centers,” n.d.). The document also provided a warning: “If North Carolina fails to recognize that its historic emphasis on full educational development of all of its people, consistent with their educational needs and abilities, has equally valid application to this substantial segment of its population, it will run the most serious risk that, as the State becomes more industrial, the education of its people will be distorted in the same way that the people of Germany was distorted before World War II” (“Industrial Education Centers,” n.d.).

By February of 1962, 16 Industrial Education Centers were established, with plans in place for an additional 4 more (D. Herring, personal correspondence, February 19, 1962). Dallas Herring continued to support technical education in North Carolina, but showed frustration in some of his correspondence. In a letter dated February 16, 1962 sent to a data analyst, Herring requested information as soon as possible, explaining, “For example, Goldsboro and Wilmington haven’t the slightest notion of what technical training is all about. I can use this text (and I haven’t seen it) with a handful of key people in both places and give a tremendous boost to our programs in these places” (D. Herring, personal correspondence).

What Became of the IECs in North Carolina?

After years of planning and successful implementation, the Industrial Education Centers served thousands of students across the state. Increasingly, the focus of funding and support shifted toward community colleges in the 1960s. In the document, “Education Beyond the High School,” a section called “Guidelines for the Establishment of Community Colleges” notes the importance of these institutions as a critical component of the larger education system in North Carolina. The document calls for equality in terms of support and educational outcome, regardless of the type of higher education institution.

“The cost to the State for providing instruction, for example, in first-year English, should be the same here as that of any other institution. The student finishing such a course should be willing and able to demonstrate a level of attainment equal to that of any other student who has completed a similar course at any other institution. The quality of higher education provided in the State should be jealously guarded and constant vigilance should be observed to see that the quality of education provided is constantly being strengthened and not diluted” (p. 6-7).

Some Industrial Education Centers became community colleges. This process is outlined in a document found in the Dallas Herring Papers entitled, "CONVERTING AN INDUSTRIAL EDUCATION CENTER INTO A COMMUNITY COLLEGE." It notes that the new college must meet the requirements of the Southern Association of Colleges and Schools (SACS) and the North Carolina College Conference. Necessary criteria covered the areas of faculty, curriculum, financial support, physical plants, and libraries. SACS required a ratio of approximately one full-time instructor for every 25 students. Additionally, the state required at least five departments with one chair per department who spent at least half their time teaching ("Converting an Industrial Education Center into a Community College").

The document further outlines SACS and state-level guidelines for financial operations. For example, SACS recommended a college should have an annual operating income of at least \$15,000 for the first 100 students. This money was not to include student fees or payments. The State of North Carolina required at least \$25,000. It is noted in the document that, "For both the Southern Association and State standards, the amount would seem to be unrealistically low" ("Converting" p. 2). It was also stated that the SACS and state requirements for the physical plant of each community college were very general. Wilmington College was singled out as its data was, "indicative of the physical plant needs in a Community College, both in costs and nature" ("Converting," p. 4). Regarding libraries, the SACS standard called for "at least six thousand volumes exclusive of public documents ... The State standard requires eight thousand volumes ... Under library standards, the reading room space is thirty square feet per person" ("Converting," p. 5).

A section titled "Semester Hour Cost for Community College Education" states "The plan originally was for the state, the county, and the student to share equally the current

expense costs in the community colleges and the state and county to share equally the capital outlay costs. The state now reimburses the community college \$4 per quarter hour or \$6 per semester hour of completed college transfer credit work. It bears 50% of the capital outlay costs” (“Converting,” p. 6). An example from Wilmington College in 1961-62 was provided, based on a cost of \$18 per semester hour. The document further outlines the enrollment and credit hours for IECs in North Carolina from July 1, 1961 through December 31, 1961. There were 136,645 student contact hours of technical instruction. Full-time students were reported to take an average of 18 hours per semester, with a total of 72 hours to complete a two-year program. At the time of the report, the expense cost per semester hour for IECs was \$13.80 and \$18.00 for community colleges, indicating a significantly lower cost at IECs (“Converting” p. 7-8).

Among the IECs that became community colleges were Central Industrial Education Center (CIEC), which became Central Piedmont Community College (CPCC) in 1963. Randolph Industrial Education Center (RIEC) was renamed Randolph Technical Institute and was given the authority to grant associate in applied science degrees in the fall of 1965. Future iterations included Randolph Technical College, then Randolph Community College (“Randolph Industrial Education Center: 1957-1965,” n.d.). W.W. Holding Industrial Education Center eventually became Wake Technical Community College (“Wake Tech: Leading the Way for 50 Years,” n.d.). Several of the IECs went through name changes over the years, sometimes complicating the ability of researchers to find clarity about their individual histories.

