ABSTRACT

STILWELL, LAURI HOUCK. Adult Education in North Carolina: Instructor Efficacies in the 21st Century. (Under the direction of Dr. James Bartlett)

Adult Education (AE) in the North Carolina Community College System (NCCCS) is undergoing changes in the twenty first century in response to legislation passed, namely the Workforce Innovation Opportunity Act (WIOA), beginning in 2014. Conceptualized instruction that targets job interests, a goal of employment or enrollment into a postsecondary institution upon completion of the High School Equivalency (HSE) or the Adult High School Diploma (AHSD) and new methods of measuring progress are but a few of the criteria set forth for AE as a result of WIOA. Because of the stress placed upon new standards, it is speculated that instruction in AE will be evaluated as well as those who carry out this instruction and who are responsible, in essence, for supporting the student to completion. The purpose of the study was to identify the viewpoints currently held among AE administrators in the NCCCS toward the most and least needed qualifications, skills and abilities of AE instructors in order for them to see students through to completion of their secondary credential.

Q methodology, using both quantitative and qualitative methods, provides an opportunity to study individual’s subjective reality and is used to investigate AE administrator’s viewpoints. Literature on Adult Education, current job postings for AE instructors within the NCCCS and narratives from experts in the field were used to develop a set of statements. Then, twenty-five AE administrators sorted, in a forced distribution, the statements according to their viewpoints about AE instructor qualifications, skills and abilities needed. Demographic as well as narrative information was collected from the participants to gain greater understanding about each participant’s sort. Data analysis indicated four distinct and statistically significant factor groups:
the AE Instruction Specific group, the AE Student Centered group, the Adult Learning Theory and Principles, and the AE Responding to Change group. The findings of this study generate considerations for practice, policy, and further research in the field of Adult Education and outcomes.
Adult Education in North Carolina: Instructor Efficacies in the 21st Century

by
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A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Doctor of Education

Adult and Community College Education

Raleigh, North Carolina
2018

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DEDICATION

This body of work is dedicated to my mother and grandmother, both of whom instilled in me a strong work ethic, perseverance, a love and respect for education and a passion for helping people.
BIOGRAPHY

Lauri Houck Stilwell was born in Lenoir, North Carolina and lived in several places in the Eastern United States while growing up, including: Hickory, North Carolina, Elkin, North Carolina, Schaumburg, Illinois, and Charlottesville, Virginia. After securing a part-time job with a local community college, her passion for helping students realize their potential was recognized and Lauri endeavored to pursue a career in Adult Education, also known as Basic Skills.

She received a B.A. in Human and Community Services from Lenoir-Rhyne University, and an M.A. in Higher Education from Appalachian State University as well as numerous professional credentials in specialized areas of Adult Education in the North Carolina Community College System. It was through these educational opportunities and Lauri’s interest in adding to the Adult Education literature, that the pursuit of her doctoral studies was formed.

Lauri has worked in several capacities within the field of Adult Education over the past twenty seven years including instruction, program coordination, program direction, curriculum development, enrollment and recruitment, professional development, content standards, distance learning and student learning needs. In addition, Lauri is a member of the Association for Adult and Continuing Education, the Commission on Adult Basic Education, and the ACT of North Carolina State Organization.

Lauri lives in Lenoir, North Carolina with her husband and enjoys spending time with her two adult sons, daughter-in-law and grandson as well as crafting, true crime stories, and DIY projects.
ACKNOWLEDGMENTS

This accomplishment was a collective effort of those who encouraged and supported me in more ways than one. My husband, Darren, survived the EdD journey along with me and is a constant source of love, respect and support for all that I do. I could never have even attempted this endeavor without him by my side. Also surviving, my sons, Ben and Luke, daughter-in-law, Emma, and grandson, Liam, have been sources of strength, inspiration and love who will never realize how much they contributed to this achievement.

I owe a debt of gratitude to my parents, Larry and Ann, whose lifelong backing of my educational goals have given me a support system in which to achieve whatever I wanted to, which is an enviable circumstance for most. My brother, Carey, and his family, Julie, Riley, Rachel and Madeleine, provided many accommodations, meals, rides, respite, reassurance and praise. They contributed more than they realize and I am grateful.

My supervisor, colleagues and friends at CCCTI also helped me in many ways and endured a lot in the process. I will always be thankful for their encouragement and understanding.

My committee, Dr. James Bartlett, Dr. Kenneth Boham, Dr. Michelle Bartlett and Dr. Diane Chapman, taught me so much and I will always be appreciative of their efforts and time. Dr. Boham, particularly, has served as a mentor and guide for many years, encouraging me to believe in myself, and providing an example of leadership that I will always revere.

Last but not least, the cohort provided invaluable support. Each and every one of them encouraged me in some way, but Brian Thomas and Katie Kandalec were major contributors to my success and without their friendship, I would not have completed. Many thanks to all from the bottom of my heart.
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CHAPTER 1

The success of Adult Education programs in North Carolina is crucial to the realization of many future social, economic and political factors within the state. As reported in *Education Week*, May of 2015, the U.S. Department of Education showed North Carolina holding an 83% graduation rate for the 2012-13 school year. Compared to the national graduation rate average of 81% from the same source, North Carolina would seem to be holding its own with regard to seeing students through to completion of their high school diplomas. While this statistic gives a snapshot of 21st century public school student outcomes in North Carolina, and invokes a positive concept of secondary education for the state, the fact remains that students today continue to drop out of high school for numerous reasons and are then faced with grim prospects for employment as adults. This research will enter the discussion about secondary education and graduation rates in North Carolina by studying the preparedness of community college instructors in Adult Education and their ability to see students in their classrooms through to completion. The purpose of the research is to bring twenty first century social and political changes in Adult Education into focus and then, to acknowledge the modifications needed in the field of Adult Education with regard to ongoing training and professional development of instructors.

In the United States, Adult Education programs incorporate Adult Basic Education (ABE) for adults functioning below high school literacy levels, Adult Secondary Education (ASE) for adults seeking to pass the General Educational Development (GED®) test, or the equivalent, Adult High School Diploma and English Literacy Courses (Friedel, 2011). These programs largely receive federal support from the Adult Education and Family Literacy Act (AEFLA), a legislative act under Title II of the Workforce Investment Act (WIA) of 1998.
(Gordon, 2014), which replaced the National Literacy Act of 1991 and the Adult Education Act of 1966 (Gordon, 2014). Since this provision was implemented, the federal government has provided grants to states to offer programs and services to adults who fit into the Adult Education program categories defined above (Smith, King, & Schroeder, 2012). Programs have shown measurable gains in literacy skills, based on standardized assessments, over the course of the last decade (Holzer, 2011); however, recent statistics would indicate that many adults in the United States continue to lack the literacy skills needed for success in higher education and in the workforce (Holzer, 2011).

To address this continuing concern, in July 2014, President Barrack Obama authorized the Workforce Innovation and Opportunity Act (WIOA), the first legislative update to the United States’ workforce development and training policies since 1998 (Jeffcoat, et al, 2014). WIOA supersedes the legislative decisions included in WIA of 1998, AEFLA of 1998, the Wagner-Peyser Act, and incorporates portions of the Perkins Act for Career and Technical Education (Holzer, 2011). Given the comprehensive nature of the act, it strives to implement and enhance programs for various aspects of workforce development, employment, and rehabilitation services (Holzer, 2011), addressing the needs of youth, veterans, individuals with disabilities, migrant workers, and low-income workers (Holzer, 2011). The act went into effect in July 2015, with agencies and organizations having specific target dates to implement changes and accountability measures.

WIOA has significantly impacted AEFLA and the manner in which AEFLA programs are measured, receive funds, offer classes and ultimately, transition students into employment and/or postsecondary education. Because of this impact and the extent to which it implies change in Adult Education programs, the specifics of these acts are necessary to understand.
The specific changes made to AEFLA include:

- Requiring states to prepare a unified plan to address strategic goals for funding, corrections education, English Language Acquisition, educational training, and assessment;
- Establishing common performance measures;
- Strengthening relationship between adult education programs, postsecondary education, and employers;
- Supporting the education and careers of incarcerated individuals;
- Altering the requirements states use in funding local adult education programs;
- Encouraging professional development opportunities for innovation in adult education programs;
- Striving to improve quality of adult programs; and
- Systemize integrated English Language Acquisition and Civics Education programs. (Jeffcoat, et al, 2014)

The majority of the updates and changes pose challenges and opportunities for adult students, but also for the individuals working in Adult Education. Several of the provisions mentioned above directly impact these individuals, as Title II of WIOA directly addresses the educational programs governed by the Department of Education (Holzer, 2011). Those provisions are important to understand for the sake of this research, since it is within the implementation of those provisions that stakeholders in Adult Education are beginning to acknowledge the numerous changes that must take place for programs to be successful in seeing students through to completion of their secondary credential.
For individuals working within educational programs targeting Adult Education, Title II of WIOA represents a shift in several key policies and procedures. Collectively, WIOA introduces a shift to career pathways and a focus on integrating efforts with employers. All entities are encouraged to collaborate with employers, and states/regions are developing and enhancing local boards in an effort to foster positive relationships between institutions and regional employers.

Career pathways are intended to help meet the needs of both the students and the employers by creating more intentional educational paths for students. Students and instructors can articulate the utility of each course and the related career outcomes. While this concept is utilized in secondary and postsecondary education, the shift for Adult Education is the requirement to align career pathways within the unified state plans to create workforce development programs to simultaneously meet the needs of students and employers (Friedel, 2011).

Yet, more importantly, the new accountability measures for Adult Education introduced in WIOA, have strong implications for funding of programs and for performance evaluations. Under the new plan, states will be evaluated on the employment of program participants and their median earnings, in addition to the percentage of individuals obtaining a diploma or postsecondary credit and achieving measurable skills gains throughout the program (Friedel, 2011). Having previously focused on students’ degree completion and credentials only, the employment accountability measures require educators to shift their focus to a broader audience. The implications of these changes in Adult Education has initiated this research. This study examines Adult Education programs in North Carolina Community Colleges, specifically what the instructors in those programs need in order to carry out the aforementioned provisions.
Adult Education (AE) currently has the need for instructors to be trained in multiple areas that involve many facets of serving these adult learners. Historically, instructors hired to teach adult students who needed a high school equivalency came from many different backgrounds, most without teacher training. Those instructors hired who are skilled in teaching, such as retired public school teachers, often come with a honed subject matter background, and with limited or nonexistent training in adult learners (Tyler & Lofstrom, 2009). Many ABE and ASE programs have only the 4-year degree as a requirement to teach in this area. In the past, an instructor has needed minimal skills specific to the AE field in order to help a student pass the tests necessary to complete their high school equivalency, namely the General Education Development Test, also known as the GED®. Currently, many ABE and ASE programs haven’t changed their qualifications for teaching and yet, what these students need in order to be successful has changed dramatically (USDOE, 2015).

Statement of the Problem

So, the aforementioned needs of the Adult Education classroom today encompass a breadth of knowledge, skills, training, experience and resources on the instructors’ behalf in order to fully support a student from the onset of testing and addressing academic needs, to securing the actual credential and transitioning into the workforce or into postsecondary endeavors. While these student needs are surfacing as a result of various vicissitudes related to legislation, workforce development, and the focus of K-12 education, the impact of any or all of it greatly affects the outcome of that students’ experience and efforts in the AE classroom.

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1 GED® and GED Testing Service® are registered trademarks of the American Council on Education (ACE).
AE instructors have historically been hired with just a BA/BS, no matter the background. Teaching experience was preferred on advertised AE instructor positions in the past, but not required. Basically, the qualifications for the positions were that candidates held a 4-year degree and this was not necessarily a requirement across the state. Because of the autonomy given to each college, the requirements for those positions was a local decision and many only required an Associate’s degree. Now, with the changes in WIOA legislation, Adult Education programs are being held to new criteria. That new criteria is evident in the following example taken from the NCCCS website in March 2017, specifically the College and Career Readiness webpage:

Research studies prove that the quality of instruction has the greatest impact on student performance. As a result, federal and state agencies, in addition to other national organizations, require higher standards for instructors. In 2012, the Program and Professional Development Team established a process and credentialing system to train instructors in evidence-based teaching methodologies. These include the learning philosophies and frameworks that are unique to adult education and literacy activities. The credentialing courses and credentialing process funded through the NC Community College System and are accessible to all full or part-time basic skills instructors or community-based volunteers. Each of the CEU courses may be taken as stand-alone credit or combined to earn one of the certifications:

- College and Career Readiness Core Certificate
- Adult Secondary Education (ASE) Specialty Certificate
- College and Career Readiness ESOL Specialty Certificate

While the pressure to meet the WIOA standards has brought on considerable change to the skills and abilities necessary for these instructors to help students complete their credential, it
is not yet a requirement for instructors to have these newly developed certificates to be considered for instructor openings, as is evident in the current AE instructor positions posted within the NCCCS that are discussed in more detail in Chapter 3.

Instructors may not feel the impact of this new criteria right away, however; the WIOA State Plan for the State of North Carolina is clear in its charge to Adult Education programs. In the excerpt below, taken directly from the state plan, the specific measures for quality are outlined and explained:

Assessing Quality: The North Carolina Community College System (NCCCS) will assess the quality of all sub-grant recipients through a variety of continuous program monitoring and oversight activities. In order to empower adult education and family literacy providers to effectively serve individuals and communities, the NCCCS office will develop a Basic Skills Quality Checklist to identify quality indicators, based on evidence-based best practices and the thirteen considerations. This tool will provide the framework to identify strengths and weakness as well as the level and type of support each sub–grant recipient needs from the NCCCS office. To assist in building stronger adult education and family literacy programs in North Carolina, the NCCCS office will conduct ongoing programmatic and data reviews, plus quarterly and annual evaluations with sub-grant recipients. Quality will be evaluated through monitoring visits, performance reports, and on-site program reviews. Additionally, NRS approved assessments will measure the effectiveness of the state and local providers in achievement of core indicators and levels of student improvement as negotiated with the U.S. Department of Education Office of Career, Technical, and Adult Education (OCTAE). Programs must provide student progress measures obtained from all students who have attended at least 12 hours of
instruction. Documented progress of student performance measures must include at a minimum: Literacy skill level improvements in reading, writing, and speaking the English language, problem solving, numeracy, and other literacy skills as measured through Measurable Skills Gains, employment rates in the second and fourth quarter after exit, attainment of secondary school diploma and enrollment in postsecondary education/training or employed within one year after exit, and attaining a post-secondary credential while enrolled or one year after exit.

The NCCCS team will also develop and provide technical assistance trainings for programs that struggle to meet goals and objectives. If a sub-grant recipient fails to meet performance goals or other programmatic requirements, the NCCCS office will take specific action to assist the program in improving the quality of the program. NCCCS will use the following two plans to take action to improve the quality of the adult education and family literacy activities.

1. Performance Improvement Plan (PIP) – A PIP will be required for programs which are identified as low–performing when compared to the State performance on federal or State benchmarks. The PIP will include specific action steps related to performance. NCCCS will provide support and assistance to programs, which may include targeted professional development, face-to-face trainings in specific areas of challenge, and technical assistance visits.

2. Corrective Action Plan (CAP) – A CAP will be implemented with programs that are out of compliance with State and/or federal policies. NCCCS will provide technical assistance throughout the corrective action process, and by the end of a designated
timeframe, programs should be able to correct the identified issues and end their respective CAP.

As a part of both plans, the NCCCS office will provide ongoing technical assistance, professional development, and other support until the required steps of the plans are completed. The type of technical assistance, professional development, and other support will be based upon the specific area(s) of deficiency or need for the individual program. Quality Assessment Review Activities through the evaluation and monitoring process, NCCCS will monitor the goals and objectives for achieving measurable skill gains, transitioning into post-secondary programs or training, and/or employment. The following activities are part of the NCCCS Quality Assessment Review process:

1. Ongoing Desktop Monitoring – Ongoing monitoring will include data validations through the information management system conducted by the Program Quality and Accountability team within the NCCCS team.

2. Quarterly Data Review - Programs will submit quarterly data and these data will be reviewed for progress in meeting federal reporting and performance measures.

3. Annual Performance Review
   Programs will submit an annual performance data that will be used to evaluate the effectiveness for the program year as measured by NRS performance measures.

4. On-Site Review - NCCCS will conduct on-site reviews of 25% of sub-grant recipients each year. Programs determined to be high risk may also receive an on-site review. A data risk assessment will occur annually for each program. An evaluation system will be developed to measure the effectiveness of both the professional development offerings and technical assistance provided by NCCCS. All professional development and technical assistance will be systemically
evaluated. An impact analysis of this data will be performed each quarter assessing instructor credential attainment to student measurable skill gain. NCCCS will also examine program data to gauge the impact of professional development and technical assistance conveyed to individual programs. This systematic evaluation will provide a holistic lens through to view the impact of the instructor credentialing system and provider technical assistance.”

This excerpt is but a small portion of the WIOA State Plan for North Carolina, but even in the brevity of this text, it is apparent that programs will be held accountable for their performance and service to students. While it was once sufficient for an instructor to assist the student in earning the diploma, students now also have to make measureable skill gains, have jobs, or be enrolled in postsecondary education before AE programs get “credit” to receive the usual grant funding. This has significant direct impact on instructors. In the earlier excerpt from the NCCCS website, the College and Career Readiness page stated that research reveals that instruction has the most influence on student success. Now, with the new criteria from WIOA, the funding of these AE programs is going to depend on the performance of these instructors and their influence on students and their success. If AE programs are to be measured effectively based on the performance of instructors, it is imperative that all stakeholders realize the importance of having well prepared instructors in place. Crucial to this realization, is that instructors, first and foremost be fully aware of their responsibility to that student.

Instructors employed in these areas have traditionally been hired for part-time positions, teaching approximately 12-15 hours per week. Many of these instructors are looking to supplement their income from other full-time jobs with a few hours per week of teaching. Others work more hours but typically fewer than twenty, and it has been a common practice for those instructors to never be evaluated due to their part-time status of less than twenty hours per
These positions are typically offered professional development opportunities as funds allow, but rarely is it the case that instructors are held to accountability on behalf of their students’ success. These positions are not allowed paid time for preparation and instructors are seldom paid for staff meetings or anything but explicit instruction. For these reasons, AE instructors are often not included in meetings, webinars, conferences and the like, where trending information about AE is disseminated. In other words, many instructors are often left out of the loop or not held to the same standards as administrators are when it comes to staying abreast of currents trends or research in their field. For some instructors, the changes as a result of WIOA will require more of a commitment on their behalf, more accountability for their daily interactions with students, and certainly more preparation for their time in the classroom.

Instructors without a developed degree of awareness and skill in regard to these needs, in addition to the specific academic skills necessary for their career interests, are not able to fully support the student to completion. The problem is defined here: The needs of students in Adult Education programs in the North Carolina Community College System (NCCCS) have changed drastically in the 21st century. Professional skills and training necessary to address these requirements in instruction are specific and extensive. While the student needs, goals and challenges have transformed, it is speculated that most hiring and instructor evaluation practices have not been modified to accommodate those needs, therefore the need to study the skills, training, and ongoing professional development of Adult Education instructors in North Carolina Community Colleges is inherent.

**Purpose of the Study**

In understanding what Adult Education program leaders feel are the critical qualifications of their instructors, we gain an understanding of the challenges facing the instructors who
interact with these most vulnerable students. It is the instructors who can ultimately make or
break a program with their influence on the students, through classroom management, quality of
instruction, implementation of curriculum, and their interactions with students. Better
understanding the needs of this role mean we can make concentrated efforts to minimize the
rates of attrition of adult learners and better meet the forthcoming state standards.

Traditionally, Adult Education programs in the NCCCS have been administratively
managed by criteria set forth within each college and local processes and procedures. Each of
the 58 community colleges has Adult Education (formerly known as Basic Skills) in different
areas or departments. Many now have these programs in departments known as College and
Career Readiness (Jeffcoat et al, 2014). Because of the differences in how AE programs are
situated in the NCCCS, it is understandable that the hiring, training and professional
development practices and standards of each college are different as well. Considering these
differences and in light of the aforementioned changes in accountability on behalf of AE
programs, it would seem imperative for stakeholders to undertake an investigation of the
standards for instructors in these areas. With the possibility that AE programs are situated
differently in each college, it is speculated that the standards for instruction are diverse as well,
which would indicate that not all NCCCS instructors in Adult Education programs are being held
to the same standards. With so much at stake under current WIOA standards, leaders in AE
programs must seek to identify the minimum skills and abilities needed by AE instructors, train
those instructors to meet WIOA standards, and continue to evaluate their programs to ensure
necessary professional development. Therefore, with the new standards in place as a result of
WIOA and the subsequent WIOA State Plan for the State of North Carolina plainly stating how
AE programs success will be measured, it would seem crucial for interested parties to explore the need for statewide standards for AE instructors.

**Theoretical Framework**

When connecting conceptual ideas to the problem statement and proposed study, several theories and approaches present themselves; however, two distinct theories from the tenets of social change and adult learning are most applicable. The Human Capital Theory and the Adult Learning Theory are used here to provide a framework in which to examine Adult Education (AE) and what is needed from instructors to support students to completion. While these distinct theories provide the structure, both encompass several additional related theories that figure into the study and have impact on the need for the study in AE.

**Human Capital Theory.** Change components are all obvious elements in the study of the skills needed to support students to completion in ABE. Although the Human Capital Theory offers the strongest support for this particular research interest, there are other change theories that lend context as well, such as the Individual Change Theory and Organizational Change Theory. The Human Capital Theory has come to be known as the basis for much development and education policies, and rests on the idea that formal education is necessary to sustain and improve the productivity of a population. According to Schultz (1971), Sakamonta and Powers (1995) and Psacharopoulos and Woodhall (1997), a population cannot be industrious without training and teaching, which is the core principle of human capital. In this theory, education and all that goes in to that process is viewed as an investment, not unlike or less in value, a fiscal investment. In the most basic understanding, Human Capital Theory stresses the importance of education as it relates to productivity and efficiency of the workforce by increasing the degree of human intellectual capability which is a result of inherent abilities and vested interest in human
beings. It represents the investment people make in themselves (Olaniyan and Okemakinde, 2008).

Socially, human capital and the potential for its continued growth should be considered as well as the individual’s ability to change. Will students seeking the secondary credential leading to increased skill, knowledge and ability increase human capital (Balatti, 2002)? Consequently, a case can be made for the question of human capital being compromised. Will this specific population of students continue to add to the well-being of their communities, economically, socially or educationally if AE instructors are not able to deliver what is needed to support students to completion (Balatti, 2002)? The Theory of Social Capital can also be viewed from the perspective of the study of AE instructors and the skills necessary to support students to completion, since the impact of success, or lack thereof, could have a great effect on society. Historically, and up until recent changes in legislation, testing and employment (c. 2012), a large percentage of students who attended AE classes eventually passed and completed, ultimately contributing to human, as well as social capital. When changes began to take effect, this perceived success rate was compromised. Will students be able to accept the increased rigor, move past the potential barriers and succeed in spite of the changes (Bell, 1973)? This is a meaningful question to pose in the midst of these critical changes; however, if instructors of these students are not equipped with what is needed to support these students, is it indeed reasonable to evaluate that same success rate? The Theory of Human Capital fits in to the justification of the study here. At a time when completing the high school equivalency is even more critical than in the past due to continued societal changes, instructors of nontraditional students have a responsibility that affects human capital greatly. While other theories contribute in parts and lend in the understanding of the need to study this problem in AE today, the Human
Capital Theory, while broad, leaves no questions regarding the importance of education to preserve the productive society we live in today. In order to maintain a culture that is made up of people that invest in themselves for the good of their families and the legacies they leave behind, the educational endeavors of all are at stake. We must keep educating and putting faith in the abilities of people to produce human capital (Jepsen & Montgomery, 2012).

![Human Capital Theory Diagram](image)

Figure 1: Human Capital Theory

Other social change theories play a lesser role in the framework to support the study of AE instructor’s needs to support students to completion. Organizationally, said changes in AE may be scrutinized and stakeholders may endeavor to inquire if these changes are due to the external pressures of the current political atmosphere of educational policy that is promoting job readiness or are these changes due more in part to an internal growth on behalf of the American Council of Education, that recognizes the need for a revision in order to bring the academic skills needed up to par with 21st century job requirements? The answer to this question, if possible to answer, may be that there is evidence of both external pressures and internal growth on behalf of politics, educational reform, the economic landscape as well as cultural paradigm shifts.
(Maralani, 2011). More importantly here, and to the point of using a change theory to scaffold the problem in Adult Education, is to make the argument that the question and/or the answer is not the focus, but rather an outcome of the change that is taking place and answered or not, the changes have taken place.

**Individual Change Theory.** Individual Change Theory is another theory of change that contributes somewhat to the study of AE needs and is considered when typical student characteristics and attitudes are examined. The classic motivational Theory of Cognitive Dissonance could be looked at here to explain the individual change that may arise with the changes in AE. When students begin to challenge themselves, or recognize their individual capabilities, as opposed to believing they are predetermined for failure and acceptance of the consequences of that inability to achieve, a noticeable change takes place (Wood, 2000). The inability to merge the opposing attitudes or preconceived notions of futility brings about a motivation on behalf of the student that often propels the individual into behavior modification (Zacharakis, et.al, 2011).

In order for students seeking the secondary credential to be successful, a shift in individual thinking, attitudes and behavior is necessary on behalf of the student as well as the instructor. Considering the typical characteristics of these students, will they as individuals be able to make the modifications necessary to complete? Can instructor qualifications and professional development change as to affect the needs of the 21st century ABE student? Many questions at many levels of the field are posited when individual change in relation to the study of Adult Education and the needs of instructors is contemplated.
When considering any changes to an area of human service that affects a vast number of people, concepts of change immerse and can be referred to for support, guidance and leadership that often help the transition and enable those with a vested interest to put forth effort that will positively influence and condone the changes so that outcomes are ideal; however, as good as the intentions may be, the root of any change produces a concept that frightens most and does not allow for easy adaptation. The Human Capital Theory provides a context in which researchers can consider social changes taking place and the effects of that change on individuals and organizations, and yet, continue to hold up the relevance of education, investment in each other and capacity for intellectual productivity.

**Adult Learning Theory.** The other distinct theory holding up the structure of a study of AE instructors’ needs to support students to completion is that of the Adult Learning Theory. Much has been written and researched about Adult Learning Theory and its effect on practice. Although there are differences among scholars regarding the relevance of andragogy and the degree to which the principles should be considered in the classroom of formal education settings
for adults, there does exist one point that is less arguable among experts; that adults learn differently than children.

According to Knowles (1975), adult students are task motivated, bring experience with them to the classroom, as well as a readiness to learn, and the ability to self-direct. With that in mind, it seems there are more adult students than ever in formal and informal educational settings today (Kienzel, 2008). Older students who are back in the classroom come from varied situations and belong to several groups including: the unemployed, veterans, single parents, previously incarcerated, those who seek a job that requires advanced skills in their field, as well as those that want to broaden their career opportunities by earning a credential in a new trade or vocation (Kenner & Weinerman, 2011). With the diverse and emergent adult student population of today, it seems prudent for educators to address the needs of these students, as well as their instructors, and consider how Adult Learning Theory affects practice. While it has always been important to address these needs, this theory emphasizes the importance of knowing the particular needs of adults in the classroom and with regard to the study of interest, it lends further credence to claims that instructors need targeted and continued training to fully engage and promote nontraditional students to their goals of completion.

Adult students are defined as those who have two or more of these characteristics: they are 25+ years old and are working full-time, enrolling part time, raising children, coming back to school after time away, and/or supporting themselves financially (Kasworm, 2000). When considering at least two of these characteristics and sometimes all of them, it is easy to see why educators of adults need to contemplate the student’s individual circumstances as well as any advising needs the student might have. Going to high school at a traditional age affords most
students the opportunity to attend classes full-time without having to work 40 hours per week, consider daycare for dependent children, or support themselves financially.

Many of the characteristics and life circumstances that draw students away from high school are beyond educator’s control, and they generally take precedence over pursuing their classes and academic goals. Although there exists a school of thought that educators may exert only an ancillary effect on adult-student persistence, their influence is still critical in students’ success or failure. Instructors create the climate students encounter on campus, or the characteristics that the student attributes to the school such as friendliness, indifference, or condescension (Capps, 2012). Campus climate is particularly significant for adult students in fragile educational or life conditions, of whom many are enrolled in AE.

Considering the demographics and goals of the student population enrolled in AE programs in North Carolina Community Colleges of today, it would seem judicious for those organizations to evaluate their services, to include instruction. Nontraditional students have differences that generally require a paradigm shift of the educator in planning to meet their needs. Kenner & Weinerman (2011) and Jepsen & Montgomery (2012) point out that nearly 40% of the student population enrolled in community colleges today are at least 25 years old and ignoring this population is progressively problematic since the return to school of the mature labor force appears to be an increasing phenomenon.