Though there were plans for new community colleges in the early 1960s, Dallas Herring still advocated for the expansion of Industrial Education Centers. In a letter to

Representative David Henderson on February 20, 1962, Herring wrote, “I can think of nothing more worthy of your time and effort now than the future of the IEC’s. If at all possible, please talk this over with our Senators and Congressmen and ask them to come to our assistance” (D. Herring, personal correspondence, February 20, 1962). Herring asked Henderson to support S.B. 1991 Manpower Development Training Act, and expressed concern that funds might be directed to “private profit-making technical institutes.” He said, “Dave, I have never pressed you on the stand you have felt it wise to take with these matters, but now I must. You have seen what we are doing in the IEC’s and you realize we have just begun to fight for the future of the 95% of our youngsters who never graduate from college” (D. Herring, personal correspondence, February 20, 1962). As he had for years, Herring continued to ask for political support of the IECs as the longest serving chairman of the North Carolina Board of Education.

Conclusion

Industrial education centers and community colleges in North Carolina have roots in programs and ideas from across the United States. From the establishment of Joliet College in 1901, through the growth of the North Carolina Community College System in the 1950s and 60s, the need for vocational and technical training in the form of two-year higher education programs grew.

Federal funding in the form of the Smith-Hughes Act of 1917 and the GI Bill of 1944 provided support for job preparedness and training to adults in need of new or better careers. These funds were supplemented by state and local money in North Carolina to support the establishment of industrial education centers and community colleges in areas demonstrating need for such programs.

Approval for North Carolina's first seven industrial education centers was provided by the State Board of Education on April 3, 1958, and the initial IECs were established in 1958-1959. These first seven IECs were located in Burlington, Durham, Goldsboro, Greensboro-High Point, Leaksville, Wilmington, and Wilson. An additional 11 centers were planned for 1960-1961. By 1961, 19 centers were opened across the State of North Carolina.

By the early 1960s, W. Dallas Herring advocated for the establishment of a North Carolina Community College System. He faced opposition from those who feared the state could not afford such schools. Others questioned the role of community colleges and expressed concerns that they might negatively impact private colleges.

Several industrial education centers became community colleges. This process was outlined in a document created by W. Dallas Herring, entitled *Converting an Industrial Education Center into a Community College*. IECs including those in Charlotte, Asheville, and Raleigh became community colleges that are still in existence today.

Though they only existed under the banner of "industrial education centers" for a few years, the IECs left an important mark on the history of higher education in North Carolina. Because of men like Dallas Herring and Luther Hodges, students who might otherwise have been left behind received training for new and improved careers.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

The Industrial Education Centers of North Carolina had a short, but significant role in the state's history of higher education. They served a special purpose at a time of transition following World War II before the North Carolina Community College System was fully formed. The IECs brought hope in the form of training and skills to young people from underserved areas who might have otherwise had few options for their education and, more significantly, their employment. These centers also served as a catalyst to bring new industries and businesses to North Carolina, which benefitted numerous entities including politicians and government leaders, businessmen seeking opportunities to expand, and local citizens who hoped to gain better employment. The centers helped provide training for local workforces which was useful in attracting industries. The opening of factories and plants created more jobs and better economic conditions for the municipalities and counties in which they were located. In addition to the job-related skills provided in the Industrial Education Centers, it was the belief of their founder, Dallas Herring, that the whole person should be addressed. This was manifested in Herring's desire to provide courses in humanities and social sciences, to help people become well rounded through their educations.

The importance of the Industrial Education Centers, not only to businesses and political leaders, but also to the citizens of North Carolina cannot be overstated. In the words of Dallas Herring:

“In the IEC's we are, by and large, reaching people whose roots are already down, who are married and at work and cannot leave to take instruction in a traditional residential setting. The vast majority of them would never get into any college ...

This is, in truth, a missionary effort of the most humane kind ... (D. Herring, personal communication, December 28, 1961).

With this statement, Herring revealed the practicality of the IECs as bringing training to people who might otherwise not receive any education beyond high school. He explained in simple terms that the purpose of these institutions was to literally meet students where they were – planted in the cities and towns many of them grew up in and were unlikely to leave. They might be unable or unwilling to move because of family ties or economic reasons, thus it was essential to offer training and courses accessible to the state's citizens no matter where they lived. Further, Herring noted it was a humane effort to insure everyone had access to education and training, regardless of where they lived or their economic level. This quote embodies the essence of the North Carolina Community College System, whose mission is

to open the door to high-quality, accessible educational opportunities that minimize barriers to post-secondary education, maximize student success, develop a globally and multi-culturally competent workforce, and improve the lives and well-being of individuals by providing:

Education, training and retraining for the workforce including basic skills and literacy education, occupational and pre-baccalaureate programs.

Support for economic development through services to and in partnership with business and industry and in collaboration with the University of North Carolina System and private colleges and universities.

Services to communities and individuals which improve the quality of life
(www.nccommunitycolleges.edu).

The inclusion of the words “open door” and “accessible” in the opening of the mission statement speaks to the most critical purposes of North Carolina’s community colleges: to serve and meet students where they are, both geographically and based on their educational and economic needs. These ideas were central to Herring’s vision for the industrial education centers and community colleges and should continue to be honored and referred to when making decisions about the future of the system in North Carolina. The IECs and community colleges offered education to students who might not be able to afford four-year university tuition and board, or may not be able to gain admission to such institutions. Community colleges continue to offer affordable education and training to students seeking training for employment or to prepare them for higher education in four-year colleges.

It was largely the vision and passion promoted by Dallas Herring, which led to the creation of the industrial education centers in North Carolina. In 1992, Herring published a series of essays he wrote from the 1950s to the 1970s entitled, “What has happened to the golden door?” These essays, coupled with Herring’s larger body of work, help us understand how strongly he believed in the importance of educating the complete person in order to benefit them as individuals, as well as the larger community and society. Further, Herring believed that the idea of a golden door of opportunity for Americans lay in education.

Herring stated:

It is either a false idea, or else one that is too abstruse for me, that one cannot be both a philosopher and a workman made more worthy of his hire through education and more worthy of his citizenship through familiarity with the great ideas that have moved western civilization ahead. Every man is to some extent a philosopher.

Democracy makes that assumption. Indeed, it risks its very existence on that assumption (Herring, p. 144, 1992).

Truly, in Herring's mind, democracy and education should work hand in hand. Everyone should have access to education, and governing bodies should help provide it to the citizenry as a mutually beneficial endeavor. Community colleges in North Carolina continue to be relatively affordable options for training and education in the state. In his work, Herring also promoted the notion that people should not only be trained specifically for a vocation, but as human beings who will live and work in a larger society. Thus, Herring promoted teaching humanities courses to students in vocational programs, rather than solely relying on technical training. This idea of educating the whole person and creating a balance of knowledge and skills is easily lost in today's challenging economic times. Herring would likely remind community college practitioners not to lose sight of this notion of "total education."

Discussion of Findings

Research Question 1: What role were the Industrial Education Centers in North Carolina originally intended to serve and who were the major contributors and influencers? As evidenced in this study, IECs were intended to provide technical training to young adults in North Carolina. Though present for only a few years, the IECs succeeded in this task. A large amount of their success is attributed to their champions: state legislators, governors, local administrators, and educational leaders. Perhaps the most influential person to the IECs was William Dallas Herring, whose dreams of expanding technical education to rural parts of North Carolina, was greatly aided by Governor Luther Hodges.

Research Question 2: How did the formation of the initial IECs contribute to the growth of the North Carolina Community College System? Several of the Industrial Education Centers combined with other education institutions or morphed directly into community colleges in the 1960s. The IECs provided part of the foundational goals of the future community colleges in that a major focus of the centers was to provide vocational and technical training beyond high school. This filled a role not adequately addressed in the public schools or four-year colleges prior to the formation of the IECs.

Implications for Practice

Research contained in this study fills a gap in the literature regarding the history of the Industrial Education Centers in North Carolina. While there have been numerous publications and research projects about higher education and community colleges, information about the IECs is scattered and largely available in primary sources.

Bringing additional information about IECs and community colleges to light helps provide guidance and examples for today's administrators in these institutions. Most IECs offered programs of study based on the needs of their geographic location. For example, Guilford IEC offered Woodworking and Knitter Fixing, in keeping with the area's role in furniture and textile industries. Today, Guilford Technical Community College offers programs in aviation, in partnership with Piedmont Triad International Airport, which is currently a major hub for several businesses. The examples of partnerships between IECs and local industries continue at many community colleges today. Such connections between education institutions and local businesses should be expanded, and community colleges are well equipped to continue this work.

Implications for Future Study

While this study has provided initial information about the history of the Industrial Education Centers in North Carolina, there is still much room for further research. Future research should delve into the reasons each center was established in its respective location. Focused studies could also be performed on individual histories for each center, revealing local political and economic reasons for the formation of each school in particular counties and cities. Such research could also indicate why particular programs were offered at some centers and not others. Demographics might be analyzed to provide comparisons across centers and areas of the state to reveal who enrolled in various programs and perhaps determine monetary benefits to their counties and the businesses and industries located therein.