These students typically have factors that set them apart from the traditional student that might include: financial independence, dependents, a full-time job and/or the ability to only attend class part-time (Kenner & Weinerman, 2011). The elements involved in these student scenarios require the educators to be cognizant of these demands and adapt their curriculum, classroom management and teaching styles. But, does this happen? If this is happening in Adult
Education classrooms, are the principles of andragogy inherent and are the students experiencing a different result compared to their prior learning involvements? Many adult students enroll in secondary education courses expecting a similar experience to that of their public school elementary or high school journeys (McGrath, 2009). Sadly, numerous AE students had negative school experiences and as a result, are convinced they are not capable of achieving anything different as an adult. As mentioned earlier, adult learners bring with them attitudes, beliefs and assumptions about learning that are sometimes deeply rooted and not easily dismissed (Alewine, 2010). If an adult student has a phobia about math that was born out of a possible learning disability coupled with an impatient and/or ignorant math teacher in the second grade, this dread will not easily be subsided and can certainly bring on undue anxiety, stress and other risk factors for that student’s success.

To add to this dismal picture, ponder this same student having no other options than to attend classes and try to earn a credential that will allow him or her to at least be in the category of consideration for a job that will help to provide for his or her family. To add to consideration of this scenario, there is also a recent group of AE students emerging in the classrooms today, those with mental health and behavioral diagnoses who bring a host of other needs that present challenges for the typical AE instructor (Dobmeier, & Moran, 2008). Could the principles of andragogy make the difference for that student and his success? Could an educator of adults who had been trained in Adult Learning Theory and applied that knowledge to the manner in which the adult classroom is conducted affect a new opportunity for that student? While many instructors in AE classrooms today have much experience in education, it is perceived that very few would have been trained with principles of the Adult Learning Theory (McGrath, 2009).
Figure 3: Adult Learning Theory

The conceptual framework that serves as the basis for this paper and that supports the argument that adult students need to be served in a different manner than children, include several pieces of Adult Learning Theory as well as the basic principles of andragogy. Schraw and Moshman (1995) posit that metacognitive frameworks are the structures in which adults identify their own knowledge systems (Kenner and Weinerman, 2011). These structures give experts in the field a manner in which to examine how adult students acquire the skills that help them learn and in which modes they may apply. The Tacit Theory of adult learning includes the notion that adults attain their metacognitive skills from peers, instructors and the native culture (Kenner and Weinerman). In entering the adult student classroom, many students begin their return to secondary school experiences with an educational gap (Kenner & Weinerman) and the Tacit Theory includes the realization that the ways in which these students have taught themselves to learn best, right or wrong, are deeply rooted and may be difficult, if not impossible, to change at that point.
Closely related is the Informal Theory from Schraw and Moshman (1995). This concept describes the learner as having “at least a rudimentary conscious thought process regarding their framework” (Kenner and Weinerman, 2011) and claims that students still acquire their metacognitive skills through informal interactions of learning such as the workplace and with peers. Both of these theories give the educator a framework to consider from what vantage points the adult student might be operating in regard to knowing their own learning habits and needs. Further, both theories involve the learning process as it unfolds in everyday life and what many refer to as practical knowledge or common sense. While this knowledge is indeed necessary in traversing life’s journey, it is often insufficient for the demands of education endeavors and the academic world in which many of these mature students are entering after years of having only work experiences to learn from (Kenner and Weinerman). Further, if this theory is indeed credible, then it is further cause for instructors to be trained and developed on how their interactions are affecting students and their success.

Knowles (1984) points out that because these students are task and goal oriented, it is imperative that educators help them realize how their academic assignments are related to that common sense and lead to increasing not only their knowledge base, but their insight into the world around them as well.

A theory that is secondary in the scaffolding of the study of AE instructors, yet is at the core of the purpose of this study and closely related to andragogy is that of Self-Determination Theory. Self-Determination Theory states that humans have a primary drive toward progression as beings and that the desires for self-sufficiency, connection and capability are at the core of this determination (Houde, 2006). Internally motivated behaviors are important to consider when discussing adult students and their needs. When considering the typical adult student of the
community college today, for example, the motivational behaviors present would be essential to consider on the part of any stakeholder in that students journey since an awareness of what is driving that student could help in the connection to his or her readiness to learn. These intrinsic needs are a basis of the adult learner concept and are interwoven through its principles.

Figure 4: Merged Theories that Support this Study

When considering the need to merge these theories and offer them as a foundation to this study, a synthesis of their importance to the research of AE instructors’ needs to support students to completion is presented. The Human Capital Theory provides the larger framework and helps to conceptualize the broader view of why an assessment of AE instructor needs is imminent, while the need to include adult learner principles adds to the core of the framework and
demonstrates specific needs within the nontraditional secondary classroom today. The Human Capital Theory suggests that the opportunity costs of enrolling in school can outweigh the earning potential of that student since mature students have less time to recoup the return on their investment (Jepsen and Montgomery, 2012). From an economic perspective, this theory combined with the statistics mentioned earlier on the growing phenomenon of the mature labor force enrolling in secondary education programs supports the implied urgency of the need to evaluate how adult students are being served. If the Human Capital Theory maintains that age and costs are impediments to further education for adults over the age of 25, and enrollment reports indicate higher than ever numbers of students in that same category, it seems fair to infer that our present society is made up of large numbers of adults that feel they have no other choices than to go back into the classroom. For these reasons, that are greatly supported by traditional, well known and researched theories, the study of AE instructors’ needs to support students to completion is imperative.

Figure 5 represents a conceptual notion of how the study of AE instructors’ efficacies in the NCCCS could influence the hiring, professional development and evaluation of instructors going forward. In this proposed study, researchers would endeavor to influence Department Chairs and Directors of AE programs to make modifications or develop entirely new processes. Included in the study would be the recommendation to use Kirkpatrick’s Model of Program Evaluation (1979) for the continued assessment of these plans.
Research Methods

As the purpose of this research study is to identify the traits that Adult Education program directors feel are most critical in AE instructors, this study will utilize Q methodology. Q methodology provides an objective structure through which we can identify and quantify participants’ subjective views on a given topic (McKeown & Thomas, 1988; Stephenson, 1953; Watts & Stenner, 2012). More specifically, this method enables a researcher to identify groupings or shared beliefs, attitudes, and perceptions among participants within a study; these patterns or shared beliefs in Q methodology are called factors (Cross, 2005; Watts & Stenner, 2012). A more in-depth examination of Q methodology will be presented in Chapter 3.

Research Questions

The specific research questions which guide this study are as follows:
Research Question 1: What are the most and least needed qualifications of Adult Education instructors in the NCCCS to see students through to completion as viewed by Adult Education Program Directors across the 58 community colleges in North Carolina?

Research Question 2: Among the Adult Education program directors in the NCCCS who participated in this study, what are the items of consensus regarding the most needed qualifications of Adult Education instructors and why would it seem these items are in widespread agreement?

Research Question 3: How closely do the desired qualifications, as identified through the various viewpoints that emerge, match the actual skills, abilities, and qualifications that are currently sought in Adult Education instructors in the state of North Carolina?

Significance of the Study

The significance of this problem lies in the very goal of Adult Education, to help students attain their secondary credential and transition to college and/or a job. While many other factors figure into the rates at which students are completing such as: changes in how the secondary credential is earned, the economy, and workforce trends, the impact of an Adult Education instructor not being fully prepared to help these students could be detrimental (Prince & Jenkins, 2005). Adult Education students bring a whole host of needs to the classroom today, in addition to low level literacy skills. Teaching a student to improve their basic reading, writing and math skills is no longer enough to help these students be successful (Zeidenberg, Cho, & Jenkins, 2010). In the past, if Adult Education instructors were able to help a student attain the level of these skills necessary to pass the tests to earn their high school equivalency, this was sufficient. The student was often able to find employment that offered a family sustaining wage with the earned high school equivalency credential. Those times have faded and today, employers
continually report the need for a pool of qualified candidates who not only have the high school
credential, but also have a degree of job readiness that accounts for employability factors, soft
skills, and an awareness of barriers (Reder, 1999).

In addition, those Adult Education students who have a goal of transitioning to college
present the need for additional professional development for instructors. Most instructors in the
Adult Education field have few supports outside of their own departments and the information,
referrals and support that students receive typically comes directly from their instructor.

To add to the situation, the current trends in Adult Education include many programs that
offer pathways to employment. If qualified, these pathways allow the Adult Education student to
begin a technical program such as Landscape Gardening, Medical Office Assistant, Automotive
Technology and Early Childhood Education, to name a few, while simultaneously completing
their secondary credential, therefore taking less time to get the student to the point of
employment (wsbctc, 2008).

The pathways programs consist of specific knowledge and skills necessary for their
chosen field. Contextualized curriculum in their Adult Education studies aligned with the
technical pathways programs’ course content allows the student to hone their academic skills
needed while learning vocabulary, measurements, and other requirements specific to that
vocation (Zeidenberg, Cho, & Jenkins, 2010). While these pathways are a great opportunity for
the student, they present challenges for the instructors in numerous ways. Adult Education
instructors are charged with learning these technical programs’ components in order to help the
student manage the contextualized curriculum. In addition to learning the programs’ content,
Adult Education instructors have to know how to navigate the process for enrollment in the
pathways. All of the pathways have different eligibility requirements, rules, materials or gear
needed, costs and enrollment procedures that often change (USDOE, 2015). Comprehensively, this is a lot of information to have even a familiarity with, much less a grasp of the information required to fully support students in their efforts to sign on to a pathway.

An additional barrier that has become apparent in Adult Education classes is the numbers of students who have cognitive disabilities, mental health diagnoses, and/or basic needs going unmet (National Commission on Adult Literacy, 2008). These challenges present an even greater need for professional development for instructors, as those in the role of teacher are typically not armed with the skills, information and/or tools necessary to address these grave issues.

Another development of late in the Adult Education field is the growing numbers of students enrolling who haven’t mastered the most basic levels of reading, language or math (Friedel, 2011). These students needed remediation to pass grade level assessments long ago in elementary school and somehow, they reach the 11th grade not capable of making an inference, writing a complete sentence or multiplying single digits without a calculator (Zachry, 2010). At this level of academic need, the Adult Education program has to adjust instruction to fit those needs. Those students need daily direct instruction from a professional who is trained in explicit teaching techniques (Prince, & Jenkins, 2005).

On the other end of the spectrum of Adult Education student needs, there is the new GED® (2014) along with new options for earning a high school equivalency, namely, the TASC (Test Assessing Necessary Completion) and the HiSet (High School Equivalency Test). The changes to the GED® in 2014 were significant and require an understanding of Webb’s Depth of Knowledge (USDOE, 2015). Emphasis is placed on level 3 of Webb’s Depth of Knowledge, Strategic Thinking, where students are expected to be able to solve non-routine problems,
interpret information from a complex graph, support ideas with details and examples, develop a scientific model for a complex situation, develop a logical argument and identify and then justify a solution, just to name a few of the skills necessary at this level. Ensuring that these types of skills are part of the everyday lesson plans in Adult Education classrooms require an entirely different plan with regard to how students are taught and how much additional support is needed for students academically.

Due to the impact the GED®, as a requirement for further education and employment, has on the larger picture of the nation’s economic and educational systems, an intense analysis of the academic skills needed to pass the tests took place. Because of the results of that analysis, as well as the aforementioned drivers, the former GED, having been updated in 2001, was no longer sufficient in preparing students for college and/or career requirements (nysed.gov, 2009). Driving the changes in the GED, in part, were economic factors in the U.S. that changed the national landscape of employment. Employers are no longer able to hire adults without the necessary credentials to ensure their level of skill in academics, interpersonal skills and a critical level of thinking (Langland, 2012). Also, employers want applicants that have adequate abilities initially and that don’t require an upfront investment of time and money that drains their resources. Because of the downturned economy just after the turn of the century, the vast number of Americans without jobs greatly increased the pool of candidates, therefore enabling employers to be selective in their choices (Langland, 2012). In addition to unemployment, adults in the U.S. were having a difficult time securing a job with a family sustainable wage due to increases in costs of living. Economically, the GED was being pushed to change to meet the needs of employers and employees that came about as a direct result of the nation’s recession (Park, 2007).
Socially, the GED® is being required to evolve as a result of several factors including education reform, a push for completers to be college and career ready, and the need for students to have 21st century skills (Sieben, 2011). According to the U.S. Census Bureau of 2012, there are 4,296,000 Americans, 25 years and older, functioning on a 7th to 8th grade level academically (Current Population Survey, Social and Economic Supplement, 2012). To address this figure, along with other sobering statistics, current education reform has mandated the inclusion of Common Core standards formally adopted by 46 states. These standards, supported by the National Governors Association, have made it necessary for states to examine their educational programs and requirements for each grade level as well as graduation (Stillwell, 2013). Upon investigation of current practices, individual states began to realize, along with the American Council of Education, that the criteria for the former GED did not align with these standards (nysed.gov, 2009).

In addition to the Common Core standards, technology was a social driver of the GED® changes as well. While technology forces all members of society to change to some degree, the GED® is no different than any other business or service and now requires a level of computer skills. Technology is important to include and require as a part of the GED® process for reasons other than ensuring students have 21st century skills. Although technically, keyboarding, using the internet for various tasks and learning to use software or web based programs are all imperative skills in the quest for college and career readiness, the connection with and application of what the students are learning to their everyday lives is an equally vital concept that allows the student to benefit from the more general aspects of technology (Hatcher, 2002).

Politically, the drivers of the GED 2014, began with President Obama’s goal for the U.S. to have the world’s highest proportion of college graduates again by 2020 (Address to Joint
Session of Congress, February 24, 2009). From that point, the U. S. would have to produce an additional 1 million graduates per year until the goal date to meet the president’s aim. Of course, this initiative forced the nation’s educational organizations and providers, including the GED®, to enhance their current practices and to ramp up the demands of academic skills for those students in pursuit of the credential (nysed.gov, 2009).

In addition to the president’s goal, globalization was a driving force behind the GED® changes. Because organizations, instead of governments or cultures, are able to have autonomy within the phenomenon of globalization, (Hatcher, Globalization, 2002) the power that controls how the GED® is developed and produced has been greatly influenced and subsequently, is controlled by a for-profit company. Politically, it seems the GED® has become a source of revenue and has allowed globalization to guide its motives and possibly, its principles.

In addition to the various drivers of these changes and the subsequent shifts in legislation and educational standards, it is important to note the typical characteristics of students that seek the secondary credential. Most students are underprepared academically, as well as socially. They often have a low socioeconomic status, lack supportive relationships, are faced with multiple barriers like transportation, childcare, health, or legal issues, cannot maintain motivation, and frequently present learning disabilities (Riffle, 2010). Although there are many students that do not come to the AE classroom with any of these characteristics, these elements are commonly seen factors that greatly impact a student’s success.

Of equal significance in considering the importance of AE instructors being capably trained, are the potential outcomes for students that earn the secondary credential. Of course, the most heavily weighted outcome, it would seem, is the increased number of job opportunities afforded to the secondary credential holder. In the past, jobs that did not require a secondary
education credential were plentiful and seemingly, not difficult to secure. Those with the high school diploma or GED® were generally presented with adequate job opportunities; jobs that brought better wages, benefits and opportunity to advance (Stillwell, 2013). Now, it seems, most jobs require a secondary education credential, even those with low pay, no benefits and no likelihood of advancement. To make matters worse, older adults with no secondary education credential, but years of on the job experience, were unable to find jobs during the recession and were forced, in their would-be retirement years, to go back to school to qualify for unemployment benefits they desperately needed (Rose, M., 2013). Currently, efforts in education are being made to assure that another generation of Americans does not face this same impasse in the form of career emphasis, exploration and skills emphasized in lower grades (Garvey, 2011).

With the standards for the GED® and other secondary credentials increased from increased pressure to meet recognized political and educational criteria, the outcomes of attaining these credentials are that post-secondary education or training in preparation for a career would evidently become a realization. Historically, many graduates often pursue more education and sadly, end up in developmental education classes as a result of not being prepared academically for entry level college work (Lott, 2012). This is a significant drain on resources, motivation and persistence for countless students and as a result, often end up feeling defeated and give up on their educational goals. The potential outcomes of the ramped-up standards for the secondary credential would ideally deter such disappointment and prepare students for their pursuits, as well as instill personal satisfaction and act as a role model for children in completing a GED (Rose, 2013). In order to make this outcome a reality for students, instructors must be fully prepared to meet the challenges of working with students who commonly have more than
academic deficits. Drivers of changes in secondary credential standards, common traits that students have to overcome and the potential outcomes for completers are all important pieces of the big picture when considering how instructors in Adult Education classrooms have to be prepared to see students through to completion and the impact it may have on students if they are not sufficiently trained.

**Limitations of the Study**

Limitations in the study are inclusive of several areas.

1. The Q sort methodology has limitations inherent in its design. The sorting method is constricted in accuracy as the participants must be accurate in self assessing their own viewpoints and not giving way to what they think they should put instead of how they actually feel.

2. Exposure to the statements presented in the sort procedure itself could influence participants to view or begin to think about the topic in a different way based on the statements’ relationships to each other.

3. Because Q method is designed to extract significant data from a small group of participants, the resulting conclusions are limited to the non-representative sample and cannot be easily generalized for a larger population.

4. The targeted population, program directors for Adult Education departments in the state of North Carolina, are very busy, particularly during the target data collection window of late spring and early summer of 2017. It may prove challenging to schedule on site visits at times which are convenient for either the researcher or the program directors being surveyed. As such, the study will be limited to those
individual participants who are willing and able to utilize an online survey instrument, with follow up phone calls and/or focus groups as necessary.

**Delimitations**

The study and literature are delimited to the following:

1. Only program directors in the state of North Carolina during the spring and summer of 2017 were included in the study.

2. For the purposes of this study, the Adult Education instructors referred to include those who teach Adult Basic Education (ABE) and Adult Secondary Education (ASE) and does not include any of those AE instructors who teach English Language Acquisition (ELA) or Special Populations.

**Definition of Terms**

To assist with clarity, the following terms used throughout the study should be understood as follows:

- *Adult Basic Education*- for the purposes of this study, the term Adult Basic Education consists of classes and instruction designed for students who function at elementary and/or middle school levels (grade levels 1.0-8.9).

- *Adult Education*- used in this study to include programs offered through the North Carolina Community College System (NCCCS) that offer any student 16 years of age and older options for completing his or her secondary credential, i.e. the GED® or Adult High School Diploma.

- *Adult Secondary Education*- for this research, the term Adult Secondary Education refers to classes and instruction designed to instruct students who function at the high school level (grade levels 9.0-12.9).
• **College and Career Readiness**- referred to in this study to identify the departments or areas within each college within the NCCCS that serve students who do not have a secondary credential or who have completed that credential and need to strengthen their basic reading, writing or math skills.

• **Concourse**- A list of items used in Q methodology that can be included in the Q sort.

• **Factor Loadings**- The correlation of factors amongst participants in a Q methodology study.

• **National Reporting System for Adult Education (NRS)** - is an outcome-based reporting system developed by the U.S. Department of Education's Division of Adult Education and Literacy (DAEL) for the federally funded (and state-administered) adult education program.

• **P-set**- set of participants who are chosen to participate because they have relevance to the study.

• **Q methodology**- a mixed method study conducted to examine a phenomenon or topic that includes chosen participants who respond by ranking items according to relevance.

• **Q-set**- the set of items taken from the concourse for the participants to sort.

• **Q-sort**- each participants’ final product in the process, ranked by relevance.

**Summary**

This chapter began with an overview of the need for current changes in Adult Education practices in the NCCCS because of WIOA legislation and future funding in light of those changes, discussed relevant theories that uphold the need to study this area of education,
identified research questions for the proposed study and concluded with the significance of researching Adult Education efficacies in the 21st century.

Understanding the importance of connecting literature to the current need to study Adult Education instructor efficacies, Chapter 2 will be devoted to a comprehensive literature review which addresses each of the issues and provides necessary context for the study. Chapter 3 will contain an overview of Q Methodology and a justification for its inclusion in this study.
CHAPTER TWO: REVIEW OF LITERATURE

The current literature addressing Adult Education is multifaceted and is developed from many perspectives. Although there is a myriad of literature available that speaks to different elements that make up Adult Education, the summary of literature for the purposes of this study focused specifically on those components that are bringing the needed training for AE instructors to light. Namely, legislation and workforce development studies, adult education and family literacy research and adult learning theory were compiled. It is often difficult, but necessary to understand how these areas affect each other and while those outside the Adult Education field of study may not immediately see the connections, both real and implied, those networks of services in the communities that the North Carolina Community Colleges serve, are essential to understand for this study.

History of Adult Education in North Carolina

In order to fully comprehend what is at stake when discussing the need for the study of Adult Education efficacies in North Carolina, it is necessary to understand its foundation. Adult Education is a very broad term and in different areas of this country, it could take on a dissimilar connotation; however, generally speaking, in North Carolina Adult Education parallels that of most regions (Hagan, 2006). While the basis for the study proposed here would have its roots in the North Carolina Community College System, it is helpful to have a general knowledge of the inception of Adult Education in the state.

Like many southern states, North Carolina’s Adult Education efforts began with the enactment of the Morrill Land Grant Act of 1862 (Hagan, 2006). This initiative by the federal government was the first of its kind with regard to using resources to establish an institution of
higher learning (Hagan, 2006) and consisted of land being deeded to states after the Civil War for this purpose (Sticht, 2002).

These principles that Kline referred to are not unlike those ideologies of the past that helped shape the inception and subsequent development of Career and Technical Education, formerly known as Vocational Education. The notion of instruction designed to prepare students for entry-level jobs in occupations requiring less than a baccalaureate degree dates back to before the turn of the twentieth century (Friedel, 2011). Although it seems as though vocational education has morphed over the many years it has been a part of education, the previous description, upon inception, is still applicable today. The very beginnings of vocational education started with agriculture and trades and industry for male students and homemaking education for female students (Friedel, 2011). These classrooms in the early days of vocational education included laboratories with hands on demonstrations or site visits to area farms or manufacturing plants to foster the “on-the-job training” philosophy (Friedel, 2011).

Public funding was granted for vocational education in 1917 with the passage of the Smith Hughes Act. This legislation put vocational education into high schools, included adult education in agriculture and home economics and created the Federal Board for Vocational Education (Friedel, 2011). In the history of vocational education, this act made provisions for the field that shaped the way in which Career and Technical Education is organized today. The Smith Hughes Act of 1917 brought about the creation of separate funds, boards, curriculum, students, professional development and student organizations, which, according to Gordon (2014), launched one of the nations’ greatest assets, vocational education (Gordon, 2014).

The George Acts, passed from 1929 through 1950 authorized additional monies to be appropriated to specific programs within vocational educational programs, and giving home
economics a status separate from agriculture. The acts enabled the creation of vocational student organizations (VSO’s) and allowed for federal funding to be used for vocational educational management, advising and teacher training (Friedel, 2011).

In 1963, a vocational act was passed that changed who the vocational programs were intended for (Gordon, 2014). Until this time, the legislation that had supported vocational education and the federal funding that had been used specifically for those programs, was intended for secondary education students and to answer the needs of the employers that needed qualified workers (Gordon, 2014). Now, with the Vocational Act of 1963, and its subsequent amendments, Vocational Education would be designed to meet individual needs and include “those persons who had academic, socioeconomic or other handicaps” (Friedel, 2011).

The Carl D. Perkins Vocational Education Act of 1984 replaced the Vocational Education Act of 1963 and addressed the special needs population access to the full range of programs. The special needs population included those who have a disability, are disadvantaged or have limited English proficiency (Friedel, 2011). Other improvements to the field of vocational education under this act included highlighting gender equality, program upgrading, regular assessments of programs, performance indicators, and focused efforts on the skills necessary for workplace and college of secondary education completers (Friedel, 2011).

1990 brought further improvements to vocational education with the Carl D. Perkins Vocational and Applied Technology Act of 1990. This act echoed the acknowledgement of the move to a service-based economy, the development of computer and information technologies, as well as supported the necessities for educational programs and services to underprivileged, disabled and those with limited English language skills (Gordon, 2014). This act was not meant for the development of new programs, but to build relationships between high school and post-
secondary prep, integrate academics into vocational education and to develop core standards and performance measures (Friedel, 2011). Current and emerging needs of the workforce continued to be highlighted by the government in the 1990’s and hence, brought on advances in vocational education. Tech prep was born out of this reform and consisted of two years of high school with two years of postsecondary education for a result of an associate’s degree or certificate (Gordon, 2014).

1998 brought about the Workforce Investment Act (WIA) as well as Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III). Perkins III touted longer term planning, made it necessary for an extended amount of funding go to local areas, lessened the directives for intended populations, and mandated that states create specific performance levels for a series of measures (Wilson & Brown, 2012). Also, in order to receive incentive grants at the state level, programs within WIA, adult education and literacy, and vocational education had to exceed specified performance levels.

WIA was put into place in order to try to merge and restructure the excess of federal job training and associated programs to cultivate a cohesive plan between the Departments of Labor, Education, and Health and Human Services (Friedel, 2011). This included the Adult Basic Skills and Family Literacy Act, Title II that was charged with determining the accomplishments of students in gaining and keeping employment, and their earnings following program participation (Holzer, 2011). This act required greater accountability on behalf of the states in that an annual report of core indicators, separated by special populations, was necessary. These core indicators measured academic and vocational or technical achievement, placement, and retention in program related employment. States were required to continually make progress toward improved performance. (Friedel, 2011). This was the beginning of increased emphasis on
employment within the programs of the Adult Basic Skills and Family Literacy Act. The Workforce Investment Act (WIA), a piece of legislation that marked drastic parting from earlier policies, has now been replaced with an updated version with the same intents and purposes but greatly reformed (Van Horn, 2015). This new version, The Workforce Innovation and Opportunity Act, promises to bring changes to adult education policies and procedures on a national level. This legislation is not unlike earlier versions in that it signifies change for government funded programs that offer services to the low skilled, unemployed.

Other reform and initiatives came about after the turn of the century, and specifically related to vocational education, the Carl D. Perkins Career and Technical Education act of 2006 (Perkins IV) was passed. Notably here, a significant change in Perkins IV was the change from the term Vocational Education to Career and Technical Education (CTE) (Gordon, 2014). Senator Edward Kennedy stated “…vocational education is no longer the 1950’s version; it has evolved from shop classes into courses that use cutting-edge technology and focus on emerging and growing fields that will become the jobs of the future. That is why we now call it career and technical education…” (Friedel, 2011).

Perkins IV focused on CTE improving the academic achievement and technical skills of secondary education students (Friedel, 2011). The focus on special populations and nontraditional enrollment was a highlight of Perkins IV and funds became available to help many categories of students including, 1) individuals with disabilities; 2) individuals with economically disadvantaged families; 3) individuals preparing for nontraditional training and employment; 4) single parents, including single pregnant women; 5) displaced homemaker; and, 6) individuals with other barriers to educational achievement including individual with limited English proficiency (Friedel, 2011).
Perkins IV insured that virtually any student, no matter their circumstances, could benefit from funds appropriated for CTE. Because the students that traditionally need basic skills and seek out Adult Education services are described in one or several of the categories above, those students were already enrolled in the classes that began to be targeted to offer employment services. At this point in the history of legislation and CTE, Adult Education and Family Literacy participants began to see instruction, demonstrations, referrals, integrated curriculum and added services such as Human Resource Development (HRD) in their classroom experiences.

**New Developments in Adult Education**

As the Workforce Innovation and Opportunity Act and its guidelines specific to the Adult Education and Family Literacy Act unfold, the effect of this new legislation on practice is anticipated with anxiety for many. Educators and professionals who have worked with this often-marginalized population, are apprehensive about how this reform will play out for their students as well as the programs they work with. For many, the expected guidelines could mean a total overhaul of the programs and services they are a part of, including the very outcomes they have always endeavored to achieve. With the implications of WIOA weighing on AEFLA, many administrators in the field are looking at the possible restructuring necessary for programs, classes, curriculum, instruction, and staffing. Although the specific guidelines for AEFLA are yet to be unveiled, the predicted changes needed in these areas to satisfy the mandates in WIOA for AEFLA will be extensive and involve the collaboration with several local entities.

Traditionally, the programs and services within AEFLA have consisted of classes available for students over the age of 16 that needed to improve their basic reading, language or math skills, had a developmental disability and needed life skills, did not have a secondary
education credential or needed to improve or learn English as their second language. The class options for students have typically included Adult Basic Education (ABE), Compensatory Education (CED), General Education Diploma (GED), Adult High School Diploma (AHSD) and English Second Language (ESL). The Family Literacy piece of AEFLA has included ABE, GED, and ESL classes set within locations that provide childcare and pre-K services for children of students at that age.

In addition to the categories of classes that describe what educational opportunities are available for these students, other services are also available. These services are described in detail in the *Perceptions of Dislocated Workers* article by Wilson and Brown (2012) who interviewed students recently unemployed and placed directly into the cycle of these services. Services that are often connected with AEFLA under WIA include local unemployment training centers, one stop centers, resume writing helps, pre-job skills classes, Career Readiness Certificate (CRC) classes and technology skills classes. With all of these services in mind, the intent was to make the experience of someone that needed services under AEFLA comprehensive in nature and employment targeted. The benefits for the student increased with these services in mind and as Wilson and Brown (2012) point out in their research, many students were well served while others were left unable to navigate the system necessary to find gainful employment. It is important to note here that while services under the AEFLA were intended to be sufficient to secure employment for all who needed it, the service area and regional labor market has a great bearing on the outcome as well. It is impossible to connect students to jobs when the area those students live in does not have available employment for the level of skill of the individual and/or the student refuses to relocate to areas that are more prosperous and have more opportunities.
With the Wilson and Brown (2012) article in mind, students reported their perceptions of navigating some of the services mentioned above. Many of these students lacked the basic reading, writing, and math skills needed for gainful employment, as will most likely continue to be the case well into the future. This population of students who lack these basic academic skills, often also lack critical thinking skills, as well as the life skills necessary for everyday decision making, goal setting, self-advocacy and career success. In addition, these students often show up in AEFLA classes with a plethora of life complications and neglected responsibilities, such as the poor health of themselves or their dependent children, substance abuse issues, financial crises, family obligations, lack of transportation, legal difficulties and even homelessness. Any and all of these circumstances often present situations that defy the students attempts to improve their academic skills and or seek and gain employment. To add to this already dismal portrayal, there are often development disabilities, learning disabilities, and/or mental health diagnosis that accompany the student to the classroom. Obviously, when professionals, educators and administrators who work in AEFLA programs plan their services, they are typically up against a host of barriers to begin with. For these providers of AEFLA services to consider a total restructuring of their current practices, procedures and goals for students comes with the awareness that in most cases, all of the above obstacles for students will have to be considered in the planning and implementation process.