Summary

This study examined primary and secondary sources to uncover the role of early Industrial Education Centers in North Carolina. A literature review was conducted to determine the available materials related to the IECs and higher education. The Dallas Herring Papers, housed in the special collections of the Hunt Library at North Carolina State University, were identified as the key source of information about the IECs. The summary of the contents of the papers was examined to determine which portions of the Herring Papers were relevant to the research questions of this study.

After identifying key documents in the development of the IECs, the information contained in these items was combined with the more general historical background located in published works and other research to help answer the research questions. The study was organized chronologically and thematically.

Recommendations for Future Study

Though many community colleges have websites and in-house publications disclosing their history, there are few publications specific to each one. There are also unpublished theses and dissertations, which have examined IECs and community colleges. Close studies of the founding of each Industrial Education Center will provide missing information about the social and political reasons each center opened and potentially, why they opened, the reasons they offered particular courses and programs, and other insights. Such information will further scholars and practitioners' understanding of why the centers were founded, thus furthering the body of scholarship examining the founding of technical programs in North Carolina.

Conclusion

Failure to fully understand the foundations of the modern community college system by acknowledging the significant role and history of the Industrial Education Centers in North Carolina would be detrimental to the future wellbeing of the state's community colleges and students. It is essential to recognize the desire of the IEC founders to accomplish key objectives that became increasingly clearer with time. These goals are the foundation of what technical education was in the past and what it should continue to be in the future. There is a danger of modern community colleges attempting to become all things to all people, when their administrators and other stakeholders should look no further than the reasons such institutions were founded in the first place.

North Carolina's Industrial Education Centers were founded in order to reach rural students who might otherwise not have access to such training after high school. These students were often tied to agriculture with few other local prospects for jobs. Unfortunately

for many, times were changing in the early to mid-1900s and the youth of the state, particularly those of little economic means, did not have access to secondary education to train for different careers. It was because of the vision of men like Dallas Herring that these students were able to access training for skills in new trades. Placing the IECs in convenient locations to the students who most needed them was a critical element of their role in serving rural students. Today's community colleges and their satellite campuses mirror this objective of locating campuses within close commuting distance of students across the state.

The IECs provided specific skills and training in a variety of vocational areas, many of which were common across the state. These included automobile mechanics and television and radio repair. Such programs insured students had the training necessary for jobs regardless of where they lived or their economic status. Other training in areas such as knitter fixing and commercial art were rare, only found in one or two IECs in the state because they answered a need specific to their location. This is a successful practice from the past that today's community colleges can continue to improve upon by looking at the examples set by the IECs. Forming partnerships with local industries and establishing programs that prepare students for jobs in those specific areas ensures the students are more likely to find gainful employment. Companies benefit from such collaborations as well because they will have a ready workforce, making them more likely to continue to invest in the community. Not only will this continue to grow the community colleges in these localities, but the towns and counties benefit economically as well.

The benefit of the IECs and community colleges to their local economies and citizens, as well as the state itself was something Dallas Herring understood and promoted. He was also an advocate for balancing vocational training with some liberal arts training in order to

develop more complete student citizens. While the debate often continues today about whether community colleges should focus upon vocational education or college transfer programs, it is important to note that there is ample room and reason to offer both at the community college level. Providing job training and preparing students for further education adheres to the mission of the IECs and modern community colleges in North Carolina: to meet students where they are and admit them through the open door of opportunity.

The origins of the community college system are clearly rooted in subjects typically considered vocational in nature. These programs, such as welding, mechanics, and woodworking were intended to provide training to help people get jobs. Today's community colleges would do well to remember their value to their municipalities is their ability to adapt to economic changes and to train people for current and future vocations.

The IECs developed during a period of economic shift in North Carolina. The state's community colleges, which have remained most economically viable have adapted to change as well. Offering programs and degrees that are not only on trend or in demand, but supported by local businesses and industries means students are being prepared for real jobs. This lends value and credibility to the community colleges, which also results in continued and better funding from all levels of government.

There is great interest within North Carolina and across the country on student engagement and retention. This is understandable given the current costs for states to operate colleges, as well as for students to attend them. It is now common for students, business owners, and local leaders to expect clear and measurable results from community college programs and degrees. These results often manifest themselves in the completion of certifications, degrees, or skills that lead to job promotions or new careers. The mission of

the initial Industrial Education Centers was based on this notion; students attended classes and completed programs in order to attain new or better jobs for a changing economy. Understanding the reasons for the formation of the IECs and applying them to the continuation of North Carolina's community colleges will help leaders assess their efficacy moving forward.

After studying the history of the IECs and community colleges in North Carolina, it is also clear that while the year 1963 is typically cited as the beginning of the state's community college system, the year 1957 is actually more appropriate. The origins of the North Carolina Community College System are inextricably linked to the formation of the state's initial Industrial Education Centers, beginning in 1957.