**Student Needs in Adult Education**

One of the main arguments for the lack of gainful employment within this population now is that students typically lack the abilities to make decisions, weigh out opportunities, critically consider the consequences of their actions and maintain the motivation level required to
change their circumstances. Many of them are mired in their unfortunate statuses and lack the
ability to see beyond the day in which they are living.

Not every student who is served under AEFLA programs suffers as described above;
however, if speaking with an experienced professional in the field, they will likely paint a similar
depiction of participants. This scenario of typical barriers is unfolded here to give an overall of
impression of the difficulties encountered in the field of AEFLA. Now consider that these
programs serving these students are largely funded with federal funds that are allocated based on
need and are rewarded with incentives when performance measures are achieved. These
performance measures included employment placement with the AEFLA under WIA beginning
in 1998. When students were placed in employment, said programs were compensated
accordingly and these monies were considered additional and on top of funds that were allocated
based on the numbers of graduates and completers. Federal monies were given to programs
when educational functioning levels were gained. In considering the vast array of complications
added to individual student pathways of success, the completion of a secondary credential and
educational functioning levels gained was not an easy task and the federal monies earned from
these accomplishments were well earned.

Now, it is difficult to consider the effects of putting into place the mandates from WIOA
with these same students in mind. As it is explained to this point, this reform will add to this
scenario that in order to receive federal funding to continue these needed AEFLA programs,
those same marginalized students will have to be placed into employment. This raises many
questions for educators and professionals in the field. To name a few of the concerns of
administrators in AEFLA programs, tracking, available jobs, needed counseling, instruction,
curriculum and collaboration with local workforce development boards are at the top of the list.
At this point in the literature review for this study, the Adult Learning Theory enters the discussion, as it is imperative in understanding the need for studying AE instructor preparedness. Because of the breadth of this literature, it is organized into multiple categories: introduction to adult learning theory readings, social context, learning environments and learning concepts, adult learners: who participates and why, andragogy and other models of adult learning, self-directed learning, transformational learning, intelligence, memory, and cognition and the brain.

To begin, a synthesis of an introduction to adult learning theory readings would not be complete without Daloz (1988), who speaks to the need for AE professionals to look under what students are saying they want, to discern what it is they are actually seeking. Student learning goals may be very different based on what their realities are. As educators, we are not the sole influencers on our student’s lives in regard to their educational goals. *Lifelong Learning, 11*(4), 4-7, presents an example of an instructor who felt that it was the student who needed to change her perspective to be successful in their mentor/mentee relationship, when in truth, both of them needed to gain perspective on where the other was coming from. The instructor also needed to understand, through meeting the family that he was not the forefront figure in Gladys’ life, and the other influences may have actually been discouraging towards her degree completion efforts.

In Kiely & Truluck (2004), the article attempts to reconcile the multiple conceptual frameworks (boundaries) of Adult Learning Theory posed by Merriam (1988), Brookfield (1995), Mackeracher (1996), and Merriam and Caffarella (1999) into a four-lens model that should be taken together to form a holistic version of learning in adulthood. From the learner lens, (based on Malcolm Knowles characteristics of adult learners), a clear picture of the adult learner is painted as multiple traits are apparent. Specifically, adults tend to see themselves as more responsible, self-directed, and independent, they have a larger, more diverse stock of
knowledge and experience to draw from, their readiness to learn is based on developmental and real-life responsibilities, their orientation to learning is most often problem centered and relevant to their current life situation, they have a strong need to know the reasons for learning something and they tend to be more internally motivated. From the process lens, based on Mezirow’s Transformational Learning Model (1991), adults learn and experience change when they reexamine taken for granted assumptions, become critically aware of why our presumptions constrain the way we perceive, understand and feel about the world, and have life changing experiences – IE… divorce, death in family, birth of a child. Continuing with the four-lens model, the context lens suggests that learning does not exist in a vacuum by claiming that adults are social learners who learn as “persons in society” (Jarvis, 1987), and that adults learn as a result of a relationship with social surroundings and physical settings in “real-life” (Caffarella and Merriam, 2000). The last of the four-lens model, the educator lens, helps educators develop an awareness of different philosophical traditions because philosophies make educators aware of the underlying values, beliefs, and theories which guide practice, provide different quality criteria for making decisions, highlight different educational purposes and help to construct a social vision, understand our own assumptions regarding learning content and processes, and expand awareness of different learning traditions and their impact on adult learning (Elias and Merriam, 1995). The implication for practice here is that being aware of educational philosophy helps to shape and change teaching practices to meet learners where they are in the learning process.

To highlight the social context, learning environments and learning concepts within the Adult Learner theory literature, Ellinger, A. D. (2005), summarizes a qualitative study that explored contextual factors that either positively or negatively influenced informal learning in
Contextual factors influencing informal learning in a workplace setting: The case of “reinventing itself company” from Human Resource Development Quarterly, 16(3), 389-415. The study was conducted at a manufacturing company identified as RIC and involved interviews with thirteen employees (spread across lower, middle and senior level management) who were considered to be committed lifelong learners and who were viewed as exemplary facilitators of others learning. The researchers developed a set of semi-structured questions about the learning environment within the organization. Some questions asked what each individual viewed as an optimal learning environment for informal learning and what corporate barriers prevented the organization from being an optimal environment for informal learning. The findings showed several positive overarching themes with the most prevalent being “Learning-committed leadership and management”. Other identified factors to creating optimal learning environments included: creating informal learning opportunities, serving as developers (coaches or mentors), maintaining visible support and making space for learning, instilling the importance of sharing knowledge and developing others, encouraging risk taking, giving positive feedback and recognition and serving as role models. Implications from this article advised that leaders of any type of organization have an opportunity to create learning environments within their organization, must be supportive and committed to learning and be willing to help drive a culture committed to learning. In addition, removing barriers such as providing tools and resources, removing structural barriers to change, and changing over time helps to create positive learning environments for organizations.

Merriam & Baumgartner (2003) posit that learning is done informally through social interactions with family, work, social, civic, and professional organizations. This article delves into how individuals learn about and become part of marginalized organizations. Such
marginalized communities include but are not exclusive to militia groups, the communist party, Wiccans. New or perspective members must learn the culture, norms, attitudes, values, and behaviors of these groups but there is often isn’t any formally issued or publically available materials to help them understand the culture.

This study utilized a qualitative study because the researchers felt that understanding the process was more important than understanding a particular outcome. Participants were solicited from multiple Wiccan websites and list serves. In all, 20 white adults (8 men and 12 women) volunteered to participate in the study. The findings included several interesting perspectives on how adult learners function with social groups. The trajectory of participation was evident, indicating that before anyone can join a marginalized group they must first be aware that the group exists and have some basic knowledge of how to obtain entry into the group. In this study, all of the participants reported that they were dissatisfied with mainstream religious groups and were looking for a spiritual home. Additionally, on the periphery, the groups often held an informal open house where they conveyed information about the group and instructed those still interested to sign a list. Elders also interacted with the applicants and determined whether or not they felt them worthy of being asked back. Moving to center was also apparent. The movement from periphery to center varies from group to group, in this particular case the group kept all applicants on a sort of probationary/training period for a year and a day. Learners are fully initiated when they and the elders believed they were ready. Learning in practice was also identified in the findings, while some formal readings are available for members, most of the applicants reported that they learned from hands-on experimental activities, learning through doing and making mistakes. Learning is also conducted through a give-and-take support network that involves and members of varying levels. As the applicants become more involved with
fellow Wiccans they begin to establish an identity. This involves the mastering of a particular craft and taking a Wiccan name. Changing identity was reported last in the findings. Study participants reported that they were able to change their sense of self as a result of participating in the community. They reported being more balanced, integrated, reflective, tolerant, and empowered.

Social context is a powerful driver of how learning occurs in marginalized groups. In some groups, learning occurs best once the individual has become assimilated into the group. This may only occur once they have been socially accepted. We as educators need to be aware of how cliques or social groupings in the classroom may affect student learners.

**Adult Learning and Barriers**

**Who participates and why?** The next group of literature examples, adult learners: who participates and why, includes relevant information with regard to student barriers. Boshier and Collins (1985) present a research study that used the Education Participation Scale (E.P.S.) to test Houle's 3 part typology on adult participation in education. The researchers found a clear connection and support for the goal and learning orientations but found the activity orientation to be much more complex than initially proposed. The research discusses the past research on orientations by Sheffield and Burgess. Boshier and Collins research used a much larger sample derived from learners in various settings and was able to support Houle's typology but found the activity-oriented learner was "multifaceted and composed of items normally labeled Social Stimulation, Social Contact, External Expectations, and Community Service" (p.125). The researchers suggest using cluster analysis for the most accurate empirical results. They suggest future study on the extent to which orientations change as learner’s progress through educational
programs. Overall, Boshier and Collins were able to provide empirical support for Houle's typology.

Kasworm, Sandmann, and Sissel (2000) relate key concepts for adult learning and the processes that hinder the learning process in adult education settings. Namely, the authors propose that adult learners are making up a larger and larger proportion of students/learners in institutes of learning and higher education, there is a policy disconnect between the needs of adults and of “traditional” students, institutions have marginalized adult learners because of outside demands, perhaps viewing them as “not as serious”, and those who need the most support (financial, social, etc…) are often those who go without because there is no hidden safety net for adults. Further, the thought that institutions of higher education must be all things to all people and that there is an inherent obligation to do so can be barrier. The writers also claim that with adults making up a larger portion of the educational landscape, the services are not in place to support them, that retention numbers do not take into account the needs of adult learners who frequently “drop in and drop out” of education, and that the measures of success (retention) may need to be different when the goals of the learners are different. Adult students often are unsuccessful due to the barriers that our society and our institutions present. The implication here is that the need to make educational process easier to obtain for all adults (remove the institutional and societal barriers) is obvious.

In chapter 5 of Learning in adulthood: A comprehensive guide, Merriam, Caffarella and Baumgartner (2007) state three main goals of self-directed learning (SDL) and that they can be grouped as follows: (1) to enhance the ability of adult learners to be self-directed in their learning, (2) to foster transformational learning as central to self-directed learning, and (3) to promote emancipatory learning and social action as an integral part of self-directed learning.
Self-directed learning is a process that encompasses a number of models. Linear models included Tough, who used the term “self-planned” learning and believed learners planned the majority of their own projects as well as Knowles whose six steps for SDL included: (1) climate setting, (2) diagnosing learning needs, (3) formulating learning goals, (4) identifying human and material resources for learning, (5) choosing and implementing appropriate learning strategies, and (6) evaluating learning outcomes. Interactive models included Spear, who presented a model that rests on three elements: the opportunities people find in their own environments, past or new knowledge, and chance occurrences. Brockett and Hiemstra's model coined the term “self-direction in learning” while Garrison's model is multidimensional and interactive. Instructional models were made up of Grow’s staged SDL and a model that focused on social and political settings by Hammond and Collins. SDL is also used in Human Resource Development (HRD). Merriam, et al (2007) mention Ellinger’s works on links between SDL and HRD. Implications from this literature suggest that SDL can be used in a variety of settings, whether one teaches or not. It is helpful when presenting material in workshops or even in meetings. The teacher, presenter, manager needs to remember the audience has the power and ability to manage their own learning.

**Andragogy and other models of adult learning.** Andragogy and other models of adult learning literature focused on Sandlin (2005) who offered five main interrelated critiques of andragogy. First, andragogy assumes wrongly that education is value neutral and apolitical, does not recognize that knowledge is inherently value laden (Collins, 1995, Welton 1995), and does not take into account privilege and oppression based on race, gender and class. Secondly, andragogy promotes a generic adult learner as universal with white middle class values. Third, andragogy ignores other ways of knowing and silences other voices, such as women, minorities
and alter identities. Fourth, andragogy ignores the relationship between self and society and last, andragogy is reproductive of inequalities; it supports the status quo, perpetuates racism and sexism. One way this is done is by allowing the learner to center only on what the learner wants to learn. These critiques are derived from critical, feminist, and Afrocentric perspectives. Implications from this piece of literature are that adult educators need to be mindful of these critical perspectives and keep these ideas at the fore front. An andragogic-based adult education is clearly not sufficient to meet the needs of a diverse and critically aware field any longer.

**Self-directed learning.** Self-directed learning also lends much to the literature in Adult Education and helps to shape the understanding of adult students in the AE classroom of the 21st century. Miller (2000) in the Handbook of adult and continuing education Chapter 5, pp 71-86, uses Usher’s definition of learning from experience and experiential learning. Experiential learning is defined as “happening in everyday contexts as part of day to day life, although it is recognized as such. Experiential learning, on the other hand, is a key element of discourse which has this every day process as its “subject” and which constructs in a certain way, although it appears to be merely a term which describes the process.” Miller also uses Weil and McGill’s metaphors of villages to help draw attention to the need to see experiential learning activities in their social and historical contexts. Village One is concerned with assessing and accrediting learning from life and work experience as a basis for creating new routes into higher education, employment, training opportunities and professional bodies. Village Two focuses on experiential learning as a basis for change in structure, purpose and curricula of post-secondary education. Village Three represents experiential learning as a basis for social change, community action and group consciousness raising while Village Four projects personal growth
and development and experiential learning approaches that increase self-awareness and group effectiveness.

Also discussed within the Self-directed literature is Kolb’s four stage model of learning process using the four stages (concrete experience, reflective observation, abstract generalization and active experimentation). The author superimposes his personal learning experiences to discuss and describe each step and how these experiences shaped his thinking about experiential learning.

Limitations of the Experiential learning cycle are discussed as well. Jarvis finds Kolb’s model to be simplistic and developed a nine-stage process, which also includes a non-learning stage as well. Michelson, Usher, Bryant and Johnson argue that they are skeptical of any mode; that is rooted in theories of assumptions of rationalist and empiricist philosophies. Implications here are that many challenges exist to devise ways of enabling learners to incorporate their experience into their learning and develop their ability to become self-reflective. Educators need to become involved in the examination of learning processes if they are to really understand their learners, the ethics of experiential learning and how to manage the emotional dimensions of learning.

**Transformational learning.** Chapter 6, Transformation Learning, from Merriam and Baumgartner (2007) explains that this type of learning involves making an epic change in our view of our world and ourselves. In contrast, informational learning is taking what we know and changing it.

The authors review Taylor’s seven lenses of transformational learning. The lenses are divided into two groups, first the “individual” and second the “sociocultural.” Each group has theorists associated with it. The theorists associated with the individual group are Mezirow,
Daloz, and Boyd. Freire, Tisdell, and O’Sullivan are in the sociocultural category. Mezirow’s theory includes how adults make sense of their life experience, sets of assumptions, points of view, transformation of beliefs and attitudes, learning by adding knowledge to our meaning, processes can be put into action because of crisis, and is summed up by four main components: experience, critical reflection, reflective discourse, and action. (Merriam, Caffarella, Baumgartner, 2007, pp. 135-136). Daloz believes that transformative learning is holistic and intuitive, education is a journey and it should promote development, a teacher serves as a mentor, and the use of storytelling is important (Merriam, Caffarella, Baumgartner, 2007). Boyd added a psychoanalytic approach to transformative learning, and a “Dialog between ego and other” (Merriam, Caffarella, Baumgartner, 2007, p.139). Freire’s theory was one of “Personal empowerment and social transformation” (Merriam, Caffarella, Baumgartner, 2007, p.140), a learner recognizes negative forces in one’s life and works to effect social change, and the ultimate goal of education is “the action and reflection of men and women upon their world in order to transform it” (Merriam, Caffarella, Baumgartner, 2007, p.141). Tisdell’s theory added a cultural and spiritual approach to transformative learning, and community based education (Merriam, Caffarella, Baumgartner, 2007). O’Sullivan thought that educators had a responsibility to expand the world view of their students, expand the vision of quality of life to include the community, and finally, transformative education needs to address spirituality (Merriam, Caffarella, Baumgartner, 2007). Key concepts to transformational learning are experience, critical reflection and development or growth ultimately enhance change.

Transformational learning literature also includes Baumgartner (2001 who discusses Dirkx’s “four-lens approach” to transformational learning. The author references’ Dirkx who draws from Friere’s focus on “social justice” along with Mezirow’s focus on rational thought.
Lens three comes from Daloz who spoke about the “interplay between education and development. The final lens, according to Baumgartner is taken from the works of Dirkx and Healy who included a spiritual component to their theory of transformational learning.

Finally, an expanded version of Mezirow’s theory is examined in this article. The expanded theory, according to Baumgartner (2001) includes “insights into the importance of relationships, feelings, and context in the process.” Implications include the need to look at educating adults from a holistic perspective instead of a single perspective such as the knowledge or cognitive perspective. The environment, context and social aspects play into how individuals learn.

Ettling (2006) writes about ethics and transformational learning as it relates to the practice of education and poses the question for transformative educators, how do you affect transformation without infringing on the rights of students? There is debate on the ethics of transformational learning including whether educators have the right to ask students to make changes in their beliefs, and if it is ethical to ask students to reflect and make changes in the classroom setting. Ettling does not offer answers to the ethical dilemmas but she does recommend educators develop their own set of ethical guidelines from which to work. Ultimately, Ettling suggests that educators need to be aware that learners may not have the same educational goals as the educator. Not all learning is transformational and educators should not push personal agendas or feelings on their learners.

Continuing with transformational learning, Mezirow believes humans have a need to “understand and order the meaning of our experience.” Transformational learning, according to Mezirow, is a process of forming “beliefs about our experiences” and is a “process by which we
transform our taken-for-granted frames of reference to make them more inclusive,
discriminating, open, emotionally capable of change and reflective…”

Bruner, as quoted in Mezirow, lists four ways of establishing meaning. Establishing,
shaping, and maintaining inter-subjectivity, relating events, utterances, and behavior to the action
taken, constructing of particulars in a normative context and using conceptual systems to achieve
decontextualized meanings, including rules of inference and logic and such distinctions as
whole-part, object-attribute, and identity-otherness.

There are four different ways learning happens, according to Mezirow “by elaborating
existing frames of reference, by learning new frames of reference by transforming points of
view, or by transforming habits of mind.” Mezirow believes critical reflection is the answer.

The suggestion here is the importance of being mindful of the authority and influence
educators have over students, even if the students are adults. Transformation is a powerful
concept and educators need to be aware of that. Change, even positive change, does not just
occur to the one doing the changing. Friends and family are all affected and the effect has
ramifications the student will need to be aware of.

**Experience and learning.** Experience and learning readings also add to the Adult
Learner literature. Fenwick (2000) discusses adult learning and how it is understood to be a part
of everyday interactions in work, home, community and other forms of informal/non-formal
education. Many also view or define adult education as associated with formal education
processes such as class discussions, readings, reflection and analysis. Fenwick defines
experiential learning as “a process of human cognition” which encompasses all aspects of
learning for adults. She goes on to discuss five perspectives, which expands the current
The five views discussed are Constructivist, Psychoanalytic, Situative, Critical Cultural and finally, Enactivist.

Constructivists (Reflection) believe the learner is central to the experience, reflects on the experience, interprets and generalizes the experience to make meaning or mental structures. These mental structures become knowledge and are stored as concepts, which can be transferred to new situations. The learner derives meaning from his/her actions in the world. A major criticism of this theory is that the learner’s desire to acquire knowledge is not taken into account.

Psychoanalytic (Interference) learning is viewed as interference of conscious thought by the unconscious and the psychic conflicts that result from this. The unconscious interferes with our perceptions and causes us to question our truths or beliefs. Critical reflection and questioning causes us to build new beliefs or knowledge. Situative (Participation) asserts that learning is rooted in the situation in which someone participates, not as intellectual concepts produced as reflection or psychic conflicts. Understanding is a product of the participation in a particular community, tools and activity of the situation. Knowledge is a result of the interaction of all of the above elements. Criticism of this theory argues that knowledge is not context dependent and that not all learning in communities is laudable. Critical Cultural (Resistance) sees power as a central or core issue. To understand learning, we must look at the structures of dominance that govern social relationships, forms of communication and cultural practices. Finally, enactivist (Co-emergence) assumes cognition depends on the kinds of experience that comes from having a body with sensorimotor capacity embedded in a biological, psychological and cultural context. The person and the context are inseparable and change occurs from systems that affected by the interactions of each other. Implications for practice here include that educators can better understand these theoretical frames as experiential learning and also understand their role.
relative to these processes. While the constructivist perspective is the most dominant experiential learning theory, the other four perspectives play an integral role in how people formulate knowledge.

Kolb (1984) describes experiential learning as a holistic perspective, which combines experience, perception, cognition and behavior to describe how adults learn. He goes on to describe the common characteristics of three models of experiential learning from Lewin, Dewey and Piaget. The Lewinian Model of Action Research and Laboratory Training is described as a process that begins with a here and now experience that is followed by data collection and observations of the experience. Learning is a four-stage cycle comprised of a concrete experience, observation/reflection, formation of abstract concepts/generalizations, and testing of concepts in new situations. Two major concepts of this process is the here and now experience and feedback processes. The goal of this method is to integrate the experience and feedback process into an effective, goal-directed learning process. Dewey’s Model of Learning is very similar to the Lewinian model, however, Dewey more formally developed the feedback process and how learning transforms impulses, feeling, and desires of concrete experience into higher-order purposeful action. Piaget describes the learning process as a cycle of interactions between individuals and the environment. Piaget acknowledges that learning lies in the interaction of the process of the assimilation of events and experiences into an already existing schema. This continual stage of assimilation and accommodation leads to cognitive growth. Piaget also described four major stages of cognition that emerge from birth until ages 14-16. Stage 1 (0-2 yrs.) is the sensory motor stage and learning occurs predominantly through feeling, touching and handling. Stage 2 (2-6 yrs.) is the representational stage. Children can begin to reflect and internalize action. Stage 3 (7-11 yrs.) is the stage of concrete operations. Children can increase
their independence through inductive abilities. Stage 4 (12-15 yrs.) shows adolescents moving from symbolic processes based on concrete experiences and the ability to reflect on situations. This allows the adolescent to engage in hypothetical reasoning.

Kolb defines characteristics of experiential learning as: learning being conceived as a process, not an outcome, learning is a continuous process, which is grounded in experience, process of learning requires resolution of conflicts between didactically opposed modes of adaptation to the world, learning is a holistic process of adaptation to the world, learning involves transactions between the person and the environment, and that learning is a process of creating knowledge.

Implications here include that learning is not only the acquisition of knowledge but also the process of how that knowledge is assimilated into experiences and used to develop higher order thinking. This helps me to understand why adult learners want application and meaning for their learning and how their experiences shape what and how they learn. I need to be able to recognize what stage or where my learners are in this process.

Merriam, Caffarella, and Baumgartner (2007) posit in Chapter 7 of *Learning in adulthood: A comprehensive guide*, that experience has always been viewed as a critical component of adult learning and there are various theories or lenses that can be used that emphasize different aspects of experiential learning. John Dewey hypothesized that “all genuine education comes about through experience.” However, not all experiences may be valuable in producing learning. Dewey notes “every experience is a moving force. Its value can only be judged on the ground of what it moves toward and into.” For learning to happen through experience, two principles must occur: the principle of continuity, where every experience takes something from those experiences which have come before and modifies the quality of
experiences that come after and the principle of interaction, where experience is what it is because of a transaction that happened between an individual and his environment.

There are five models of experiential learning relevant in the literature. First, constructivism, of whom Kolb, Dewey, Piaget and Lewin are members, claims that experiential learning requires four different abilities: a) Concrete experience, an openness and willingness to be involved in new experiences) Reflective observation, an observation and reflection that allows the experience to be viewed from other perspectives, c) Abstract conceptualization, the ability to analyze and integrate ideas and concepts, and d) Active experimentation, that involves putting new ideas and concepts into practice. Second, situated approach, who Boud, Keogh and Walker theorize, includes an augmented Kolb’s theory by 1) recognizing context shapes individual experiences in different ways and 2) differences among learners in past history, learning strategies and emotions influence learning developed through reflection. Learners are involved in a community of practice. There are three stages of learning: returning to and replaying the experience, attending to the feelings/emotions the experienced invoked, and re-evaluating the experience. Beard and Wilson acknowledge the emotional domain can hinder or enhance learning and offer several methods for working with emotion in the classroom. Third, the psychoanalytic approach, that recognizes learners need to get in touch with unconscious fears or desires and fourth, the critical approach focuses on the learner’s needs to resist dominant social norms. Power is a core issue in the experience of a learner. Finally, the complexity theory of experiential learning is the interaction of any of the above-mentioned approaches for learning.

Educator’s roles and purposes are defined by the lens in which they view experiential learning. Constructivists encourage critical reflection on assumptions and assesses the learners’ experiences. Situative educators engage students through communities of practice through
service and cognitive apprenticeships. Psychoanalytic educators help learners recognize unconscious conflicts that may hinder their learning and finally, critical culture educators help learners see the influence of power, encourage resistance to oppression and helps learner find solutions to issues. Complexity theory educators help students understand change in large, complex systems. Methods associated with reflective and situative paradigms are discussed here. Reflective practice is defined as “a deliberate pause to assume an open perspective, to allow for higher-level thinking processes. Practitioners use these processes for examining beliefs, goals, and practices, to gain new or deeper understandings that lead to actions that improve learning for students.” This process can be applied to formal and informal learning situations. Reflection-on-action is thinking about a situation after it happens. The learner returns to the experience to question the experience, decide what they would do differently and then use the experience to try out their decision. Reflection-in-action reshapes “what we are doing while we are doing it” and is typically triggered by surprise and gives rise to “on the spot” experimentation of our feelings, AKA “gut-feelings.”

Situated cognition is when the learning process is not separate from the situation and instead, occurs together. The physical and social experience includes the situation(s) and the tools used in the experience and are integral to the entire learning process. Thoughts and actions depend upon the environment individuals are in. Cognitive apprenticeships attempt to incorporate learning into authentic practices of activity and social interaction. Five phases of this method include: Modeling, a demonstration of the activity while explaining it, approximating, where the learner performs the activity while the teacher coaches the learner (scaffolding), coaching and scaffolding, where these are gradually removed with the learner performing more independently alone and in groups, the learner is self-directed and assistance is given when
requested and generalizing, where generalization of the skill is discussed and the learner is encouraged to try skills in new situations. Anchored instruction includes instructors creating student-learning situations that experts encounter. Learners are presented with “real life” problems and asked to solve with rudimentary knowledge. Case studies, problem based learning are two examples of this.

**Spiritual, narrative, and non-western perspectives.** Spiritual, narrative, and non-western perspectives is yet another area of Adult Education literature to glean insight from with regard to this study. Tisdell (2000), Spirituality and emancipatory adult education in women adult educators for social change, *Adult Education Quarterly, 50*(4), 308-335, examines the influence of spirituality on the motivations and practices of a multicultural group of women adult educators who teach for change. Spirituality defined according to Hamilton and Jackson (1998) as 1) further development of self-awareness, 2) a sense of interconnectedness, and 3) a relationship to a higher power. A qualitative study of 16 women educators was conducted to determine how spirituality influences their motivations and practices. The study utilizes a critical post structural feminist theoretical framework that is concerned with giving voice to marginalized or ignored perspectives. The findings of the study revealed five themes across the 16 women participants: A spiral process of moving beyond and "re-membering" is the concept that these women moved beyond their childhood attachments to religious traditions and re-evaluated and reshaped them to be more relevant to their adult spirituality. It was more than just remembering these traditions but a process of questioning these traditions and moving beyond them and utilizing them as a method of forming their current spiritual positions, spirituality as life force, interconnectedness, and wholeness was how the group tended to define the term by giving examples of "spiritual experiences". Pivotal experience of a perceived higher power that
facilitates healing, the facilitation of the development of authentic identity where the participants noted that spiritual experiences greatly contributed to the development of their authentic identity and their ongoing personal development could not be separated from their spirituality. Lastly, a way of life requiring inner reflection and action for social change: the participants saw their work as a way of life that required an integrated approach to living that was grounded in their spirituality. They also felt spirituality should be a non-coercive presence in emancipatory educational practice and agreed spirituality informed their practices. Implications for practice here includes that if adult education teachers seek transformational learning, it is important to realize the influence of spirituality in the lives of adult learners and allow them to bring this to the classroom. Tisdell states, "it is important to remember that adult learners bring their whole selves, including their spirituality, with them when they enter the learning environment" (2000). Creating an environment and space for adult learners to bring spirituality to an activity could facilitate greater learning and a move for action.