Learning from the examples set by the IECs in North Carolina is not only a good idea, but is essential to the continued health of the North Carolina Community College System. The rich history of the Industrial Education Centers in North Carolina paved the way for a strong and vibrant system which other states might also emulate. Providing an open door that meets students where they are while offering critical skills and training are the foundations on which this system is built. The current mission of the system is in keeping with the original vision and intent of the IECs and community colleges in North Carolina. Adhering to this mission, and maintaining respect for its origins will help the system continue to serve the best interests of the students and the State of North Carolina today and for many years to come.

REFERENCES

- A ten-year report of the Fund for Adult Education: 1951-1961 (1962). Fund for Adult Education, White Plains, NY. Retrieved from <http://files.eric.ed.gov/fulltext/ED028376.pdf>
- Adams, C., et. al., “North Carolina Community College System timeline” revised 6/2/2014, retrieved from: <https://www.randolph.edu/rcc-history/ncccs-timeline.html>
- Association for Career & Technical Education. (n.d.) Workforce Investment Act. Retrieved from: <https://www.acteonline.org/WIA/#.WsVVLdPwYdU>
- Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). Redesigning America’s community colleges: a clearer path to student success (1st ed.). Cambridge, MA: The President and Fellows of Harvard College.
- Barrier, L. P. (1977). A history of industrial arts education in North Carolina, 1919-1977 (Unpublished doctoral dissertation). North Carolina State University, Raleigh, NC.
- Berg, B. L. (2007). Qualitative research methods for the social sciences (6th ed.). Upper Saddle River, NJ: Pearson Education.
- Bok, Derek. (2015). Higher education in America. Princeton, NJ: Princeton University Press. Retrieved from https://books.google.com/books?hl=en&lr=&id=zYCSBQAAQBAJ&oi=fnd&pg=PP1&dq=higher+education+in+america&ots=WLk_EsLUcb&sig=wZt3J_vSAvuutEZqcRCfCbKZZDI#v=onepage&q=higher%20education%20in%20america&f=false
- Brawer, F. B. & Cohen, A. M. (2008). The American community college. San Francisco: Jossey-Bass.

- Brinkmann, S. (2013). *John Dewey: Science for a changing world*. New Brunswick, NJ: Transaction Publishers. Retrieved from <https://site.ebrary.com/prox.lib.ncsu.edu/lib/ncsu/reader.action?docID=10807452&ppg=28>
- Brint, S. and Karabel, J. (1989). *The diverted dream: community colleges and the promise of educational opportunity*. New York: Oxford University Press.
- Broadhurst, C. J. & J. E. Bartlett II (2014) A History of the Community College Internship Program at North Carolina State University, *Community College Journal of Research and Practice*, 38:6, 564-574, DOI: 10.1080/10668926.2011.632748
- Cheng, E. K. (2012). *Historiography: An introductory guide*. London: Continuum International Publishing Group.
- Cooper, D. "Sanford Accepts 'Blame'." *The News and Observer*. Nov. 8, 1961.
- Cullen, J. (2012) *Essaying the past: How to read, write, and think about history* (2nd ed.). Hoboken, NJ: John Wiley & Sons. Retrieved from <http://site.ebrary.com/prox.lib.ncsu.edu/lib/ncsu/reader.action?docID=10575479>
- Community college study: Prepared as part of the Survey of Public Education. (1952). Raleigh, NC: State Superintendent of Public Education. Retrieved from <http://babel.hathitrust.org/cgi/pt?id=nc01.ark:/13960/t9w09zs14;view=1up;seq=5>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- D. Hiden Ramsey Papers, 1877-1966. The Southern Historical Collection. Louis Round Wilson Special Collections Library, University of North Carolina at Chapel Hill.
- Dewey, J. C. (1916). *Democracy and education*. New York, NY: Macmillan.

- Drury, R. L. (2013). Community colleges in America: a historical perspective. *Inquiry*, Vol. 8 No. 1, Spring 2003. Retrieved from: <https://files.eric.ed.gov/fulltext/EJ876835.pdf>
- Eddy, P. L. and J. P. Murray (Eds.). (2007). *Rural community colleges: Teaching, learning, and leading in the heartland*. San Francisco, CA: Josey-Bass.
- “First N.C. vocational training center opens.” *The Advisor*. July, 1958. Retrieved from Gerald B. James Library, Rockingham County Historical Collections, Rockingham Community College.
- Foner, E. (2013). *Give me liberty!: an American history vol. 2* (4th ed.). New York, NY: W.W. Norton & Company, Inc.
- “Furniture work shifts from N.C. to south China.” NPR. December 18, 2009. Retrieved from <https://www.npr.org/templates/story/story.php?storyId=121576791>.
- “GE Aviation planning to expand West Jefferson facility” *Ashe Mountain Times*, July 12, 2013. Retrieved from: <http://www.ashencedc.com/news-media/ge-aviation-planning-to-expand-west-jefferson-facility>.
- “GE expands, adds jobs in Ashe, WCC aids training” *Wilkes Journal Patriot*, North Wilkesboro, NC, July 10, 2015. Retrieved from: http://www.journalpatriot.com/news/ge-expands-adds-jobs-in-ashe-wcc-aids-training/article_402d69ba-2729-11e5-9abd-d7e30fe963fd.html.
- Geiger, R. L. (2015). *The history of American higher education: Learning and culture from the founding to World War II*. Princeton: Princeton University Press.
- George, A. B. (Ed.). (1994). *A handbook on the community college in America: Its history, mission, and management*. Albany: State University of New York Press. Retrieved from <http://www.nccommunitycolleges.edu/get-facts>

- Goodyear, L., Barela, E., & Jewiss, J. (2014). *Research methods for the social sciences: Qualitative inquiry in evaluation: From theory to practice*. San Francisco, CA: Jossey-Bass.
- Gordon, H. R. D. (2014). *The history and growth of career and technical education in America* (4th ed.). Long Grove, IL: Waveland Press, Inc.
- Harbour, C. P. (2015). *John Dewey and the future of community college education*. London, UK: Bloomsbury Academic.
- Heller, D. E. (2001). *The states and public higher education policy: Affordability, access, and accountability*. Baltimore, MD: Johns Hopkins University Press.
- Herring, W. D. Papers. Special Collections Research Center. North Carolina State University Libraries, Raleigh, North Carolina.
- Herring, W. D. (1992). *What has happened to the golden door?* Rose Hill, NC: Bedwyr Historical Press.
- History of State Board of Education, <https://stateboard.ncpublicschools.gov/about-sbe/history/chapter-ten>.
- Huppert, G. (1970). *The idea of perfect history: Historical erudition and historical philosophy in Renaissance France*. Urbana, IL: University of Illinois Press.
- Hurlburt, A. S. (1952). *Publication No. 285 community college study: prepared as part of the Survey of Public Education*. Raleigh, NC: State Superintendent of Public Instruction.
- Retrieved from: <http://catalog.hathitrust.org/Record/007375473>
- “Industrial Education Center Work Starts” *Salisbury Post* Sept. 25, 1962.
- <http://www.jjc.edu/about-jjc>

Ivan Valentine obituary. Retrieved from

<https://www.findagrave.com/memorial/15457256/ivan-ernest-valentine>

Jenkins, J. Interview with William Dallas Herring, May 16, 1987. Interview C-0035.

Southern Oral History Program Collection.

King, S. W. (ed.) (1962). Preparatory Trade and Industrial Training Programs in Public

Schools A Directory: 1961-62. Bulletin 1963, No. 4. Washington, D.C.: United States

Government Printing Office. Retrieved from:

<https://files.eric.ed.gov/fulltext/ED544005.pdf>

Kromm, C. (Mar. 10, 2016). Trade deals have hit North Carolina harder than Michigan.

Facing South. Retrieved from: <https://www.facingsouth.org/2016/03/trade-deals-have-hit-north-carolina-harder-than-mi>.

Langfitt, F. (Dec. 18, 2009). Furniture work shifts from N.C. to South China, *National Public*

Radio. Retrieved from

<https://www.npr.org/templates/story/story.php?storyId=121576791>

Little, J. E. (2003). South Piedmont Community College: Historical description and analysis

of events leading to the establishment of a new community college in the North

Carolina Community College System (Unpublished doctoral dissertation). North

Carolina State University, Raleigh, NC.

Lochra, A. P. (1978). The North Carolina Community College System: Its inception—its

growth—its legal framework (Unpublished doctoral dissertation). University of North

Carolina Greensboro, Greensboro, NC.

Lucas, C. J. (1994). American higher education: a history. New York, NY: St. Martin's

Press. <http://markers.ncdcr.gov/Markers.aspx?MarkerId=J-113>

“Many in Ailing NC Furniture Industry Couch Support for Trump in Economic Terms,”
WRAL, Oct. 27, 2016.

Mayberry, L. P. D. (1972). “William Dallas Herring: Leader in five issues in education in North Carolina (Unpublished doctoral dissertation). North Carolina State University, Raleigh, NC.

“Many in ailing NC furniture industry couch support for Trump in economic terms” October 27, 2016, Retrieved from <http://www.wral.com/many-in-ailing-nc-furniture-industry-couch-support-for-trump-in-economic-terms/16169034/>.