To further examine spirituality, Tisdell and Tolliver (2003) discuss the influence on adult educators in their article, “Claiming a sacred face: The role of spirituality and cultural identity in transformative adult higher education.” from the Journal of Transformative Education. 1(4), 368-392. Spirituality is an important influence for adult educators focused on transformation. The article looks at a qualitative study that examined the role of spirituality in adult educators that teach for social transformation by dealing with cultural identity based on race, class, gender and sexual orientation. A discussion is given on literature and theories that relate to spiritual or cultural identity: transformative learning, spiritually grounded, and culturally relevant pedagogy. The authors argue little attention has been paid to the role of spirituality in the transformative literature but point to David Abalos (1998) work on the impact of cultural
hegemony and colonialism on an individual's four faces: the personal face, the historical face, the political face, and the sacred face.

This study focuses on the sacred face. Spirituality in the context of this article is defined by the following: 1) related to a connection (life force, God, Creator, higher self or purpose) 2) has a context; is different from but related to religion 3) is about a sense of wholeness, healing, and interconnectedness of all things; 4) is about meaning making 5) is about how people construct knowledge through largely unconscious and symbolic processes manifested through image, symbol, ritual, art, and music 6) "spiritual experiences" generally happen by surprise; and 7) is about the ongoing development of identity, of moving toward a greater authenticity, more authentic identity, or authentic vocation.

"The primary purpose of the research was to find out how adult educators in higher education and community-based settings interpret how their spirituality influences their attempts to teach for social change and cultural relevance and how their spirituality has changed over time since childhood." (p. 375-376). The authors found that educators use spirituality in dealing with internalized oppression and found spirituality to be important in the healing process. The study also revealed the use of spirituality for participants in mediating among their multiple identities (race, gender, class, sexual orientation). It was also found some participants crossed culture to help in their own spiritual development. The use of unconscious processes in the construction of knowledge was also found among the participants in that ritual, gesture, music and art were found to have enduring power and were often connected to both cultural and spirituality.

Implications for practice here include engaging learners in culturally relevant, personal, structural, political, and artistic/spiritual levels; education can be more transformative (p.
389). Educators, in realizing the value of cultural and spiritual influence, can improving upon the knowledge gained by their students.

To round out the literature regarding spirituality, narrative and non-western perspectives, an article from *International Journal of Leadership in Education* argues there are 3 missing elements in the discourse of transformative leadership: 1) respect to a prophetic spirituality; 2) the disclosed impact of reflection on the transformative leaders as espoused by Freire and 3) a spirit filled resistance that proposes a project or praxis for self and institutional change. The author, Dantley (2003), introduces a new concept of "critical spirituality" as a means to broaden the notions of transformative leadership than includes the missing elements of Burns transformative leadership in the article: Critical spirituality: enhancing transformative leadership through critical theory and African American prophetic spirituality 6(1), 3-17. Dantley goes on to discuss African American spirituality as an underlying foundation for transformative leadership given the nature of African American spirituality. A discussion of West (1988) three prophetic practices: 1) deep seated moralism; 2) an inescapable opportunism; and 3) an aggressive pessimism. The author discusses the application and inclusion of these concepts into school leadership.

So, to summarize, critical spirituality combines critical theory and prophetic, African American spirituality, deals with notions of what is moral, democratic, and equitable in schools, and critiques and deconstructs undemocratic power relations. Burns (1978) Transformative Leadership consisted of one or more persons engaging themselves in an affiliation where both leaders and followers intentionally raise one another to higher levels of motivation and morality, assumes leadership involves relationship, influence, and some notions of virtue or rectitude and encompasses the idea that purposes of leaders and followers become fused and their respective
bases of power become the mutual support or foundation essential to the achievement of a common purpose.

Implications for practice here are that the author argues adding this critical perspective to transformational educational leadership could prove beneficial to traditionally marginalized and disenfranchised groups within American schools. Transformative leaders realize the notion of making meaning and demands a transcendence from the daily tasks of leadership through contextualizing these in a broader sense of the greater good.

**Critical theory, postmodern and feminist perspectives.** Critical Theory, Postmodern and Feminist Perspectives readings also add to the significant literature regarding Adult Education and comprises many authors. Critical theorists assume that rationality is a means to better knowledge whereas postmodernists assume no such thing; critical theorists see knowledge as a logical outcome of neatly categorized human interests. In other words, they believe that people tend to know about what they are interested in being able to do (Kilgore, 2001, p. 54). Postmodernist see knowledge as tentative, fragmented, multi-faceted, and not necessarily rational (Kilgore, 2001, p. 54). Critical theorists challenge what we think we know is true by demonstrating how it serves the interest of certain individuals and groups at the expense of other individuals and groups (Kilgore, 2001, p. 54). From either a critical or postmodern perspective, knowledge is socially constructed and situated in a particular context (Kilgore, 2001, p. 54). Postmodernism focuses on popular culture; a goal is to legitimize all forms of cultural expression, including those previously marginalized by concepts of ‘high’ culture such as Eurocentric arts (Hemphill, p. 21). Race, class, and gender are the three themes that characterize this perspective (Merriam, et al, 2007, p. 243).
In terms of worldviews, critical theory could include the following notions: knowledge is a rational product of human interests, power is possessed by subjects and is repressive, knowledge frees subjects from power, and learning is achieved through critical reflection and consciousness raising. Postmodernism would then, in turn, include these notions: knowledge is tentative, multifaceted and not necessarily rational, power is expressed by subjects and is productive, knowledge is an expression of power and learning is achieved through deconstruction, play, eclecticism (Kilgore, 2001, p. 59). Postmodernism focuses on popular culture; a goal is to legitimize all forms of cultural expression, including those previously marginalized by concepts of ‘high’ culture such as Eurocentric arts (Hemphill, p. 21).

There are seven ‘learning tasks’ embedded in the critical learning theory:

- Challenging ideology- this is the basic tool for helping adults learn to penetrate the givens of everyday reality to reveal the inequity and oppression that lurk beneath.
- Contesting hegemony- Hegemony is the notion that people learn to accept as natural and in their own best interest an unjust social order.
- Unmasking power- part of becoming adult is learning to recognize the play of power in our lives and ways it is used and abused
- Overcoming alienation- the removal of alienation allows for the possibility of freedom, for the un-manipulated exercise of one’s creative powers. As such, claiming freedom and overcoming alienation are inextricably intertwined.
- Learning liberation- adults need to learn to liberate themselves, individually and collectively, from the dominant ideology.
• Reclaiming reason- A major concern of critical theory is to reclaim reason as something to be applied in all spheres of life, particularly in deciding values by which we should live, not just in areas where technical decisions are called for.

• Practicing democracy- adults must learn to live with the contradictions of democracy, learning to accept that democracy is always a partially functioning ideal (Merriam, et al., 2007, p. 257).

Feminist perspective is a critical part of the Adult Education literature that must be included when examining Adult Learning Theory. Feminist pedagogy has been influenced by different educational models. The issues are how to teach women more effectively so that they gain a sense of their ability to effect change in their own lives, placing an emphasis on connection and relationship (rather than separation) with both the knowledge learned and the facilitator and other learners, and women’s emerging sense of personal power (Tisdell, 1993, p. 93).

The Liberatory (emancipatory) Model deals with the nature of structured power relations and inter-locking systems of oppression based on gender, race, class, age, and so on (Tisdell, 1993, p. 94). Versions of the liberatory model attempt to account for and deal with why it is that women (and minorities) are often silenced or absent or that their contributions are overlooked or discounted in the public arenas of our society, including government, industry, education, and in the classroom at all education levels (Tisdell, 1993, p. 94). The underlying philosophical assumption of feminist materialism is that the material realities of people lives—the physical realities of maleness or femaleness, race, material needs for food and shelter, and so on—shape or affect all other aspects of people’s sociocultural lives, including their values (Tisdell, 1993, p. 94). Common sense, a characteristic that both the black and white women attributed to
themselves, was defined as the ability to negotiate working class culture and to solve day-to-day problems (Tisdell, 1993, p. 96). There appear to be 3 central themes in feminist resistance theory. First, all people have the capacity to be the creators and producers of meaning in their lives and to resist the forces of oppression. Second, the forms that such resistance takes are influenced by multiple factors of oppression, including race, class, gender, age, sexual orientation, and ethnicity. Third, the various forms of resistance that people use, based on the multiple factors of race, class, gender, and so on, may sometimes propagate other forms of oppression or domination of themselves or other people (Tisdell, 1993, p. 96).

The Gender Model deals directly with women’s socialization as nurturers (Tisdell, 1993, p. 96-97). Women learn best in environments that emphasize connected teaching and learning (Tisdell, 1993, p. 97) and that in these environments, women begin to recognize their own ability to think independently, to think critically, and to come to their own conclusions. During this time, they also begin to recognize and hear their own voices (Tisdell, 1993, p. 97).

Implications for practice here include that we need to carefully consider curriculum materials, adopt teaching strategies that challenge structured power relations, develop new courses specifically designed to deal directly with power relations, address the ways in which their own unconscious behaviors in the learning environment either challenges or reproduces society inequitable distribution of power.

Adult Development. Adult development readings also contribute to the significant literature of Adult Education and Learning. The main ideas here embrace the idea that good teachers intend to help students to distance themselves from their ‘upbringing, to see their values in a broader context. For only then can the culture remain alive to the possibility of change and develop the consequent capacity to adapt itself to an environment which is inevitably in flux.
Students should see themselves as part of a larger tribe. Tribal thinking is ‘others have myths, but we have the Truth. The task is to help students see that we all have myths, and those myths are a special form of truth. Proposition 1: Human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment (Bronfenbrenner, 1994, p. 38). Proposition 2: the form, power, content, and direction of the proximal processes effecting development vary systematically as a joint function of the characteristics of the developing person; of the environment—both immediate and more remote—in which the processes are taking place; and the nature of the developmental outcomes under consideration (Bronfenbrenner, 1994, p. 38). Microsystem is a pattern of activities, social roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with, and activity in, the immediate environment. Mesosystems comprise the linkages and processes taking place between two or more settings containing the developing person. Exosystems comprises the linkages and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which events occur that indirectly influence processes within the immediate setting in which the developing person lives. Macrosystems consists of the overarching pattern of micro-, meso-, and exosystems characteristic of a given culture or subculture, with particular reference to the belief systems, bodies of knowledge, material resources, customs, life-styles, opportunity structures, hazards, and life course options that are embedded in each of these broader systems.
Chronosystems encompass change or consistency over time not only in the characteristics of the person but also of the environment in which that person lives.

Development has been defined as ‘systematic change within an individual or a group of individuals that results from a dynamic interaction of heredity and environmental influences (Merriam, et al., 2007, p. 298). The four approaches to Adult Development, when broken down, help to organize the broader philosophies. Those approaches include biological aging and its impact on learning, psychological models of development, sociocultural factors and integrative models of development.

The implications for practice here include that the information discussed in this section can be used to help faculty/staff/administrators understand the developmental stages of our community college students. The population of our students vary greatly, and this understanding will allow us to better serve them on a day to day basis.

Cognitive development. Cognitive development readings are helpful in understanding the needs of Adult Education instructors in the classroom as well. Ardelt (2000) differentiates between intellectual and wisdom-related knowledge as it relates to older individuals and describes the characteristics of both and makes an argument that is more essential for older adults to acquire wisdom rather than intellectual knowledge in the article, Intellectual versus wisdom-related knowledge: The case for a different kind of Learning in the later years of life. *Educational Gerontology* 26: pp. 771-789. The six domains of goals, approach, range, acquisition, effects on the knower, and relationship to aging are discussed as they relate to both intellectual knowledge and wisdom-related knowledge (table 1 on pg. 774 summarizes these domains).
The central concepts include that goals of intellectual knowledge are to acquire new information or master skills of the world (quantitative) while the goals of wisdom-related knowledge is to find meaning in one's life and liberation from inner forces (qualitative). The approach to intellectual knowledge is linear and detached from the individual; it is impersonal and can be separated from the knower; however, wisdom-related knowledge is "applied, concrete, and involved." Wisdom-related knowledge inherently involves the individual in the search for meaning and purpose and is personal to the knower. The range of intellectual knowledge is limited and can fluctuate based upon the context (historical or scientific). The range of wisdom-related knowledge is timeless and is not affected by historical, political, or scientific changes.

The acquisition of intellectual knowledge is related to one's cognitive abilities but the acquisition of wisdom-related knowledge requires both cognitive abilities and the ability to self-reflect upon one's own perception of themselves. The acquisition of wisdom-related knowledge required openness and cannot be taught directly but involves personal involvement. The acquisition of intellectual knowledge can be taught and obtained through more detached measures such as reading, studying or attending lectures. Intellectual knowledge can result in self-centeredness on the part of the knower and is used mostly to satisfy individualistic goals; whereas the effects on the knower with wisdom-related is more collective and holistic and less concerned with the individual.

With respect to the relationship to aging, both intellectual and wisdom-related increase as an individual ages; however, intellectual knowledge may eventually decline as a person begins to lose cognitive abilities with age. However, wisdom-related knowledge can continue to increase with age as there is much less reliance on cognitive abilities and acquiring new
information and more emphasis on processing and finding meaning in the information already gained.

The author proposes adopting a life course model where wisdom related knowledge does not become obsolete and that we change our view of old age as a time of social and physical decline to a time for new opportunities and the development of wisdom. It is argued continuing education programs should shift focus for older adults from the acquisition of intellectual knowledge and promote wisdom-related knowledge. The opportunity for older people to do autobiography work and the promoting the study of liberal arts and the humanities are two proposed solutions by the author to develop wisdom-related knowledge for older adults.

Daloz (1999) from *Maps of Transformation: How adults change and develop.* In Mentor: Guiding the journey of adult learners (p.43-86), examines how we change and develop as we age. The chapter examines 3 developmental theories through the lens of 3 different stories. Daniel Levinson's map in *The Seasons of a Man's Life* is concerned with "What happens to people psychologically as they grow older?" Robert Kegan's stage theory is also examined as a map that focuses on growing wiser rather than older. William Perry's map, a "scheme of intellectual and ethical development" is also examined and explained as a way for one to move to more relativistic reasoning. The chapter uses 3 conversations/stories to answer the questions: "What is important? Who am I? and What is right?"

Levinson divides men’s' lives into 4 major eras: childhood and adolescence, early adulthood, middle adulthood and late adulthood. The author pays particular attention to the middle 2 eras (17-60), posits that late teens and early 20s are a transition into adulthood when many men find mentors, and goes on to suggest that the early 40s tends to prompt a reappraisal of life and we address polarities that lie within us. Jung termed it individuation:" the process by
Kegan's Stage Theory also adds much to the literature about cognitive development and includes: seeing life stages as a upward spiraling helix, cycling through levels of being preoccupied with self and at other times preoccupied with our relations with "the other", beginning stages that balances and are characterized by impulsiveness and self-centeredness giving way to a more "other-centered" self, which leads to the birth of a new, more separate self and finally evolves to an "interindividual balance". Kegan focuses on the quality of transitions (not on the stages), posits that to understand human behavior; we must understand the environment's part, how it confirms us, contradicts us and provides continuity (p. 67), and that most adult learners are moving through interpersonal balance toward institutional stance.

The Perry Scheme was developed by looking at the stages of undergraduate students but has been applied to all learners and includes 9 positions:

- Position 1: students see the world in polar terms: we-right/good vs. other wrong/bad
- Position 2: perceives diversity of opinion, and uncertainty and accounts for them as unwarranted confusion in poorly qualified Authorities
- Position 3: accepts diversity and uncertainty as legitimate but still temporary in areas where Authority "hasn't found the the Answer yet"
- Position 4: perceives legitimate uncertainty to be extensive and raises it to the status of an unstructured epistemological realm of its own in which "anyone has a right to his opinion," a realm which he sets over against Authority's realm where right-wrong
still prevails or (b) the student discovers qualitative contextual relativistic reasoning as a special case of "what They want" within Authorities realm

- Position 5: perceives all knowledge and values as contextual and relativistic and subordinates dualistic right-wrong functions to the status of a special case, in context
- Position 6: student apprehends the necessity of orienting himself in a relativistic world through some form of personal Commitment
- Position 7: student makes an initial Commitment in some area
- Position 8: student experiences the implications of Commitment and explores the subjective and stylistic issues of responsibility
- Position 9: student experiences the affirmation of identity among multiple responsibilities and realizes Commitment as an ongoing, unfolding activity through which he expresses his lifestyle

Students may linger or progress through stages at different rates and may retreat back to a previous stage but the model is hierarchal and rests upon one another. Implications for practice here include that understanding maps of transformation for adult learners can guide adult educators to see students where they are and help them through their current stages. It is important to remember that as educators, you may not see all stages in a student but understanding the various stages can help an educator get a student to where they need to be and design activities more relevant and rewarding for the student.

Goldberger (1996) uses stories from individuals from four different cultures to highlight the shared struggles, emotions, and experiences of trying to assimilate to another predominant culture in Cultural imperatives and diversity in ways of knowing, Knowledge, Difference & Power: Essays Inspired by Women’s' Ways of Knowing. (p. 335-371). Each culture had a
different “way of knowing” outside of traditional andragogy. Each culture had to adopt strategies (such as silence or loudness) outside their culture to become successful in their environment. Each person encountered varying degrees of difficulty in assimilation and struggled with their identity (or loss of). The central concept is acculturation or the power of dominant cultures to impose ways of being and knowing on individuals from minority cultures and immigrant groups. Feminist and culturalists argue we need to move beyond family and focus on social, economic, and political systems (our culture) to understand how people live and define themselves.

Uses stories from individuals from four different cultures to highlight the shared struggles, emotions, and experiences of trying to assimilate to another predominant culture. Each culture had a different “way of knowing” outside of traditional andragogy. Each culture had to adopt strategies (such as silence or loudness) outside their culture to become successful in their environment. Each person encountered varying degrees of difficulty in assimilation and struggled with their identity (or loss of).

Implications for practice from this reading include that we as educators and researchers should reflect on our subjectivity when dealing with others from other cultures. We should try to be aware of and understand the perspectives of others based on their life experiences and not process, scrutinize, and teach individuals based on our ethnocentric perspective.

Merriam (2004) argues that a higher level of cognitive development may be necessary for transformative learning to take place in “The role of cognitive development in Mezirow's transformational learning theory” *Adult Education Quarterly. 55*(1), 60-68. She focuses on Mezirow's theory of transformative learning and the components of critical reflection and rational/reflective discourse and argues that the process of these components require advanced
levels of cognitive development. Mezirow argues that in order for transformation to take place; one must engage in critical reflection of the experience. Rational/reflective discourse involves the discussion and evaluation of new meanings. Merriam argues that regardless of the cognitive development model one uses {Piaget (1972), King Kitchener's (1994), Perry's (1970), Belenky, Clinchy, Goldberger, and Tarule's (1986), or Kegan's (1994)}; these concepts assume certain levels of cognitive development. They appear to be both age and education dependent.

Mezirow's Transformational Learning Theory includes the ideas development is at the heart of transformational learning, "fostering greater autonomy in thinking is both a goal and a method for adult educators, and achieving greater autonomy in thinking is a product of transformative learning" and that transformative process involves critical reflection.

Implications for practice from these readings would include that those wishing to have transformational learning take place within their lives or their students’ lives should consider how "mature or cognitively developed one must be to have a transformational learning experience. Merriam suggests continuing to examine cognitive development as it relates to critical reflection and rational discourse as a prerequisite for transformative learning.

Merriam, Caffarella & Baumgartner (2007) in Chapter 13 (Cognitive Development in Adulthood) of “Learning in adulthood: comprehensive guide “focused on children’s cognitive development while claiming it as a foundation for adults. The 4 stages of cognitive development from Piaget: sensory motor (birth -2 yrs.), preoperational (2-7 yrs.), concrete operational (7-11 yrs.), and formal operational (12 plus yrs.) are discussed and formal operation is characterized by the ability to think abstractly, considered the apex of mature thinking. Neo-Piagetian (Knight, Sutton, Arlin & Sinnott) challenged Piaget, and found evidence of post formal thought (logical thinking plus reflection).
Linear and categorical models of adult cognitive development include Perry’s Developmental Scheme, made up of nine positions, each representing a qualitatively different way to view or interpret learning experiences. Dualistic knowledge, either right or wrong, and relativistic knowledge, the context of knowledge is as important as the knowledge, are both inherent.

The Reflective Judgment Model, from King and Kitchener, focuses on reflective thinking from late adolescence to adulthood and has 8 stages. Stages 1, 2, 3 (pre-reflective thinking) is made up of knowledge that is gained from authority figure or through experience. Stages 4, 5, 6 (quasi-reflective reasoning) define knowledge in terms of uncertainty and subjective in their thinking. Stages 7 and 8 include the idea that knowledge is constructed by the individual and must be understood in context of learning.

Women’s Ways of Knowing (Belenky, Clinchy, Goldberger, and Tarule) contains 5 categories of knowing and is the study of only women and how they viewed knowledge acquisition and self:

1. Silence – experience themselves as voiceless, mindless, subject to external authority.
2. Received knowledge – capable of receiving knowledge from others but not capable of producing it on their own.
3. Subjective knowledge – truth and knowledge are perceived as personal, private and subjectively known.
4. Procedural knowledge – women are invested in learning and applying objective procedures for obtaining and communicating knowledge.
5. Constructed knowledge – all women view knowledge as contextual, women are creators of knowledge and value subjective and objective strategies for knowing. (Development of authentic voice)

The Epistemological Reflection Model (Magolda) illustrates ways of knowing that are socially constructed and context bound. The model claims that taking responsibility for your beliefs, identity and relationships allows you to become open to change. The 4 Ways of Knowing include: absolute knowing, transitional knowing, independent knowing and contextual knowing.

The Transcendence View (Washburn and Wilber) posits that individuals need to transcend above consciousness in order to be open to new learning and that there are two themes or levels of cognitive development: dialectical (acceptance of inherent contradictions and alternative truths) and context (acceptance of different cultures).

Dialectical Thinking (Riegel) suggests that individuals don’t have to pass through the Piagetian stages, we can operate simultaneously on all levels. Benack and Basseches claim there are four phases of dialectical framework to pass through. Kegan believed that life necessitates different ways of thinking and “a new conception of consciousness thresholds that individuals may have to reach to satisfy expectations of love and work.” Also, we are conditioned to respond to the mental demands of the modern world.

The Contextual Perspective (Labouvie-Vief and Goldberger) theorizes that the variables related to one’s social context rather than to one’s age account for particular developmental gradients in cognition. Labouvie-Vief looked at the relationship between cognitive complexity and cognitive affective integration. Intelligence and knowledge is also tied to how fast we respond and our ability to reflect, postulating that these traits are imitated in coping and defense strategies.
Goldberger suggested that silence is culturally determined and is actually a sign of positive knowing and not at all seen as oppressive. The theorist also proposed that wisdom might be the pinnacle of adult learning. There are many questions on how to define and measure cognitive development since intelligence, creativity and wisdom are separate yet inter-related constructs.

**Intelligence, memory, cognition and the brain.** Intelligence, Memory, Cognition and the Brain is the last category of Adult Education literature to be reviewed for the proposed study. Boulton-Lewis & Tam (2012) in their work, “Active ageing, active learning: Issues and challenges”, speculate that the population of the world is rapidly aging. The Pew Report 2001 as cited in the chapter calls this the “silver tsunami”. Wolf suggests four phrases of learning which are not just for older adults: differentiation, dissonance, deconstruction, and reconstruction. There are important reasons for learning as adults, such as to keep the brain active or to enjoy a challenge. Common reasons for not learning were discussed as being lack of time and lack of evidence. Horn and Hoffer offered nine cognitive processes that are either maintained (M) or are vulnerable (V) with age:

1. Knowledge derived from acculturation-M
2. Fluency of retrieval of knowledge-M
3. Visualizing capabilities-M
4. Auditory capabilities-M
5. Quantitative capabilities-M
6. Reasoning capabilities-V
7. Maintaining immediate awareness-V
8. Speed of apprehension-V
9. Speed of arriving at decisions- V (2012, p. 23)

Interestingly, processes 1, 2 and 5 increase until they decline in the 60’s, while processes 6, 7, 8, and 9 decline earlier in adulthood, so they are vulnerable.

Several generalizations from this body of literature appear and are of value when proposing the study of Adult Education Instructors needs. Higher education appears to have a positive effect on older adult’s cognitive abilities, while cognitive decline needs to be addressed when designing educational programs for older adults. Older adults do have the capacity to learn and educators need to keep in mind that the learning acquired earlier in life has an impact on older adult’s capacity to learn. Among the generalizations made within this literature, the question of motivation is brought to the surface. What motivates older adults to learn? Authors from this genre suggest that reviewing their life and life events can prompt older adults to continue learning. Transportation, health and safety are also drivers of learning, however; learning technology does not drive older adults to learn, although older adults can learn technology.

How do older adults want to learn? Authors claim that older adults want to learn informally, through reading, conversation, and educational television. What do they want to learn? Technology, new talents, and new skills seem to be what older adults are interested in learning. Implications for Practice here are to remember what and how older adults want to learn. More importantly, recognize older adults have the capacity to learn.

Cozolino & Sprokay (2006) in their work, “Neuroscience and adult learning.” New Directions for Adult and Continuing Education, 2006(110), 11-19, discuss brain development and learning. Adult educators use their “interpersonal skills to tailor enriched environments that enhance brain development.” Neural plasticity is introduced and defined as a process that is
“dependent on modifications of the brain’s chemistry and architecture” that affects one’s ability to learn and can be enhanced through principles of psychotherapy. Stress and learning is an area that is important to consider when proposing studying Adult Education and instructor needs as well. Cozolino & Sprokay, 2006, p.14 state that a moderate state of arousal enhances learning, that it “triggers neural plasticity”, while stress/fear can affect one’s learning ability negatively.

A notion that a supportive, caring, encouraging, enthusiastic environment created by the teacher can enhance learning is put forward in this literature as well as a suggestion that if educators take on mentoring roles and use mentoring techniques, the fearful educational environment can be overcome. Thinking and feeling is another important area to consider when reviewing this literature involving cognition. Authors claim that caring has an effect on brain development and has positive effects on adult learning while the narrative (story) of the learner plays an important part in adult education because it can be used as a memory tool and to enhance self-esteem. Use of journaling and group discussion to help adults reframe their narrative from a negative to a positive one is discussed as an important technique when working with adults. According to the authors, “trust, dialogue, and healing precede genuine learning” (Cozolino & Sprokay, 2006, p. 17). Wisdom is discussed as adult learners learn better if they can tie their life experiences to the concepts they are learning, teachers who inspire adult learners and use their wisdom and experience support brain development, and allowing adult students to teach can also aid in their learning.

Implications for practice from this reading state the importance behind an educator recognizing the significance of the teacher/student relationship. A positive relationship between the teacher and the adult learner allows both to experience changes in their brains. This change in brain structure can enhance neural plasticity and thus enhance learning.
Taylor (2006) wrote a chapter in “Brain function and adult learning: Implications for practice. New Directions for Adult and Continuing Education, 2006(110), 71-85, to “connect brain function with adult learning practices chiefly associated with meaningful learning” (Taylor, 2006, p. 71). Meaningful learning is defined as “learning that changes not just what people know but how they know.” Constructivism and experiential Learning are concepts that are introduced and explained here with the following examples: learning is “constructed in the learner’s mind” (Taylor, 2006, pp.72-73), the “sociocultural environment” affects learning (Taylor, 2006, p.73), teachers need to focus on what the student understands, teachers need to put the material in context and adult learners need to make connections with the material in order to truly learn. The author goes on to add that narratives, journals, autobiography, and writing-to-learn all bring “meaning through articulation.”

Nonveridical learning is an interesting point for educators to consider and is viewed as not focusing on getting the right answers to problems, a method that is preferred because it allows learners to reflect and use critical thinking and is considered action centered learning that creates “adaptive pathways of the brain” (Taylor, 2006, p.75).

Transformational learning comes on to the scene here and is based upon dialogue and critical thinking. The article references Daloz’s idea that “teaching is preeminently an act of care” (Taylor, 2006, p. 82) and that emotion can either enhance or hinder thinking while powerful emotions can affect long-term memory (Taylor, 2006, p.75).

Implications for practice from this article can encourage educators of adults to review brain function literature. The literature can then be used to examine one’s educational practices and make decisions about changing those practices to make learning more meaningful to adult learners.
A chapter from Zull (2006), Key aspects of how the brain learns. *New Directions for Adult and Continuing Education, 2006*(110), 3-9 focuses on the basics of brain function along with the manner in which learning occurs through the “change in neuron networks” (Zull, 2006, p.3).

According to Zull, one’s brain changes as a result of learning. Using the four areas of the neocortex is important to incur change. Learning is an activity that involves change. The four “pillars of learning” (Zull, 2006, p. 5) are: gathering (data), reflecting (making meaning), creating, and testing (putting ideas in writing and talking about the ideas) (Zull, 2006, pp. 5-7). The “windows for learning” (Zull, 2006, p.7) suggests that we experience some closing as we age, however; age does not necessarily end learning. Zull is quick to point out that neuroscience confirms these ideas.

Generalizations here from reading literature about cognition suggests that educators need to learn more about the biology of learning, need to allow learners to “develop their own representations, theories and actions” (Zull, 2006, p.8), can present learners with new experiences, need to look towards neuroscience to help look at existing learning theory, and as brain research evolves, educators need to make revisions to their existing theories.