Moore, G. “Why was the Smith-Hughes Act needed?” The Agricultural Education Magazine, Vol. 89, Issue 4, Jan/Feb 2017. Retrieved from: <https://search-proquest-com.prox.lib.ncsu.edu/docview/1892767114/fulltextPDF/FA61B04A3C1048C7PQ/1?accountid=12725>.

NCCCS Fact Book, Raleigh, NC: North Carolina Department of Cultural Resources.

Retrieved from

<http://digital.ncdcr.gov/cdm/fullbrowser/collection/p249901coll22/id/25226/rv/compo-undobject/cpd/18394>.

North Carolina & tobacco: historical background. Retrieved from:

<http://www.pbs.org/pov/brightleaves/historical-background/>.

“North Carolina public school bulletin XVI May 1952.” (1952). Raleigh, NC: North Carolina Department of Education. Retrieved from

<http://archive.org/details/northcarolinapub16nort>

“Putting North Carolina back to work: how stimulus money and the Workforce Investment Act benefitted the state.” North Carolina Commission on Workforce Development.

Retrieved from: <https://www.nccommerce.com/Portals/11/Documents/Reports/NC-Back-to-Work.pdf>.

Rothwell, W. J., Gerity, P. E., & Carraway, V. L. (2017). Community college leaders on workforce development: opinions, observations, and future directions. Lanham, MD: Rowman & Littlefield.

Senger III, K. B. (1974). A history of the community college movement in North Carolina, 1927-1963. Kenansville, NC: James Sprunt Press.

Stubblefield, H. W. & Keane, P. (1994). Adult education in the American experience: From the colonial period to the present. San Francisco: Jossey-Bass.

Thelin, J. R. (2011). A history of American higher education (2nd ed.). Baltimore, MD: Johns Hopkins University Press. Retrieved from https://books.google.com/books?id=q7uM0jInCDcC&printsec=frontcover&source=gs_ge_summary_r&cad=0#v=onepage&q&f=false.

Townsend, B. and Bragg, D. (Eds.). (2006). ASHE Reader on Community Colleges. Boston, MA: Pearson Custom Publishing.

Tuchman, B. (1981). Practicing history: Selected essays. New York, NY: Random House.

Vaughan, G. B. (1985). The community college in America: a short history. Washington, D.C.: American Association of Community and Junior Colleges National Center for Higher Education. Retrieved from <https://files.eric.ed.gov/fulltext/ED255267.pdf>.

- Van Noy, M., Heidkamp, M., & Manz, E. "Community college practices that serve older dislocated workers." In Brief, Issue Brief of The NTAR Leadership Center, April 2013. Retrieved from: <https://www.dol.gov/odep/pdf/CommunityColleges.pdf>
- Wescott, J. W. II (2005). A vision of an open door: The establishment and expansion of the North Carolina Community College System (Unpublished masters thesis). North Carolina State University, Raleigh, NC.
- Wescott, J. W. II (1998). Competing visions: Herring and Hodges and the conception of the community college system in North Carolina (Unpublished doctoral dissertation). North Carolina State University, Raleigh, NC.
- Wescott, J. W. II (2014). Creating success: The North Carolina Community College System. Chapel Hill, NC: Chapel Hill Press.
- Wescott, J. W. II (2000). Reaching the forgotten: the industrial education centers in North Carolina, 1957-1953. (Unpublished masters thesis). Wake Forest University, Winston-Salem, NC.
- Wiggs, J. L. (1989). The community college system in North Carolina: a silver anniversary history, 1963-1988. Raleigh, NC: North Carolina State Board of Community Colleges.
- Wyner, J. S. (2014). What excellent community colleges do: preparing all students for success. Cambridge, MA: Harvard Education Press.
- Zwerling, L. S. (1986). The community college and its critics. San Francisco, CA: Jossey-Bass.

APPENDICES

Appendix A: Community College Populations by City or Town

Community College	Location	Population
Alamance Community College	Graham	14,153
Asheville-Buncombe Technical Community College	Asheville	83,393
Beaufort County Community College	Washington	9,744
Bladen Community College	Dublin	338
Blue Ridge Community College	Flat Rock	3,114
Brunswick Community College	Bolivia	143
Caldwell Community College and Technical Institute	Hudson	3,776
Cape Fear Community College	Wilmington Morehead	106,476
Carteret Community College	City	8,661
Catawba Valley Community College	Hickory	40,010
Central Carolina Community College	Sanford	28,094
Central Piedmont Community College	Charlotte	731,424
Cleveland Community College	Shelby	20,323
Coastal Carolina Community College	Jacksonville Elizabeth	70,145
College of The Albemarle	City	18,683
Craven Community College	New Bern	29,524
Davidson County Community College	Thomasville	26,757
Durham Technical Community College	Durham	228,330
Edgecombe Community College	Tarboro	11,415
Fayetteville Technical Community College	Fayetteville	200,564
Forsyth Technical Community College	Winston-Salem	229,617
Gaston College	Dallas	4,488
Guilford Technical Community College	Jamestown	3,382
Halifax Community College	Weldon	1,655
Haywood Community College	Clyde	1,223
Isothermal Community College	Spindale	4,321
James Sprunt Community College	Kenansville	855
Johnston Community College	Smithfield	10,966
Lenoir Community College	Kinston	21,677
Martin Community College	Williamston	5,511
Mayland Community College	Spruce Pine	2,175
McDowell Technical Community College	Marion	7,838
Mitchell Community College	Statesville	24,532
Montgomery Community College	Troy Rocky	3,189
Nash Community College	Mount	57,477
Pamlico Community College	Grantsboro	688

Piedmont Community College	Roxboro	8,362
Pitt Community College	Winterville	9,269
Randolph Community College	Asheboro	25,012
Richmond Community College	Hamlet	6,495
Roanoke-Chowan Community College	Ahoskie	5,039
Robeson Community College	Lumberton	21,542
Rockingham Community College	Wentworth	2,807
Rowan-Cabarrus Community College	Salisbury	33,662
Sampson Community College	Clinton	8,639
Sandhills Community College	Pinehurst	13,124
South Piedmont Community College	Polkton	3,375
Southeastern Community College	Whiteville	5,394
Southwestern Community College	Sylva	2,588
Stanly Community College	Albemarle	15,903
Surry Community College	Dobson	1,586
Tri-County Community College	Murphy	1,627
Vance-Granville Community College	Henderson	15,368
Wake Technical Community College	Raleigh	403,892
Wayne Community College	Goldsboro	36,437
Western Piedmont Community College	Morganton	16,918
Wilkes Community College	Wilkesboro	3,413
Wilson Community College	Wilson	49,167

Appendix B: Members of Community College Committee

Senator Julian Allsbrook
Roanoke Rapids, North Carolina

Dr. Hoyt Blackwell, President Mars Hill College
Mars Hill, North Carolina

Mr. Vernon A. Buck, Director George Washington Carver College
Charlotte, North Carolina

Dr. Glenn L. Bushey, President Asheville-Biltmore Junior College
Asheville, North Carolina

Mr. A. B. Combs, Assistant Director Division of Instructional Service Department of Public Instruction
Raleigh, North Carolina

Miss Bonnie E. Cone, Director Charlotte College
Charlotte, North Carolina

Mr. Earl Funderburk, Superintendent Elizabeth City Schools
Elizabeth City, North Carolina

Dr. Elmer H. Garinger, Superintendent Charlotte City Schools
Charlotte, North Carolina

Dr. Nelson H. Harris, Director Teacher Education Shaw University
Raleigh, North Carolina

Dr. James E. Hillman, Director Division of Professional Service Department of Public Instruction
Raleigh, North Carolina

Dr. John T. Hoggard, President Wilmington College
Wilmington, North Carolina

Dr. Allan S. Hurlburt, Chairman Director of Bureau of Educational Research and Service
University of North Carolina Chapel Hill, North Carolina

Mr. W. A. Kennedy, President Textile Machinery
1814 South Tryon Street Charlotte, North Carolina

Mr. A. D. Kornegay, Superintendent Hendersonville City Schools
Hendersonville, North Carolina

Dr. J. H. Lampe, Dean School of Engineering North Carolina State College
Raleigh, North Carolina

Dr. J. D. Messick, President East Carolina College
Greenville, North Carolina

Dr. Guy B. Phillips, Dean School of Education University of North Carolina
Chapel Hill, North Carolina

Dr. William M. Randall, Dean Wilmington College
Wilmington, North Carolina

Mr. H. M. Roland, Superintendent New Hanover County Schools
Wilmington, North Carolina

Mr. J. Warren Smith, Director Division of Vocational Education Department of Public Instruction
Raleigh, North Carolina

Mr. S. C. Smith, Dean Technical Institute Agricultural and Technical College
Greensboro, North Carolina

Mr. J. J. Stevenson, Jr., Dean Brevard College
Brevard, North Carolina

Consultant

Dr. L. O. Todd, President East Central Junior College
Decatur, Mississippi

Field Associates

Mr. Harry J. Jarvis Graduate Student Teachers College, Columbia University
New York, New York

Mr. Herman J. Preseren Graduate Student University of North Carolina
Chapel Hill, North Carolina

Mr. Ivan B. Stafford Graduate Student University of North Carolina
Chanel Hill, North Carolina