Implications for Practice here remind us, as Zull (2006) pointed out, that it is important for educators of adults to study brain research in order to create meaningful learning experiences for students. Teachers of adults would do well to remember to allow their students to create their own ideas and make their own meanings.

Memory is an area of learning that is important to understand when thinking of how to interact with adult students. Memory and learning are not the same. Memory is recalling past experiences where learning is a process of modifying behavior. Learning and memory are
dependent on each other. Different types of memory use different parts of the brain. The website, *The brain from top to bottom.* (n. d) defines three types of memory:

- Sensory memory (quickly taking in information through the senses).
- Short-term memory (has a storage capacity of about seven items and lasts less than a minute).
- Long-term memory (stores information away for up to a lifetime, however, it is not without problems).

Merriam, Caffarella, & Baumgartner (2007) write about intelligence and aging in chapter 14 of *Learning in adulthood: A comprehensive guide.* According to the authors, traditional approaches to studying intelligence include biologic, individual differences, a systematic way to study individual differences, grounded in psychological (psychometric) testing. Binet and the IQ test is an example here. Age and intellectual abilities are discussed. Theorists Thorndike, Bregman, Tilton, and Woodyard (1928) did not believe one’s ability to learn peaks at a young age and proposed the idea that adults could learn much later in life and the onset of the downturn was forty-five, rather than twenty-five. Baltes and Schaie studied plasticity and compensation, both processes that are important in the idea that adults can redirect their “intellectual development (Merriam, Caffarella, & Baumgartner, 2007, p.367). Also offered were concepts that adults can make improvements to their IQ tests and that compensation, a way to adapt to losses in thinking ability, is something we all develop as we age.

Research is offered here on cross-sectional studies that found intelligence declined with age and longitudinal studies that claimed that was not the case. Gardner’s Theory of Multiple Intelligences was presented in this body of literature and widened the view of intelligence to eight forms that Gardner believed were possessed by all: linguistic, logical-mathematical, spatial,
musical, bodily/kinesthetic, understanding of self and others (2) and naturalist intelligence. (Merriam, Caffarella, & Baumgartner, 2007). Sternberg et al. coined the phrase “academic intelligence” (Merriam, Caffarella, & Baumgartner, 2007, p.377) and used the Triarchic theory of intelligence to explain practical intelligence, while adding that a person’s thinking is influenced by insight, creativity and the external environment.

Emotional intelligence is talked about here and Goleman says people have two ways of “knowing”, their “rational self” and their “emotional self”. Goleman claims that self-awareness is the key to emotional intelligence, although that Goleman’s theory is not well supported in research. Contextual intelligence is examined and Berg asserts it is made up of the ability to adapt in a variety of contexts and that intelligence means different things to different groups of people, while Sternberg is notes for cross-cultural studies of intelligence. The study of “intellectual functioning in adulthood” (Merriam, Caffarella, & Baumgartner, 2007, p.386) encompasses four ideas: adults’ ability to think declines with age, adults like the idea of practical intelligence, adults need to think about context, and adults need different strategies to maintain their level of intelligence.

The implications for practice from this reading includes that there is not a definite answer to the question whether adults sustain their level of intelligence as they age. Some theorists believe adults’ intelligence levels decline with age, others disagree. The chapter ends with a message for educators. Educators, according to the authors need to acknowledge there are differing ideas about intelligence and aging; circumstances affect intelligence and educators need to have a better understanding of ways adults can learn and remember.

Chapter 15, Memory, Cognition and the Brain, from Learning in adulthood: A comprehensive guide, offers much for the researcher of Adult Education and instructor needs.
Authors inform that cognitive scientists and neuroscientists are working together to discover how and where in the brain learning happens. Cognitive scientists and psychologists are finding that working and long-term memory do experience loss as we age, however; the authors caution readers to remember that many of these studies are comparisons with young and older adults.

For example, sensory memory, what we remember through hearing, seeing, and the senses, would be hard to test. Whether the memory is affected by age-related vision and hearing loss or actual memory loss would be difficult to discern. Working memory is written about as problematic as people age, and that it is hard for older adults to keep information in short-term memory and recall it in proper order, possibly caused by slower processing and overloaded memory systems. Authors suggest that long term memory is affected by age and the ability to take in information and recall it is affected by time of life as well. Memory in context is another important concept for Adult Education educators and is discussed as the functional memory, or putting memory tasks in context, but authors note here that studies are limited because it involves many variables. What can educators of adults do to help memory? Educators including memory training in their curriculum is one suggestion.

A cognitive style is briefly theorized here, due to limited research and most conducted with children that cannot be generalized to adult learning, and involves information processing that develops in connection with one’s personality traits. Learning style, a popular notion that came about in the twentieth century, is examined and has multiple theorists’ input. Cranton suggested that there are preferences in ways of learning, while Desmedt and Valcke define learning styles as a way to “explain and accommodate individual differences in learning”. Kolbs learning style inventory, a popular tool with educators, help learners and educators, and remind learners their learning style is not necessarily the best way for them to learn. Learning style
inventories help learners and teachers understand students’ learning styles and their strengths and weaknesses.

The implications for practice here include that educators need to remember there are not a lot of definitive answers to questions about intelligence, aging and brain studies. It does appear some brain functions do decrease with age, however; new research may prove to be helpful for educators as we create programs for aging adults.

So, there is a plethora of literature on Adult Education and adults as learners and narrowing the scope of these works is critical for this study. Specifically, an overview of legislation and workforce development is important to understand the foundation for the current shifts in the field of Adult Education and as a result of those shifts, what outcomes are to be expected from instructors in the field. Adult Education and family literacy research is equally important in realizing what instructors in this field have been charged with in the past and what training, skills and abilities were necessary to support students to complete their program of study until recently. Adult Learning theory is relatively new, historically speaking, and is a product of twentieth century theorists who began to realize that adults were going back to school to complete credentials, including secondary education, in order to gain a better job and way to provide for their families. These adults were attending classes at nights, on the weekends and eventually, via technology. These alternate ways of attending classes, along with the demographic differences, caused a need for researchers to study how adults learn. Specifically, the question was posed by researchers, “Do adults learn differently that children?” Adult Learning Theory was born and offers perspectives that are imperative for educators in the field of Adult Education to glean information from. The literature regarding Adult Learning Theory is critically important to this study because it reminds the reader of the extensive skills and
experience necessary to serve Adult Education students and the immense range of needs they bring to the classroom. While the literature on Adult Education definitely fits into a significant number of categories when researching specific topics within the field, the compilation of these studies is necessary, and adds to the body of knowledge needed to appreciate the breadth of the effects of instructors in the field of Adult Education not being fully prepared to support students through to completion of their secondary education credential.

**Current Adult Education Program Organization**

The Adult Education program organization within the NCCCS is complex and differs from college to college. As stated in Chapter One, local processes and procedures have been in place since AE programs have been offered. The consistency from program to program is lacking and even among regions of the state, there are noted dissimilarities. With these differences, the hierarchical variances are evident as well. For example, within the Adult Education area, there could be many departments of the college to which it might belong and to whom it might be held responsible. When studying the AE professionals who hire and employ the AE instructors who are targeted in this study, they could include many titles, and supervisory roles. These titles might include: directors, coordinators, department chairs, and/or deans. For ease of reading and understanding, all of these professionals will be referred to as “program directors” for the purpose of this study. Many of these positions answer to Vice Presidents of the colleges, while others are supervised by lower ranking personnel. Some of these professionals hold titles that include teaching loads and are held to accountability for instructional standards themselves. To add to this confusion, the hiring and continued employment of these instructors are all done by different levels of the organizations. Some colleges have their director of the AE program at large conduct the hiring process for instructors and supervise those already in place,
while others have the individual program (Adult High School, AHS or High School Equivalency, HSE) directors handle these practices. Still others have in place their Human Resource Manager to handle the contracting of new instructors.

While AE programs are in differing departments of the NCCCS colleges such as: Corporate and Continuing Education, Curriculum, College and Career Readiness, or Student Services, the annual data for measures of student success are reported separate from any one department. This process exists largely because those measures are calculated so differently from other departments in the NCCCS colleges and are subject to different rules and regulations by state and federal guidelines. So, because the AE organization is so different from college to college, it is important for the purposes of this study, to understand how viewpoints and items of consensus indicate widespread agreement among Adult Education program directors regarding the credentials and qualifications of their instructors.

**Skills Needed for the Adult Educator**

To begin, a brief overview of legislation and workforce development is offered. In 2011, Harry J. Holzer from Georgetown University proposed a project that sought to raise the job quality and skills for American workers and “to advance America’s promise of opportunity, prosperity and growth” (Holzer, 2001). Within the research evidence that Holzer presents as the problem, he states that twenty five percent of Americans fail to complete high school, much less a postsecondary credential that would widen their opportunities for gainful employment (Holzer, 2001). Interestingly, Holzer is touching on a subject that has become critical in the United States in the past decade, the gap between American educational attainments from higher income versus lower income backgrounds ((Holzer, 2011). This gap is perhaps widening as are the
prospects for full time permanent employment, particularly the disadvantaged (Jacobson & Lalonde, 2013).

Holzer goes on to add that the growth in education ranks among Americans has not been adequate to keep up with the increasing mandate for the skills in the labor market, thus leading to immobility of earning potential and emergent disparity (Holzer, 2011). Along with Holzers’ claims, Wilson and Brown (2012) posit that fewer low literacy skilled people get help being placed in a job due to several factors, but namely, they are a higher risk than others in the eyes of employers. These groups of uneducated, low skilled Americans are being marginalized as the twenty first century demands credentials in order to secure a job with a family sustaining wage. Wilson and Brown (2012) also point out that federal programs have traditionally been a key role, along with education, in the attempts to boost opportunities for the low skilled unemployed by the American government. While these programs were born as a result of the Workforce Investment Act of 1998 (WIA), and were based on a set of guiding principles that emphasized overall policy goals, structural mechanisms, a theoretical concept that perceived the government being engaged in training these Americans, and an idea of socially responsible human resource development, the programs became complicated, overwhelming to some, and often, a maze of services that were tedious, and only confused the people that needed them the most (Wilson & Brown, 2012). Kline (2012) contends that under WIA, the United States had “an outdated workforce investment system in which employers struggled to find skilled workers, employees that lacked important training, and taxpayer dollars were wasted” (Kline, 2012). To update the system, politicians and stakeholders realized reforms were necessary and pushed forward to reorganize the workforce investment system with three critical principles in mind, a leaner and more accountable system, one that offers the skills necessary to meet the current needs of
employers, and lastly, a twenty first century system that can respond quickly and effectively to the changing needs of workers (Kline, 2012).

**Current job requirements.** The current job requirements for Adult Education Instructors are varied and extensive, depending on the specific NCCCS college postings. Interestingly, most of the required qualifications include a bachelor’s degree, and some experience in teaching; however, this is the extent to which the postings are alike. A number of the postings include requirements specific to the job location. For example, the AE instructor job positions that are searching for a qualified candidate to work in a prison prefer experience working in a prison. Many of the postings seek candidates with availability at certain times of the day or night and even include this in the requirements for the job. At least two of the current AE instructor positions open state preferred qualifications to include an understanding of the mission of the college.

To gain a better perspective on the specific criteria, skills, and abilities required for Adult Education Instructors currently, a search was conducted for open positions in the field within the North Carolina Community College System. Table 1. below depicts the range of requirements categorized by type, including: education and/or credentials, experience, technology, and skills and/or abilities.
<table>
<thead>
<tr>
<th>Education/Credentials</th>
<th>Experience</th>
<th>Technology</th>
<th>Skills/Abilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s Degree with at least six months of teaching experience.</td>
<td>Adult Education Experience.</td>
<td>Familiarity with MS Office.</td>
<td>Ability to develop lesson plans that incorporate contextualized instructions or real-life/authentic materials.</td>
</tr>
<tr>
<td>Prefer Master’s degree with K-12 teacher certification</td>
<td>Experience teaching employability skills.</td>
<td>Commitment to instructional technology.</td>
<td>Critical thinking skills with the ability to process information and exercise good judgment in the collection, evaluation, and analysis of data.</td>
</tr>
<tr>
<td>Certification, bachelors, and/or master’s degree in special education, or closely related field.</td>
<td>Adult teaching experience/community college teaching experience required.</td>
<td>Familiarity and comfort with using technology in the classroom, including SMARTBoards, iPads, computers, etc.</td>
<td>Ability to implement various teaching methods to meet the learning styles of individuals.</td>
</tr>
<tr>
<td>Background in occupational therapy, music/art therapy, music/art education, home economics, vocational rehabilitation, supported employment, etc.</td>
<td>At least two years of experience teaching basic reading, writing and math skills to adults or at-risk high school students.</td>
<td>Be able to incorporate technology into the classroom.</td>
<td>Ability to follow-up and follow-through so that each student may realize educational gains and success.</td>
</tr>
<tr>
<td>Associate’s degree is required.</td>
<td>One year of successful teaching experience in a community college or similar institution.</td>
<td>Must have a general understanding of computer-based instruction and learning methodologies.</td>
<td>Ability to apply adult learning theory and principles.</td>
</tr>
<tr>
<td>Requirement</td>
<td>Experience</td>
<td>Must be proficient in computer applications and software systems.</td>
<td>Strong oral and written communication skills.</td>
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<td>-------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Required to have a degree in adult education.</td>
<td>Experience teaching adults in a correctional setting preferred.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coursework in teaching non-traditional students, curriculum development and technology.</td>
<td>Experience working with students from diverse backgrounds.</td>
<td>Possess a strong knowledge of computer fundamentals, such as word processing, manipulation of spreadsheets, presentation programs, and computer aided instructional technology.</td>
<td>Effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change.</td>
</tr>
<tr>
<td>Background/knowledge in Research Based Instructional strategies.</td>
<td>Experience working with at-risk populations required.</td>
<td></td>
<td>Ability to obtain and maintain NC Department of Public Safety (prisons) security clearance.</td>
</tr>
<tr>
<td>A valid North Carolina motor vehicle operator’s license.</td>
<td></td>
<td></td>
<td>A thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System.</td>
</tr>
</tbody>
</table>

From the table of sample requirements for current AE instructor job openings within the NCCCS, it is evident there is little consistency with regard to qualifications. In the Education category, the consensus seems to be a bachelor’s degree, only a few entries specifying a field of study. The Experience category includes everything from *adult education experience* to some very specific experiential requirements, depending on the students served, to *one year of successful full-time teaching experience in secondary or postsecondary education*. Technology was categorized because it was required in several of the postings. There seems to be a need for AE instructors to be familiar with Microsoft Office Suite. Under the Skills and Abilities
category, there was quite the plethora of examples. The ability to teach basic reading, writing and math was an obvious entry; however, *familiarity with and appreciation for the mission of a comprehensive community college* is an example of a skill or ability for an AE instructor who is more forward thinking. This sample of requirements for the AE instructor gives us a basis for which begin to develop an understanding of the current expectations of new hires in the field of AE in the NCCCS today.

**Pending changes to the role of adult education instructor.** As evident in the excerpts taken from the *WIOA State Plan for North Carolina* earlier in the chapter, these instructors will be held responsible for more going forward, which leads to the need for more fully prepared instructors. The role of the instructor is changing and no longer will that role be just the “teacher” who helps a student review fractions or learn to write a five-paragraph essay. The AE instructors will have to have a working knowledge of what it will take to see that student be academically prepared and gainfully employed or enrolled in college classes or a training program. With this in mind, the role of the instructor will have to transform.

This transformation will have to include a manner in which to hold the instructor accountable for his or her time with students. Looking specifically at the *WIOA State Plan for North Carolina*, there is considerable mention of measuring effectiveness of programs, and on many levels. As stated below, an excerpt taken from the *WIOA State plan for North Carolina*, it is indeed clear what the indicators of progress will mean from the states’ point of view.

“*Documented progress of student performance measures must include at a minimum: Literacy skill level improvements in reading, writing, and speaking the English language, problem solving, numeracy, and other literacy skills as measured through Measurable Skills Gains, employment rates in the second and fourth quarter after exit, attainment of*
secondary school diploma and enrollment in postsecondary education/training or employed within one year after exit, and attaining a post-secondary credential while enrolled or one year after exit.”

Although it is speculated that current AE instructors have some knowledge of Measureable Skill Gains with regard to the specific skills stated in the excerpt above, if those same instructors are to be directly responsible for documented progress of such, along with the added performance measures of employment rates and enrollment in postsecondary, it is apparent that changes will have to take place. When considering the table of AE instructor requirements as a reference for what current AE professionals who hire are looking for, there is evidence of targeting individuals who will be able to support students in academic endeavors as well as more holistic goals; however, it would seem pertinent for stakeholders to carefully consider what else is needed for instructors to fully sustain a student through not only the attainment of their secondary credential, but securing a job and/or enrolling in a postsecondary institution.

Summary

To summarize, there is a significant change at hand within the field of Adult Education in the North Carolina Community College System. Current changes in legislation and workforce development are bringing about needed modifications in the manner in which services in Adult Education are implemented. Traditional methods and longtime practices in the field are no longer sufficient to meet new standards brought on by state and federal level movements. Educators of these students are facing challenging criteria and what would seem insurmountable outcomes with regard to student completion of the secondary education credential in the NCCCS, namely the GED®, HiSet, TASC and the Adult High School Diploma. Research is
needed to identify precisely what is going to be needed by Adult Education instructors to support students through to completion while also attaining said criteria.

Research and literature in the areas of workforce development, Adult and Family Literacy, and Adult Learning Theory offers a picture of what success as a student and an instructor might have looked like in the past, as well as informs constituents of Adult Education what future measures of success lie ahead. The overall goal is much the same, to serve adult students who have not completed their high school credential with needed tools, materials and resources to be able to finish necessary credits, in the case of the Adult High School diploma, or pass required tests to earn the GED®, however; in the twenty first century, with new methods of accountability, that goal alone will not equal a success. Exactly how these new measures of attainment will unfold is yet to be determined in exact terms since implementation of new regulations is still in its infancy. For that reason, it is imperative that constituents in Adult Education in the NCCCS, seek information that will guide their decisions going forward as the stakes have never been higher, both for students and instructors. The necessary skills, abilities, training, credentials and ongoing professional development of these instructors is critical to identify so as to provide students with all that is necessary to succeed from the classroom to the graduation stage and beyond.
CHAPTER 3: METHODS

This chapter discusses the use of Q methodology for researching the aforementioned questions regarding Adult Education instructor efficacies in the NCCCS. The chapter includes a review of the research questions and a brief explanation of the Q method as it relates to the research plan. The research design and analysis description will follow the discussion on Q methodology.

Research Design

Three research questions regarding Adult Education (AE) instructors within the North Carolina Community College System (NCCCS) served as the foundation for this study. The intention of these questions was to examine the perceived qualifications of AE instructors in light of recent initiatives in North Carolina as a result of WIOA.

This analysis of AE instructors in the NCCCS will attempt to address how many different viewpoints towards the academic credentials and expertise of Adult Education instructors emerge among Adult Education program directors in the state of North Carolina, and the common and distinguishing characteristics of these viewpoints. The study will go on to attempt to identify what items of consensus indicate widespread agreement among Adult Education program directors regarding the credentials and qualifications of their instructors. In addition, the research intends to measure how closely the desired qualifications, as identified through the various viewpoints that emerge, match the actual skills, abilities, and qualifications that are currently sought in Adult Education instructors in the state of North Carolina.

Each of these queries within the analysis are experimental and necessitate a research methodology that provides a manner in which to measure a distinctive area of education and specific needs with regard to new criteria for its’ instructors, the professionals who will be
responsible for student success as declared by the WIOA State Plan for North Carolina. Q methodology is chosen as a result.

**History of Q Methodology**

William Stephenson created Q Methodology in 1935 in response to the need for a method of research that allowed for exposure of subjectivity in any condition. Traditional correlational research did not allow for such, and to reveal the *how* and *why* people think the way they do had not been attempted before (Brown, 1994). Quantitative procedures characteristically pass over the viewpoints of the person’s life from the one who is living it (Brown, 1996; Shemmings, 2006). Brown (1994) posits that Q Methodology has a chief goal to reveal by what means people conceptualize and believe the way they do as well as for what reason.

Adding to the range of qualitative methodological tools, Q methodology is a manner in which to amplify current qualitative investigative procedures and extend the scope of how the data can be applied to the study at hand according to Shemmings (2006). With the intention to detect similarities, patterns, and themes from observations, interviews and field notes, Q methodology uses factor analysis, and is extraordinarily manageable. This method requires no knowledge of mathematics to interpret the data obtained, although factor analysis, a statistical method used to describe variability among observed, correlated variables, is quite mathematically complex (Shemmings, p. 2, 2006).

Consequently, Q methodology gives the researcher an advantage in that the aforementioned patterns and themes across a sample group can easily be identified. The significant difference between Q methodology and correlation coefficients is that "Q does not need large numbers of subjects as does correlational research, for it can reveal a characteristic independently of the distribution of that characteristic relative to other characteristics" (Smith
2001; as cited by Brown, 1994). To simplify, rather than having a large number of individuals receive a small number of experiment items, now a small number of individuals are receiving a large number of experiment items. Because of this flexibility in the manner of carrying out the study, Q methodology is a smart choice for research endeavors where large numbers of persons with the experience to contribute their perspectives to the topic may be difficult to access.

Q methodology is seen as an inversion of customary quantitative research, since the procedures allow the researcher to correlate persons instead of trials. Historically, qualitative studies are carried out by the use of comprehensive written questioning procedures that contribute to developing conceptual frameworks from interviews (Shemmings, 2006). By correlating people, Q factor analysis makes available data about resemblances, predilections, and perspectives on a specific topic (Brown, 1993). Within qualitative research, Q methodology provides choices to the researcher. Steelman & Maguire (2003) state that Q methodology can often:

1. identify important internal and external constituencies;
2. define participant viewpoints and perceptions;
3. provide sharper insight into preferred management directions;
4. identify criteria that are important to clusters of individuals;
5. examine areas of friction, consensus, and conflict;
6. and isolate gaps in shared understanding (as cited in Baker, 2003)

Q Methodology Procedure

In Q methodological research, data is gathered from individuals during subjective studies on various matters of interest, that is then clustered based on similarity of opinion. Helping to grasp the subject matter by being able to determine whether or not these opinions demonstrate a
theme is the general purpose for this method (Brown, 1993). Precise guidelines have to be followed in order to produce the thematic effects that Q-methodology is used for. The stages of Q methodology include establishing the sample, administering the test, and analyzing the results and involve the following steps:

**Step 1: Define the concourse.** In developing the concourse, the researcher tries to generate a comprehensive collection of all the possible statements that can be made about a given topic of interest. This material can be assembled from a variety of resources, including contributor observation, pulling from the educational and social involvements of the researchers, literature reviews, consultations, and opinion. The concourse is developed through various means that can include: current literature analyses, querying professionals in the field, participant observations, preliminary studies and guided discussions (van Exel & de Graaf, 2005; Watts & Stenner, 2005).

Next, the statements are categorized based on general themes. Though these opinions come from various sources, the gauge used to sort the items remains fixed. Once the concourse is determined, a common method of assessing the list of statements is to rate them on a scale of -4 to +4, which reflects the participant’s level of agreement with the statement (Brown, 1993). Van Exel & de Graaf (2005) posit that the collected material should represent the existing thoughts and opinions that people in the field of study would have to say on the subject matter.

**Step 2: Develop the Q-Set.** Refinement of the concourse can describe the next step of Q methodological development. Brown (1993) suggests that this editing process can be completed by allowing experts in the field to critique the statements, perform a pilot study, or through a random sample of statements. Various experts in Q-methodological assessment recommend a
finalized set of 30 to 60 sample items to be determined before beginning the Q-sort (Brown, 1996; Cross, 2005; Thomas & Watson, 2002).

**Step 3: Select the P-Set.** A P-Set is made up of individuals who are versed in the subject of research, and have gained a perspective of that subject matter from which to form an opinion. Van Exel & de Graaf (2005) state that "this P-Set is not random, rather it is a structured sample of respondents who are theoretically relevant to the problem under consideration". The size of the p-set is not as crucial here as is with quantitative research and for this reason, Q methodology serves researchers well who are studying topics of interest that might not include a large pool of individuals knowledgeable and/or experienced in that subject.

**Step 4: Q-Sorting.** After the Q-sample is established, the next step in the process is to direct the Q-sort. This research technique was developed by Stevenson to gain more insight into participant subjectivity (Shemmings, 2006). "When administering the Q-sort, participants are often given a sheet with specific sorting instructions called a condition of instruction and an answer sheet to record the rank ordering" (Brown, 1993). During this self-guided process, the participant ranks the items based on a quantified numeric scale which ranges from negative to positive and is determined by the research questions and the needs of the study.

**Step 5: Analysis and interpretation.** The last step in Q-methodological assessment is to measure the attitudinal patterns related to the subject matter or phenomenon and requires factor analysis. Brown (1993) proposes that this analysis of the Q-sorts is an entirely methodological, impartial process and consequently, is often referred to as the scientific foundation for Q. Calculating the correlation matrix of Q, which represents the degree of dis(similarity) in points of view between the individual Q sorters’, begins the analysis (Van Exel & de Graaf, 2005). Next, carrying out factor analysis discovers the relationships that exist between the individual
sorters, which in turn, determines how many different Qsorts are identified. Van Exel & de Graaf (2005) describe, "people with similar views on the topic will share the same factor. A factor loading is determined for each Q-sort, expressing the extent to which each Q-sort is associated with each factor. The number of factors in the final set depends on the variability in the elicited Qsorts". Thomas & Watson (2002) add to the understanding of the analysis, "the factors produced represent groupings of people with similar patterns of response during the sorting, and the loading of a particular respondent on a given factor indicates the level of agreement or disagreement".

To conclude the analysis, factor rotation and factor score are performed. Maintaining as much of the variance as possible is the primary goal in factor rotation and is a rotation of the original set of factors, achieved either objectively or theoretically. Statistical principal is required for objective rotation while theoretical rotation involves the preconceived ideas about the topic or knowledge gained through experience of the researcher. Rotation of factors involves the researcher viewing the respondents’ opinions and responses from different slants. Rotation is only performed to shift the perspective from which the factors are viewed and analyzed. Known as Z-scores, factor scores and differential scores are calculated when rotation is complete and describe a given factor. A composite Q-sort for each factor can be attained by adding a Z-score back to the distribution. Because of this, once interpretation begins, declarations need to be measured from the perspective of the conversation piece they were taken from. Hence, the nuanced meaning for each factor is created from the certain arrangement of statements together.

**Definitions for Q Methodology terms.**

*Concourse:* The “set” of written or spoken ideas, statements, opinions or questions about the topic of research, i.e. the discourse.
*Condition of Instruction:* A guide for a participant to follow for sorting the Q sort cards from his or her own point of view.

*Factor:* Latent constructs (factors) that explain fundamental, hidden relationships among interrelated variables.

*Factor Loadings:* The relationships of each variable to the underlying factor.

*P-set:* The sample of participants needed for the study who have relevance to field.

*Q Methodology:* Q-methodology is a fusion of qualitative and quantitative principles used to examine biased data and cluster individuals according to their responses. It is based on the use of factor analysis, a quantitative mathematical-statistical technique that allows for the understanding of multifaceted individual theories or opinions.

*Q-set:* Representative statements that express the major ideas, viewpoints, feelings, and opinions in the concourse and are conveyed in everyday language.

*Q-sort:* Ranked pattern of the statements that represents individual beliefs.

**Q Methodology and Adult Basic Educators**

The purpose of this research study is to identify the traits that Adult Education program directors feel are most critical in AE instructors, and therefore, the use of Q methodology is ideal since it has the capability to provide an objective structure through which we can identify and quantify participants’ views in regard to said traits. The quantification of these views can then be compared to what is currently desired in seeking new AE instructors as well as any professional development designed to inform instructors already in place. This comparison can then be used to inform AE program directors in the NCCCS.

**Q-Sample.** Adult Education Instructor efficacies are somewhat difficult to collect in that the very terminology used implies a general definition. For the purposes of this research,
efficacies are viewed as the instructor abilities, skills and knowledge necessary in order to support a student through to completion of their secondary credential. Taken from a variety of resources, a collection of statements was amassed from current, albeit restricted, literature on the subject, interviews, departmental meetings, instructor experiences, webinars specific to the subject, requirements for current advertised open positions in the NCCCS and the researchers’ own successes and failures in the classroom.

In order to measure the participants’ beliefs regarding the efficacies of Adult Education instructors in the twenty first century, a concourse was developed that included 54 items. The process of creating the concourse began with a thorough search for current advertisements of available positions in the NCCCS for Adult Education instructors. As a result of this search, 54 statements were initially collected. As seen in Appendix A, the statements were grouped together by larger themes that emerged through the collection process, including: educational and training requirements, experience, technology, teaching skills, professionalism, educational philosophy and “other”. Further, a review of documents, notes and minutes from meetings, interviews and webinars was performed to add concourse items that were a result of that information. Categorization continued as any and all concourse items were added.

Upon completion of the categorization, purging of items began. Any concourse item that was unclear or lacked scholarly support was removed. In addition, statements that were parallel or repetitive were combined. In one instance, a statement was broken apart for clarity. This resulted in a final list of 25 items.

**P-Set.** The participants for this study will be comprised of those directors, coordinators, and department chairs employed in the College and Career Readiness areas in each of the schools that make up the North Carolina Community College System in the spring of 2017. The
researcher is working with the Director of Institutional Effectiveness at Caldwell Community College and Technical Institute to obtain a list of these individuals by contacting a representative in the College and Career Readiness Division at the North Carolina Community College System Office. The sample size for the P-set will be determined by the size of the Q-Sample. In order to determine the proper Q-Method sample size, the recommended ratio for Q-Sample to P-Set be a minimum of 2:1 (Watts & Stenner, 2012). Given that the Q-Sample contains 25 statements, a minimum p-set of 13 will be required. For a greater depth of understanding, the researchers’ goal is to recruit a minimum of 20-25 participants. A draft of the email to be sent to prospective participants is included in the appendices.

**Instrumentation.** This study will be completed using software called Qsortware, found at http://qsortware.net/home.html. This software enables the researcher to collect Q-sort data quickly and easily since it electronically administers all of the necessary materials to complete this study. Obviously, managing the study in this manner allows the researcher to include participants that might normally be excluded from participating if the study was conducted in person. The electronic format also permits the investigator to collect the results in an electronic database that will accurately record results, therefore removing any possibility of human error during the collection and recording process.

**Data Collection.** Data will be collected using QSortWare to measure the efficacies of Adult Education Instructors in the NCCCS subsequent to approval by the North Carolina State University Institutional Review Board (IRB). The concourse statements will be uploaded to the website, www.qsortware.com, and upon finalization of the concourse, analysis questions as well as demographic inquiries will be included. Participants will be recruited through the NCCCS College and Career Readiness Division with the help of the Director of Institutional
Effectiveness at Caldwell Community College and Technical Institute, and will have complete conditions of instruction and individualized links provided to them after agreeing to participate in the study.

**Analysis.** QSortware will collect valuable information including personal demographics, professional background information, and open-ended responses that will be utilized to analyze the factor groups and detect common themes. One of the benefits of using Q methodology is the creation of two distinct, but equally valuable, data sets. Upon completion of the Q-grid by each participant, the researcher will conduct a Q-factor analysis using the R statistical package designed specifically for Q methodology. Specific factors will begin to be identified as the analysis will reveal that participants who sorted statements in a similar manner will load together. Factor loadings will differ depending on how similarly each of the responses are ranked and finally, provide the researcher with intended information regarding the subjective views of the participants (Coogan & Herrington, 2011).

The demographic and narrative data provided through the open-ended questions will be analyzed using SPSS and researcher interpretation. The demographic data may yield valuable information on divisions of viewpoints along gender, age, or experience lines for example. Further interpretation of the factor groups will be done using the narrative questions provided through a qualitative approach. Should further clarification or analysis be required, the researcher intends to ask participants if they would be open to participating in follow-up focus groups regarding their viewpoints and background. The focus groups will not be a condition of participation, but could be valuable in the collection of additional qualitative data to provide a deeper interpretation and understanding of the findings.
Summary

The contents and purpose of this chapter is to provide an introduction to Q Methodology, explain the procedures involved in creating this potential research study and ultimately, to describe how the researcher will obtain data to uncover the existing views regarding the skills, abilities and credentials needed by the Adult Education instructors in the NCCCS today. The methodology used in this study does not require a large sample size since it has been demonstrated that a limited number of opinions, beliefs, and viewpoints exist for a given subject (Brown, 1993) and is ideal to use considering it employs both quantitative and qualitative methods that are necessary to fully understand the participants’ rankings and their respective underlying philosophies and how they might affect each other. The use of two distinctive sets of data is ideal in a study of educators since by nature, this research topic can be subjective. Having the quantitative data allows the investigator to see statistical evidence of any themes or common threads while the qualitative information adds specific details that can aid in explaining the possible differences.

Given that scholarly research is limited regarding Adult Education instructors in the NCCCS and their skills, abilities and credentials, this study is intended to add to the body of knowledge about what is needed to support ABE/ASE students through to completion of their secondary credential during a time of perceived considerable change in the field.
CHAPTER 4: FINDINGS

This chapter will describe the findings and data analysis as a result of the q sort and ultimately answer the research questions presented in Chapter One. Twenty-five administrators from the College and Career Readiness Department of the NCCCS responded to the survey.

All participants who responded to the survey were employed by one of the 58 colleges in the North Carolina Community College System or the Adult Basic Skills Professional Development Institute at Appalachian State University in Boone, NC. The participants sorted 24 statements in relation to their preferences for efficacies desired in an Adult Education Instructor in the NCCCS. QSortware, an online instrument created by Dr. Alessio Prennedu for the collection of Q sort data, was utilized to collect the data. This chapter will present the data collected in order to answer the following questions.

Research Question 1: What are the most and least needed qualifications of Adult Education instructors in the NCCCS to see students through to completion as viewed by Adult Education Program Directors across the 58 community colleges in North Carolina?

Research Question 2: Among the Adult Education program directors in the NCCCS who participated in this study, what are the items of consensus regarding the most needed qualifications of Adult Education instructors and why would it seem these items are in widespread agreement?

Research Question 3: How closely do the desired qualifications, as identified through the various viewpoints that emerge, match the actual skills, abilities, and qualifications that are currently sought in Adult Education instructors in the state of North Carolina?
The purpose of this Q-Methodology study was to gain knowledge of the participants’ viewpoints toward specific skills, behaviors, and credentials. The demographics for each of the participants can be seen in Table 2.

Table 2: Participant Personal Demographics

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<td></td>
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<tr>
<td>Gender</td>
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<tr>
<td>female</td>
<td>20</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>25-34 years old</td>
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<tr>
<td>35-44 years old</td>
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<tr>
<td>45-54 years old</td>
<td>7</td>
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<tr>
<td>55-64 years old</td>
<td>7</td>
</tr>
<tr>
<td>65-74 years old</td>
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</tr>
<tr>
<td>Ethnicity</td>
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<td>White</td>
<td>22</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>1</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
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</tr>
<tr>
<td>Highest level of education</td>
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<tr>
<td>Bachelor’s degree</td>
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</tr>
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<td>Master’s degree</td>
<td>18</td>
</tr>
<tr>
<td>Professional degree</td>
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<tr>
<td>Doctorate degree</td>
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Table 3: Participant College Demographics

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<td><strong>College type</strong></td>
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<tr>
<td>Urban</td>
<td>5</td>
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<tr>
<td>Suburban</td>
<td>14</td>
</tr>
<tr>
<td>Rural</td>
<td>6</td>
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<tr>
<td><strong>College size</strong></td>
<td></td>
</tr>
<tr>
<td>Up to 3,000</td>
<td>12</td>
</tr>
<tr>
<td>3,000 -6,000</td>
<td>4</td>
</tr>
<tr>
<td>6,000-10,000</td>
<td>5</td>
</tr>
<tr>
<td>10,000-15,000</td>
<td>2</td>
</tr>
<tr>
<td>15,000-20,000</td>
<td>1</td>
</tr>
<tr>
<td>20,000 and above</td>
<td>1</td>
</tr>
<tr>
<td><strong>Adult Education program size</strong></td>
<td></td>
</tr>
<tr>
<td>Up to 1,000</td>
<td>15</td>
</tr>
<tr>
<td>1,000-3,000</td>
<td>9</td>
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<tr>
<td>3,000-5,000</td>
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<tr>
<td>5,000 and above</td>
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</table>
Table 4: Participant Professional Demographics

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<th>Overall</th>
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</thead>
<tbody>
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<tr>
<td><strong>Years worked in current position</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>4</td>
</tr>
<tr>
<td>1 -3 years</td>
<td>4</td>
</tr>
<tr>
<td>3-7 years</td>
<td>9</td>
</tr>
<tr>
<td>7-10 years</td>
<td>4</td>
</tr>
<tr>
<td>10 years or more</td>
<td>4</td>
</tr>
<tr>
<td><strong>Years worked in Adult Education</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>0</td>
</tr>
<tr>
<td>1-5 years</td>
<td>2</td>
</tr>
<tr>
<td>5-10 years</td>
<td>9</td>
</tr>
<tr>
<td>10 years or more</td>
<td>14</td>
</tr>
<tr>
<td><strong>Area of highest completed educational degree</strong></td>
<td></td>
</tr>
<tr>
<td>Adult Education</td>
<td>6</td>
</tr>
<tr>
<td>Community College Administration/Executive Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Educational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Higher Education Administration</td>
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</tr>
<tr>
<td>Career and Technical Education</td>
<td>1</td>
</tr>
<tr>
<td>Developmental Studies</td>
<td>1</td>
</tr>
<tr>
<td>ESL Instruction</td>
<td>1</td>
</tr>
<tr>
<td>Instructional Design</td>
<td>1</td>
</tr>
<tr>
<td>Marketing</td>
<td>1</td>
</tr>
<tr>
<td>Psychology</td>
<td>1</td>
</tr>
<tr>
<td>Reading</td>
<td>1</td>
</tr>
<tr>
<td>TESOL</td>
<td>1</td>
</tr>
<tr>
<td><strong>Position or title</strong></td>
<td></td>
</tr>
<tr>
<td>Assistant Director, ABSPD</td>
<td>1</td>
</tr>
<tr>
<td>Dean</td>
<td>4</td>
</tr>
<tr>
<td>Coordinator/Director Academic Readiness and Support</td>
<td>2</td>
</tr>
<tr>
<td>Coordinator of Curriculum &amp; Instruction for Transitional Studies</td>
<td>1</td>
</tr>
<tr>
<td>Coordinator/Director of College and Career Readiness</td>
<td>16</td>
</tr>
<tr>
<td>Chief HSE Examiner</td>
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</tr>
</tbody>
</table>
Table 2 shows that 20.0% of the participants were male while the remaining 80.0% were female. The age range of participants was varied and while there were a few in each of the categories from 25 to 74 years old, the largest percentage was 28.0% from the 45-54 years old category as well as 28.0% from the 55-64 years old category. While 88.0% identified as white, the other 12% included one African American, one Hispanic or Latino and one participant who identified as “other”. 72.0% of participants surveyed hold a Master’s Degree. Table 3 indicates that 56.0% of the participants reported that they worked in suburban colleges while 48.0% indicated the annual enrollment of their colleges is in the 3,000 and under category. Most of the participants, or 60.0% of them, work in Adult Education programs who serve 1,000 and under students per year. The participants’ professional demographics, displayed in Table 4, show that 24.0% of them reported their highest degree is in the field of Adult Education. With regard to experience, 36.0% of the participants have been in their current positions from 3 to 7 years while 56.0% of them have ten or more years in the field of Adult Education and most of them, or 64.0%, hold the title of Coordinator or Director of College and Career Readiness.

Data Collection, Factor Analysis, & Eigenvalues

Both SPSS and R statistical software were used to process the data. The factor analysis began with a seven-factor solution as Watts and Stenner (2012) suggest. Only four factor groups needed to be extracted after data was analyzed further. Satisfying the criteria set forth by both Brown (2004) and Watts and Stenner (2012), Eigenvalues in excess of 1.0 while containing at least two significantly loading cases in each of the four factor groups reporting were identified and thus used to determine the utilization of a four--factor solution.

To begin, the first step of the data analysis is factor analysis. Factor analysis happens after data from the Q sort is assembled into important groups based on factor loadings. As Watts
and Stenner (2012) point out, Q methodological research examines factor analyzed data as opposed to individual opinion statement. Factors are labeled after the statistical characteristics of the sort have been combined with the survey question responses from participants after the sort. Principle Component Analysis with Varimax rotation, a method of factor rotation seeking a mathematically-superior solution that maximizes the amount of variance explained by the extracted factors (Watts & Stenner, 2005, 2012), was used to rotate the factors. Factor solutions were run for three, four, five, six, seven and eight factors. Table 5 below provides a summary of the factor solutions.

Accounting for 56% of variance among the sorts and included 20 of the 25 participants, a three-factor solution had a highest correlation rate of .50 among the factors. No consensus statements were identified. The four factor solution raised the percentage of accounted variance to 63% as well as the participants who loaded on a factor to 21 of the 25, and had correlation among factors as .46. Again, no consensus statements were identified. Increasing the explained variance level to 63%, but decreasing the participants who loaded to 17 of 25, the correlation was .41 for the 5 factor solution. Still increasing the explained variance (to 73%), the 6 factor solution had .51 correlation at the highest but only had 17 of 25 participants loading. The 7 factor solution had an even higher 78% explained variance with only 17 of 25 participants loading and a .47 correlation as the highest between factors. Finally, with the highest explained variance of 83%, the 8 factor solution had 21 of 25 participants loading with .53 correlation between factors. Still, no consensus statements emerged.

The four-factor solution was selected after a concerted and comprehensive consideration of the factor analysis because it offered a significant variance, strong eigenvalues, was the best descriptive factor for the model, and numerous participants could be flagged on factors.
Although the 8 factor solution shows 83% of the explained variance and had 84% of the participants loading, this solution had very few distinguishing statements, and fewer participants flagged on factors.
<table>
<thead>
<tr>
<th>Factor Rotation Solution</th>
<th>Eigen Values</th>
<th>Explained Variance</th>
<th>Number of Participants</th>
<th>Highest Correlation Between Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Factors</td>
<td>5.0</td>
<td>56%</td>
<td>20 out of 25 (80%)</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>4.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td></td>
<td></td>
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<tr>
<td>4 Factors</td>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>3.8</td>
<td>63%</td>
<td>21 out of 25 (84%)</td>
<td>.46</td>
</tr>
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<td></td>
<td>2.2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5 Factors</td>
<td>4.7</td>
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<td></td>
<td>4.1</td>
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<td>3.2</td>
<td></td>
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<tr>
<td></td>
<td>2.8</td>
<td>68%</td>
<td>17 out of 25 (68%)</td>
<td>.41</td>
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<td>2.5</td>
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<tr>
<td>7 Factors</td>
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</tbody>
</table>
Table 6 shows the Eigenvalues for each of the groups range from a high of 4.8 to a low of 2.2. The table also shows that the 4 factor groups combined to explain 62.5% of the variance between the responses. According to Sweet and Martin (1999), an acceptable reliability score is in excess of .70 on a 0 to 1.0 scale, so reliability amongst the factor groups is adequate since they ranged from .92 to .97.

Table 6: Factor Characteristics

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Reliability Coefficient</th>
<th>Number of Loading Q Sorts</th>
<th>Eigen Values</th>
<th>Variance Explained</th>
<th>Reliability</th>
<th>Standard Error of Factor Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>0.8</td>
<td>7.0</td>
<td>4.8</td>
<td>19.2</td>
<td>.97</td>
<td>.19</td>
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<tr>
<td>Group 2</td>
<td>0.8</td>
<td>6.0</td>
<td>4.8</td>
<td>19.2</td>
<td>.96</td>
<td>.20</td>
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<tr>
<td>Group 3</td>
<td>0.8</td>
<td>5.0</td>
<td>3.8</td>
<td>15.2</td>
<td>.95</td>
<td>.22</td>
</tr>
<tr>
<td>Group 4</td>
<td>0.8</td>
<td>3.0</td>
<td>2.2</td>
<td>8.9</td>
<td>.92</td>
<td>.28</td>
</tr>
</tbody>
</table>

**Correlation Matrix**

In order to demonstrate strength of similarities between the groups, a correlation matrix was created. Correlation matrices show that correlation coefficients are measured on a scale of -1.0 to +1.0, where +1.0 indicates a group’s response is indistinguishable from another group’s, while -1.0 would indicate that the groups responded oppositely (Mertler & Vannatta, 2010). The correlation matrix in Table 7 shows how each of the groups related to one another. The table shows that the strongest correlation between groups registered Group 1 and Group 3 with a correlation value of .46. Conversely, the weakest relationship was between Group 1 and Group 4 with a correlation value of .12. This means that between the groups listed, Group 1 and Group 3
answered the Q-sort in the most similar manner while Group 1 and Group 4 answered it is the most dissimilar manner.

Table 7: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>1.00</td>
<td>.38</td>
<td>.46</td>
<td>.12</td>
</tr>
<tr>
<td>Group 2</td>
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<td>.44</td>
<td>.15</td>
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<tr>
<td>Group 3</td>
<td>.46</td>
<td>.44</td>
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<tr>
<td>Group 4</td>
<td>.12</td>
<td>.15</td>
<td>.18</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Factor Loadings**

Identifying commonalities and variances is necessary in this research; however, it is also important to ascertain which participants are included in the four groups. Table 9 presents the flagged factor loadings produced by the R statistical software. Loadings are considered significant at the .05 level and range from -1.0 to +1.0. Variables will generally load on all factors but will usually only load highly on one factor (Merlter & Vannatta, 2010). The flagged factor loadings table shows on which factor each of the participants flagged, allowing the researcher to place each of the participants into their best-fit factor group. Table 8 represents the factor group in which each participant loaded highest and was consequently placed. In this research, none of the participants flagged on more than one factor group. Group 1 contains 7 participants, Group 2 has 6 flagged participants, Group 3 contains 5 participants, while Group 4 contains 3 participants who loaded highly.
Table 8: Flagged Factor Loadings

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P2</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
</tr>
<tr>
<td>P3</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P4</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P5</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
</tr>
<tr>
<td>P6</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
</tr>
<tr>
<td>P7</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P8</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P9</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P10</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P11</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P12</td>
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<td>FALSE</td>
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<td>FALSE</td>
</tr>
<tr>
<td>P13</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
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<tr>
<td>P14</td>
<td>TRUE</td>
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<tr>
<td>P15</td>
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<tr>
<td>P16</td>
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<td>FALSE</td>
</tr>
<tr>
<td>P17</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P18</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P19</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P20</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P21</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P22</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P23</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P24</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
</tr>
<tr>
<td>P25</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
</tr>
</tbody>
</table>
The factor loadings for each individual are reported in Table 9. Group 1 had 7 individuals that significantly loaded. The factor loadings for group 1 ranged from .8651 to .4580. Group 2 had 6 that loaded significantly and the loadings ranged from .7454 to .5173. Group 3 had 5 individuals load significantly, ranging from .6949 to .6261. Group 4 had only three individuals significantly load (.6751, .4822, -.6978).
### Table 9: Factor Loadings

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0.7651</td>
<td>0.4060</td>
<td>-0.1341</td>
<td>0.1490</td>
</tr>
<tr>
<td>P2</td>
<td>0.2079</td>
<td>0.0197</td>
<td>0.3193</td>
<td>0.4822</td>
</tr>
<tr>
<td>P3</td>
<td>0.3297</td>
<td>0.5048</td>
<td>0.3359</td>
<td>0.4685</td>
</tr>
<tr>
<td>P4</td>
<td>0.3224</td>
<td>0.4946</td>
<td>0.2095</td>
<td>0.5530</td>
</tr>
<tr>
<td>P5</td>
<td>0.2792</td>
<td>0.1540</td>
<td>0.0815</td>
<td>0.6752</td>
</tr>
<tr>
<td>P6</td>
<td>0.3618</td>
<td>0.1073</td>
<td>0.0633</td>
<td></td>
</tr>
<tr>
<td>P7</td>
<td>0.8176</td>
<td>0.1911</td>
<td>0.2431</td>
<td>-0.2007</td>
</tr>
<tr>
<td>P8</td>
<td>0.1541</td>
<td>0.6687</td>
<td>-0.1939</td>
<td>0.0571</td>
</tr>
<tr>
<td>P9</td>
<td>-0.0800</td>
<td>0.4626</td>
<td>0.4333</td>
<td>0.2637</td>
</tr>
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<td>0.6679</td>
<td>0.5191</td>
<td>0.1961</td>
</tr>
<tr>
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<td>0.8652</td>
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<td>0.1918</td>
<td>0.1861</td>
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<tr>
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<td>0.1153</td>
<td>0.3395</td>
<td>0.6797</td>
<td>0.0448</td>
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<tr>
<td>P13</td>
<td>0.6030</td>
<td>0.2593</td>
<td>0.2697</td>
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</tr>
<tr>
<td>P14</td>
<td>0.7286</td>
<td>0.3135</td>
<td>0.2386</td>
<td>0.0784</td>
</tr>
<tr>
<td>P15</td>
<td>0.3539</td>
<td>0.5174</td>
<td>0.3397</td>
<td>-0.1364</td>
</tr>
<tr>
<td>P16</td>
<td>0.1343</td>
<td>-0.2554</td>
<td>0.6949</td>
<td>-0.1023</td>
</tr>
<tr>
<td>P17</td>
<td>0.4580</td>
<td>0.1719</td>
<td>-0.1123</td>
<td>0.2202</td>
</tr>
<tr>
<td>P18</td>
<td>0.3894</td>
<td>0.1323</td>
<td>0.6743</td>
<td>0.2138</td>
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<tr>
<td>P19</td>
<td>0.3576</td>
<td>0.5647</td>
<td>0.5358</td>
<td>0.0315</td>
</tr>
<tr>
<td>P20</td>
<td>-0.0200</td>
<td>0.7279</td>
<td>0.2480</td>
<td>-0.0828</td>
</tr>
<tr>
<td>P21</td>
<td>0.2930</td>
<td>0.7103</td>
<td>0.0812</td>
<td>0.09862</td>
</tr>
<tr>
<td>P22</td>
<td>0.6420</td>
<td>-0.5212</td>
<td>0.2185</td>
<td>0.1051</td>
</tr>
<tr>
<td>P23</td>
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<td>0.1553</td>
<td>0.6830</td>
<td>-0.0240</td>
</tr>
<tr>
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<td>0.7454</td>
<td>0.1234</td>
<td>0.1442</td>
</tr>
<tr>
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<td>0.2982</td>
<td>0.2971</td>
<td>0.6262</td>
<td>0.3554</td>
</tr>
</tbody>
</table>
Z Scores

Z-scores are often used to measure the standard deviations between an item and the mean. If an item is a specified number of standard deviations below the mean, this produces a negative z-score, whereas if an item is a specified number of standard deviation above the mean, a positive score is produced. The closer a z-score is to zero, the closer it is to the mean (Sweet & Grace-Martin, 1999). For the q sort methodology, z-scores are used to determine how significant a specific statement is to the factor on which it loaded. In short, the closer a z-score get to +3.0, the higher the level of agreement that the statement should be placed towards the extreme positive end of the q sort. A z-score near -3.0 would indicate the same is true at the extreme negative end of the q sort (Spurgeon, Humphreys, James, & Sackley, 2012). Table 11 shows the z-scores for each of the statements amongst the four extracted factor groups. During the process of factor analysis, isolating this information is helpful in that it make available not only direction (+/-) and distance (in standard deviations) from the mean, but also aids in categorizing responses into factor groups. In this research, participants rated Statement 1 (AE instructors in the NCCCS need an Associate’s degree) and Statement 3 (AE instructors in the NCCCS need a Master’s degree) at the moderately negative end of the q-sort, resulting in z-score values at one or more and up to two standard deviations below the mean across three of four factor groups. Conversely, participants rated Statement 12 (AE instructors in the NCCCS need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials) in the moderately positive end of the sort, resulting in a z-score at or in excess of one standard deviation above the mean across all four factor groups.
Table 10: Z-Scores

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>-1.392</td>
<td>-1.83</td>
<td>-2.051</td>
<td>.600</td>
</tr>
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<td>Q2</td>
<td>-1.328</td>
<td>.693</td>
<td>1.360</td>
<td>1.855</td>
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<tr>
<td>Q3</td>
<td>-1.940</td>
<td>-.442</td>
<td>-.945</td>
<td>1.160</td>
</tr>
<tr>
<td>Q4</td>
<td>-.601</td>
<td>-1.376</td>
<td>.172</td>
<td>-.631</td>
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<td>Q5</td>
<td>-.409</td>
<td>-1.682</td>
<td>.439</td>
<td>.631</td>
</tr>
<tr>
<td>Q6</td>
<td>1.004</td>
<td>-1.742</td>
<td>.180</td>
<td>1.201</td>
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<tr>
<td>Q7</td>
<td>.701</td>
<td>-.206</td>
<td>-.055</td>
<td>-1.472</td>
</tr>
<tr>
<td>Q8</td>
<td>-.049</td>
<td>-.042</td>
<td>-1.053</td>
<td>.988</td>
</tr>
<tr>
<td>Q9</td>
<td>-.717</td>
<td>.943</td>
<td>-.766</td>
<td>-.864</td>
</tr>
<tr>
<td>Q10</td>
<td>.998</td>
<td>.194</td>
<td>-.664</td>
<td>-.225</td>
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<tr>
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<td>.754</td>
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<tr>
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<td>.581</td>
<td>-.406</td>
</tr>
<tr>
<td>Q17</td>
<td>1.153</td>
<td>.348</td>
<td>1.01</td>
<td>-.884</td>
</tr>
<tr>
<td>Q18</td>
<td>.593</td>
<td>1.094</td>
<td>.578</td>
<td>.334</td>
</tr>
<tr>
<td>Q19</td>
<td>.323</td>
<td>.516</td>
<td>-.561</td>
<td>.945</td>
</tr>
<tr>
<td>Q20</td>
<td>-.066</td>
<td>.213</td>
<td>-1.143</td>
<td>-.461</td>
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<td>Q21</td>
<td>.183</td>
<td>-.724</td>
<td>-1.124</td>
<td>1.094</td>
</tr>
<tr>
<td>Q22</td>
<td>-1.00</td>
<td>-.792</td>
<td>-1.548</td>
<td>-1.849</td>
</tr>
<tr>
<td>Q23</td>
<td>-.408</td>
<td>1.732</td>
<td>.311</td>
<td>1.152</td>
</tr>
<tr>
<td>Q24</td>
<td>.799</td>
<td>.575</td>
<td>1.458</td>
<td>-.795</td>
</tr>
</tbody>
</table>
Factor Arrays

It is often helpful to use Factor Arrays to analyze and interpret q sort data since all of the sorts from a given factor are combined and presented in a simplified manner. This information can easily be compared/contrasted to not only other factors, but to other statements in the q sort. The q sort documented participant viewpoints about Adult Education instructor efficacies in a manner that created a forced distribution, revealing participant viewpoints. The span of the distribution traversed from -5 (least needed efficacies) to +5 (most needed efficacies) with all participant answers contained somewhere in between. The factor array for each of the factor groups in an equal distribution is shown in Table 12. Statements available in the q sort, followed by the average of where each factor group positioned the statement in the q sort, are shown in the table. Positive scores across all factor groups as seen with Statement 12 (Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials), Statement 13 (Need the ability to implement various teaching methods to meet the learning styles of individual), Statement 14 (Need to possess skills necessary to make appropriate student assignments for a multi-level classroom) and Statement 18 (Need to have strong customer relation skills), indicates that each of the factor groups placed the statement on the positive side of the q sort, or that participants rated these statements as most needed instructor efficacies. On the contrary, negative scores across all factor groups as seen with Statement 3 (Need a Master’s degree), Statement 15 (Need to have familiarity in administering assessments and tests) and Statement 22 (Need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System), indicates the factor groups placed the statement on the negative side of the q sort or as least needed instructor
efficacies. This process enables the researcher to identify both consensus and distinguishing statements, which will be discussed following Table 11.

Table 11: Factor Arrays

<table>
<thead>
<tr>
<th></th>
<th>G1</th>
<th>G 2</th>
<th>G 3</th>
<th>G 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q01</td>
<td>Need an Associate’s degree</td>
<td>-4</td>
<td>-5</td>
<td>-5</td>
</tr>
<tr>
<td>Q02</td>
<td>Need a Bachelor Degree</td>
<td>-3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Q03</td>
<td>Need a Master’s degree</td>
<td>-5</td>
<td>-1</td>
<td>-2</td>
</tr>
<tr>
<td>Q04</td>
<td>Need a degree in adult education</td>
<td>-1</td>
<td>-3</td>
<td>0</td>
</tr>
<tr>
<td>Q05</td>
<td>Need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date (G2 and G3)</td>
<td>-1</td>
<td>-3</td>
<td>1</td>
</tr>
<tr>
<td>Q06</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
<td>3</td>
<td>-4</td>
<td>0</td>
</tr>
<tr>
<td>Q07</td>
<td>Need Adult Education experience</td>
<td>1</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Q08</td>
<td>Need experience teaching employability skills</td>
<td>0</td>
<td>0</td>
<td>-2</td>
</tr>
<tr>
<td>Q09</td>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
<td>-2</td>
<td>2</td>
<td>-2</td>
</tr>
<tr>
<td>Q10</td>
<td>Need familiarity and comfort with using and incorporating technology in the classroom, including SMART Boards, iPads, computers, interactive PowerPoint presentations, etc...</td>
<td>2</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>Q11</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies</td>
<td>-2</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Q12</td>
<td>Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Q13</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individual</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Q14</td>
<td>Need to possess skills necessary to make appropriate student assignments for a multi-level classroom</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Q15</td>
<td>Need to have familiarity in administering assessments and tests</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>Q16</td>
<td>Need the ability to determine students’ work and life-related goals through both formal (testing) and informal assessment</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Q17</td>
<td>Need strong personal and professional integrity</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q18</td>
<td>Need to have strong customer relation skills</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 11 continued

| Q19 | Need the ability to work effectively and collegially with others in a team environment | 1 | 1 | -1 | 2 |
| Q20 | Need to promotes relationships of trust and respect throughout the college and the community | 0 | 0 | -3 | -1 |
| Q21 | Need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change | 0 | -2 | -3 | 2 |
| Q22 | Need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System | -2 | -2 | -4 | -5 |
| Q23 | Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system | -1 | 5 | 0 | 3 |
| Q24 | Need the ability to apply adult learning theory and principles | 2 | 1 | 4 | -2 |

**Consensus Statements**

Consensus statements, or those that have no significant difference between any factors upon comparing z-scores, are identified by the R statistical software by lack of variance. This lack of variance fails to distinguish one factor from others since all factors could score the same statement identically. Identifying consensus statements adds considerable value to the factor analysis as it allows the researcher to understand the inherent features of that factor. In this research, R statistical software indicated there were no consensus statements, otherwise indicating that there were no factors that agreed on any statements.

**Distinguishing Statements**

Distinguishing statements are determined by comparing z-scores as well. Factors with significantly different z-scores at a p-value < .05 are considered distinguishing statements and are used to ascertain inconsistencies among the groups. These inconsistencies then provide contrast that allows the researcher more insight into how the factor groups differ from one
another. Considerations are made for statements that ranked higher or lower by a given factor in comparison to the other factor groups.

Table 12 below shows the statements with an adequate amount of variance between the factors groups to be recognized by the R software as distinguishing statements. Among the distinguishing statements, 8 of them varied on a single factor while 11 of the statements varied on multiple factors. Providing additional insight into the factors’ fundamental makeup, distinguishing statements allow the researcher a more refined understanding of the qualitative aspects of Q Methodology. This research produced twenty distinguishing statements of 24 total, providing the researcher with insight into how the statements were sorted as a whole in a general sense.
Table 12: Factor Arrays with Distinguishing Statements

<table>
<thead>
<tr>
<th>Question (Q)</th>
<th>Statement</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q01</td>
<td>Need an Associate’s degree (G4 only)</td>
<td>-4</td>
<td>-5</td>
<td>-5</td>
<td>1</td>
</tr>
<tr>
<td>Q02</td>
<td>Need a Bachelor Degree (G1 and G2)</td>
<td>-3</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Q03</td>
<td>Need a Master’s degree (G1 only)</td>
<td>-5</td>
<td>-1</td>
<td>-2</td>
<td>-3</td>
</tr>
<tr>
<td>Q04</td>
<td>Need a degree in adult education (G2 and G3)</td>
<td>-1</td>
<td>-3</td>
<td>0</td>
<td>-2</td>
</tr>
<tr>
<td>Q05</td>
<td>Need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date (G2 and G3)</td>
<td>-1</td>
<td>-3</td>
<td>1</td>
<td>-2</td>
</tr>
<tr>
<td>Q06</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date (G2 and G3)</td>
<td>3</td>
<td>-4</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Q07</td>
<td>Need Adult Education experience (G1 and G4)</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-4</td>
</tr>
<tr>
<td>Q08</td>
<td>Need experience teaching employability skills (G3 and G4)</td>
<td>0</td>
<td>0</td>
<td>-2</td>
<td>2</td>
</tr>
<tr>
<td>Q09</td>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students (G2 only)</td>
<td>-2</td>
<td>2</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Q10</td>
<td>Need familiarity and comfort with using and incorporating technology in the classroom, including SMART Boards, iPads, computers, interactive PowerPoint presentations, etc... (G1 only)</td>
<td>2</td>
<td>0</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Q11</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies (G1 only)</td>
<td>-2</td>
<td>-1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Q13</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individual (G3 and G4)</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Q14</td>
<td>Need to possess skills necessary to make appropriate student assignments for a multi-level classroom (G4 only)</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Q15</td>
<td>Need to have familiarity in administering assessments and tests (G1 only)</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Q17</td>
<td>Need strong personal and professional integrity (G2 and G4)</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-3</td>
</tr>
<tr>
<td>Q19</td>
<td>Need the ability to work effectively and collegially with others in a team environment (G3 only)</td>
<td>1</td>
<td>1</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Q21</td>
<td>Need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change (G1 and G4)</td>
<td>0</td>
<td>-2</td>
<td>-3</td>
<td>2</td>
</tr>
<tr>
<td>Q23</td>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system (G1 and G3)</td>
<td>-1</td>
<td>5</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Q24</td>
<td>Need the ability to apply adult learning theory and principles (G3 and G4)</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>-2</td>
</tr>
</tbody>
</table>
Factor Group 1: Adult Education Instruction Specific

Factor Group 1 has been deemed Adult Education Instruction Specific since the highest ranked statements, as well as the narrative answers from participants, indicates that the quality of instruction has the biggest influence on seeing students through to completion of their secondary credential. Group 1 had a total of seven participants loading, who accounted for 28.0% of the population and 19.2% of the variance. When asked “What Adult Education instructor traits or abilities do you think have the biggest influence on a student completing their High School Equivalency or Adult High School Diploma?”, participants from this group replied with “Enthusiasm and compassion combined with innovative and engaging instruction”, “The most effective way to help student meet their educational goals is to teach using explicit instruction strategies, direct instruction”, and “Ability and eagerness to use varied instructional methods”.

Equally as valuable in assessing this group were replies to a question asking what each participant would tell a potential Adult Education instructor when asked what the most important qualifications are for the job. These responses included: “they should be excellent educators, knowing their subject matter and instructional methods”, “The most important qualifications would include knowledge of subject matter, ability to relate and contextualize instruction to make it meaningful and relevant to students ’ lives”, and “be willing to put in the time and effort to plan for effective and engaging instruction”.

Helping to define this group even more, the demographic information providing further insight. Of the seven participants who loaded on this factor, 4 of them have been in the Adult Education field more than 10 years while 5 of the 7 work in colleges with an Adult Education department that serves from 1,000-3,000 students. This information provides further support to
the idea that Group 1 is pragmatic and their viewpoints come from years of experience serving a wealth of students.

Table 13: High and Low Items for Group One

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Card Number</th>
<th>Corresponding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials.</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individual.</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>Need strong personal and professional integrity</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date Need familiarity and comfort with using and incorporating technology in the classroom, including SMART Boards, iPads, computers, interactive PowerPoint presentations, etc...</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>Need familiarity in administering assessments and tests</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>Need the ability to apply adult learning theory and principles</td>
</tr>
<tr>
<td>Lowest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td>3</td>
<td>Need a Master’s degree</td>
</tr>
<tr>
<td>-4</td>
<td>1</td>
<td>Need an Associate’s degree</td>
</tr>
<tr>
<td>-3</td>
<td>15</td>
<td>Need a Bachelor Degree</td>
</tr>
<tr>
<td>-3</td>
<td>2</td>
<td>Need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System</td>
</tr>
<tr>
<td>-2</td>
<td>22</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies</td>
</tr>
<tr>
<td>-2</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

Table 13 shows that this group rated Statement 12 (Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials) the highest followed by Statement 13 (Need the ability to implement various teaching methods to meet the learning styles of individual) and Statement 17 (Need strong personal and
professional integrity). Group 1 had eight Distinguishing Statements as seen in Table 14. These statements further support this group's value, or lack thereof, of instructors’ education being a key point in helping students complete their credential as evidenced in the low ranking of statements that were labeled “need a bachelor’s degree” and “need a master’s degree”. Further, this group’s ranking of statements that included assessment administration familiarity and philosophy of putting students’ needs first were very different than their peers, thus supporting the pragmatism mentioned earlier.

Figure 6 demonstrates the model for the completed q sort by participants in Group 1. The model identifies which statement the participant’s in Group 1 recognized as most needed instructor efficacies to the statement they deemed as least needed instructor efficacies. While the model is necessary in gaining a perception of this group, the open-ended questions at the end of the survey provide additional understanding of this group’s viewpoints, as stated earlier. The combination of the information, both quantitatively and qualitatively, acquired from the participants’ input allow the researcher to see the underlying theme of this group’s viewpoints on what qualifications are most needed with regard to seeing students through to completion. With this group, an emphasis on explicit, contextualized instruction that meets the learners goals while making lessons relevant to their specific circumstances, is viewed as most needed.
Table 14: Distinguishing Statements for Group One

<table>
<thead>
<tr>
<th>Question</th>
<th>Statement</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q02</td>
<td>Need a Bachelor Degree (G1 and G2)</td>
<td>-3</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Q03</td>
<td>Need a Master’s degree (G1 only)</td>
<td>-5</td>
<td>-1</td>
<td>-2</td>
<td>-3</td>
</tr>
<tr>
<td>Q07</td>
<td>Need Adult Education experience (G1 and G4)</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-4</td>
</tr>
<tr>
<td>Q10</td>
<td>Need familiarity and comfort with using and incorporating technology in the classroom, including SMART Boards, iPads, computers, interactive PowerPoint presentations, etc... (G1 only)</td>
<td>2</td>
<td>0</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Q11</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies (G1 only)</td>
<td>-2</td>
<td>-1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Q15</td>
<td>Need to have familiarity in administering assessments and tests (G1 only)</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Q21</td>
<td>Need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change (G1 and G4)</td>
<td>0</td>
<td>-2</td>
<td>-3</td>
<td>2</td>
</tr>
<tr>
<td>Q23</td>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system (G1 and G3)</td>
<td>-1</td>
<td>5</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 14 gives more insight into Factor Group 1 and its’ makeup. According to the distinguishing statements found in this table, these participants do not view educational credentials as important as experience in the Adult Education field. According to the statements rankings for this group found in table 15, statements 2 and 3 were ranked lowest with regard to education while statement 7, experience in Adult Education field, was ranked highest compared to other groups. When considering the information from the narrative input and the highest and lowest ranked statements, in addition to the distinguishing statements, it would seem that this group places emphasis on teaching. This group seems to devalue the credentials of the instructor and leadership and rather places value on what occurs specifically in the classroom with regard to lessons, content standards and contextualization of materials. The credential that did hold
significance for this group was that of the NC Core Certificate from NCCCS College and Career Readiness within 2 years of hire date, which is an Adult Education specific credential designed to enhance instructors’ grasp of the lesson plans, resources, materials and meeting state guidelines regarding the North Carolina Adult Education Content Standards. The NCCCS College and Career Readiness Adult Education Standards were originally developed and field tested by adult educators statewide from 2007 to 2010. The Office of Career, Technical, and Adult Education (OCTAE) introduced the College and Career Readiness Standards for Adult Education in April 2013 and so the NCCCS College and Career Readiness Adult Education Standards were aligned to reflect these new standards.
<table>
<thead>
<tr>
<th>Least Needed AE Instructor Efficacies</th>
<th>Neutral</th>
<th>Most Needed AE Instructor Efficacies</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5</td>
<td>-4</td>
<td>-3</td>
</tr>
<tr>
<td>Need a Master's degree</td>
<td>Need a degree in adult education</td>
<td>Need to promote relationships of trust and respect throughout the college and the community</td>
</tr>
<tr>
<td>Need an Associate's degree</td>
<td>Need to have a thorough understanding of and commitment to the mission and philosophy of the NCCCS</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individuals</td>
</tr>
<tr>
<td>Need a Bachelor's degree</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies</td>
<td>Need to have earned a Core Certificate from NCCCS CCR within 2 years of hire date</td>
</tr>
<tr>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting student needs first</td>
<td>Need the ability to determine students' work and life-related goals through both formal (testing) and informal assessment</td>
</tr>
<tr>
<td></td>
<td>Need experience teaching employability skills</td>
<td>Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instruction</td>
</tr>
</tbody>
</table>

Figure 6: Model Sort for Factor Group One-Adult Education Instruction Specific

Note. Distinguishing items are highlighted in red; consensus items are highlighted in green.
Factor Group 2: Adult Education Student Centered

Factor Group 2 has been labeled Adult Education Student Centered since the highest ranked statements, as well as the narrative answers from participants, indicates that the ability to serve the student and their individual circumstances has the biggest influence on seeing students through to completion of their secondary credential. Group 2 had a total of six participants loading, who accounted for 24.0% of the population and 19.2% of the variance. When asked “What Adult Education instructor traits or abilities do you think have the biggest influence on a student completing their High School Equivalency or Adult High School Diploma?”, participants from this group replied with “Compassion for students and their achievements”, “The ability to provide a safe, comfortable learning environment”, “The ability to build a relationship with each student”, “When interviewing we tell teachers that they need to be empathetic (but only to a point)”, “The ability to motivate students would be extremely important, along with a thick skin, and a willingness to listen to students. The ABC’s of instruction and classroom technique are not as important as the ability to work with and engage individuals”, and “Non-judgmental”.
Table 15: High and Low Items for Group Two

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Card Number</th>
<th>Corresponding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>5</td>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individual.</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>Need to have strong customer relation skills</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>Need to possess skills necessary to make appropriate student assignments for a multi-level classroom</td>
</tr>
<tr>
<td>Lowest</td>
<td>-5</td>
<td>Need an Associate’s degree</td>
</tr>
<tr>
<td>-4</td>
<td>6</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
</tr>
<tr>
<td>-3</td>
<td>5</td>
<td>Need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
</tr>
<tr>
<td>-3</td>
<td>4</td>
<td>Need a degree in adult education</td>
</tr>
<tr>
<td>-2</td>
<td>22</td>
<td>Need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System</td>
</tr>
<tr>
<td>-2</td>
<td>21</td>
<td>Need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change</td>
</tr>
</tbody>
</table>
Table 15 shows that this group rated Statement 23 (Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system) the highest followed by Statement 13 (Need the ability to implement various teaching methods to meet the learning styles of individual) and Statement 18 (Need to have strong customer relation skills). Group 2 had six Distinguishing Statements as seen in Table 17. The distinguishing statements for this group were telling since Table 17 clearly shows the de-emphasis placed upon education for instructors qualifications as opposed to their peer’s views.

Table 16: Distinguishing Statements for Group Two

<table>
<thead>
<tr>
<th></th>
<th>Q02</th>
<th>Q04</th>
<th>Q05</th>
<th>Q06</th>
<th>Q09</th>
<th>Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Need a Bachelor’s Degree</td>
<td>Need a degree in adult education</td>
<td>Need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
<td>Need strong personal and professional integrity</td>
</tr>
<tr>
<td>G1</td>
<td>-3</td>
<td>2</td>
<td>-1</td>
<td>3</td>
<td>-2</td>
<td>3</td>
</tr>
<tr>
<td>G2</td>
<td>2</td>
<td>3</td>
<td>-3</td>
<td>-4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>G3</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>G4</td>
<td>5</td>
<td>-2</td>
<td>-2</td>
<td>3</td>
<td>-2</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 7 demonstrates the model for the completed q sort by participants in Group 2. The model identifies which statement the participant’s in Group 1 recognized as most needed instructor efficacies to the statement they deemed as least needed instructor efficacies. While the model is necessary in gaining a perception of this group, the open-ended questions at the end of
the survey provide additional understanding of this groups viewpoints, as stated earlier. The combination of the information, both quantitatively and qualitatively, acquired from the participants’ input allow the researcher to see the underlying theme of this groups viewpoints on what qualifications are most needed with regard to seeing students through to completion. With this group, an emphasis on student needs and being student centered is viewed as most needed. When asked what they would tell potential Adult Education instructors are the most needed qualifications for the job are, they replied with:

“The knowledge that a student can’t learn until their basic needs are met (Maslow’s Hierarchy of Needs). If a student is hungry, tired, lacking a place to live, that student will not be able to concentrate in class. You are a resource guide to your students and should keep that in mind when you are communicating with each student.”, “The ability to motivate students would be extremely important, along with a thick skin, and a willingness to listen to students. The ABC’s of instruction and classroom technique are not as important as the ability to work with and engage individuals.”

The demographic data for this group was also helpful in getting a better picture of their viewpoint and possibly what they might have in common. In the Adult Education Student Centered group, 4 out of the 6 participants who loaded on this factor work in rural colleges while the other 2 indicated they work in suburban colleges. The majority (4 of 6) of these participants also indicated working in colleges where the Adult Education student population is 1,000 or less. Also of note, 4 of these participants stated they had more than 10 years in the Adult Education field while the other 2 had between 5 and 10 years of experience. This information helps the researcher realize a group of participants who have many years of experience in the field and
who also worked at relatively small rural colleges see being student centered and putting their needs first has the most influence on their completion.
Table 7: Model Sort for Factor Group Two - Adult Education Student Centered

Note. Distinguishing items are highlighted in red; consensus items are highlighted in green.
**Factor Group 3: Adult Learning Theory and Principles**

Factor Group 3 has been labeled Adult Learning Theory and Principles since the highest ranked statements, as well as the narrative answers from participants, indicates that the ability to understand Adult Learning Theory and its’ principles has the biggest influence on seeing students through to completion of their secondary credential. Group 3 had a total of five participants loading, who accounted for 20.0% of the population and 15.2% of the variance. When asked “What Adult Education instructor traits or abilities do you think have the biggest influence on a student completing their High School Equivalency or Adult High School Diploma?” participants from this group replied with; “*Being able to maximize a student's strengths to help them build confidence in the areas in which they may be weaker is also an important trait in an effective instructor. Also, the ability to help students experience success at reaching small goals can help them "stick" until they complete. “*, “The ability to foster a student's belief in themselves that they can learn and be successful.”, “Humility enough to realize there is so much to learn about teaching. This humility creates the desire to become a lifelong learner.” and “The ability to create classroom community or trust in a one on one relationship.
Table 17: High and Low Items for Group Three

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Card Number</th>
<th>Corresponding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 12</td>
<td>Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials</td>
</tr>
<tr>
<td></td>
<td>4 24</td>
<td>Need the ability to apply adult learning theory and principles</td>
</tr>
<tr>
<td></td>
<td>3 2</td>
<td>Need a Bachelor’s Degree</td>
</tr>
<tr>
<td></td>
<td>3 14</td>
<td>Need to possess skills necessary to make appropriate student assignments for a multi-level classroom</td>
</tr>
<tr>
<td></td>
<td>2 17</td>
<td>Need strong personal and professional integrity</td>
</tr>
<tr>
<td></td>
<td>2 11</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies</td>
</tr>
<tr>
<td>Lowest</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-5 1</td>
<td>Need an Associate’s degree</td>
</tr>
<tr>
<td></td>
<td>-4 22</td>
<td>Need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System</td>
</tr>
<tr>
<td></td>
<td>-3 21</td>
<td>Need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change</td>
</tr>
<tr>
<td></td>
<td>-3 20</td>
<td>Need to promotes relationships of trust and respect throughout the college and the community</td>
</tr>
<tr>
<td></td>
<td>-2 9</td>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
</tr>
<tr>
<td></td>
<td>-2 3</td>
<td>Need a Master’s degree</td>
</tr>
</tbody>
</table>

Table 17 shows that this group rated Statement 12 (Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials) the highest followed by Statement 24 (Need the ability to apply adult learning theory and principles) and Statement 2 (Need a Bachelor’s Degree). Group 2 had eight Distinguishing Statements as seen in Table 18. The distinguishing statements for this group were influential in
labeling its’ emphasis since Table 18 indicates stress placed upon statements 4 (need a degree in adult education), statement 5 (Need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date), statement 6 (Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date) and statement 24 (Need the ability to apply adult learning theory and principles) in comparison to other factor groups.

Table 18: Distinguishing Statements for Group Three

<table>
<thead>
<tr>
<th>Q</th>
<th>Statement</th>
<th>G1</th>
<th>G 2</th>
<th>G 3</th>
<th>G 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4</td>
<td>Need a degree in adult education</td>
<td>-1</td>
<td>-3</td>
<td>0</td>
<td>-2</td>
</tr>
<tr>
<td>Q5</td>
<td>Need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
<td>-1</td>
<td>-3</td>
<td>1</td>
<td>-2</td>
</tr>
<tr>
<td>Q6</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
<td>3</td>
<td>-4</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Q8</td>
<td>Need experience teaching employability skills</td>
<td>0</td>
<td>0</td>
<td>-2</td>
<td>2</td>
</tr>
<tr>
<td>Q13</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individual.</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Q19</td>
<td>Need the ability to work effectively and collegially with others in a team environment</td>
<td>1</td>
<td>1</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Q23</td>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system</td>
<td>-1</td>
<td>5</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Q24</td>
<td>Need the ability to apply adult learning theory and principles</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>-2</td>
</tr>
</tbody>
</table>

Figure 8 demonstrates the model for the completed q sort by participants in Group 3. The model identifies which statement the participant’s in Group 3 recognized as most needed instructor efficacies to the statement they deemed as least needed instructor efficacies. While the model is necessary in gaining a perception of this group, the open-ended questions at the end of
the survey provide additional understanding of this groups viewpoints, as stated earlier. The combination of the information, both quantitatively and qualitatively, acquired from the participants’ input allow the researcher to see the underlying theme of this groups viewpoints on what qualifications are most needed with regard to seeing students through to completion. With this group, an emphasis on Adult Learning Theory and principles is viewed as most needed. When asked what they would tell potential Adult Education instructors are the most needed qualifications for the job are, they replied with: “understanding of adult learners; appreciation for what students bring to the table in the way of experience and knowledge; desire to assist others in reaching their goals; vision of yourself as a lifelong learner along with the students; flexibility in an ever changing professional environment....” this response alone is not only supportive of Adult Learning Theory, but echoes sentiments of many written works on the subject and is at the core of Adult Learning Theory.

The demographic data for this group was also helpful determining the representation of their viewpoints. In the Adult Learning Theory group, 3 out of the 5 participants who loaded on this factor have more than 10 years’ experience in Adult Education, 4 out of 5 work in rural colleges and 3 out of 5 of them work in colleges with an Adult Education population of 1,000 or less. Of note with this group, 3 of the 5 participants had advanced degrees in Adult Education.
<table>
<thead>
<tr>
<th>Least Needed AE Instructor Efficacies</th>
<th>Neutral</th>
<th>Most Needed AE Instructor Efficacies</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5</td>
<td>-4</td>
<td>-3</td>
</tr>
<tr>
<td>Need an Associate's degree</td>
<td>Need to promote relationships of trust and respect throughout the college and the community</td>
<td>Need the ability to apply adult learning theory and principles</td>
</tr>
<tr>
<td>-2</td>
<td>-1</td>
<td>+1</td>
</tr>
<tr>
<td>Need experience teaching employability</td>
<td>Need familiarity and comfort with using and incorporating technology in the classroom</td>
<td>Need to have earned an ASE Certificate from NCCCS OCR within 2 years of hire date</td>
</tr>
<tr>
<td>0</td>
<td>+2</td>
<td>-3</td>
</tr>
<tr>
<td>Need Adult Education experience</td>
<td>Need to determine students' work and life-related goals through both formal (testing) and informal assessment</td>
<td>Need to possess skills necessary to make appropriate assignments for a multi-level classroom</td>
</tr>
<tr>
<td>+3</td>
<td>+4</td>
<td>-5</td>
</tr>
<tr>
<td>AE instructors in the NCCCS need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change</td>
<td>Need a Master's degree</td>
<td>Need a Bachelor's Degree</td>
</tr>
<tr>
<td>-2</td>
<td>-1</td>
<td>+1</td>
</tr>
<tr>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
<td>Need the ability to work effectively and collegially with others in a team environment</td>
<td>Need to have a general understanding of computer-based instruction and learning methodologies</td>
</tr>
<tr>
<td>0</td>
<td>+2</td>
<td>-3</td>
</tr>
<tr>
<td>Need to have familiarity in administering assessments and tests</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individuals</td>
<td>Need to have earned a Core Certificate from NCCCS OCR within 2 years of hire date</td>
</tr>
<tr>
<td>+2</td>
<td>+3</td>
<td>-4</td>
</tr>
<tr>
<td>Need to have strong customer relation skills</td>
<td>Need strong personal and professional integrity</td>
<td>Need to be able to develop lesson plans that incorporate contextualized or real-life authentic materials</td>
</tr>
<tr>
<td>+3</td>
<td>+4</td>
<td>-5</td>
</tr>
<tr>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 8: Model Sort for Factor Group Three- Adult Learning Theory and principles

Note. Distinguishing items are highlighted in red; consensus items are highlighted in green.
Factor Group 4: Adult Education Responding to Change

Factor Group 4 has been labeled Adult Education Responding to Change since the highest ranked statements, as well as the narrative answers from participants, indicates that the ability to respond to ongoing changes in the field of Adult Education has the biggest influence on seeing students through to completion of their secondary credential. Group 4 had a total of three participants loading, who accounted for 15.0% of the population and 8.9% of the variance. When asked “What Adult Education instructor traits or abilities do you think have the biggest influence on a student completing their High School Equivalency or Adult High School Diploma?” participants from this group replied with; “I think the biggest influence is relevancy. Instructors must make learning relevant to the students’ lives, not just HSE or AHS. That involves knowing each student’s goals and interests and understanding contextualized instruction and project-based teaching to enable instruction to mirror those goals and interests.” and “Compassion, Perseverance, Subject Matter Knowledge.”
Table 19: High and Low Items for Group Four

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Card Number</th>
<th>Corresponding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>5</td>
<td>Need a Bachelor’s Degree</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Adult Education instructors in the NCCCS need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Need experience teaching employability skills</td>
</tr>
<tr>
<td>Lowest</td>
<td>-5</td>
<td>Need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System</td>
</tr>
<tr>
<td></td>
<td>-4</td>
<td>Need Adult Education experience</td>
</tr>
<tr>
<td></td>
<td>-3</td>
<td>Need a Master’s degree</td>
</tr>
<tr>
<td></td>
<td>-3</td>
<td>Need strong personal and professional integrity</td>
</tr>
<tr>
<td></td>
<td>-2</td>
<td>Need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students</td>
</tr>
<tr>
<td></td>
<td>-2</td>
<td>Need the ability to apply adult learning theory and principles</td>
</tr>
</tbody>
</table>

Table 19 shows that this group rated Statement 2 (Need a Bachelor’s Degree) the highest followed by Statement 12 (Need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials) and Statement 6 (Need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire...
Group 4 had eight Distinguishing Statements as seen in Table 20. The distinguishing statements for this group were crucial in understanding the emphasis since Table 20 indicates how these statements from this factor group stood apart from the others. Statement 8 (Need experience teaching employability skills) and statement 21 (Adult Education instructors in the NCCCS need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change) are those that this group ranked more important than others and directly speak to the need for change in instruction in Adult Education in the twenty first century. In contrast, this group obviously devalues adult education experience (statement 7) and Adult Learning Theory (statement 24) which have been traditionally thought of as necessary for Adult Education Instructor qualifications.

Table 20: Distinguishing Statements for Group Four

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>G1</th>
<th>G 2</th>
<th>G 3</th>
<th>G 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Need an Associate’s degree</td>
<td>-4</td>
<td>-5</td>
<td>-5</td>
<td>1</td>
</tr>
<tr>
<td>Q7</td>
<td>Need Adult Education experience</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-4</td>
</tr>
<tr>
<td>Q8</td>
<td>Need experience teaching employability skills</td>
<td>0</td>
<td>0</td>
<td>-2</td>
<td>2</td>
</tr>
<tr>
<td>Q13</td>
<td>Need the ability to implement various teaching methods to meet the learning styles of individual. Need to possess skills necessary to make appropriate student assignments for a multi-level classroom</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Q14</td>
<td></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Q17</td>
<td>Need strong personal and professional integrity</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-3</td>
</tr>
<tr>
<td>Q21</td>
<td>Need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change</td>
<td>0</td>
<td>-2</td>
<td>-3</td>
<td>2</td>
</tr>
<tr>
<td>Q24</td>
<td>Need the ability to apply adult learning theory and principles</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>-2</td>
</tr>
</tbody>
</table>

Figure 9 demonstrates the model for the completed q sort by participants in Group 4. The model identifies which statement the participant’s in Group 4 recognized as most needed
instructor efficacies to the statement they deemed as least needed instructor efficacies. While the model is necessary in gaining a perception of this group, the open-ended questions at the end of the survey provide additional understanding of this groups viewpoints, as stated earlier. The combination of the information, both quantitatively and qualitatively, acquired from the participants’ input allow the researcher to see the underlying theme of this groups viewpoints on what qualifications are most needed with regard to seeing students through to completion. With this group, an emphasis on responding to ongoing changes in the field is viewed as most needed. When asked what they would tell potential Adult Education instructors are the most needed qualifications for the job are, they replied with: “The most important qualifications would include knowledge of subject matter, ability to relate and contextualize instruction to make it meaningful and relevant to students’ lives, and the ability to see things through the students’ eyes – truly understand their challenges—but at the same time help them to understand that challenges don’t define their future.” The mention here of contextualization and relevance to the students’ life reflects the current “buzzwords” in Adult Education at the state level and the need to modify instruction to meet students’ employment goals.

The demographic data for this group was also useful in teasing out the underlying theme of these participants’ responses and factor loadings. In the Adult Education Responding to Change group, all 3 participants who loaded on this factor have at least five years’ experience in Adult Education, 2 out of 3 serve an Adult Education population of 1,000 or less, and 2 of 3 of them have been in their current positions for at least 5 years. This information provided the researcher with further support for the label of “responding to change”, since it would seem that these Adult Education administrators have been in their positions long enough to have developed
an understanding for the changes at the state level with regard to legislation and what that might take in the classroom to serve the students according to new guidelines.
Figure 9: Model Sort for Factor Group Four- Adult Education Responding to Change

**Note.** Distinguishing items are highlighted in red; consensus items are highlighted in green.
Summary

In Chapter 4, data collected from 25 Adult Education administrators from the North Carolina Community College System was analyzed. The data used came from Q sorts completed by the participants mentioned above along with question responses collected afterward. A factor analysis was implemented to provide statistical data while demographic as well as narrative data was examined. Four factors materialized.

Factor One, “Adult Education Instruction Specific,” can be described as those participants who view classroom instruction as the most influential in helping students complete their secondary credential. The value in this group was placed on experience in the field and the explicit instruction of Adult Education instructors. From narrative and demographic information, a pragmatic tone was detected among this group, leading the researcher to infer that these participants feel that, all things considered, no matter what resources are available to the student, it is simply the quality of instruction that will end up helping that student to finish, or not.

Factor Two, “Adult Education Student Centered” would best be defined as those participants who view instructor’s ability to put the student and their needs first as the most important quality to help students through to completion. This group would be characterized as those who use Maslow’s Hierarchy of Needs as a reference in assessing students and their readiness to participate in the program. The emphasis here is meeting the student where they are, developing relationships, being empathetic, referring students to other services and continually fostering self-confidence and encouragement.

The third factor, deemed “Adult Learning Theory and Principles” feels that students are best helped through to completion by using knowledge gleaned by studying Adult Learning
Theory and its principles. This group feels that by recognizing the student as an adult learner with specific learning needs, as opposed to children, instructors are able to make learning relevant to their lives, acknowledge what experience they bring to the classroom as well as identifying their specific goals, which ultimately helps these students stick with the program and complete.

Factor Four, “Adult Education Responding to Change”, reflects participants’ views of recent changes in the Adult Education field with regard to legislation and the fact that modifications are necessary in order to meet measurement criteria for student success. The stress here is placed on acknowledging the need for change in the classroom, rather than longstanding instructional methods rooted in experience in the field.

Based on these findings, there are four distinct groups with different values placed upon what is viewed as most important for the Adult Education instructor to have in helping students through to completion. All four groups bring to light the differing viewpoints among Adult Education administrators as to what they think is necessary for students to succeed and finish, and while all of them have merit when discussing instructor needs, there are implications here that may have significance when considering how these instructors are being hired and trained currently. These implications, as well as recommendations for future studies, are discussed in Chapter 5.
CHAPTER 5: DISCUSSION AND IMPLICATIONS

This study sought to examine the current school of thought among Adult Education administrators in the North Carolina Community College System regarding what qualifications, skills and abilities are necessary for instructors in the field to have in order to see a student through to completion of their secondary credential. These administrators were asked to rank statements including qualities, skills and abilities according to what they felt was most needed and least needed in order for an Adult Education instructor to serve the student and support them through completion. This research is an attempt to more fully understand the current needs in Adult Education in the NCCCS, especially considering changes in legislation that have led to added measurements of student progress in the field and focus on student employment. Few studies have been conducted that focus on Adult Education and students who drop out of high school. The research that has spoken to this area of need has generally been an attempt to conceptualize why students drop out or what, if anything, could have made a difference in their decision. Other studies have focused on student needs after entering an Adult Education program or what barriers those students may face and how they might overcome them. The lack of research on instructors in the Adult Education field provides a gap for the current exploration of the instructor qualifications that may be necessary in order to fully serve students and allow them to complete their High School Equivalency or Adult High School Diploma.

The investigation of Adult Education instructors examined the viewpoints of administrators in Adult Education in the NCCCS and sought to answer the following research questions:
Research Question 1: What are the most and least needed qualifications of Adult Education instructors in the NCCCS to see students through to completion as viewed by Adult Education Program Directors across the 58 community colleges in North Carolina?

Research Question 2: Among the Adult Education program directors in the NCCCS who participated in this study, what are the items of consensus regarding the most needed qualifications of Adult Education instructors and why would it seem these items are in widespread agreement?

Research Question 3: How closely do the desired qualifications, as identified through the various viewpoints that emerge, match the actual skills, abilities, and qualifications that are currently sought in Adult Education instructors in the state of North Carolina?

The results can be used by NCCCS administrators in Adult Education who hire and train instructors in many ways to improve instruction and therefore increase student success.

Administrators can use this information to gauge their current hiring practices, develop and implement training for existing instructors and critically evaluate their own programs’ success in light of recent changes in legislation that have redefined the manner in which North Carolina is assessed with regard to Adult Education services. The current study provides a foundation by which Adult Education administrators in NC can interpret viewpoints from colleagues and begin an examination of their own programs instructors’ qualifications, skills and abilities and then subsequently develop a plan of what they believe is needed for the future.

The study began by consulting the literature relevant to Adult Education instruction, changes in the field due to the Workforce Innovation Opportunity Act signed in 2015 by then President Barrack Obama as well as researching the current job postings in AE in the NCCCS. The compilation of this literature was studied to identify needed qualifications, skills, and
abilities of Adult Education instructors in order to begin developing the study concourse. The final set of statements used included 24 statements about AE instructors’ qualifications and represents a breadth of credentials, expertise and aptitudes.

Designed to measure the perceptions, attitudes, and viewpoints of a target population, Q Methodology was used for this research. Chapter 3 explained the method, justification for the use of Q method, research design and data collection processes, and analysis and interpretation of the data.

An analysis of the results was described in Chapter 4, including correlation data, factor scores, as well as distinguishing statements for each factor. Clustered by similarity of their sorts, four factors were recognized including Adult Education Instruction Specific, Adult Education Student Centered, Adult Learning Theory and Principles, and Adult Education Responding to Change. Narrative question responses were included to cultivate a deeper understanding of the underlying philosophies existing in each of the factor groups.

Finally, the last chapter explores the implications for current practice based on the factor themes and narrative responses. Suggestions for future research is presented as well.

Limitations

The current study was intended to measure the perceptions of Adult Education administrators with regard to qualifications needed in AE instructors today. The study focused solely on AE administrators employed in the North Carolina Community College System. As a result, the outcomes may not be generalized to all professionals who hire and train AE instructors nor all states. The enlistment of a broader participant group may have produced results with larger factor loadings or more diverse themes.
Adult Education administrators often have extensive job duties and wear many hats beyond supervision of instructors and programming. The survey instrument was not a part of the participant’s already wide-ranging job duties and therefore may have hindered response rates. To add to the limitations, the timing of the study may not have been conducive to high response rates since the request for participation was sent out in early fall, a typically hectic time in any education program. Participants were drafted through their school-provided email addresses, of which some may have deflected the request for participation to spam or junk email folders. In addition, the individuals asked to participate may not have been the person responsible for hiring and training instructors in their program since all colleges have different organizational structures and this duty falls on different members of Adult Education in each college.

Based on some of the questions received by the researcher after AE administrators were asked to participate, the instrument used to collect the data may have been a limitation in and of itself. Several participants indicated frustration with the instructions, disliked the forced distribution aspect, and that they had completed the survey, but did not save it at the end in which case the software discarded their responses. Future studies should endeavor to clarify instructions, accessing procedures and completion details required within the software.

Implications

While this body of research generates additional questions for forthcoming studies, it adds to the current bodies of literature in the field as well. Adult Education administrators and instructors can benefit from the results of this study on many levels. Although beneficial to those administrators in North Carolina, it is imperative to realize that the results of this study are not universal and cannot be generalized across states or other Adult Education programs that are not part of the North Carolina Community College System.
Implications for Policy. Perhaps the most practical piece of this study’s contributions is found in its relation to the recent and ongoing changes in Adult Education at the state level. As noted in the significance of the study earlier in this document, the traditional manner in which Adult Education programs in the NCCCS have been administratively managed is by criteria set forth within each college and local processes and procedures. Each of the 58 community colleges has Adult Education (formerly known as Basic Skills) in different areas or departments. Jeffcoat et al, (2014) points out that many now have these programs in departments known as College and Career Readiness. Because of the differences in how AE programs are situated in the NCCCS, it is understandable that the hiring, training and professional development practices and standards of each college are different as well. Considering these differences and in light of the aforementioned changes in accountability on behalf of AE programs, it would seem imperative for stakeholders to undertake an investigation of the standards for instructors in these areas. This research could conceivably add to this investigation of standards, setting the foundation for a discussion of what AE administrators believe instructors should have with regard to qualifications to be consistent across the state. Also discussed earlier, if AE programs are situated differently in each college, it is speculated there are diverse standards for instruction as well, which would indicate that not all NCCCS instructors in Adult Education programs are being held to the same standards. With so much at stake under current WIOA standards, if leaders in AE programs seek to identify the minimum skills and abilities needed by AE instructors, train those instructors to meet WIOA standards, and continually evaluate their programs to ensure necessary professional development, this research could very well contribute to the launching stage of that effort. With the possibility of statewide standards for AE instructors as a result of WIOA and the subsequent WIOA State Plan for the State of North
Carolina plainly stating how AE programs success will be measured, it would seem prudent for interested parties to develop a plan to move toward what those standards will entail. The implications from this research would be a starting point for stakeholders to consider as a means for opening that dialogue.

This research has further implications for Basic Skills (which includes Adult Education) program policy within the 58 community colleges in the NCCCS. In addition to the WIOA implications as discussed above, hiring practices that include the most qualified candidates for these AE instructor positions across the state will also come under scrutiny. Being able to recruit and then interview, hire and train the “best qualified” Adult Education instructor could potentially be an ambiguous undertaking. Considering the policy perspective, the criteria in the vacancy announcement and subsequent hiring process could be further evaluated to ensure that qualifications, skills and abilities needed by the candidate are made clear. This policy may include producing a more explicit job announcement that clearly states the criteria necessary in a candidate as opposed to a generic announcement, such as those found for open positions in the NCCCS at the time of this research. This clarity would most likely attract desirable candidates to apply for the position while potentially deterring applications from persons who do not have the experience, skills and/or abilities.

**Implications for Practice.** The results of this research could introduce the need for discussion with regard to the specific qualifications, skills and abilities needed for AE instructors. Earlier in the discussion, it was noted that historically AE instructors hired to teach adult students who needed a high school equivalency came from many different backgrounds, most without teacher training. Those instructors hired who are skilled in teaching, such as retired public school teachers, often come with a honed subject matter background, but with
limited or nonexistent training in adult learners (Tyler & Lofstrom, 2009). Many ABE and ASE programs have only the 4-year degree as a requirement to teach in this area. In the past, an instructor has needed minimal skills specific to the AE field in order to help a student pass the tests necessary to complete their high school equivalency, namely the General Education Development Test, also known as the GED®. Currently, many ABE and ASE programs haven’t changed their qualifications for teaching and yet, what these students need in order to be successful has changed dramatically (USDOE, 2015).

With this in mind, implications here are that these traditional hiring practices will soon have to be modified and while this research establishes a context for the NCCCS to reference in attempting to create a standard in which each college would adhere to when hiring and training new instructors, it is speculated that each individual institution would still have unique needs with regard to their respective populations.

The practical significance of this research in recruiting, hiring and training AE instructors is significant and at the administrators’ level, the results of the q sort did provide insight into what qualifications are deemed needed at this time. While the state may decide not to develop a standard in which all colleges must adhere to when hiring, the q sort could be used to help AE programs at individual colleges start discussions of what their specific programs need. The four factor groups identified could be utilized to develop training plans, professional development and regular schedules of evaluation for AE instructors.

With all 58 community colleges in North Carolina having different needs, it would be challenging to establish one practice for hiring AE instructors that would serve all sufficiently.

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2 GED® and GED Testing Service® are registered trademarks of the American Council on Education (ACE).
While the q sort includes a comprehensive set of cards regarding skills, abilities and qualifications to sort, there could potentially be additional cards needed according to the college and its’ individual needs. The idea or premise behind sorting the cards as administrators see them as most or least needed is what may be the most useful in modifying the practice of recruiting, hiring and training new AE instructors. While the results of this particular study may be valuable to some, other AE administrators may use the study as a facilitator for other manners in which to evaluate their practices.

**Implications for Theory.** According to the theoretical framework of this study, Human Capital Theory offers the strongest support for this particular research interest, while Adult Learning Theory and Individual Change Theory also provide models that support the results.

The Human Capital Theory has come to be known as the basis for much development and education policies, and rests on the idea that formal education is necessary to sustain and improve the productivity of a population. As discussed earlier, the most basic understanding of Human Capital Theory stresses the importance of education as it relates to productivity and efficiency of the workforce by increasing the degree of human intellectual capability which is a result of inherent abilities and vested interest in human beings. It represents the investment people make in themselves (Olaniyan and Okemakinde, 2008). With this in mind, the results of this study show that not only does the investment people make in themselves not happen without the AE instructor, the significance of the AE instructor being able to support the student through to completion is critical. The factor group “Adult Education Reacting to Change” is an indication of the need for AE administrators to respond to the need to modify practices in order to keep productivity and efficiency of the workforce as the focus of service to students.
Individual Change Theory is a theory of change that contributes to the study of AE needs and is considered when typical student characteristics and attitudes are examined. When students begin to challenge themselves, or recognize their individual capabilities, as opposed to believing they are predetermined for failure and acceptance of the consequences of that inability to achieve, a noticeable change takes place (Wood, 2000). Research results here are applicable as the individual student cannot begin to recognize their capabilities without an instructor who is trained, skilled and able to help them. Considering the “Adult Education Student Centered” factor group, this study would imply that instructors have to know their students’ needs to be able to support them to completion.

The other theory applied to the study of AE instructors’ needs to support students to completion is that of the Adult Learning Theory. According to Knowles (1975), adult students are task motivated, bring experience with them to the classroom, as well as a readiness to learn, and the ability to self-direct. Adult Learning Theory affects practice and while it has always been important to address these needs, this theory emphasizes the importance of knowing the particular needs of adults in the classroom and with regard to the study of interest, it lends further credence to claims that instructors need targeted and continued training to fully engage and promote nontraditional students to their goals of completion. Adult Learning Theory and Principles are actually the theme for one of the factor groups and therefore indicates this philosophy’s importance within the study.

This research has attempted to show that it is a balance of these three theories that influences the most and least needed qualifications, skills and abilities of AE instructors in the NCCCS. This concept is reinforced by the aforementioned factor groups represented and their significance with specific theories.
Recommendations for Further Study

The significance of Adult Education programs in the United States has been emphasized by recent legislation, namely the Workforce Innovation and Opportunities Act (WIOA), signed by then president, Barrack Obama, in July of 2015. More specifically, in North Carolina, the WIOA State Plan for the State of North Carolina is clear in its charge to Adult Education programs and under the Adult Education and Family Literacy Act (AEFLA) or Title II as it is commonly referred to, the specific measures for quality are outlined and explained. Given this catalyst to evaluate programs and ensure quality, the investigation of AE instructor qualifications, skills and abilities would, among many areas of Adult Education, seem prudent and warrant further research.

In addition to widening the range of the current study to include a larger participant pool, the collection of supplementary qualitative data would possibly help define the perceptions of AE administrators with regard to needed qualifications, skills and abilities. Additional queries about the specific statements in the study could be useful, such as: “Are there qualifications, skills and abilities not part of the qsort that you think should have been added?” or “Do you believe that an instructor’s length of time on the job affects their ability to see a student through to completion?” It could also be useful to gather information regarding whether or not the AE administrators think that they are currently meeting WIOA guidelines and meeting student needs as outlined in the WIOA State Plan for the state of North Carolina. Further follow up data to collect might include if the participants themselves have teaching experience in Adult Education, how much professional development and/or training is provided by their respective colleges annually and if their instructors are evaluated regularly.
In an effort to more fully answer Research Question 3: How closely do the desired qualifications, as identified through the various viewpoints that emerge, match the actual skills, abilities, and qualifications that are currently sought in Adult Education instructors in the state of North Carolina?, further exploration is needed. More specific information is needed from those individuals who hire and train the AE instructors from the colleges who are advertising for prospective employees. The data gathered in this research with regard to currently advertised positions for AE instructors in North Carolina as a part of the NCCCS is ambiguous and lacks enough detail to compare it to the perceptions measured by the qsort. A more insightful description of qualifications for needed positions is necessary to more fully appreciate how closely related the viewpoints are to what is currently sought in new hires in the field.

Additional recommendations regarding hiring AE instructors include the hiring committee. Since educational institutions are often bureaucratic in nature and hiring committees are only allowed to use the qualifications listed in the job vacancy when selecting an applicant, a new study could potentially include requesting that hiring committee members complete the qsort prior to serving on the committee. The intent here would be to uncover any personal biases about which behaviors, traits, and credentials are most desirable. This does not imply that educational institutions need to seek a candidate who is deemed qualified simply because his or her skill set directly matches the results of the q sorts of those serving on the committee. While the range of responses in this research indicate several different viewpoints on what is most needed in the AE instructor, many of them overlap and have similar themes. For example, the factor group labeled “Adult Education Student Centered” has a focus on the student needs; however, the factor group labeled “Adult Learning Theory and Principles” has much the same focus. Being student centered is indeed a large part of Adult Learning Theory, so the
commonalities here are logical and these types of differences among hiring committee members would not indicate an impasse in agreement of needed qualifications. Even so, having hiring committee members complete the qsort as part of their process could give valuable insight as to what the group is actually looking for in a new hire. This act could open dialogue about perceived most or least needed qualifications in an attempt to avoid assumptions.

Additional research in this line of questioning might also include student perceptions of needed AE instructor skills and abilities to include gathering feedback from graduates as well as currently enrolled students. To gain a more defined perspective, a study that focused on AE instructor qualifications, skills and abilities of those colleges with high success rates would possibly be helpful, where the commonalities of those colleges would be identified in an effort to share and expand best practices across the state.

Recommendations for Future Q Studies

QSortWare software offered accessibility and expanded the geographical area for research participants; however, this study had trials that would need to be addressed before individuals consider using Q methodology, specifically regarding online data collection. The majority of respondents had no prior knowledge of Q methodology or the procedure involved, which could have greatly affected the response rate. Several participants stated they had difficulty accessing the survey instrument, while others complained of unclear instructions and frustration with navigating the software. Still others say they completed the survey only to realize their responses were not saved. Because only two participants communicated their trying experiences and need for direction, it is uncertain as to how many surveys were begun and then left incomplete because of technical difficulties or lack of clear instruction. In light of this
information and considering further studies, more complete directives on how to complete the survey as well as step by step instructions and screen shots are recommended.

Summary

The current study was intended to examine the viewpoints of Adult Education administrators in the North Carolina Community College System towards the most needed and least needed qualifications, skill and abilities of Adult Education instructors in order to see students through to completion. Twenty-five administrators agreed to complete the study, and twenty-five of those responses were used in the data analysis. They were asked to sort and rank 24 statements from least needed to most needed Adult Education instructor qualifications, skills and abilities to see students through to completion and then complete ten narrative post-sort questions to gather further information on their demographic characteristics and further explain their viewpoints on this topic. Four factors were identified during analysis, and were themed as Adult Education Instruction Specific, Adult Education Student Centered, Adult Learning Theory and Principles, and Adult Education Responding to Change. Several statements were sorted similarly between groups, but each factor group had distinguishing statements emphasizing the differences.

The current study reveals themes held by AE administrators towards Adult Education instructor qualifications, skills and abilities, which has implications for the current state of Adult Education in the state of North Carolina especially in light of recent legislation and increased pressure from that legislation to prove student progress.

As previously discussed, the Adult Education administrators in the NCCCS are key decision makers for their respective colleges and those programs with regard to what is required by instructors to be able to fully support this population of students from start to finish. Basic
Skills administrators, Adult Education personnel across the state and even those other stakeholders who are responsible for professional development and training can utilize the results of this research to aid in the modification of current and future hiring practices as well as ongoing training and evaluation of AE instructors.
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APPENDICES
Appendix A: Initial Concourse of Statements by Category

**Educational and Training Requirements**
1. Adult Education instructors in the NCCCS need a Bachelor Degree.
2. Adult Education instructors in the NCCCS need a Bachelor’s Degree with at least six months of teaching experience.
3. Adult Education instructors in the NCCCS need a Master’s degree with K-12 teacher certification.
4. Adult Education instructors in the NCCCS need a certification, bachelors, and/or master’s degree in adult, or closely related field.
5. Adult Education instructors in the NCCCS need an associate’s degree.
6. Adult Education instructors in the NCCCS need a degree in adult education.
7. Adult Education instructors in the NCCCS need coursework in teaching non-traditional students, curriculum development and technology.
8. Adult Education instructors in the NCCCS need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date.
9. Adult Education instructors in the NCCCS need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date.
10. Adult Education instructors in the NCCCS need to pass an exam to confirm their own reading, math and writing skills.

**Experience**
11. Adult Education instructors in the NCCCS need a background in occupational therapy, music/art therapy, music/art education, home economics, vocational rehabilitation, supported employment, etc.
12. Adult Education instructors in the NCCCS need a background/knowledge in Research Based Instructional strategies.
13. Adult Education instructors in the NCCCS need Adult Education experience.
14. Adult Education instructors in the NCCCS need experience teaching employability skills.
15. Adult Education instructors in the NCCCS need adult teaching experience/community college teaching experience.
16. Adult Education instructors in the NCCCS need at least two years of experience teaching basic reading, writing and math skills to adults or at-risk high school students.
17. Adult Education instructors in the NCCCS need one year of successful teaching experience in a community college or similar post-secondary institution.
18. Adult Education instructors in the NCCCS need experience working with students from diverse backgrounds.
19. Adult Education instructors in the NCCCS need experience working with at-risk populations.

**Technology**
20. Adult Education instructors in the NCCCS need familiarity with MS Office.
21. Adult Education instructors in the NCCCS need commitment to instructional technology.
22. Adult Education instructors in the NCCCS need familiarity and comfort with using technology in the classroom, including SMART Boards, iPads, computers, interactive PowerPoint presentations, etc…
24 Adult Education instructors in the NCCCS need to be able to incorporate technology into the classroom.
25 Adult Education instructors in the NCCCS need to have a general understanding of computer-based instruction and learning methodologies.
26 Adult Education instructors in the NCCCS need to be proficient in computer applications and software systems.
27 Adult Education instructors in the NCCCS need to possess a strong knowledge of computer fundamentals, such as word processing, manipulation of spreadsheets, presentation programs, and computer aided instructional technology.

*Teaching Skills*
28 Adult Education instructors in the NCCCS need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials.
29 Adult Education instructors in the NCCCS need the ability to implement various teaching methods to meet the learning styles of individuals.
30 Adult Education instructors in the NCCCS need the ability to follow-up and follow-through so that each student may realize educational gains and success.
31 Adult Education instructors in the NCCCS need the ability to teach basic mathematics, reading, and writing.
32 Adult Education instructors in the NCCCS need the ability to teach reading comprehension, language arts/writing, basic math, algebra, and geometry.
33 Adult Education instructors in the NCCCS need the ability to teach mechanics of Language and essay writing.
34 Adult Education instructors in the NCCCS need to possess skills necessary to make appropriate student assignments for a multi-level classroom, administer assessments and tests and maintain accurate student and program records.
35 Adult Education instructors in the NCCCS need the ability to perform general teaching and office duties.
36 Adult Education instructors in the NCCCS need the ease of mobility in supervising students in classroom/lab settings, carrying supplies and other instructional materials.
37 Adult Education instructors in the NCCCS need to be sensitive to the needs and expectations of disadvantaged students.
38 Adult Education instructors in the NCCCS need to be able to adjust to diverse student populations and flexible work conditions/situations.
39 Adult Education instructors in the NCCCS need the ability to determine students’ work and life-related goals through both formal (testing) and informal assessment.

*Professionalism*
40 Adult Education instructors in the NCCCS need strong personal and professional integrity.
41 Adult Education instructors in the NCCCS need to have strong customer relation skills.
42 Adult Education instructors in the NCCCS need to be able to work effectively with students, faculty, and staff.
43 Adult Education instructors in the NCCCS need the ability to work effectively and collegially with others in a team environment.
44 Adult Education instructors in the NCCCS need to promote relationships of trust and respect throughout the college and the community.
45 Adult Education instructors in the NCCCS need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change.

46 Adult Education instructors in the NCCCS need the ability to communicate effectively both orally and in writing, possess excellent inter-personal skills.

47 Adult Education instructors in the NCCCS need the ability to maintain clear and meaningful criteria or standards for effective performance.

Educational Philosophy
48 Adult Education instructors in the NCCCS need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System.

49 Adult Education instructors in the NCCCS need the familiarity with and appreciation for the mission of a comprehensive community college.

50 Adult Education instructors in the NCCCS need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system.

Other
51 Adult Education instructors in the NCCCS need critical thinking skills with the ability to process information and exercise good judgment in the collection, evaluation, and analysis of data.

52 Adult Education instructors in the NCCCS need the ability to apply adult learning theory and principles.

53 Adult Education instructors in the NCCCS need to be trained in Tests of Adult Basic Education (TABE) Assessment.

54 Adult Education instructors in the NCCCS need ability to move, climb, or crawl under equipment.
Appendix B: Q Set Statements by Category

Educational and Training Requirements
1. Adult Education instructors in the NCCCS need an Associate’s degree
2. Adult Education instructors in the NCCCS need a Bachelor Degree
3. Adult Education instructors in the NCCCS need a Master’s degree
4. Adult Education instructors in the NCCCS need a degree in Adult Education
5. Adult Education instructors in the NCCCS need to have earned an Adult Secondary Education Certificate from NCCCS College and Career Readiness within 2 years of hire date
6. Adult Education instructors in the NCCCS need to have earned a Core Certificate from NCCCS College and Career Readiness within 2 years of hire date

Experience
7. Adult Education instructors in the NCCCS need Adult Education experience
8. Adult Education instructors in the NCCCS need experience teaching employability skills
9. Adult Education instructors in the NCCCS need at least two years of experience teaching basic reading, writing, and math skills to adults or at-risk students

Technology
10. Adult Education instructors in the NCCCS need familiarity and comfort with using and incorporating technology in the classroom, including SMART Boards, iPads, computers, interactive PowerPoint presentations, etc…
11. Adult Education instructors in the NCCCS need to have a general understanding of computer-based instruction and learning methodologies

Teaching Skills
12. Adult Education instructors in the NCCCS need to be able to develop lesson plans for a classroom setting that incorporate contextualized instructions or real-life/authentic materials.

13. Adult Education instructors in the NCCCS need the ability to implement various teaching methods to meet the learning styles of individuals.

14. Adult Education instructors in the NCCCS need to possess skills necessary to make appropriate student assignments for a multi-level classroom.

15. Adult Education instructors in the NCCCS need to have familiarity in administering assessments and tests.

16. Adult Education instructors in the NCCCS need the ability to determine students’ work and life-related goals through both formal (testing) and informal assessment.

*Professionalism*

17. Adult Education instructors in the NCCCS need strong personal and professional integrity.

18. Adult Education instructors in the NCCCS need to have strong customer relation skills.

19. Adult Education instructors in the NCCCS need the ability to work effectively and collegially with others in a team environment.

20. Adult Education instructors in the NCCCS need to promote relationships of trust and respect throughout the college and the community.

21. Adult Education instructors in the NCCCS need effectiveness in collaborating and facilitating, providing vision and leadership, creating and innovating, and anticipating and responding to change.
Educational Philosophy
22. Adult Education instructors in the NCCCS need a thorough understanding of and commitment to the mission and philosophy of the North Carolina Community College System

23. Adult Education instructors in the NCCCS need to work from an educational philosophy that drives how they serve that student to include putting the needs of the student first without regard of the educators’ opinion of the system

Other
24. Adult Education instructors in the NCCCS need the ability to apply adult learning theory and principles
Appendix C: Survey Recruitment Letter

To: NCCCS College and Career Readiness Administrators

From: Lauri Stilwell, NCSU Doctoral Student

Date: September 2017

Re: Request for Participation in Adult Education Research Study

I am a doctoral student at North Carolina State University (NCSU) and am conducting research in Adult Education (AE) for my dissertation to earn the Doctorate in Adult and Community College Education at NCSU. My dissertation topic pertains to skills, abilities, and credentials desired in applicants for the position of Adult Education Instructor in the North Carolina Community College System (NCCCS). I am requesting the assistance from NCCCS community college administrators in the area of College and Career Readiness (e.g. Directors, Coordinators, Deans and Department Chairs) who would be responsible for hiring an Adult Education Instructor to teach Adult Basic Education (ABE) and/or Adult Secondary Education (ASE).

You are being asked to participate in this study because of your role in employing and supervising the Adult Education instructors in the NCCCS. This is indeed an interesting time to be conducting research in this field as the implications of the Workforce Invest Opportunity Act (WIOA) indicate serving students at a more specialized level than ever. The results of this study will aim to more clearly identify the skills, abilities and credentials needed to fully support an ABE/ASE student through to completion of the secondary credential.

Your participation in this study will require you to complete a ranking of statements encompassing the skills, abilities and credentials needed for AE instructors followed by the completion of a brief questionnaire. It is estimated that this study will take 25-30 minutes.

Your final statement sorting and questionnaire responses will be kept strictly confidential. Your identity will not be revealed in any publication that may follow this study. In addition, the survey software does not keep any information should you choose to not complete the study.

This research is being conducted under the direction of Dr. James E. Bartlett II, Associate Professor of Leadership, Policy and Adult and Higher Education at North Carolina State University, james_bartlett@ncsu.edu. Please contact me at lastilwel@ncsu.edu or call me at 828-729-7043 for any questions or concerns that you may have.

Thank you for your time and consideration.

Sincerely,

Lauri Stilwell